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# The Patent

Office Record

# La Gazette

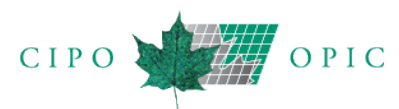
du Bureau des brevets



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Canada



# THE CANADIAN PATENT OFFICE RECORD

## LA GAZETTE DU BUREAU DES BREVETS

The Canadian Patent Office Record is published on Tuesday of each week under the authority of the Commissioner of Patents, Ottawa-Gatineau, Canada, to whom all communications should be addressed.

The Canadian Intellectual Property Office does not guarantee the accuracy of this publication, nor undertake any responsibility for errors or omissions or their consequences.

La Gazette du Bureau des brevets paraît le mardi de chaque semaine sous l'autorité du Commissaire aux brevets, Ottawa-Gatineau, Canada, à qui doit être adressée toute correspondance.

L'Office de la propriété intellectuelle de Canada ne garantit pas l'exactitude de la présente publication et ne se rend responsable d'aucune erreur ou omission ou de leurs conséquences.

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## Notices

## Avis

### 1. Dates and Code Numerals Appearing in Patent Headings

#### Dates

All dates appearing in the patent headings of this publication follow the form recommended by the International Standards Organization. The four digits on the left represent the years followed by two digits each for the months and the days. For example, January 02, 1999 will be shown as 1999-01-02.

#### Code Numerals

The numerals within the brackets in the patent headings are INID codes. "INID" is an acronym for "Internationally agreed Numbers for the Identification of Data". These codes are utilized to identify patent bibliography as recommended by the Permanent Committee on Industrial Property Information (PCIPI) under the administration of the World Intellectual Property Organization (WIPO) based in Geneva, Switzerland.

The INID Codes and their corresponding definitions of bibliographic data elements are as follows:

- [11] - Number of Patent document
- [13] - Kind-of-document code
- [21] - Number assigned to the Application
- [22] - Date of Filing Application or
- [22] - Date of filing of related divisional application
- [25] - Language in which the published application was originally filed
- [30] - Data relating to priority under the Paris Convention
  
- [41] - Open to Public Inspection Date
- [45] - Date of Issue
- [48] - Correction Date ( Re-Issued, Re-Examined )
- [51] - International Classification
- [52] - Domestic Classification
- [54] - Title of Invention
- [60] - Related by Supplementary Disclosure
- [62] - Related by Division
- [64] - Related by Reissue
- [71] - Name(s) of Applicant(s)
- [72] - Name(s) of Inventor(s)
- [73] - Name(s) of Grantee(s)
- [85] - National Entry Date
- [86] - PCT International Filing Data
- [87] - PCT International Publication data

### 1. Dates et chiffres de code figurant à l'entête des brevets

#### Dates

Toutes dates figurant aux entêtes des brevets de cette publication suivent la forme recommandée par l'Organisation des normes internationales. Les quatre chiffres de gauche représentent les années et sont suivis, vers la droite, de deux autres chiffres chacun, pour les mois et les jours. Le 2 janvier 1999, par exemple, sera représenté par 1999-01-02.

#### Chiffres de code

Les chiffres à l'intérieur des parenthèses aux entêtes des brevets sont des codes INID. Le sigle « INID » signifie « Identification numérique internationale des données bibliographiques ». Ces codes sont utilisés pour l'identification de la bibliographie de brevets, tel que recommandé par le Comité permanent chargé de l'information en matière de propriété industrielle (PCIPI), sous l'administration de l'Organisation mondiale de la propriété intellectuelle (OMPI), sise à Genève, Suisse.

Les codes INID accompagnés des définitions des données bibliographiques correspondantes sont comme suit :

- [11] - Numéro du brevet
- [13] - Désignation du type de document
- [21] - Numéro attribué à la demande
- [22] - Date du dépôt de la demande ou
- [22] - Date du dépôt de la demande divisionnaire apparentée
- [25] - Langue dans laquelle la demande publiée a été initialement déposée
- [30] - Données relatives à la priorité selon la Convention de Paris
  
- [41] - Date de mise à la disponibilité du public
- [45] - Date de délivrance
- [48] - Date de correction ( Redélivrance, Réexamen )
- [51] - Classification internationale
- [52] - Classification nationale
- [54] - Titre de l'invention
- [60] - Apparenté par divulgation supplémentaire
- [62] - Apparenté par division
- [64] - Apparenté par redélivrance
- [71] - Nom(s) du (des) demandeur(s)
- [72] - Nom(s) de(s) l'inventeur(s)
- [73] - Nom(s) du (des) titulaire(s)
- [85] - Date d'entrée en phase nationale
- [86] - Données du dépôt international selon le PCT
- [87] - Données de publication internationale selon le PCT

## 2. Country Code

The Country Codes appearing in this publication conform to those contained in annex A of the *Handbook on Industrial Property Information and Documentation* published by the World Intellectual Property Organization (WIPO). This document is accessible from a link entitled Standards ST-3 on the List of WIPO Standards, Recommendations and Guidelines (Abbreviated Titles) located on the WIPO Web site: ([www.wipo.int/scit/en/standards/standards.htm](http://www.wipo.int/scit/en/standards/standards.htm)).

## 3. How to Purchase Paper Copies of Canadian Patents and Canadian Applications Open to Public Inspection

Paper copies of all other Canadian Patents and Canadian applications open to public inspection may be purchased at the cost of \$1 per page by visiting ([www.strategis.ic.gc.ca/patentsorder](http://www.strategis.ic.gc.ca/patentsorder)) or by writing to the Commissioner of Patents, Ottawa-Gatineau, K1A 0C9.

Item 25.1* On requesting copy in electronic form of a document:	N/A
a) for each request	\$10
b) plus, for each patent or application to which the request relates	\$10
c) plus, if the copy is requested on a physical medium, for each physical medium requested in addition to the first	\$10
d) plus, for each additional 10 megabytes or part of them exceeding 7 megabytes	\$10

## 4. Orders for Patents by Class or Sub-Class

A listing of all patents that have issued in each class or sub-class including both patents in force and expired patents, may be ordered at a price of \$1 per page from the Patent Office.

## 2. Code des pays

Les Codes des pays qui se trouvent dans cette publication sont conformes à ceux dans l'annexe A du *Manuel sur l'information et la documentation en matière de propriété industrielle* publié par l'Organisation Mondiale de la Propriété Intellectuelle (OMPI). Ce document est accessible à partir de l'hyperlien intitulé Normes ST-3 dans la Liste des normes, recommandations et principes directeurs de l'OMPI (Titres abrégés) qui se trouve au site Web de l'OMPI: ([www.wipo.int/scit/fr/standards/standards.htm](http://www.wipo.int/scit/fr/standards/standards.htm)).

## 3. Comment acheter des copies sur papier de brevets canadiens et de demandes canadiennes mises à la disponibilité du public

Les copies sur papier de tous les autres brevets canadiens et des demandes canadiennes mises à la disponibilité du public peuvent être achetées au coût de 1 \$ par page en visitant notre site Web ([www.strategis.ic.gc.ca/brevetscommande](http://www.strategis.ic.gc.ca/brevetscommande)) ou en écrivant au Commissaire aux brevets, Ottawa-Gatineau, K1A 0C9.

Article 25.1* Demande d'une copie d'un document sous forme électronique :	S.O.
a) pour chaque demande	10 \$
b) pour chaque demande de brevet ou brevet visé par la demande	10 \$
c) dans le cas où le document doit être copié sur plus d'un support matériel, pour chaque support matériel additionnel	10 \$
d) pour chaque tranche de 10 méga-octets qui excède 7 méga-octets, l'excédant étant arrondi au multiple supérieur	10 \$

## 4. Commande de brevets par classe ou sous-classe

Les listes de brevets délivrés dans chaque classe ou sous-classe, incluant les brevets en vigueur et ceux ayant expiré, peuvent être commandées auprès du Bureau des brevets au prix de 1 \$ la page.

## 5. Advice on Making a Patent Application

Any person intending to file a patent application may obtain an information kit upon request from the Commissioner of Patents, Ottawa-Gatineau, Canada K1A 0C9. It is recommended that applicants make use of the services of a registered Patent Agent. A list of Patent Agents in any area of Canada will also be supplied upon request.

## 6. Licensing of Patents

### Voluntary Licences

Persons desiring to use, make or sell an invention patented in Canada should negotiate terms with the patent owner. The address of the patentee may be obtained by writing to the Commissioner of Patents, Ottawa-Gatineau, Canada, K1A 0C9. If a voluntary licence cannot be arranged, a compulsory licence may be possible.

### Compulsory Licences

Three years after a patent has been granted, one may request a compulsory licence to use the patent if there has been an abuse of the exclusive right. See Sections 65 to 71 of the *Patent Act*. Applications for a compulsory licence are made to the Commissioner of Patents.

## 7. Patents Available for Licence or Sale

An asterisk (\*) placed beside any patent listed in this issue of the *Canadian Patent Office Record* indicates that as of the date of grant the said patent is available for licence or sale. These and other patents now made available for licensing are included in the listing in part 8 of these notices.

## 8. List of Patents Available for Licence or Sale

The following Canadian patents have been made available this week for sale or licensing:

None

## 5. Conseils relatifs à la préparation de demandes de brevets

Toute personne qui a l'intention de déposer une demande de brevet peut obtenir une trousse d'information sur demande faite au Commissaire aux brevets, Ottawa-Gatineau, Canada K1A 0C9. On recommande aux demandeurs d'avoir recours aux services d'un agent de brevets inscrit au registre. Une liste des agents de brevets dans n'importe quelle région du Canada sera également fournie sur demande.

## 6. Octroi de licences en vertu des brevets

### Licences librement accordées

Les personnes désirant utiliser, fabriquer ou vendre une invention brevetée au Canada doivent en négocier les conditions avec le titulaire du brevet. L'adresse du titulaire peut être obtenue en écrivant au Commissaire aux brevets, Ottawa-Gatineau, Canada, K1A 0C9. S'il est impossible d'obtenir une licence résultant d'un libre accord, il est peut être possible d'obtenir une licence obligatoire.

### Licences obligatoires

Il est possible de faire la demande d'une licence obligatoire trois ans après l'octroi d'un brevet si les droits exclusifs qui en dérivent ont donné lieu à un abus. Voir les articles 65 à 71 de la *Loi sur les brevets*. Les demandes de licence obligatoire doivent être présentées au Commissaire aux brevets.

## 7. Brevets disponibles pour licence ou vente

Un astérisque (\*) marqué à côté de tout brevet inscrit dans le présent numéro de la *Gazette du bureau des brevets*, signale qu'à compter de la date de la présente publication, ledit brevet est disponible pour octroi de licence ou vente. Une liste de ces brevets et d'autres mis en disponibilité pour octroi de licence, est publiée au no. 8 des présents avis.

## 8. Liste des brevets disponibles pour octroi de licence ou vente

Les brevets canadiens suivants ont été mis en disponibilité cette semaine pour vente ou octroi de licence :

Aucun

## 9. Applications Open to Public Inspection

All patent applications filed since October 1, 1989 and documents filed in connection therewith are open to public inspection at the Patent Office after the expiration of a confidentiality period of eighteen months beginning on the filing date of the application, or where a request for priority has been made in respect to the application, beginning on the priority date claimed. An application may become open to public inspection sooner at the request or with the approval of the applicant (Section 10(2) of the *Patent Act*). However, an application shall not be open for public inspection if it is withdrawn within the time set out in Section 92 of the *Patent Rules*. This time limit is two months before the expiry of the confidentiality period or where the Commissioner is able to stop technical preparations to open the application to the public at a subsequent date.

## 10. Language of Published Documents

When ordering a published patent, please note that the language of the document can be identified by the language code (INID [25]) EN (English) or FR (French).

## 11. Patent Cooperation Treaty (PCT) Schedule of Fees Applicable for Applications Filed on or After June 3, 2020

1. Transmittal Fee (Rule 14)	\$300
2. International Filing Fee	\$1961*
For each additional sheet over 30	\$22
3. International Search Fee	\$1600

The above mentioned fees are due at time of filing of the international application, or within one month from the international filing date (date of receipt of the international application by the receiving office). These fees are to be paid in Canadian dollars and cheques should be made payable to the Receiver General for Canada.

If the fees are not paid within one month from the international filing date, the receiving office shall invite the applicant to pay the amount required, together with a late payment fee under

## 9. Demandes mises à la disponibilité du public

Toutes les demandes de brevet et documents relatifs à ceux-ci, déposés au Bureau des brevets depuis le 1er octobre 1989, peuvent y être consultées après l'expiration de la période de confidentialité de dix-huit mois à compter de la date de dépôt de la demande de brevet ou, si une demande de priorité a été présentée à l'égard de celle-ci, de la date de dépôt sur laquelle la demande de priorité est fondée. Une demande de brevet peut être consultée avant l'expiration de la période, à la requête ou sur autorisation du demandeur (article 10(2) de la *Loi sur les brevets*). Toutefois, une demande de brevet ne pourra être consultée si celle-ci est retirée à l'intérieur du délai prévu à l'article 92 des *Règles sur les brevets*. Le délai prévu est de deux mois précédant la date d'expiration de la période de confidentialité ou, lorsque le commissaire est en mesure, à une date ultérieure, d'arrêter les préparatifs techniques en vue de la consultation de cette demande.

## 10. Langue du document publié

Toute personne intéressée à obtenir une copie d'un brevet publié doit prendre note que les codes suivants EN (Anglais) ou FR (Français) représentent (INID [25]) la langue de la copie du brevet publié.

## 11. Traité de coopération en matière de brevets (PCT) barème de taxes à partir du 3 juin 2020

1. Taxe de transmission (Règle 14)	300 \$
2. Taxe de dépôt internationale	1961 \$*
Pour chaque feuille au delà de 30	22 \$
3. Taxe de recherche internationale	1600 \$

Les taxes mentionnées ci-haut sont payables au moment du dépôt de la demande internationale, ou dans un délai d'un mois à compter de la date de dépôt international, (soit la date de réception de la demande internationale par l'office récepteur). Les taxes doivent être payées en dollars canadiens et les chèques sont payables au receveur général du Canada.

Si les taxes n'ont pas été payées dans un délai d'un mois à compter de la date de dépôt international, l'office récepteur invitera le demandeur à payer le montant dû, accompagné de la

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Rule 16bis.2, within one month from the date of the invitation. Failure to pay the fees will result in the withdrawal of the application by the receiving office.

### 4. Late payment fee

50% of the fees that are due, or,  
Minimum: Transmittal fee  
Maximum: 50% of the international filing fee

### Preliminary Examination

5. Handling fee (Rule 57.2(a)) \$295

6. Preliminary examination fee (Rule 58) \$800

\* International fees will be reduced by:

- \$295 for all applications filed electronically using PCT-SAFE or ePCT (The request in character coded format).
- \$442 for all applications filed electronically using PCT-SAFE or ePCT (The request, description, claims and abstract in character coded format).

## 12. PCT Notices

### Patent Cooperation Treaty (PCT)

Copies of the *Patent Cooperation Treaty Applicants Guide* and the *Patent Cooperation Treaty & Regulations* are available from WIPO - World Intellectual Property Organization at a cost of 200 Swiss Francs and 18 Swiss Francs, respectively.

Those wishing for further information including prices for both previous and current subscriptions should contact WIPO at:

Information Products Section  
Post Office Box 18  
1211 Geneva 20 Switzerland  
Telephone (011 41 22) 338-9618  
Facsimile (011 41 22) 740-1812

or by "E-mail" ([publications.mail@wipo.int](mailto:publications.mail@wipo.int)) or visit their Web site ([www.wipo.int](http://www.wipo.int)).

taxe pour le paiement tardif visée à la règle 16bis.2, dans un délai d'un mois à compter de l'invitation. Si vous omettez de payer les taxes, l'office récepteur retirera votre demande.

### 4. Taxe pour paiement tardif

50% du montant impayé, ou,  
Minimum : taxe de transmission  
Maximum : 50% de la taxe de dépôt international

### Examen préliminaire

5. Taxe de traitement (Règle 57.2a) 295 \$

6. Taxe d'examen préliminaire (Règle 58) 800 \$

\* Les frais seront réduits de:

- 295 \$ pour toutes les demandes déposées en utilisant PCT-SAFE ou ePCT (La requête étant en format à codage de caractères).
- 442 \$ pour toutes les demandes déposées en utilisant PCT-SAFE ou ePCT (La requête, la description, les revendications et l'abrégé étant en format à codage de caractères).

## 12. Avis PCT

### Traité de Coopération en matière de brevets (PCT)

Des copies du *Guide du déposant du PCT* ainsi que du *Traité et des Règlements* sont disponibles auprès de l'OMPI - Organisation mondiale de la propriété intellectuelle au coût de 200 francs suisses et 18 francs suisses, respectivement.

Les personnes qui désirent obtenir de plus amples renseignements, notamment sur le prix des abonnements antérieurs et courants, sont priées de s'adresser directement à :

l'OMPI à la Section des produits d'information  
Boîte postale 18  
1211 Genève 20 Suisse  
Téléphone (011 41 22) 338-9618  
Télécopieur (011 41 22) 740-1812

ou par courriel ([publications.mail@wipo.int](mailto:publications.mail@wipo.int)) ou visiter leur site Web ([www.wipo.int](http://www.wipo.int)).



### 13. Practice Notice

#### LIMITED PARTNERSHIPS CAN BE ENTERED ON THE REGISTER OF AGENTS AND ON THE LIST OF TRADE-MARK AGENTS

**Note:** *This practice notice is intended to provide guidance on current Patent and Trade-marks Office practice and interpretation of relevant legislation. However, in the event of any inconsistency between this notice and the applicable legislation, the legislation must be followed.*

The Patent Office and the Trade-marks Office (hereinafter jointly referred to as “the Offices”) have been receiving inquiries as to whether limited partnerships are entitled to act as patent and trade-mark agents before the Offices.

With respect to the register of patent agents, section 15 of the *Patent Act* provides that a register of patent agents shall be kept in the Patent Office on which shall be entered the names of all persons and firms entitled to represent applicants in the presentation and prosecution of applications for patents or in other business before the Patent Office. Section 2 of the *Patent Rules* stipulates that the expression “patent agent” means any person or firm whose name is entered on the register of patent agents pursuant to section 15. Paragraph 15(c) of the *Patent Rules* provides that the Commissioner shall enter on the register of patent agents, on payment of the fee set out in item 33 of Schedule II, the name of **any firm, if the name of at least one member of the firm is entered on the register.**

With respect to the list of trade-mark agents, subsection 28(2) of the *Trade-marks Act* provides that the list of trade-mark agents shall include the names of all persons and firms entitled to represent applicants in the presentation and prosecution of applications for the registration of a trade-mark or in other business before the Trade-marks Office. Paragraph 21(d) of the *Trade-mark Regulations* (1996) stipulates that the Registrar shall, on written request and payment of the fee set out in item 19 of the schedule, enter on a list of trade-mark agents the name of **any firm having the name of at least one of its members entered on the list as a trade-mark agent.**

Both the patent and trade-mark legislation therefore provide that firms may act as agents before the Offices, as long as one of their members is entered on the register or list of agents. It is generally recognised that the term “firm” includes partnerships, and the Offices have already allowed general partnerships and limited liability partnerships to be entered on the register or list of agents. The Offices consider that limited partnerships are also firms, and that they are entitled to act as agents before the

### 13. Énoncé de pratique

#### LES SOCIÉTÉS EN COMMANDITE PEUVENT ÊTRE INSCRITES AU REGISTRE DES AGENTS DE BREVETS ET SUR LA LISTE DES AGENTS DE MARQUES DE COMMERCE

**Nota :** *Le présent énoncé de pratique a pour but de préciser les pratiques actuelles du Bureau des brevets et du Bureau des marques de commerce et l'interprétation faite par ces derniers de certaines dispositions législatives. Toutefois, en cas de divergence entre le présent énoncé et la législation applicable, c'est la législation qui prévaudra.*

Le Bureau des brevets et le Bureau des marques de commerce (ci-après appelés conjointement « les Bureaux ») ont reçu des questions à savoir si les sociétés en commandite (en anglais « limited partnerships ») ont le droit d'agir en tant qu'agents de brevets et de marques de commerce auprès des Bureaux.

En ce qui concerne le registre des agents de brevets, l'article 15 de la *Loi sur les brevets* prévoit qu'un registre des agents de brevets est tenu au Bureau des brevets sur lequel sont inscrits les noms de toutes les personnes et entreprises ayant le droit de représenter les demandeurs dans la présentation et la poursuite des demandes de brevet ou dans toute autre affaire devant le Bureau des brevets. Aux termes de l'article 2 des *Règles sur les brevets*, « agent de brevets » s'entend de toute personne ou maison d'affaires dont le nom est inscrit au registre des agents de brevets aux termes de l'article 15. L'alinéa 15c) des *Règles sur les brevets* prévoit que le commissaire inscrit au registre des agents de brevets, moyennant paiement de la taxe prévue à l'article 33 de l'annexe II, le nom de **toute maison d'affaires dont le nom d'au moins un membre est inscrit au registre des agents de brevets.**

En ce qui concerne la liste des agents de marques de commerce, le paragraphe 28(2) de la *Loi sur les marques de commerce* prévoit que la liste des agents de marques de commerce comporte les noms des personnes et études habilitées à représenter les intéressés dans la présentation et la poursuite des demandes d'enregistrement des marques de commerce et de toute affaire devant le Bureau des marques de commerce. Aux termes de l'alinéa 21d) du *Règlement sur les marques de commerce* (1996), le registraire, sur demande écrite et sur paiement du droit prévu à l'article 19 de l'annexe, inscrit sur la liste des agents de marques de commerce le nom de **toute firme dont le nom d'au moins un membre est inscrit sur la liste à titre d'agent de marques de commerce.**

La législation actuelle sur les brevets et celle sur les marques de commerce prévoient donc que des firmes peuvent agir en tant qu'agents auprès des Bureaux, à condition que l'un de leurs membres soit inscrit au registre ou à la liste des agents. Il est généralement admis que le terme « firme » inclut les sociétés (en anglais « partnerships ») et les Bureaux ont déjà autorisé des sociétés en nom collectif (en anglais « general partnerships ») ainsi que des sociétés à responsabilité limitée

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(en anglais « limited liability partnerships ») à être inscrites au registre ou à la liste des agents. Les Bureaux considèrent que les sociétés en commandite sont aussi des firmes et qu'elles ont le droit d'agir en tant qu'agents auprès des Bureaux.

Therefore, commencing immediately, the Offices will enter upon request, on the register or list of agents, limited partnerships that otherwise meet the requirements set out in the patent and trade-mark legislation.

En conséquence, sur demande, les Bureaux inscriront désormais au registre, ou à la liste des agents, les sociétés en commandite qui répondent aux exigences de la *Loi sur les brevets et de la Loi sur les marques de commerce*.

The Offices, however, continue to consider that the current patent and trade-mark legislation do not allow corporations to be entered on the register or list of agents, since corporations do not have members and therefore cannot meet the requirements set out in paragraph 15(c) of the *Patent Rules* and paragraph 21(d) of the *Trade-mark Regulations* (1996).

Les Bureaux continuent toutefois de considérer que la législation actuelle sur les brevets et les marques de commerce ne permet pas aux compagnies (en anglais « corporations ») d'être inscrites au registre ou à la liste des agents, étant donné que les compagnies n'ont pas de membres et ne peuvent donc pas satisfaire aux exigences de l'alinéa 15c) des *Règles sur les brevets* et de l'alinéa 21d) du *Règlement sur les marques de commerce* (1996).

## 14. Correspondence Procedures

The correspondence procedures and the related practice for written communications to the Commissioner of Patents and the Patent Office under the Patent Act and the Patent Rules is outlined in Chapter 2 of the Manual of Patent Office Practice (MOPOP).

Web Link for MOPOP:

[http://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h\\_wr00720.html](http://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr00720.html)

The correspondence procedures and the related practice of written communications with respect to Trademarks and to Industrial Design can be found in the Practice Notice entitled [Correspondence Procedures](#), available on CIPO's website.

CIPO Web Link for correspondence procedures pertaining to Trademarks and Industrial Design:

<https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/wr00633.html>

Publication date: May 10, 2017

Amendment date: June 17, 2019

### On this page:

1. Physical Delivery of Correspondence and Written Communications to CIPO
2. Electronic Correspondence
3. Details Concerning the Electronic Formats Accepted
4. General Information
5. Time Period Extensions
6. Procedures in Case of an Unexpected Office Closure at CIPO

## 14. Procédures de correspondance

Les procédures de correspondance et les pratiques connexes de communication écrite au commissaire aux brevets ou au Bureau des brevets en vertu de la Loi sur les brevets et des Règles sur les brevets seront exposées dans le chapitre 2 du Recueil des pratiques du Bureau des brevets (RPBB).

Lien Web pour le RPBB :

[http://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/fra/h\\_wr00720.html](http://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/fra/h_wr00720.html)

Les procédures de correspondance et les pratiques connexes de communication écrite concernant les marques de commerce et les dessins industriels se trouvent dans le document intitulé [Procédures de correspondance](#), consultable sur le site Web de l'OPIC.

Lien Web de l'OPIC pour les procédures de correspondance relatives aux marques de commerce et aux dessins industriels :

<https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/fra/wr00633.html>

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7. Procedures when CIPO is Open to the Public but Clients are Unable to Communicate with the Office
8. Intellectual Property Acts, Rules and Regulation

7. Procédures à suivre lorsque l'Office est ouvert au public, mais les clients sont incapables de communiquer avec l'Office
8. Lois, règles et règlements sur la propriété intellectuelle

This notice is intended to clarify the practice of the Canadian Intellectual Property Office with respect to correspondence procedures and written communications and replaces all previous notices.

Le présent énoncé de pratique a pour but de préciser la pratique de l'Office de la propriété intellectuelle du Canada relativement aux procédures de correspondance et de communications écrites et remplace tout avis antérieur.

### 1. Physical Delivery of Correspondence and Written Communications to CIPO

For the purposes of sections 5 and 54 of the Patent Rules, subsection 10(1) of the Trademarks Regulations, section 2 of the Copyright Regulations, section 4 of the Industrial Design Regulations and section 3 of the Integrated Circuit Topography Regulations, the address of the Patent Office, the Office of the Registrar of Trademarks, the Copyright Office, the Industrial Design Office, and the Office of the Registrar of Topographies (hereinafter sometimes collectively referred to as "CIPO") is:

Canadian Intellectual Property Office  
Place du Portage I  
50 Victoria Street, Room C-114  
Gatineau QC K1A 0C9

In accordance with subsections 5(2), 5(3), 54(1) and 54(2) of the Patent Rules, subsection 10(2) of the Trademarks Regulations, subsections 2(2) and (3) of the Copyright Regulations, subsection 5(1) of the Industrial Design Regulations and subsections 3(2) and (3) of the Integrated Circuit Topography Regulations, correspondence and written communications delivered to the above address between 8:30 a.m. to 4:30 p.m. (Eastern Time) Monday to Friday is deemed to have been received on the actual date of their delivery if they are delivered when CIPO is open to the public.

Correspondence delivered at a time when CIPO is closed to the public will be deemed or considered to have been received on the day on which CIPO is next open to the public.

Please be advised that once correspondence is received by CIPO it cannot be returned to the sender, even if the sender states that the correspondence was sent by mistake. Exceptionally, in cases where correspondence is related to a patent application that does not meet the requirements under subsection 27.1(1) of the Patent Act for obtaining a filing date, the documents will be returned to the sender.

The Fee Payment Form should always be submitted as a covering document and should be the only document submitted

### 1. Remise physique de correspondance et communications écrites à l'OPIC

Pour l'application des articles 5 et 54 des Règles sur les brevets, du paragraphe 10(1) du Règlement sur les marques de commerce, de l'article 2 du Règlement sur le droit d'auteur, de l'article 4 du Règlement sur les dessins industriels et de l'article 3 du Règlement sur les topographies de circuits intégrés, l'adresse du Bureau des brevets, du Bureau du registraire des marques de commerce, du Bureau du droit d'auteur, du Bureau des dessins industriels, et du Bureau du registraire des topographies (ci-après parfois collectivement appelés « OPIC ») est la suivante :

Office de la propriété intellectuelle du Canada  
Place du Portage I  
50, rue Victoria, pièce C-114  
Gatineau (Québec) K1A 0C9

Conformément aux paragraphes 5(2), 5(3), 54(1) et 54(2) des Règles sur les brevets, du paragraphe 10(2) du Règlement sur les marques de commerce, des paragraphes 2(2) et (3) du Règlement sur le droit d'auteur, du paragraphe 5(1) du Règlement sur les dessins industriels et des paragraphes 3(2) et (3) du Règlement sur les topographies de circuits intégrés, la correspondance et les communications écrites ayant été remises à l'adresse ci-dessus entre 8h30 et 16h30 (Heure de l'Est) du lundi au vendredi seront réputées avoir été reçues le jour de leur remise, si elles sont remises alors que l'OPIC est ouvert au public.

La correspondance remise lorsque les bureaux de l'OPIC sont fermés au public sera réputée avoir été reçue le jour de la réouverture de l'OPIC au public.

Veuillez prendre note qu'une fois que l'OPIC reçoit de la correspondance, celle-ci ne peut pas être retournée à l'expéditeur, même si l'expéditeur indique que la correspondance a été envoyée par erreur. Exceptionnellement, dans le cas où la correspondance vise une demande de brevet qui ne rencontre pas les exigences du paragraphe 27.1(1) de la Loi sur les brevets pour l'obtention d'une date de dépôt, les documents seront retournés à l'expéditeur.

Le formulaire de paiements des frais devrait toujours être

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to CIPO that contains financial information, such as credit card numbers.

Download the [Fee Payment Form](#).

### 1.1 Designated Establishments

For the purposes of subsections 5(4) and 54(3) of the Patent Rules, subsection 10(1) of the Trademarks Regulations, subsection 2(4) of the Copyright Regulations, section 4 of the Industrial Design Regulations and subsection 3(4) of the Integrated Circuit Topography Regulations, the following are the designated establishments or designated offices to which correspondence addressed to the Commissioner of Patents, the Registrar of Trademarks, the Copyright Office, the Industrial Design Office or the Registrar of Topographies may be delivered **in person**. Please note that documents, payments and payment instructions delivered to the addresses listed below **must be enclosed in a sealed envelope** and that **no in person payment transactions** are processed on site. The ordinary business hours for each designated establishment are listed below.

- Innovation, Science and Economic Development  
Canada  
C.D. Howe Building  
235 Queen Street, Room S-143  
Ottawa ON K1A 0H5  
Tel.: 343-291-3436

8:30 a.m. to 4:30 p.m. (local time) Monday to Friday,  
except statutory holidays

- Innovation, Science and Economic Development  
Canada  
Sun Life Building  
1155 Metcalfe Street, Room 950  
Montreal QC H3B 2V6  
Tel.: 514-496-1797  
Toll-free: 1-888-237-3037

8:30 a.m. to 4:30 p.m. (local time) Monday to Friday,  
except statutory holidays

- Innovation, Science and Economic Development  
Canada  
151 Yonge Street, 4th Floor  
Toronto ON M5C 2W7  
Tel.: 416-973-5000

8:30 a.m. to 4:30 p.m. (local time) Monday to Friday,

fourni comme page couverture et devrait être le seul document soumis à l'OPIIC contenant de l'information financière telle que les numéros de carte de crédit.

Téléchargez le [formulaire de paiement des frais](#).

### 1.1 Établissements désignés

Pour l'application des paragraphes 5(4) et 54(3) des Règles sur les brevets, du paragraphe 10(1) du Règlement sur les marques de commerce, du paragraphe 2(4) du Règlement sur le droit d'auteur, de l'article 4 du Règlement sur les dessins industriels et du paragraphe 3(4) du Règlement sur les topographies de circuits intégrés, la correspondance adressée au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur, au Bureau des dessins industriels ou au registraire des topographies peut être remise **en personne** aux établissements ou bureaux désignés suivants. Veuillez prendre note que les documents, paiements et instructions de paiements remis aux adresses énumérées ci-dessous doivent être **inclus dans une enveloppe scellée** et qu'**aucune transaction de paiement en personne** n'est traitée sur place. Les heures normales d'ouverture pour chaque établissement désigné sont indiquées ci-dessous.

- Innovation, Sciences et Développement économique  
Canada  
Édifice C.D. Howe  
235, rue Queen, pièce S-143  
Ottawa (Ontario) K1A 0H5  
Tél. : 343-291-3436

8 h 30 à 16 h 30 (heure locale) du lundi au vendredi, à  
l'exception des jours fériés

- Innovation, Sciences et Développement économique  
Canada  
Édifice Sun Life  
1155, rue Metcalfe, bureau 950  
Montréal (Québec) H3B 2V6  
Tél. : 514-496-1797  
Sans frais : 1-888-237-3037

8 h 30 à 16 h 30 (heure locale) du lundi au vendredi, à  
l'exception des jours fériés

- Innovation, Sciences et Développement économique  
Canada  
151, rue Yonge, 4e étage  
Toronto (Ontario) M5C 2W7  
Tél. : 416-973-5000

8 h 30 à 16 h 30 (heure locale) du lundi au vendredi, à

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except statutory holiday

l'exception des jours fériés

- Innovation, Science and Economic Development  
Canada  
Canada Place  
9700 Jasper Avenue, Suite 725  
Edmonton AB T5J 4C3  
Tel.: 780-495-4782  
Toll-free: 1-800-461-2646

- Innovation, Sciences et Développement économique  
Canada  
Canada Place  
9700, avenue Jasper, pièce 725  
Edmonton (Alberta) T5J 4C3  
Tél. : 780-495-4782  
Sans frais : 1-800-461-2646

8:30 a.m. to 4:30 p.m. (local time) Monday to Friday,  
except statutory holidays

8 h 30 à 16 h 30 (heure locale) du lundi au vendredi, à  
l'exception des jours fériés

- Innovation, Science and Economic Development  
Canada  
Library Square  
300 West Georgia Street, Suite 2000  
Vancouver BC V6B 6E1  
Tel.: 604-666-5000

- Innovation, Sciences et Développement économique  
Canada  
Library Square  
300, rue Georgia Ouest, pièce 2000  
Vancouver (C.-B.) V6B 6E1  
Tél. : 604-666-5000

8:30 a.m. to 4:30 p.m. (local time) Monday to Friday,  
except statutory holidays

8 h 30 à 16 h 30 (heure locale) du lundi au vendredi, à  
l'exception des jours fériés

In accordance with subsections 5(4), 5(5), 54(3) and 54(4) of the Patent Rules, subsection 10(3) of the Trademarks Regulations, subsections 2(4) and (5) of the Copyright Regulations, subsection 5(2) of the Industrial Design Regulations and subsections 3(4) and (5) of the Integrated Circuit Topography Regulations, correspondence delivered to a designated establishment on a day when CIPO is open to the public will be deemed or considered to be received on the day on which they are delivered to that designated establishment. If CIPO is closed to the public, correspondence will be deemed or considered to be received on the day on which CIPO is next open to the public. For example, if correspondence intended for CIPO is delivered to the designated establishment in Toronto on June 24, it will not be considered to be received on June 24 as CIPO is closed on that day (St-Jean-Baptiste Holiday in Quebec). It will be deemed received on the day on which CIPO is next open to the public.

Conformément aux paragraphes 5(4), 5(5), 54(3) et 54(4) des Règles sur les brevets, au paragraphe 10(3) du Règlement sur les marques de commerce, aux paragraphes 2(4) et (5) du Règlement sur le droit d'auteur, au paragraphe 5(2) du Règlement sur les dessins industriels et aux paragraphes 3(4) et (5) du Règlement sur les topographies de circuits intégrés, la correspondance remise à l'un des établissements désignés susmentionnés lorsque les bureaux de l'OPIC sont ouverts au public sera réputée ou considérée avoir été reçue le jour de leur remise à cet établissement désigné. Si les bureaux de l'OPIC sont fermés au public, la correspondance sera réputée ou considérée avoir été reçue à le jour de la réouverture de l'OPIC au public. Par exemple, la correspondance adressée à l'OPIC remise à l'établissement désigné de Toronto le 24 juin ne sera pas considérée avoir été reçue le 24 juin puisque les bureaux de l'OPIC sont fermés ce jour-là (la Saint-Jean Baptiste est un jour férié au Québec). La correspondance sera alors réputée avoir été reçue le jour de la réouverture des bureaux de l'OPIC au public.

### 1.2. Registered Mail™ and Xpresspost™ services of Canada Post

For the purposes of subsections 5(4) and 54(3) of the Patent Rules, subsection 3(4) of the Trade-marks Regulations, subsection 2(4) of the Copyright Regulations, subsection 3(4) of the Industrial Design Regulations and subsection 3(4) of the Integrated Circuit Topography Regulations, the Registered Mail™ and Xpresspost™ services of Canada Post are designated establishments or designated offices to which

### 1.2. Services Courrier recommandé<sup>MC</sup> et Xpresspost<sup>MC</sup> de Postes Canada

Pour l'application des paragraphes 5(4) et 54(3) des Règles sur les brevets, du paragraphe 10(1) du Règlement sur les marques de commerce, du paragraphe 2(4) du Règlement sur le droit d'auteur, de l'article 4 du Règlement sur les dessins industriels et du paragraphe 3(4) du Règlement sur les topographies de circuits intégrés, les services Courrier recommandé<sup>MC</sup> et Xpresspost<sup>MC</sup> de Postes Canada sont des établissements ou des

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correspondence addressed to the Commissioner of Patents, the Registrar of Trade-marks, the Copyright Office or the Registrar of Topographies may be delivered.

CIPO considers that correspondence delivered through the Registered Mail™ and Xpresspost™ services of Canada Post is received by CIPO on the day indicated on the mailing receipt provided by Canada Post, or if CIPO is closed for business on that day, on the day when CIPO is next open for business.

### 2. Electronic Correspondence

For the purposes of section 8.1 of the Patent Act, subsection 64(1) of the Trademarks Act, subsection 24.1(1) of the Industrial Design Act and in accordance with subsections 5(6), 54(5), and 68(3) of the Patent Rules, subsection 10(4) of the Trademarks Regulations, subsection 2(6) of the Copyright Regulations, subsection 10(3) of the Industrial Design Regulations, and subsection 3(6) of the Integrated Circuit Topography Regulations, correspondence addressed to the Commissioner of Patents, the Registrar of Trademarks, the Copyright Office, the Industrial Design Office or the Registrar of Topographies may be sent by facsimile, online or on an electronic medium only as provided in the current notice.

In accordance with subsection 54(5) of the Patent Rules, the request for national entry is the only correspondence addressed to the Commissioner in respect of an international application that can be submitted online or on an electronic medium with the exception of sequence listings, applications prepared using the PCT-SAFE software or prepared using WIPO's ePCT online service as specified in the current notice. Other correspondence submitted online or on an electronic medium in respect of international applications that have not entered the national phase will not be accepted.

Subsection 10(5) of the Trademarks Regulations specifies certain categories of correspondence to which the provisions of subsection 10(4) do not apply.

Correspondence sent by facsimile or online to the Commissioner of Patents, the Registrar of Trademarks, the Copyright Office, the Industrial Design Office or the Registrar of Topographies constitutes the original, therefore a duplicate paper copy should not be forwarded.

Correspondence delivered to the Commissioner of Patents by electronic means of transmission, including facsimile, will be considered to be received on the day that it is transmitted if delivered and received before midnight local time at CIPO on a day when CIPO is open for business. When CIPO is closed for business, correspondence delivered on that day will be considered to be received on the next day on which CIPO is

bureaux désignés auxquels la correspondance adressée au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur, au Bureau des dessins industriels ou au registraire des topographies peut être remise.

L'OPIC considère que la correspondance remise par l'entremise des services Courrier recommandé<sup>MC</sup> et Xpresspost<sup>MC</sup> de Postes Canada sont reçus par l'OPIC le jour indiqué sur le reçu de confirmation de Postes Canada, en autant que l'OPIC soit ouvert au public ce jour-là. Si l'OPIC est fermé au public ce jour-là, la correspondance sera réputée ou considérée avoir été reçue le jour de réouverture de l'OPIC au public.

### 2. Correspondance électronique

Pour l'application de l'article 8.1 de la Loi sur les brevets, du paragraphe 64(1) de la Loi sur les marques de commerce, du paragraphe 24.1(1) de la Loi sur les dessins industriels, et conformément aux paragraphes 5(6), 54(5) et 68(3) des Règles sur les brevets, au paragraphe 10(4) du Règlement sur les marques de commerce, au paragraphe 2(6) du Règlement sur le droit d'auteur, au paragraphe 10(3) du Règlement sur les dessins industriels et au paragraphe 3(6) du Règlement sur les topographies de circuits intégrés, la correspondance adressée au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur, au Bureau des dessins industriels ou au registraire des topographies peut être transmise par télécopieur, en ligne ou à l'aide d'un support électronique et ce, seulement de la manière indiquée dans le présent énoncé.

Conformément au paragraphe 54(5) des Règles sur les brevets, la demande d'entrée en phase nationale d'une demande internationale est la seule correspondance adressée au commissaire qui peut être présentée en ligne ou sur support électronique, à l'exception des listages de séquences, des demandes préparées à l'aide du logiciel PCT-SAFE ou préparées à l'aide du service en ligne ePCT de l'OMPI, tel qu'indiqué dans le présent avis. Toute autre correspondance présentée en ligne ou sur support électronique relativement à des demandes internationales qui ne sont pas entrées dans la phase nationale ne sera pas acceptée.

Le paragraphe 10(5) du Règlement sur les marques de commerce prévoit certaines catégories de correspondance auxquelles les dispositions du paragraphe 10(4) ne s'appliquent pas.

La correspondance envoyée par télécopieur ou en ligne au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur, au Bureau des dessins industriels ou au registraire des topographies constitue une version originale. Par conséquent, un duplicata sur support papier ne devrait pas être expédié.

La correspondance livrée au commissaire aux brevets et reçue par voie électronique, y compris par télécopieur, est considérée comme ayant été reçue à l'OPIC le jour même de sa transmission, si elle est livrée avant minuit, heure locale,

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open for business.

Correspondence delivered to the Registrar of Trademarks or the Industrial Design Office by electronic means of transmission, including facsimile, is deemed to have been received on the day on which CIPO receives it (Eastern Time).

### 2.1 Facsimile

Black and white facsimile correspondence addressed to the Commissioner of Patents, the Registrar of Trademarks, the Copyright Office, the Industrial Design Office or the Registrar of Topographies may be sent to the following facsimile numbers:

(819) 953-CIPO (2476) or (819) 953-OPIC (6742)

Colour facsimile correspondence addressed to the Registrar of Trademarks or the Industrial Design Office **must** be sent to the following facsimile number:

(819) 934-3833

Note that the model of facsimile is a Xerox C505/X and that this information may be needed to ensure a successful colour transmission.

Facsimile correspondence that is sent to any facsimile number other than those indicated above, including those of a designated establishment, will be considered not to have been received.

Evidence submitted by facsimile in respect of an opposition or section 45 proceeding **will not be accepted** due to issues such as the often-poor quality of transmission, the risk of incomplete transmission and the voluminous nature of the documents.

The electronic transmittal report returned to you following your facsimile transmission will constitute your acknowledgment receipt. Confidentiality of the facsimile transmission process cannot be guaranteed. Please note that CIPO strongly discourages the use of a computer facsimile interface or internet-based facsimile services due to technical issues with reception.

When submitting by facsimile a document that also has a fee requirement, notification of the preferred mode of payment to be applied must be prominently displayed on the Fee Payment Form to ensure expedient processing.

lorsque les bureaux de l'OPIC sont ouverts au public. Si elle est transmise un jour où les bureaux de l'OPIC sont fermés au public, elle est considérée comme ayant été reçue à la date du jour d'ouverture suivant de l'OPIC.

La correspondance fournie au registraire des marques de commerce ou transmise au Bureau des dessins industriels par voie électronique, y compris par télécopieur, est réputée avoir été reçue le jour où l'OPIC l'a reçue (Heure de l'Est).

### 2.1 Correspondance par télécopieur

La correspondance en noir et blanc par télécopieur adressée au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur, au Bureau des dessins industriels ou au registraire des topographies peut être transmise aux numéros ci-dessous :

819-953-OPIC (6742) ou 819-953-CIPO (2476)

La correspondance en couleur par télécopieur (modèle : Xerox C505/X) adressée au registraire des marques de commerce ou au Bureau des dessins industriels doit être transmise au numéro ci-dessous :

(819) 934-3833

À noter que le modèle de télécopieur est un Xerox C505/X; information qui peut être nécessaire afin de compléter une transmission en couleur.

La correspondance qui est transmise par télécopieur à tout autre numéro de télécopieur que ceux qui sont indiqués ci-dessus, y compris ceux d'établissements désignés, sera considérée comme n'ayant pas été reçue.

Les éléments de preuve présentés par télécopieur dans le cadre d'une procédure d'opposition ou de radiation en vertu de l'article 45 de la Loi **ne seront pas acceptés** en raison des inconvénients reliés à la mauvaise qualité de la transmission, au risque que la transmission soit incomplète et à la nature volumineuse de ces documents.

Le rapport de transmission électronique que vous recevrez après votre transmission par télécopieur constituera votre accusé de réception. La confidentialité du processus de transmission électronique ne peut pas être garantie. Veuillez noter que l'OPIC décourage fortement l'utilisation d'une interface de télécopie par ordinateur ou de services de télécopie par le biais d'internet étant donné les problèmes techniques probables avec la réception.

Lors de la transmission par télécopieur d'un document comprenant une demande d'acquiescement de droit ou taxe, il faut clairement indiquer le mode de paiement préféré sur le formulaire de paiements des frais afin d'assurer un traitement rapide.

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### Patents

The document presentation requirements set out in sections 69 and 70 of the Patent Rules apply to facsimile correspondence.

### 2.2 Online

Correspondence addressed to the Commissioner of Patents, the Registrar of Trade-marks, the Copyright Office or the Registrar of Topographies may be sent electronically using the relevant links below.

### Patents

For the purpose of subsection 5(6) of the Patent Rules, correspondence addressed to the Commissioner may be sent electronically by accessing the following pages:

- [filing an application](#) (regular application);
- [filing a request for national entry](#);
- [filing an international application](#) (PCT Safe or ePCT);
- [general correspondence relating to applications and patents](#);
- [maintaining the name of a patent agent on the register of patent agents](#); and
- [ordering copies in paper, or electronic form of a document](#).

### Canada as Receiving Office Under the PCT: PCT-SAFE

Pursuant to PCT Rule 89bis, CIPO, in its role as a receiving Office, accepts the electronic filing of an international application prepared using the latest version of the WIPO's PCT-Safe software and applications prepared using WIPO's ePCT online service. Filing in both cases must be done using CIPO's International Filing e-service, called [PCT E-Filing](#).

**Note:** Correspondence related to PCT international applications can not be sent electronically to CIPO. Correspondence may be sent by mail, by facsimile or delivered by hand to CIPO or to a [designated establishment](#).

### Trademarks

For the purpose of subsection 10(4) of the Trademarks Regulations, the following correspondence addressed to the Registrar of Trademarks may be sent electronically by

### Brevets

Les exigences relatives à la présentation des documents énoncées aux articles 69 et 70 des Règles sur les brevets s'appliquent à la correspondance par télécopieur.

### 2.2 En ligne

La correspondance adressée au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur ou au registraire des topographies peut être transmise par voie électronique.

### Brevets

Pour l'application du paragraphe 5(6) des Règles sur les brevets, la correspondance adressée au commissaire peut être envoyée par voie électronique, notamment en accédant aux pages suivantes :

- [déposer une demande](#) (demande régulière);
- [déposer une demande d'entrée dans la phase nationale](#);
- [déposer une demande internationale](#) (PCT Safe ou ePCT);
- [correspondance générale concernant des demandes et des brevets](#);
- [maintien du nom d'un agent de brevets dans le registre des agents de brevets](#);
- [commande de copies papier ou d'un document sous forme électronique](#).

### Le Canada comme office récepteur au titre du PCT : PCT-SAFE et ePCT

Conformément à la Règle 89bis du PCT, l'OPIC, à titre d'office récepteur, accepte le dépôt d'une demande internationale préparée à l'aide de la plus récente version du logiciel PCT-SAFE de l'OMPI, et d'une demande préparée à l'aide du service en ligne ePCT de l'OMPI. Dans les deux cas, le dépôt doit se faire à l'aide du service électronique de dépôt de demandes internationales de l'OPIC, appelé [Dépôt en ligne de demandes PCT](#).

**Note:** La correspondance liée aux demandes internationales PCT ne peut être envoyée par voie électronique à l'OPIC. La correspondance peut être envoyée par courrier, par télécopieur ou remis en mains à l'OPIC ou à un [établissement désigné](#).

### Marques de commerce

Pour l'application du paragraphe 10(4) du Règlement sur les marques de commerce, la correspondance adressée au registraire des marques de commerce peut être envoyés par voie électronique, notamment en accédant aux pages suivantes



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accessing the following pages:

- [filing a new or revised trademark application](#);
- [renewal of a trademark registration](#);
- [request to enter a name on the list of trademark agents](#);
- [annual renewal of a trademark agent](#);
- [requesting copies of trademark documents](#);
- [registration of a trademark application](#);

For the purpose of subsection 10(4) of the Trademarks Regulations, correspondence addressed to the Registrar of Trademarks in the context of opposition and section 45 proceedings may be sent electronically by accessing the [Trademarks Opposition Board's online web application](#):

### *Opposition proceedings before the Trademarks Opposition Board*

- filing a statement of opposition;
- filing of a counter statement;
- submission of the opponent's evidence, or statement;
- submission of the applicant's evidence, or statement;
- submission of the opponent's reply evidence;
- submission of the opponent's written representations, or statement;
- submission of the applicant's written representations, or statement;
- filing a request for a hearing; and
- requesting an extension of time.

### *Section 45 proceedings before the Trademarks Opposition Board*

- filing a request for a section 45 notice;
- submission of the registered owner's evidence;
- submission of the requesting party's written representations, or statement;
- submission of the registered owner's written representations, or statement;
- filing a request for a hearing; and
- requesting an extension of time.

## Copyright

:

- [nouvelle demande ou demande modifiée d'enregistrement de marque de commerce](#);
- [renouvellement de l'enregistrement d'une marque de commerce](#);
- [demande d'inscription d'un nom à la liste des agents de marques de commerce](#);
- [renouvellement annuel d'un agent de marques de commerce](#);
- [commande de copies de documents de marques de commerce](#);
- [l'enregistrement d'une marque de commerce](#)

Pour l'application du paragraphe 10(4) du Règlement sur les marques de commerce, la correspondance adressée au registraire des marques de commerce dans le cadre des procédures d'opposition ou de radiation en vertu de l'article 45 peut être envoyée par voie électronique en accédant à [l'application web en ligne de la Commission des oppositions des marques de commerce](#).

### *Procédures d'opposition devant la Commission des oppositions des marques de commerce*

- production d'une déclaration d'opposition;
- Production d'une contre-déclaration d'opposition;
- Production de la preuve de l'opposant, ou d'une déclaration;
- Production de la preuve du requérant, ou d'une déclaration;
- Production de la contre-preuve de l'opposant;
- Production des arguments écrits de l'opposant, ou déclarations;
- Soumission des arguments écrits du requérant, ou déclarations;
- Produire une demande pour une audience; et
- demande de prolongation de délai.

### *Procédures en vertu de l'article 45 devant la Commission des oppositions des marques de commerce*

- Production d'une demande pour un avis en vertu de l'article 45;
- Production de la preuve du propriétaire inscrit;
- Production des arguments écrits de la demanderesse, ou déclaration;
- Production des arguments écrits du propriétaire inscrit, ou déclaration;
- Produire une demande pour une audience; et
- Demande de prolongation de délai.

## Droits d'auteur

## Notices

For the purpose of subsection 2(6) of the Copyright Regulations, the following correspondence addressed to the Copyright Office may be sent electronically, by accessing the following pages:

- [application for registration of a copyright in a work](#),
- [application for registration of a copyright in a performer's performance, sound recording or a communication signal](#);
- [filing a grant of interest](#);
- [request for certificate of correction](#);
- [ordering copies in paper, or electronic form of a document](#); and
- [general correspondence relating to copyright](#).

## Industrial Designs

For the purpose of subsection 24.1(1) of the Industrial Design Act, the following correspondence addressed to the Industrial Design Office may be sent electronically, by accessing the following pages:

- [application for registration of an industrial design](#);
- [ordering copies in paper, or electronic form of a document](#);
- [general correspondence relating to industrial designs](#); and
- [payment of industrial design maintenance fees](#).

## Integrated Circuit Topographies

For the purpose of subsection 3(6) of the Integrated Circuit Topography Regulations, the following correspondence addressed to the Registrar of Topographies may be sent electronically, by accessing the following page:

- [general correspondence relating to integrated circuit topographies](#).

### 2.3 Electronic medium

**Note:** all electronic media must be free of worms, viruses or other malicious content. Files with malicious content will be deleted.

Pour l'application du paragraphe 2(6) du Règlement sur le droit d'auteur, la correspondance indiquée ci-dessous qui est adressée au Bureau du droit d'auteur peut être transmise par voie électronique, notamment en accédant aux pages suivantes :

- [demande d'enregistrement d'un droit d'auteur sur une œuvre](#),
- [demande d'enregistrement d'un droit d'auteur sur une prestation, un enregistrement sonore ou un signal de communication](#);
- [dépôt d'une concession d'intérêt](#);
- [demande de certificat de correction](#);
- [commande de copies des documents papier ou électroniques](#) et
- [correspondance générale relative aux droits d'auteur](#).

## Dessins industriels

Pour l'application du paragraphe 24.1(1) de la Loi sur les dessins industriels, la correspondance indiquée ci-dessous qui est adressée au Bureau des dessins industriels peut être transmise par voie électronique, notamment en accédant aux pages suivantes :

- [demande d'enregistrement d'un dessin industriel](#);
- [commande de copies de documents papier ou électroniques](#);
- [correspondance générale relative aux dessins industriels](#); et
- [paiement des droits de maintien des dessins industriels](#).

## Topographies de circuits intégrés

Pour l'application du paragraphe 3(6) du Règlement sur les topographies de circuits intégrés, la correspondance indiquée ci-dessous qui est adressée au registraire des topographies peut être transmise par voie électronique, notamment en accédant aux pages suivantes :

- [correspondance générale relative aux topographies de circuits intégrés](#).

### 2.3 Supports électroniques

**Note :** Les supports électroniques doivent être exempts de ver informatique, de virus, ou de tout autre contenu malveillant. Les fichiers qui comprennent du contenu malveillant seront supprimés.

## Brevets

## Patents

The Patent Office will accept correspondence on various types of electronic medium as specified below. The electronic medium should contain a table of contents and be provided with a cover letter, which will be date stamped by CIPO and placed in the application file. Filing date requirements prescribed in the Patent Rules still remain.

When submitted on an electronic medium, the parts of the application must be logically broken down in files, which are no larger than 25 megabytes.

With regards to sequence listings under Rule 111 of the Patent Rules, the electronic medium must be separate from any electronic medium which may be filed containing parts of the application itself or amendment(s) thereof.

### Canada as Receiving Office Under the PCT: Electronic Filing of Sequence Listings

Pursuant to PCT Rules 89bis and 89ter, and in accordance with Part 7 of the PCT Administrative Instructions, where an international application contains disclosure of one or more nucleotide and/or amino acid sequence listings, CIPO, in its role as a receiving Office, accepts that the sequence listing part of the description and/or any table related to the sequence listing(s) be filed, at the option of the applicant:

- i. only on an electronic medium in electronic form in accordance with section 702 of Part 7 of the PCT Administrative Instructions; or
- ii. both on an electronic medium in electronic form and on paper in accordance with section 702 of Part 7 of the PCT Administrative Instructions;

provided that the other elements of the international application are filed as otherwise provided for under the PCT.

The sequence listing part of an international application filed in electronic form and related tables filed in electronic form shall comply with the relevant provisions of Annex C and C-bis of the PCT Administrative Instructions respectively.

For this purpose the Canadian receiving Office will accept any electronic media specified in Annex F of the PCT Administrative Instructions. Where both the sequence listing and the tables are filed in electronic form, the listing and the tables shall be contained on separate electronic media, which shall contain no other programs or files.

For the purpose of processing the international application, the Canadian receiving Office requires two (2) additional copies of

Le Bureau des brevets acceptera la correspondance transmise à l'aide de divers supports électroniques, tel qu'indiqué ci-dessous. Le support électronique devrait contenir une table des matières et être accompagné d'une lettre explicative, laquelle sera datée par l'OPIC et placée dans le dossier de la demande. Les exigences relatives à la date de dépôt énoncées dans les Règles sur les brevets resteront applicables.

Les parties d'une demande qui sont présentées sur support électronique doivent être logiquement réparties en fichiers de 25 mégaoctets au maximum.

En ce qui concerne les listages des séquences prévus à l'article 111 des Règles sur les brevets, le support électronique doit être distinct de tout support électronique qui peut être déposé et qui contient des parties de la demande elle-même ou des modifications relatives à la demande.

### Le Canada comme office récepteur au titre du PCT : Dépôt électronique des listages de séquences

Conformément aux Règles 89bis et 89ter du PCT et à la Partie 7 des Instructions administratives du PCT, lorsqu'une demande internationale contient la divulgation d'un ou de plusieurs listages des séquences de nucléotides et/ou d'acides aminés, à titre d'office récepteur l'OPIC accepte le dépôt de la partie de la description contenant les listages des séquences et/ou de tout tableau relatif aux listages des séquences et ce, à la discrétion du requérant :

- i. seulement sous forme électronique et sur support électronique, conformément à l'article 702 de la Partie 7 des Instructions administratives du PCT, ou
- ii. sur support papier et sur support électronique sous forme électronique, conformément à l'article 702 de la Partie 7 des Instructions administratives du PCT,

à condition que les autres éléments de la demande internationale soient déposés conformément aux dispositions du PCT.

Dans une demande internationale déposée sous forme électronique, la partie qui contient le listage des séquences et les tableaux connexes seront conformes aux dispositions pertinentes de l'Annexe C et de l'Annexe C-bis des Instructions administratives du PCT, respectivement.

À cette fin, l'office récepteur canadien acceptera tout support électronique prévu à l'Annexe F des Instructions administratives du PCT. Lorsque le listage des séquences et les tableaux sont déposés sous forme électronique, ils le seront sur des supports électroniques distincts ne contenant pas d'autres programmes ni fichiers.

## Notices

the electronic media containing the sequence listing and/or tables in electronic form, accompanied by a statement that the sequence listings and/or tables contained in the copies are identical to those in electronic form as filed.

For further details concerning the filing of sequence listings and/or tables in electronic form, including the labeling of the electronic media and the calculation of the international filing fee, refer to section 7 of the PCT Administrative Instructions.

### Electronic Media accepted by the Patent Office

The Patent Office will accept 3.5 inch diskette, CD-ROM, CD-R, DVD, DVD-R and any format as specified in Annex F of the PCT Administration Instructions.

### Trademarks and Industrial Design

The Office of the Registrar of Trademarks and the Industrial Design Office will accept the following types of electronic media: CD-ROM, CD-R, DVD, DVD-R, and USB stick.

## 3. Details Concerning the Electronic Formats Accepted

### Patents

In accordance with section 8.1 of the Patent Act, and for the purposes of subsections 5(6), 54(5), and 68(3) of the Patent Rules, the acceptable file formats for documents submitted electronically site using the relevant links set out in [section 2.2](#) of these correspondence procedures or on electronic media are TIFF and PDF. In order to get a correspondence date, the office will accept documents initially filed in other formats provided they are viewable with the software "Stellent Quick View Plus 8.0.0". In these cases, the office will request the documents to be replaced by documents in PDF or TIFF and the submission of a statement to the effect that the replacement documents are the same as the documents initially filed.

Sequence listings can be initially provided in TIFF, PDF or in ASCII file formats. However, as a completion requirement according to section 94 of the Patent Rules, a sequence listing in the ASCII format compliant with the "PCT sequence listing standard" has to be submitted. Therefore, CIPO encourages applicants to submit the sequence listings in the ASCII format in the first place.

When applicable, the Patent Office will accept files in the

Aux fins du traitement de la demande internationale, l'office récepteur canadien exige deux (2) copies supplémentaires du support électronique contenant le listage de séquences et/ou les tableaux sous forme électronique, accompagnées d'une déclaration indiquant que le listage des séquences et/ou les tableaux contenus dans les copies sont identiques à ceux qui ont été déposés sous forme électronique.

On trouvera à l'article 7 des Instructions administratives du PCT des détails supplémentaires sur le dépôt de listages des séquences et/ou de tableaux sous forme électronique, notamment sur l'étiquetage des supports électroniques et le calcul de la taxe de dépôt internationale.

### Supports électroniques acceptés par le Bureau des brevets

Le Bureau de brevets acceptera des disquettes 3,5 pouces, CD-ROM, CD-R, DVD, DVD-R et tout format spécifié à l'Annexe F des Instructions administratives du PCT.

### Marques de commerce et dessins industriels

Le Bureau du registraire des marques de commerce et le Bureau des dessins industriels acceptent les supports électroniques suivants : CD ROM, CD-R, DVD, DVD-R, et clé USB.

## 3. Précisions concernant les formats électroniques acceptés

### Brevets

Conformément à l'article 8.1 de la Loi sur les brevets et aux fins des paragraphes 5(6), 54(5) et 68(3) des Règles sur les brevets, les formats de fichiers acceptables pour les documents présentés par voie électronique en utilisant les liens spécifiés à [l'article 2.2](#) des présentes procédures de correspondance ou sur support électronique sont les formats TIFF et PDF. Pour qu'une date de correspondance soit attribuée, le Bureau acceptera des documents initialement déposés dans d'autres formats à condition qu'ils soient consultables à l'aide du logiciel « Stellent Quick View Plus 8.0.0 ». Dans de tels cas, le Bureau exigera le remplacement des documents par des fichiers en format PDF ou TIFF, ainsi qu'une déclaration indiquant que ces fichiers sont identiques aux documents initialement déposés.

Les listages des séquences peuvent être initialement déposés sous forme de fichiers TIFF, PDF ou ASCII. Toutefois, afin de compléter la demande, conformément à l'article 94 des Règles sur les brevets, un listage des séquences en format ASCII conforme à la Norme PCT de listage des séquences devra être présenté. L'OPIC encourage donc les demandeurs à déposer les listages de séquences en format ASCII dès le départ.

## Avis

TIFF, PDF and ASCII format when they comply with the following specifications:

TIFF Format:

- TIFF CCITT Group 4, single or multi-page, black and white;
- Resolution of either 300 or 400 dpi;
- The dimensions of the scanned/stored images should match that of the paper requirements, namely 8 1/2" by 11" or A4.

PDF Format:

- Adobe Portable Document Format Version 1.4 compatible;
- Non-compressed text to facilitate searching;
- Unencrypted text;
- No embedded OLE objects;
- All fonts must be embedded and licensed for distribution.

ASCII

- Shall be encoded using IBM Code Page 437, IBM Code Page 932 or a compatible code page.

## Trademarks

For the purposes of subsection 64(1) of the Trademarks Act, the acceptable file formats for documents submitted electronically using the relevant links set out in [section 2.2](#) of these correspondence procedures are: PNG, TIFF, JPEG, GIF, MP3, MP4, PDF, BMP and Doc.

## Industrial Design

For the purposes of subsection 24.1(1) of the Industrial Design Act, the acceptable file formats for documents, other than a representation of a design, submitted electronically are WPD, DOC, DOCX and PDF. The acceptable file formats for the representation of a design are PDF, JPEG, TIFF and GIF. The file size limit is of 60MB for PDF, 10MB for the other file formats. The scanned/stored images should be of a resolution of at least 300 dpi and the dimensions must be of 21.59 cm by 27.94 cm (8.5 in by 11 in).

Note that the conversion of files to an acceptable format may result in a change to the quality of the drawings.

Le cas échéant, le Bureau des brevets acceptera des fichiers en format TIFF, PDF et ASCII s'ils sont conformes aux spécifications suivantes :

Format TIFF

- TIFF CCITT Groupe 4, une ou plusieurs pages, noir et blanc
- Résolution : 300 ou 400 ppp
- Les dimensions des images balayées par scanner ou mémorisées doivent être compatibles avec celles qui sont requises pour les papiers, soit 8 1/2 po par 11 po ou A4.

Format PDF

- Compatible avec Adobe Portable Document Format Version 1.4
- Texte non comprimé, pour faciliter la recherche
- Texte non chiffré
- Pas d'objets OLE incorporés
- Toutes les polices de caractère doivent être incorporées et leur distribution doit être autorisée.

ASCII

- Le texte sera encodé à l'aide des pages de codes IBM 437 ou IBM 932 ou d'une page de codes compatible.

## Marques de commerce

Pour l'application du paragraphe 64(1) de la Loi sur les marques de commerce, les formats de fichiers acceptables pour les documents fournis par un moyen électronique énoncé à la [section 2.2](#) des présentes procédures de correspondance sont : PNG, TIFF, JPEG, GIF, MP3, MP4, PDF, BMP et Doc.

## Dessins industriels

Pour l'application du paragraphe 24.1(1) de la Loi sur les dessins industriels, les formats de fichiers acceptables pour les documents autres que la représentation d'un dessin, transmis par voie électronique sont : WPD, DOC, DOCX, PDF. Les formats de fichiers acceptables pour la représentation d'un dessin sont PDF, JPEG, TIFF, et GIF. La taille maximale est de 60MB pour le format PDF et de 10MB pour tout autre format. L'image numérisée/stockée devrait être dans une résolution d'au moins 300 dpi et les dimensions doivent être de 21,59 cm par 27,94 cm (8,5 po par 11po)

Veillez noter que la conversion de fichiers vers un format acceptable pourrait résulter en un changement à la qualité des dessins.

## Notices

### 4. General Information

General information may be obtained by communicating with CIPO's [Client Service Centre](#).

### 5. Time Period Extensions

- [Time period extensions under the Patent, Trademarks and Industrial Design Acts](#)
- [Time period extensions under the Copyright and Integrated Circuit Topography Acts](#)
- [Time period extensions under the Patent Cooperation Treaty](#)
- [Time period extensions under the Madrid Protocol and the Hague Agreement](#)

#### Time period extensions under the Patent, Trademarks and Industrial Design Acts

For the purposes of subsection 78(1) of the Patent Act, subsection 66(1) of the Trademarks Act, and subsection 21(1) of the Industrial Design Act, any time period fixed under those Acts and ending on 1) a **prescribed day** set out in the list below or 2) a **designated day** on account of unforeseen circumstances, will be extended to the next day that is not a prescribed day or a designated day and where CIPO is open to the public.

**Designated days** are those days that are designated by the Commissioner, the Registrar, or the Minister, on account of unforeseen circumstances and if they are satisfied that it is in the public interest to do so. If a day is designated, the public will be informed of that fact on CIPO's website.

**Prescribed days** under the Patent Act, Trademarks Act and Industrial Design Act are as follows:

- Every Saturday and Sunday;
- New Year's Day (January 1)\*;
- Good Friday;
- Easter Monday;
- Victoria Day: First Monday immediately preceding May 25;
- St. Jean Baptiste Day (June 24)\*;
- Canada Day (July 1)\*;
- The first Monday in August;\*\*\*
- Labour Day: First Monday in September;
- Thanksgiving Day: Second Monday in October;

### 4. Renseignements généraux

Des renseignements généraux peuvent être obtenus en communiquant avec [le Centre de services à la clientèle de l'OPIC](#).

### 5. Prorogation des délais

- [Prorogation des délais en vertu des les Lois sur les brevets, les marques de commerce, et les dessins industriels](#)
- [Prorogation des délais en vertu des les Lois sur le droit d'auteur et les topographies de circuits intégrés](#)
- [Prorogation des délais en vertu du le Traité de coopération en matière de brevets](#)
- [Prorogation des délais en vertu du Protocole de Madrid et de l'Arrangement de La Haye](#)

#### Prorogation des délais prévus par les Lois sur les brevets, les marques de commerce, et les dessins industriels

Pour l'application du paragraphe 78(1) de la Loi sur les brevets, du paragraphe 66(1) de la Loi sur les marques de commerce, et du paragraphe 21(1) de la Loi sur les dessins industriels, tout délai fixé sous le régime de ces lois et qui expire 1) un **jour prescrit ou réglementaire** tel qu'indiqué dans la liste ci-dessous, ou 2) un **jour désigné** en raison de circonstances imprévues, sera prorogé jusqu'au jour suivant qui n'est ni un jour prescrit ni un jour désigné et où l'OPIC est ouvert au public.

Les **jours désignés** sont les jours désignés par le commissaire, le registraire, ou le ministre, où, en raison de circonstances imprévues, s'il est dans l'intérêt public de le faire. Si un jour est désigné, le public en sera informé sur le site web de l'OPIC.

Les **jours prescrits ou réglementaires** en vertu de la Loi sur les brevets, de la Loi sur les marques de commerce et de la Loi sur les dessins industriels sont les suivants :

- Tous les samedis et dimanches;
- Nouvel An (1<sup>er</sup> janvier)\*;
- Vendredi Saint;
- Lundi de Pâques;
- Fête de la Reine ou Journée nationale des patriotes : Premier lundi immédiatement avant le 25 mai;
- Saint-Jean-Baptiste (24 juin)\*;
- Fête du Canada (1<sup>er</sup> juillet)\*;
- Le premier lundi du mois d'août\*\*\*;
- Fête du travail : Premier lundi du mois de septembre;

## Avis

- Remembrance Day (November 11)\*;
- Christmas Day (December 25)\*\*;
- Boxing Day (December 26)\*\* ;
- Any day on which CIPO is closed to the public for all or part of that day during ordinary business hours.

\*In the case of New Year's Day, St. Jean Baptiste Day, Canada Day and Remembrance Day, if the day falls on a Saturday or Sunday, deadlines will be extended to the following Tuesday.

\*\*If December 25 falls on a Friday, deadlines will be extended to the following Tuesday. If December 25 falls on a Saturday or Sunday, any time periods ending on December 25 or December 26 will be extended to the following Wednesday.

\*\*\*Please note that the Office is open to the public on the first Monday in August. Any time period which expires on that day will be extended to the next day the Office is open to the public (first Tuesday in August). However, any correspondence or fees submitted to the Office on that day will be deemed or considered received on that day.

Extensions for prescribed days occur regardless of place of residence or of the establishment to which documents are delivered.

Please be aware that not all provincial and territorial holidays are days where deadlines are extended. It is recommended that clients be mindful and ensure that all deadlines are respected.

### Time period extensions under the Copyright and Integrated Circuit Topography Acts

In accordance with section 26 of the Interpretation Act, any person choosing to deliver a document to CIPO or a designated establishment (including the Registered Mail™ and Xpresspost™ services of Canada Post) where a federal, provincial or territorial holiday exists, is entitled to an extension of any time limit for the filing of the document that expires on the holiday, until the next day that is not a holiday. It is to be noted, in respect of provincial and territorial holidays, that the entitlement to the extension is dependent on the establishment to which the document is delivered and not on the place of residence of the person for whom the document is filed or of their agent. For this purpose, documents transmitted to CIPO by electronic means, including by facsimile, would be considered to be delivered to CIPO's offices in Gatineau, Quebec.

CIPO has no practical way of keeping track of the establishment to which documents are delivered. Accordingly,

- Action de Grâce : Deuxième lundi du mois d'octobre;
- Jour du Souvenir (11 novembre)\*;
- Jour de Noël (25 décembre)\*\*;
- Lendemain de Noël\*\* ;
- Tout jour où l'OPIC est fermé au public pendant tout ou une partie des heures normales d'ouverture de l'OPIC au public.

\*Si le Nouvel An, la Saint-Jean-Baptiste, la Fête du Canada, ou le Jour du Souvenir est un samedi ou un dimanche, les délais seront prorogés au mardi suivant.

\*\*Si le 25 décembre est un vendredi, les délais seront prorogés au mardi suivant. Si le 25 décembre est un samedi ou un dimanche, les délais seront prorogés au mercredi suivant.

\*\*\*Veuillez noter que les Bureaux sont ouverts au public le premier lundi du mois d'août. Tout délai qui expire ce jour-là sera prorogé au prochain jour ouvrable (premier mardi du mois d'août). Cependant, toute correspondance, droits ou taxes fournis au Bureau ce jour-là seront réputés ou considéré avoir été reçus à cette date.

La prorogation de délai concernant les jours prescrits ou réglementaires s'appliquent nonobstant du lieu de résidence ou du lieu de l'établissement auquel les documents ont été remis.

Veuillez noter que ce ne sont pas tous les jours fériés provinciaux ou territoriaux qui sont des jours prescrits ou réglementaires pour lesquels un délai peut être prorogé. Il est recommandé que les clients soient attentifs et s'assurent que tout délai soit respecté.

### Prorogation des délais prévus par les Lois sur le droit d'auteur et sur les topographies de circuits

Selon l'article 26 de la Loi d'interprétation, lorsqu'une personne choisit de livrer un document à l'OPIC ou à un établissement désigné (y compris un bureau régional d'Innovation, Sciences et Développement économique Canada ou le service Courrier recommandé<sup>MC</sup>, ou par Xpresspost<sup>MC</sup> de Postes Canada) dans une province où il y a un jour férié fédéral, provincial ou territorial, tout délai fixé pour le dépôt du document, qui expire un jour férié peut être prorogé jusqu'au jour non férié suivant. Dans le cas d'un jour férié provincial ou territorial, il convient de souligner que le droit à la prorogation dépend de l'établissement auquel le document est livré et non du lieu de résidence de la personne pour laquelle le document est déposé ou de son agent. À cet égard, les documents envoyés à l'OPIC par un moyen électronique, y compris par télécopieur, sont réputés être livrés aux bureaux de l'OPIC à Gatineau, au Québec.

En pratique, l'OPIC n'a aucun moyen de faire le suivi relativement aux établissements auxquels des documents sont

## Notices

where a person has a time limit for the filing of a document that expires on a provincial or territorial holiday but only delivers the document on the next day that is not a holiday, CIPO will assume that the document was delivered to an establishment that would justify an extension of the time limit. In such circumstances, it will be the responsibility of the person filing the document to ensure that he or she is properly entitled to any needed extension of the time limit.

### Time period extensions under the Patent Cooperation Treaty

Rule 80.5 of the Regulations under the PCT provides:

If the expiration of any period during which any document or fee must reach a national Office or intergovernmental organization falls on a day:

- i. on which such Office or organization is not open to the public for the purposes of the transaction of official business;
- ii. on which ordinary mail is not delivered in the locality in which such Office or organization is situated;
- iii. which, where such Office or organization is situated in more than one locality, is an official holiday in at least one of the localities in which such Office or organization is situated, and in circumstances where the national law applicable by that Office or organization provides, in respect of national applications, that, in such a case, such period shall expire on a subsequent day; or
- iv. which, where such Office is the government authority of a Contracting State entrusted with the granting of patents, is an official holiday in part of that Contracting State, and in circumstances where the national law applicable by that Office provides, in respect of national applications, that, in such a case, such period shall expire on a subsequent day;

the period shall expire on the next subsequent day on which none of the said four circumstances exists.

### Time period extensions under the Madrid Protocol and the Hague Agreement

If a period within which a communication must be received by the International Bureau of the World Intellectual Property Office would expire on a day on which the International

livrés. Par conséquent, si le délai pour le dépôt d'un document tombe un jour férié provincial ou territorial et qu'une personne le livre seulement le jour non férié suivant, l'OPIC tiendra pour acquis que le document a été livré à un établissement qui justifierait une prorogation du délai. Dans de telles circonstances, il incombe au déposant de s'assurer qu'il a droit à une telle prorogation.

### Prolongations de délais prévus au Traité de coopération en matière de brevets

La règle 80.5 du Règlement d'exécution du PCT prévoit ce qui suit :

Si un délai quelconque pendant lequel un document ou une taxe doit parvenir à un office national ou à une organisation intergouvernementale expire un jour :

- i. où cet office ou cette organisation n'est pas ouvert au public pour traiter d'affaires officielles;
- ii. où le courrier ordinaire n'est pas délivré dans la localité où cet office ou cette organisation est situé;
- iii. qui, lorsque cet office ou cette organisation est situé dans plus d'une localité, est un jour férié dans au moins une des localités dans lesquelles cet office ou cette organisation est situé, et dans le cas où la législation nationale applicable par cet office ou cette organisation prévoit, à l'égard des demandes nationales, que, dans cette situation, ce délai prend fin le jour suivant; ou
- iv. qui, lorsque cet office est l'administration gouvernementale d'un État contractant chargée de délivrer des brevets, est un jour férié dans une partie de cet État contractant, et dans le cas où la législation nationale applicable par cet office prévoit, à l'égard des demandes nationales, que, dans cette situation, ce délai prend fin le jour suivant;

Le délai prend fin le premier jour suivant auquel aucune de ces quatre circonstances n'existe plus.

### Prorogation des délais en vertu du Protocole de Madrid et de l'Arrangement de La Haye

Si un délai à l'intérieur duquel une communication doit être reçue par le Bureau international de l'Organisation mondiale de propriété intellectuelle expire un jour où le Bureau international n'est pas ouvert au public, le délai expirera lors du



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Bureau is not open to the public, it will expire on the next subsequent day on which the International Bureau is open. Likewise, if the period within which a communication (such as a notification of refusal of protection) must be sent by CIPO to the International Bureau would expire on a day on which CIPO is not open to the public, it will expire on the next subsequent day on which CIPO is open.

A list of the days on which the International Bureau is closed to the public during the current and the following calendar year is available on the [WIPO website](#).

### 6. Procedures in Case of an Unexpected Office Closure at CIPO

In case of unforeseen circumstances, CIPO will attempt to remain open to the public and ensure that essential service to our clients continues with the least possible disruption or delay.

In accordance with paragraph 27.01(n) of the Patent Rules, paragraph 15(n) of the Trademarks Regulations and paragraph 36(n) of the Industrial Design Regulations, whenever CIPO is closed to the public, for all or part of a day during ordinary business hours, including closures due to extraordinary circumstances, time periods will be extended to the next day that is not a prescribed or a designated day and where CIPO is open to the public.

For Copyright and Integrated Circuit Topography, if CIPO is closed to the public due to extraordinary circumstances, CIPO considers all time limits to be extended until the next day that it is open to the public. In such situations, mail delivered to CIPO or to designated establishments will be considered to be received on the date that CIPO re-opens to the public, with the exception of correspondence addressed to the Registrar of Topographies.

In view of the date-sensitive nature of intellectual property (IP), clients are advised to address important deadlines ahead of time to minimize the risk of affecting their IP rights. For the purposes of such deadlines, unless otherwise notified, clients should assume that all due dates remain in effect.

When possible during an emergency, information and search systems will continue to be available on our website; however, services provided through the Client Service Centre and other support areas within CIPO may be temporarily unavailable. Should an emergency occur, CIPO will post information with respect to [service interruptions](#) on our website as it becomes available and as circumstances permit.

Clients are **strongly encouraged** to send date-sensitive material through Canada Post by Registered Mail™ or Xpresspost™ or to use electronic means using the relevant links set out in [section 2.2](#) of these correspondence procedures. Documents may continue to be faxed to CIPO at 819-953-CIPO (953-2476). Date-sensitive material requiring fee

premier jour suivant où le Bureau international est ouvert au public. Similairement, si un délai à l'intérieur duquel une communication (tel qu'une notification de refus de la protection) doit être envoyée par l'OPIC au Bureau international expire un jour où les bureaux de l'OPIC sont fermés au public, ce délai expirera lors du premier jour suivant la réouverture de l'OPIC.

Une liste des jours pendant lesquels le Bureau international est fermé au public pendant l'année civile en cours et à venir est disponible [sur le site web de l'OMPI](#).

### 6. Procédures en cas de fermeture des bureaux

Lors de circonstances imprévues, l'OPIC s'efforcera de demeurer ouvert au public et d'assurer un service essentiel à ses clients, et ce, avec le moins d'interruption ou de retard possible.

Conformément à l'alinéa 27.01n) des Règles sur les Brevets, l'alinéa 15n) du Règlement sur les marques de commerce et de l'alinéa 36n) du Règlement sur les dessins industriels, lorsque les bureaux de l'OPIC sont fermés au public pendant toute ou une partie des heures normales d'ouverture, y compris une fermeture en raison de circonstances extraordinaires, les délais seront prorogés au jour suivant qui ne sera pas un jour prescrit ou un jour désigné et où l'OPIC est ouvert au public.

Pour les droits d'auteur et les topographies de circuits intégrés, si les bureaux de l'OPIC sont fermés au public en raison de circonstances extraordinaires, l'OPIC considère que tous les délais sont prorogés au prochain jour d'ouverture au public. Dans de telles circonstances, le courrier livré à l'OPIC ou à des établissements désignés sera considéré avoir été reçu à la date du jour de la réouverture de l'OPIC au public, à l'exception de la correspondance adressée au registraire des topographies.

Étant donné **l'importance que revêtent les délais** en matière de propriété intellectuelle (PI), il est recommandé aux clients de minimiser les risques pouvant nuire à leurs droits en matière de PI en tenant compte à l'avance des dates limites importantes. En ce qui a trait aux délais prescrits, les clients doivent respecter toutes les dates d'échéance, à moins d'avis contraire.

En situation d'urgence, les systèmes d'information et de recherche resteront, dans la mesure du possible, accessibles à partir de notre site Web. Toutefois, les services fournis par le Centre de services à la clientèle et les autres services de soutien de l'OPIC pourraient temporairement ne pas être offerts. En situation d'urgence, l'OPIC va publier les renseignements nécessaires sur notre [page d'interruptions des services](#), lorsque ceux-ci seront disponibles et les circonstances le permettront.

Les clients sont **fortement encouragés** de faire parvenir les documents assujettis à des délais précis par Postes Canada par Courrier recommandé<sup>MC</sup>, par Xpresspost<sup>MC</sup> ou par voie électronique en utilisant les liens spécifiés à [l'article 2.2](#) des présentes procédures de correspondance. Il est toujours

## Notices

payment that is sent by fax must be accompanied by a [VISA™](#), [MasterCard™](#), or [American Express™](#) credit card number, or [CIPO deposit account number](#).

Please note that there may also be instances in which the designated offices may be temporarily closed, yet CIPO remains open to the public. In such situations, it remains **the responsibility of CIPO's clients** to ensure that all deadlines are respected.

### 7. Procedures when CIPO is Open to the Public but Clients are Unable to Communicate with the Office

#### Patents, Industrial Design, Copyright and Integrated Circuit Topography

The legislative framework in relation with the abovementioned types of intellectual property does not provide CIPO with the flexibility to extend deadlines when it is open to the public but clients are unable to communicate with the Office.

In these situations it remains the responsibility of clients to ensure that all deadlines are respected.

#### Trademarks

The Trademarks Act and Regulations allow clients to request a retroactive extension of time when a due date has been missed due to a force majeure type situation. In order for a retroactive extension of time to be granted, the Registrar of Trademarks must be satisfied that the failure to do the act or apply for an extension of time before the original due date was not reasonably avoidable. A prescribed fee is required in certain cases.

### 8. Intellectual property acts, rules and regulations

- [Copyright Act](#)
- [Copyright Regulations](#)
- [Industrial Design Act](#)
- [Industrial Design Regulations](#)
- [Integrated Circuit Topography Act](#)
- [Integrated Circuit Topography Regulations](#)
- [Interpretation Act](#)
- [Patent Act](#)

possible de transmettre par télécopieur des documents à l'OPIC en composant le 819-953-OPIC (953-6742). Cependant, les documents assujettis à des délais pour lesquels des droits ou taxes sont exigés, qui sont envoyés par télécopieur, doivent être accompagnés [d'un numéro de carte VISA<sup>MC</sup>](#), [Mastercard<sup>MC</sup>](#) ou [American Express<sup>MC</sup>](#) ou [d'un numéro de compte de dépôt à l'OPIC](#).

Veillez noter qu'il pourrait y avoir des cas où les bureaux régionaux seraient fermés temporairement, mais où l'OPIC resterait ouvert au public. Le cas échéant, **les clients de l'OPIC demeurent responsables** du respect de tous les échéanciers.

### 7. Procédures à suivre lorsque l'Office est ouvert au public, mais les clients sont incapables de communiquer avec l'Office

#### Brevets, dessins industriels, droit d'auteur et topographies de circuits intégrés

Le cadre législatif en rapport aux types de propriété intellectuelle mentionnés ci-haut ne donne pas à l'OPIC la flexibilité de proroger les délais lorsque l'Office est ouvert au public, mais les clients sont dans l'impossibilité de communiquer avec le l'Office.

Dans une telle situation, les clients demeurent tenus de veiller à ce que les échéances soient respectées.

#### Marques de commerce

La Loi sur les marques de commerce et le Règlement sur les marques de commerce permettent aux clients de demander une prolongation rétroactive lorsqu'un délai n'a pas été respecté en raison d'un cas de force majeure. Pour qu'une prolongation de délai rétroactive soit accordée, le registraire des marques de commerce doit être convaincu que l'omission d'accomplir l'acte ou de demander la prorogation avant la date initiale d'échéance n'était pas raisonnablement évitable. Un droit prescrit est exigé dans certains cas.

### 8. Lois, règles et règlements sur la propriété intellectuelle

- [Loi sur le droit d'auteur](#)
- [Règlement sur le droit d'auteur](#)
- [Loi sur les dessins industriels](#)
- [Règlement sur les dessins industriels](#)
- [Loi sur les topographies de circuits intégrés](#)
- [Règlement sur les topographies de circuits intégrés](#)
- [Loi d'interprétation](#)
- [Loi sur les brevets](#)
- [Règles sur les brevets](#)

## Avis

- [Patent Rules](#)
- [Regulations under the PCT](#)
- [Trademarks Act](#)
- [Trademarks Regulations](#)

- [Règlement d'exécution du PCT](#)
- [Loi sur les marques de commerce](#)
- [Règlement sur les marques de commerce](#)

### **15. Canadian Applications Open to Public Inspection**

The *Canadian Patent Office Record* of June 13, 2023 contains applications open to public inspection from May 28, 2023 to June 3, 2023.

### **15. Demandes canadiennes mises à la disponibilité du public**

La *Gazette du bureau des brevets* du 13 juin 2023 contient les demandes disponibles au public pour consultation pour la période du 28 mai 2023 au 3 juin 2023.

# Canadian Patents Issued

June 13, 2023

## Brevets canadiens délivrés

13 juin 2023

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[11] **2,517,322**  
[13] C

[51] **Int.Cl. C02F 3/30 (2006.01) B01D 53/22 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR TREATING FGD BLOWDOWN OR SIMILAR LIQUIDS**

[54] **APPAREIL ET METHODE POUR LE TRAITEMENT DE L'EAU DE PURGE D'UN SYSTEME DE DESULFURATION DES GAZ DE COMBUSTION OU DE LIQUIDES SEMBLABLES**

[72] PEETERS, JEFFREY GERARD, CA

[72] BONKOSKI, WILLIAM A., US

[72] COTE, PIERRE LUCIEN, CA

[72] HUSAIN, HIDAYAT, CA

[73] ZENON TECHNOLOGY PARTNERSHIP, US

[86] (2517322)

[87] (2517322)

[22] 2005-08-26

[30] US (60/701,996) 2005-07-25

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[11] **2,576,594**  
[13] C

[51] **Int.Cl. G06Q 30/0207 (2023.01) G06Q 30/0279 (2023.01)**

[25] EN

[54] **METHOD, SYSTEM AND COMPUTER PROGRAM FOR PROVIDING A LOYALTY ENGINE FOR AUTOMATED CAUSE MARKETING**

[54] **PROCEDE, SYSTEME ET PROGRAMME INFORMATIQUE POUR LA CREATION D'UN MOTEUR DE FIDELISATION AUX FINS DE MARKETING AUTOMATISE DE CAUSES SOCIALES**

[72] TIETZEN, TERRANCE PATRICK, CA

[72] YAMAMOTO, TIMOTHY MAKOTO, CA

[72] MACKAY, RONALD JAMES, CA

[73] EDATANETWORKS INC., CA

[86] (2576594)

[87] (2576594)

[22] 2007-02-01

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[11] **2,625,440**  
[13] C

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01) C07K 16/30 (2006.01) C07K 16/46 (2006.01) C12P 21/08 (2006.01) A61K 49/00 (2006.01) C12N 15/13 (2006.01)**

[25] EN

[54] **COMPOSITIONS COMPRISING CROSS-SPECIES-SPECIFIC ANTIBODIES AND USES THEREOF**

[54] **COMPOSITIONS COMPORTANT DES ANTICORPS SPECIFIQUES D'ESPACES CROISEES ET LEURS UTILISATIONS**

[72] KISCHEL, ROMAN, DE

[72] RAUM, TOBIAS, DE

[72] SCHLERETH, BERND, DE

[72] RAU, DORIS, DE

[72] CIERPKA, RONNY, DE

[72] KUFER, PETER, DE

[73] AMGEN RESEARCH (MUNICH) GMBH, DE

[85] 2008-04-10

[86] 2006-10-10 (PCT/EP2006/009782)

[87] (WO2007/042261)

[30] US (60/724,781) 2005-10-11

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[11] **2,794,101**  
[13] C

[51] **Int.Cl. G06F 7/00 (2006.01) G06F 16/906 (2019.01)**

[25] EN

[54] **RECONFIGURABLE MODEL FOR AUTO-CLASSIFICATION SYSTEM AND METHOD**

[54] **MODELE RECONFIGURABLE POUR SYSTEME ET PROCEDE D'AUTO-CLASSIFICATION**

[72] LUDLOW, STEPHEN, CA

[72] PETTIGREW, STEVE, CA

[72] DOWGAILENKO, ALEX, CA

[72] DELIGIA, AGOSTINO, CA

[72] GIGUERE, ISABELLE, CA

[73] OPEN TEXT CORPORATION, CA

[86] (2794101)

[87] (2794101)

[22] 2012-10-31

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[11] **2,802,344**  
[13] C

[51] **Int.Cl. C07K 16/46 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01) C07K 14/705 (2006.01)**

[25] EN

[54] **BI-SPECIFIC ANTIBODIES AGAINST TIM-3 AND PD-1 FOR IMMUNOTHERAPY IN CHRONIC IMMUNE CONDITIONS**

[54] **ANTICORPS DI-SPECIFIQUES ANTI-TIM-3 ET PD-1 POUR IMMUNOTHERAPIE DANS DES ETATS PATHOLOGIQUES IMMUNS CHRONIQUES**

[72] KUCHROO, VIJAY K., US

[72] ANDERSON, ANA C., US

[73] THE BRIGHAM AND WOMEN'S HOSPITAL, INC., US

[85] 2012-12-11

[86] 2011-06-16 (PCT/US2011/040665)

[87] (WO2011/159877)

[30] US (61/356,354) 2010-06-18

[30] US (61/365,910) 2010-07-20

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[13] C

[51] **Int.Cl. A61K 31/4745 (2006.01) A61B 18/02 (2006.01) A61P 17/12 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **COMBINATION THERAPY WITH CRYOSURGERY AND LOW DOSAGE STRENGTH IMIQUIMOD TO TREAT ACTINIC KERATOSIS**

[54] **POLYTHERAPIE PAR CRYOCHIRURGIE ET IMIQUIMOD A FAIBLE INTENSITE DE DOSAGE POUR TRAITER LA KERATOSE SENILE**

[72] NORDSIEK, MICHAEL T., US  
[72] LEVY, SHARON F., US  
[72] LEE, JAMES HURN-JOUNG, US  
[72] KULP, JAMES H., US  
[72] MENG, TZE-CHIANG, US  
[72] WU, JASON J., US  
[72] BABILON, ROBERT, US  
[72] BALAJI, KODUMUDI S., US  
[72] BAHM, VALYN S., US  
[73] MEDICIS PHARMACEUTICAL CORPORATION, US

[85] 2012-12-19  
[86] 2011-06-24 (PCT/US2011/041876)  
[87] (WO2011/163617)  
[30] US (61/398,494) 2010-06-25  
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[11] **2,809,914**  
[13] C

[51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6809 (2018.01) C12Q 1/6851 (2018.01)**

[25] EN

[54] **ANALYTICAL METHODS FOR CELL FREE NUCLEIC ACIDS AND APPLICATIONS**

[54] **PROCEDES ANALYTIQUES POUR ACIDES NUCLEIQUES ACELLULAIRES ET APPLICATIONS**

[72] THIERRY, ALAIN, FR  
[72] MOLINA, FRANCK, FR  
[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS), FR

[85] 2013-02-28  
[86] 2011-09-05 (PCT/EP2011/065333)  
[87] (WO2012/028746)  
[30] US (61/380,084) 2010-09-03  
[30] EP (10305952.3) 2010-09-03

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[11] **2,827,975**  
[13] C

[51] **Int.Cl. C12N 15/864 (2006.01) C12N 9/10 (2006.01)**

[25] EN

[54] **AAV-VECTORS FOR USE IN GENE THERAPY OF CHOROIDEREMIA**

[54] **VECTEURS AAV UTILISABLES EN THERAPIE GENIQUE POUR TRAITER OU PREVENIR LA CHOROIDEREMIE**

[72] MACLAREN, ROBERT, GB  
[72] SEABRA, MIGUEL, GB  
[72] DURING, MATTHEW JOHN, US  
[73] OXFORD UNIVERSITY INNOVATION LIMITED, GB

[85] 2013-08-21  
[86] 2012-02-21 (PCT/GB2012/050376)  
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[13] C

[51] **Int.Cl. C05G 5/12 (2020.01) A23P 10/20 (2016.01) A01N 25/12 (2006.01) A61K 9/16 (2006.01) A61K 47/30 (2006.01) B01J 2/28 (2006.01) C05G 3/00 (2020.01) C05G 5/00 (2020.01)**

[25] EN

[54] **MULTI-PURPOSE LIGNIN-CARBOHYDRATE BINDING SYSTEM**

[54] **SYSTEME DE LIAISON LIGNINE-GLUCIDE MULTI-USAGES**

[72] THOMPSON, HAROLD E., US  
[72] XENIKIS, TOULA, US  
[72] UPTON, DOMINI, US  
[72] COCHRAN, KEITH, US  
[73] OMS INVESTMENTS, INC., US

[85] 2013-10-07  
[86] 2012-04-06 (PCT/US2012/032596)  
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[13] C

[51] **Int.Cl. G16H 10/20 (2018.01) G16H 10/60 (2018.01) G16H 20/10 (2018.01) G16H 40/20 (2018.01) G16H 40/67 (2018.01)**

[25] EN

[54] **PATIENT-INTERACTIVE HEALTHCARE SYSTEM AND DATABASE**

[54] **SYSTEME DE SANTE INTERACTIF AVEC LE PATIENT ET BASE DE DONNEES**

[72] MANNING, MICHAEL G., US  
[72] MINNITI, MARTHA JEAN ELIZABETH, US  
[72] RAWSON, IAN G., US  
[72] COOPER, BRADLEY H.K., US  
[72] GUIDRY, JOAN LYN BALAKIER, US  
[73] CAREPARTNERS PLUS, US

[85] 2013-11-22  
[86] 2012-05-25 (PCT/US2012/039498)  
[87] (WO2012/162579)  
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[11] **2,838,011**  
[13] C

[51] **Int.Cl. A61M 39/00 (2006.01) A61M 16/00 (2006.01)**

[25] EN

[54] **MEDICAL TUBES AND METHODS OF MANUFACTURE**

[54] **TUBES MEDICAUX ET PROCEDES DE FABRICATION**

[72] STOKS, ELMO BENSON, NZ  
[72] NORTH, CHARLES CHRISTOPHER, NZ  
[73] FISHER & PAYKEL HEALTHCARE LIMITED, NZ

[85] 2013-12-02  
[86] 2012-05-30 (PCT/IB2012/001786)  
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[13] C

[51] **Int.Cl. C07K 16/08 (2006.01) A61K 39/42 (2006.01) A61P 31/20 (2006.01) C12N 5/10 (2006.01) C12N 15/13 (2006.01) C12P 21/08 (2006.01)**

[25] EN

[54] **HIGH AFFINITY HUMAN ANTIBODIES TO HUMAN CYTOMEGALOVIRUS (CMV) GB PROTEIN**

[54] **ANTICORPS HUMAINS A AFFINITE ELEVEE CONTRE LA PROTEINE GB DU CYTOMEGALOVIRUS (CMV) HUMAIN**

[72] KAUVAR, LAWRENCE M., US  
[72] ELLSWORTH, STOTE, US  
[72] USINGER, WILLIAM, US  
[72] MCCUTCHEON, KRISTA MAUREEN, US  
[72] JIANG, YING-PING, US  
[72] ZHANG, FEN, US  
[72] CHEN, BO, US  
[72] SPERINDE, GIZETTE, US  
[72] PARK, MINHA, US  
[72] FOORD, ORIT, US  
[73] TRELIS BIOSCIENCE, LLC, US  
[85] 2013-12-13  
[86] 2011-06-16 (PCT/US2011/040761)  
[87] (WO2011/159938)  
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[11] **2,845,156**  
[13] C

[51] **Int.Cl. F23R 3/38 (2006.01)**

[25] EN

[54] **COMBUSTOR FOR GAS TURBINE ENGINE**

[54] **CHAMBRE DE COMBUSTION POUR TURBINE A GAZ**

[72] MORENKO, OLEG, CA  
[73] PRATT & WHITNEY CANADA CORP., CA  
[86] (2845156)  
[87] (2845156)  
[22] 2014-03-06  
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[11] **2,853,108**  
[13] C

[51] **Int.Cl. G01V 1/50 (2006.01) G01V 1/40 (2006.01)**

[25] EN

[54] **METHODS OF AND APPARATUSES FOR IMPROVING LOG DATA**

[54] **PROCEDES ET APPAREILS POUR AMELIORER LES DONNEES DIAGRAPHIQUES**

[72] ELKINGTON, PETER ADRIAN SPENCER, GB  
[72] ASSOUS, SAID, GB  
[72] LINNETT, LAURENCE, GB  
[73] REEVES WIRELINE TECHNOLOGIES LIMITED, GB  
[86] (2853108)  
[87] (2853108)  
[22] 2014-06-02  
[30] GB (1310044.1) 2013-06-05

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[11] **2,871,934**  
[13] C

[51] **Int.Cl. C07K 16/00 (2006.01) A61K 39/395 (2006.01) A61K 49/00 (2006.01) C07K 16/46 (2006.01) C12N 15/13 (2006.01) G01N 33/53 (2006.01)**

[25] EN

[54] **MOLECULES WITH REDUCED EFFECTOR FUNCTION AND EXTENDED HALF-LIVES, COMPOSITIONS, AND USES THEREOF**

[54] **MOLECULES AYANT UNE FONCTION EFFECTRICE REDUITE ET DES DEMI-VIES ALLONGEES, COMPOSITIONS ET UTILISATIONS DE CELLES-CI**

[72] TSUI, PING, US  
[72] BORROK, MARTIN, US  
[72] DALL'ACQUA, WILLIAM, US  
[73] MEDIMMUNE, LLC, US  
[85] 2014-10-29  
[86] 2013-04-17 (PCT/US2013/036872)  
[87] (WO2013/165690)  
[30] US (61/640,327) 2012-04-30

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[11] **2,875,930**  
[13] C

[51] **Int.Cl. G03G 21/18 (2006.01) G03G 15/08 (2006.01)**

[25] EN

[54] **CARTRIDGE, PROCESS CARTRIDGE AND ELECTROPHOTOGRAPHIC IMAGE FORMING APPARATUS**

[54] **CARTOUCHE, CARTOUCHE DE TRAITEMENT, ET DISPOSITIF DE PRODUCTION D'IMAGES ELECTROPHOTOGRAPHIQUES**

[72] SATO, MASAOKI, JP  
[72] YAMASHITA, MASATOSHI, JP  
[72] KANNO, KAZUHIKO, JP  
[72] NISHIYA, SATOSHI, JP  
[72] KANNO, KAZUHIKO, JP  
[73] CANON KABUSHIKI KAISHA, JP  
[85] 2014-12-05  
[86] 2013-06-14 (PCT/JP2013/067016)  
[87] (WO2013/187534)  
[30] JP (2012-135835) 2012-06-15

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[11] **2,876,932**  
[13] C

[51] **Int.Cl. G06Q 10/02 (2012.01)**

[25] EN

[54] **INTERACTIVE VENUE SEAT MAP**

[54] **CARTE DE SIEGES DE LIEU INTERACTIVE**

[72] OXENHAM, OLIVER, US  
[72] OXENHAM, WESLEY, US  
[73] STUBHUB, INC., US  
[85] 2014-12-15  
[86] 2013-07-23 (PCT/US2013/051716)  
[87] (WO2014/018550)  
[30] US (13/559,979) 2012-07-27

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[11] **2,877,095**  
[13] E

[51] **Int.Cl. D21C 5/00 (2006.01) D21C 9/00 (2006.01) D21C 9/08 (2006.01) D21H 17/00 (2006.01) D21H 21/02 (2006.01) D21H 23/04 (2006.01)**

[25] EN

[54] **METHODS OF USING COMBINATIONS OF A LIPASE AND AN OXIDANT FOR PITCH CONTROL IN PAPER MAKING PROCESSES AND PRODUCTS THEREOF**

[54] **PROCEDES D'UTILISATION DE COMBINAISONS D'UNE LIPASE ET D'UN OXYDANT POUR LE CONTROLE DE LA POIX LORS DE PROCESSUS DE FABRICATION DE PAPIER ET PRODUITS PAPETIERS ASSOCIES**

[72] ZHOU, XIANGDONG, US  
[72] JAQUESS, PERCY, US  
[73] BUCKMAN LABORATORIES INTERNATIONAL, INC., US

[85] 2014-12-17  
[86] 2013-04-19 (PCT/US2013/037286)  
[87] (WO2013/191803)  
[48] 2023-06-13  
[30] US (61/662,955) 2012-06-22

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[11] **2,878,286**  
[13] C

[51] **Int.Cl. C12N 15/82 (2006.01) A23K 10/30 (2016.01) A23K 20/158 (2016.01) A23L 33/115 (2016.01) A01H 6/20 (2018.01) A01H 1/04 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) A23D 9/00 (2006.01) A23J 1/14 (2006.01) C11B 1/00 (2006.01) C12N 5/04 (2006.01) C12N 5/10 (2006.01) C12N 9/10 (2006.01) C12N 15/54 (2006.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **BRASSICA ROD1 GENE SEQUENCES AND USES THEREOF**

[54] **SEQUENCES DE GENES ROD1 PROVENANT DE BRASSICA ET LEURS UTILISATIONS**

[72] DENOLF, PETER, BE  
[72] VAN THOURNOUT, MICHEL, BE  
[72] BOUROT, STEPHANE, FR  
[73] BASF AGRICULTURAL SOLUTIONS SEED US LLC, US

[85] 2015-01-02  
[86] 2013-07-04 (PCT/EP2013/064186)  
[87] (WO2014/006158)  
[30] EP (12175303.2) 2012-07-06  
[30] US (61/669,370) 2012-07-09

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[11] **2,879,430**  
[13] C

[51] **Int.Cl. C23F 13/20 (2006.01)**

[25] EN

[54] **CORROSION PROTECTION USING A SACRIFICIAL ANODE**

[54] **PROTECTION CONTRE LA CORROSION A L'AIDE D'UNE ANODE SACRIFICIELLE**

[72] SERGI, GEORGE, GB  
[72] SENEVIRATNE, ATTANAYAKE MUDIYANSELAGE GAMINI, GB  
[72] WHITMORE, DAVID, CA  
[73] VECTOR CORROSION TECHNOLOGIES LTD., CA

[85] 2015-01-19  
[86] 2013-07-18 (PCT/CA2013/050561)  
[87] (WO2014/012185)  
[30] US (13/553,514) 2012-07-19  
[30] US (13/553,498) 2012-07-19  
[30] US (13/553,489) 2012-07-19

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[11] **2,880,214**  
[13] C

[51] **Int.Cl. A61B 5/316 (2021.01) A61B 5/287 (2021.01) A61B 5/361 (2021.01)**

[25] EN

[54] **DOUBLE BIPOLAR CONFIGURATION FOR ATRIAL FIBRILLATION ANNOTATION**

[54] **CONFIGURATION BIPOLAIRE DOUBLE POUR ANNOTATION DE FIBRILLATION AURICULAIRE**

[72] BAR-TAL, MEIR, IL  
[72] HOUBEN, RICHARD P. M., BE  
[72] BEN ZRIHAM, YANIV, IL  
[72] PRESSMAN, ASSAF, IL  
[72] URMAN, ROY, IL  
[72] AUERBACH, SHMUEL, IL  
[73] BIOSENSE WEBSTER (ISRAEL) LTD., IL

[86] (2880214)  
[87] (2880214)  
[22] 2015-01-26  
[30] US (61/932,877) 2014-01-29  
[30] US (14/585,828) 2014-12-30

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[11] **2,887,753**  
[13] C

[51] **Int.Cl. G01R 33/32 (2006.01) A61B 5/055 (2006.01) G01R 33/36 (2006.01)**

[25] EN

[54] **TRANSCEIVER COIL ARRAY FACILITATING MR-GUIDED PROCEDURES**

[54] **RESEAU DE BOBINES D'EMETTEUR-RECEPTEUR FACILITANT LES PROCEDES GUIDES PAR IMAGERIE PAR RESONANCE MAGNETIQUE (IRM)**

[72] HA, SEUNGHOO, US  
[72] ZHU, HAOQIN, US  
[72] PETROPOULOS, LABROS, US  
[72] DAHAN, MEIR, US  
[73] IMRIS, INC., US

[86] (2887753)  
[87] (2887753)  
[22] 2015-04-02

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[11] **2,888,561**  
[13] C

[51] **Int.Cl. H01M 4/139 (2010.01) H01M 4/13 (2010.01) H01M 4/136 (2010.01) H01M 4/1397 (2010.01)**

[25] EN

[54] **METHOD OF PRODUCING ELECTRODE MATERIAL FOR LITHIUM-ION SECONDARY BATTERY AND LITHIUM-ION BATTERY USING SUCH ELECTRODE MATERIAL**

[54] **PROCEDE DE FABRICATION D'UN MATERIAU D'ELECTRODE POUR UNE BATTERIE SECONDAIRE AU LITHIUM-ION ET BATTERIE AU LITHIUM-ION FAISANT APPEL A CE MATERIAU D'ELECTRODE**

[72] GARIEPY, VINCENT, CA  
[72] GUERFI, ABDELBAST, CA  
[72] HANAI, KAZUMA, JP  
[72] HOVINGTON, PIERRE, CA  
[72] SAITO, SHINJI, JP  
[72] SAWAI, TAKEHIKO, JP  
[72] URAO, KAZUNORI, JP  
[72] ZAGHIB, KARIM, CA  
[73] HYDRO-QUEBEC, CA

[85] 2015-04-14  
[86] 2013-10-21 (PCT/CA2013/050793)  
[87] (WO2014/063244)  
[30] CA (2,794,290) 2012-10-22

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[11] **2,891,647**  
[13] C

[51] **Int.Cl. E21D 21/00 (2006.01) E21D 20/00 (2006.01)**  
[25] EN  
[54] **MINE SUPPORT ASSEMBLY**  
[54] **ENSEMBLE DE SUPPORT DE MINE**  
[72] CAI, MING, CA  
[72] WATT, ALEXANDER, CA  
[72] PAN, HAIWEN, CA  
[72] VAN EYK, IAN, CA  
[72] TABELLE, UKELABUCHI, CA  
[73] LAURENTIAN UNIVERSITY OF SUDBURY, CA  
[85] 2015-05-14  
[86] 2013-12-20 (PCT/CA2013/001069)  
[87] (WO2014/094134)  
[30] US (61/740,525) 2012-12-21

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[11] **2,895,918**  
[13] C

[51] **Int.Cl. A61G 7/10 (2006.01) A47G 25/90 (2006.01)**  
[25] EN  
[54] **LEG MOBILITY ASSISTIVE GARMENT**  
[54] **VETEMENT D'AIDE A LA MOBILITE DES JAMBES**  
[72] LILLIE, AARON KAYNE, CA  
[73] FROG LEG MOBILITY INC., CA  
[86] (2895918)  
[87] (2895918)  
[22] 2015-06-29  
[30] US (14/747,473) 2015-06-23

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[11] **2,896,216**  
[13] C

[51] **Int.Cl. B64G 1/22 (2006.01) B64G 1/10 (2006.01) H04B 7/185 (2006.01)**  
[25] EN  
[54] **SATELLITE WITH VARIABLE MASTER CROSS SECTION**  
[54] **SATELLITE AYANT UNE SECTION TRANSVERSALE MAITRESSE VARIABLE**  
[72] NANN, ISABELLE, US  
[72] MOSSON, NICOLAS, US  
[73] THALES, FR  
[73] CENTRE NATIONAL D'ETUDES SPATIALES, FR  
[86] (2896216)  
[87] (2896216)  
[22] 2015-07-03  
[30] FR (1401506) 2014-07-04

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[11] **2,897,190**  
[13] C

[51] **Int.Cl. G16H 15/00 (2018.01) G16H 10/20 (2018.01) G16H 10/60 (2018.01) G16H 20/10 (2018.01) G16H 50/20 (2018.01) G16H 50/70 (2018.01) G16H 70/60 (2018.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR OUTCOME TRACKING AND ANALYSIS**  
[54] **SYSTEME ET PROCEDE POUR LE SUIVI ET L'ANALYSE DE RESULTATS**  
[72] PELLINI, MICHAEL, US  
[72] PALMER, GARY, US  
[72] LANCILOTTA, MARY PAT, US  
[72] HAWRYLUK, MATTHEW J., US  
[72] MILLER, VINCENT A., US  
[73] FOUNDATION MEDICINE, INC., US  
[85] 2015-07-03  
[86] 2014-01-03 (PCT/US2014/010124)  
[87] (WO2014/107548)  
[30] US (61/749,288) 2013-01-05  
[30] US (61/749,291) 2013-01-05

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[11] **2,897,602**  
[13] C

[51] **Int.Cl. A23J 1/00 (2006.01) A23L 5/20 (2016.01) A23L 13/00 (2016.01) A23L 27/26 (2016.01) A23L 33/115 (2016.01) A23L 33/17 (2016.01) A23L 33/185 (2016.01) A23P 10/00 (2016.01) A21D 2/26 (2006.01) A23D 7/00 (2006.01) A23G 1/32 (2006.01) A23G 1/48 (2006.01) A23J 1/14 (2006.01) A23J 3/14 (2006.01) A23J 3/22 (2006.01) A23L 2/66 (2006.01) C12G 3/00 (2019.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR CONSUMABLES**  
[54] **PROCEDES ET COMPOSITIONS UTILISABLES EN VUE DE LA PRODUCTION DE PRODUITS COMESTIBLES**  
[72] VRLJIC, MARIJA, US  
[72] SOLOMATIN, SERGEY, US  
[72] FRASER, RACHEL, US  
[72] BROWN, PATRICK O'REILLY, US  
[72] KARR, JESSICA, US  
[72] HOLZ-SCHIETINGER, CELESTE, US  
[72] EISEN, MICHAEL, US  
[72] VARADAN, RANJANI, US  
[73] IMPOSSIBLE FOODS INC., US  
[85] 2015-07-08  
[86] 2014-01-13 (PCT/US2014/011361)  
[87] (WO2014/110539)  
[30] US (61/751,816) 2013-01-11  
[30] US (13/941,211) 2013-07-12  
[30] US (61/908,634) 2013-11-25



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[11] **2,898,631**  
[13] C

[51] **Int.Cl. A61K 31/47 (2006.01) A61K 8/41 (2006.01) A61K 8/44 (2006.01) A61K 8/49 (2006.01) A61K 31/137 (2006.01) A61K 31/197 (2006.01) A61K 31/416 (2006.01) A61K 31/4184 (2006.01) A61P 17/00 (2006.01) A61P 27/02 (2006.01) A61Q 19/00 (2006.01)**

[25] EN  
[54] **TOXIC ALDEHYDE RELATED DISEASES AND TREATMENT**  
[54] **MALADIES LIEES A UN ALDEHYDE TOXIQUE ET TRAITEMENT**

[72] BRADY, TODD, US  
[72] YOUNG, SCOTT, US  
[72] KINNEY, WILLIAM A., US  
[72] MANDELL, KENNETH J., US  
[73] ALDEYRA THERAPEUTICS, INC., US

[85] 2015-07-17  
[86] 2014-01-23 (PCT/US2014/012762)  
[87] (WO2014/116836)  
[30] US (61/755,613) 2013-01-23  
[30] US (61/901,796) 2013-11-08

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[11] **2,898,821**  
[13] C

[51] **Int.Cl. F02B 63/00 (2006.01) F02B 63/04 (2006.01)**

[25] EN  
[54] **ENGINE SYSTEM**  
[54] **MECANISME DE MOTEUR**

[72] IKEDA, TOMOYUKI, JP  
[72] ABE, SATOSHI, JP  
[72] TAHARA, YOSUKE, JP  
[73] YANMAR CO., LTD., JP

[86] (2898821)  
[87] (2898821)  
[22] 2015-07-29  
[30] JP (2014-159294) 2014-08-05

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[11] **2,900,025**  
[13] C

[51] **Int.Cl. E04B 1/41 (2006.01)**

[25] EN  
[54] **AN ANCHORING ASSEMBLY FOR ANCHORING A LINER OF A CURED LINING MATERIAL**  
[54] **ASSEMBLAGE D'ANCRAGE POUR ANCRER UNE DOUBLURE D'UN MATERIAU DE DOUBLAGE TRAITÉ**

[72] GAROT, JEROME MICHAEL, NL  
[72] GAROT, DANIELLE FRANCESCA, NL

[72] GAROT, WOUTER, NL  
[73] SILICON HOLDING B.V., NL

[86] (2900025)  
[87] (2900025)  
[22] 2015-08-11  
[30] NL (2013327) 2014-08-13  
[30] NL (2014812) 2015-05-18

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[11] **2,900,425**  
[13] C

[51] **Int.Cl. G06F 3/0481 (2022.01) G06F 9/451 (2018.01) G06F 3/04842 (2022.01) G06F 3/04845 (2022.01) G06F 3/14 (2006.01)**

[25] EN  
[54] **SYSTEM FOR ORGANIZING AND DISPLAYING INFORMATION ON A DISPLAY DEVICE**  
[54] **SYSTEME POUR ORGANISER ET AFFICHER DES INFORMATIONS SUR UN DISPOSITIF D'AFFICHAGE**

[72] AEBI, MATTHIAS, CH  
[73] DIZMO AG, CH

[85] 2015-08-06  
[86] 2014-02-04 (PCT/IB2014/000684)  
[87] (WO2014/122535)  
[30] US (61/762,165) 2013-02-07

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[11] **2,901,073**  
[13] C

[51] **Int.Cl. G16H 50/30 (2018.01) G16H 50/20 (2018.01) G16H 50/70 (2018.01)**

[25] EN  
[54] **PREDICTIVE MODEL GENERATOR**  
[54] **GENERATEUR DE MODELE PREVISIONNEL**

[72] CARROLL, DENNIS, US  
[72] LYNCH, CECIL, US  
[72] ACUNA, GERMAN, US  
[72] VO, ANH-HOANG, US  
[73] ACCENTURE GLOBAL SERVICES LIMITED, IE

[86] (2901073)  
[87] (2901073)  
[22] 2015-08-19  
[30] US (14/464,330) 2014-08-20

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[11] **2,903,333**  
[13] C

[51] **Int.Cl. A61B 17/29 (2006.01)**

[25] EN  
[54] **ARTICULATING SURGICAL INSTRUMENTS**  
[54] **INSTRUMENTS CHIRURGICAUX ARTICULES**

[72] RANUCCI, KEVIN J., US  
[72] CAULDWELL, NATHAN STEWART, US

[72] FELIX, AUGUSTUS, US  
[73] C.R. BARD, INC., US

[85] 2015-09-01  
[86] 2014-02-21 (PCT/US2014/017680)  
[87] (WO2014/158523)  
[30] US (13/827,254) 2013-03-14

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[11] **2,905,089**  
[13] C

[51] **Int.Cl. A61K 31/47 (2006.01) A61K 31/557 (2006.01) A61P 27/06 (2006.01)**

[25] EN  
[54] **ISOQUINOLINE COMPOUNDS FOR THE TREATMENT OF OCULAR DISEASES**  
[54] **COMPOSE D'ISOQUINOLINE POUR TRAITER DES MALADIES OCULAIRES**

[72] KOPCZYNSKI, CASEY, US  
[72] LIN, CHENG-WEN, US  
[72] STURDIVANT, JILL MARIE, US  
[72] DELONG, MITCHELL A., US  
[73] AERIE PHARMACEUTICALS, INC., US

[85] 2015-09-09  
[86] 2014-03-14 (PCT/US2014/029335)  
[87] (WO2014/144781)  
[30] US (61/787,883) 2013-03-15

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[11] **2,906,725**  
[13] C

[51] **Int.Cl. G16B 30/00 (2019.01) G16B 20/00 (2019.01) G16B 35/10 (2019.01) G16B 35/20 (2019.01) C12Q 1/68 (2018.01) G01N 33/48 (2006.01)**

[25] EN

[54] **CHARACTERIZATION OF BIOLOGICAL MATERIAL USING UNASSEMBLED SEQUENCE INFORMATION, PROBABILISTIC METHODS AND TRAIT-SPECIFIC DATABASE CATALOGS**

[54] **CARACTERISATION DE MATERIEL BIOLOGIQUE AU MOYEN D'INFORMATIONS DE SEQUENCES NON ASSEMBLEES, DE METHODES PROBABILISTES ET DE CATALOGUES DE BASES DE DONNEES SPECIFIQUES DE CARACTERE S**

[72] HASAN, NUR A., US  
[72] CEBULA, TOM, US  
[72] LIVINGSTON, BOYD THOMAS, US  
[72] LI, HUAI, US  
[72] JAKUPCIAK, DAVID, US  
[72] COLWELL, RITA R., US  
[72] BRENNER, DOUGLAS M., US  
[73] COSMOSID INC., US  
[85] 2015-09-14  
[86] 2014-03-14 (PCT/US2014/028980)  
[87] (WO2014/144529)  
[30] US (13/836,139) 2013-03-15

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[11] **2,908,386**  
[13] C

[51] **Int.Cl. H04J 4/00 (2006.01)**

[25] EN

[54] **AGGREGATION OF FDD AND TDD CELLS**

[54] **REGROUPEMENT DE CELLULES FDD ET TDD**

[72] PAPASAKELLARIOU, ARIS, US  
[72] NG, BOON LOONG, US  
[73] SAMSUNG ELECTRONICS CO., LTD., KR  
[85] 2015-09-28  
[86] 2014-03-28 (PCT/KR2014/002672)  
[87] (WO2014/157993)  
[30] US (61/806,277) 2013-03-28  
[30] US (61/874,858) 2013-09-06

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[11] **2,909,266**  
[13] C

[51] **Int.Cl. H04L 47/36 (2022.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR PROCESSING DATA IN A TELECOMMUNICATIONS SYSTEM FOR DYNAMIC ADAPTATION TO THE QUANTITY OF DATA TO BE TRANSMITTED**

[54] **METHODE ET SYSTEME DE TRAITEMENT DE DONNEES DANS UN SYSTEME DE COMMUNICATION DESTINE A L'ADAPTATION DYNAMIQUE DE LA QUANTITE DE DONNEES A TRANSMETTRE**

[72] GINESTE, MATHIEU, FR  
[73] THALES, FR  
[86] (2909266)  
[87] (2909266)  
[22] 2015-10-09  
[30] FR (1402391) 2014-10-24

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[11] **2,910,244**  
[13] C

[51] **Int.Cl. H02J 13/00 (2006.01) F24F 11/46 (2018.01) F24F 11/63 (2018.01) F24D 19/10 (2006.01) F25B 49/00 (2006.01) G05B 13/02 (2006.01)**

[25] EN

[54] **SYSTEM AND APPARATUS FOR INTEGRATED HVACR AND OTHER ENERGY EFFICIENCY AND DEMAND RESPONSE**

[54] **SYSTEME ET APPAREIL POUR CHAUFFAGE, VENTILATION, CLIMATISATION ET REFRIGERATION (CVCR) INTEGRES ET AUTRES RENDEMENTS ENERGETIQUES ET REPOSE A DEMANDE**

[72] MILLS, THOMAS A., JR., US  
[72] BUDNEY, STANLEY, US  
[73] PACECONTROLS LLC, US  
[85] 2015-10-29  
[86] 2014-03-14 (PCT/US2014/028473)  
[87] (WO2014/144175)  
[30] US (61/799,501) 2013-03-15

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[11] **2,911,478**  
[13] C

[51] **Int.Cl. C07K 14/00 (2006.01) A61K 47/50 (2017.01) A61K 47/66 (2017.01) A61P 13/12 (2006.01) C07K 5/10 (2006.01) C07K 7/00 (2006.01) C07K 7/06 (2006.01) C07K 7/08 (2006.01)**

[25] EN

[54] **CONJUGATES FOR PROTECTION AGAINST NEPHROTOXIC ACTIVE COMPOUNDS**

[54] **CONJUGATS DESTINES A LA PROTECTION CONTRE LES COMPOSES ACTIFS NEPHROTIQUES**

[72] KUEBELBECK, ARMIN, DE  
[72] LARBIG, GREGOR, DE  
[72] ARNOLD, STEFAN, DE  
[72] MIER, WALTER, DE  
[72] HABERKORN, UWE, DE  
[73] MERCK PATENT GMBH, DE  
[85] 2015-11-05  
[86] 2014-04-16 (PCT/EP2014/001025)  
[87] (WO2014/180533)  
[30] EP (13002431.8) 2013-05-07

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[11] **2,912,658**  
[13] C

[51] **Int.Cl. B66B 17/02 (2006.01) E04H 12/26 (2006.01) E21F 13/00 (2006.01)**

[25] EN

[54] **OVERWIND CONVEYANCE DROP PROTECTION**

[54] **PROTECTION ANTICHUTE POUR MOYEN DE TRANSPORT DE DEPASSEMENT DE MOLETTE**

[72] WEBB, ROCKY LYNN, CA  
[72] DELABBIO, FREDRIC CHRISTOPHER, AU  
[73] TECHNOLOGICAL RESOURCES PTY. LIMITED, AU  
[85] 2015-11-17  
[86] 2014-06-06 (PCT/AU2014/000597)  
[87] (WO2014/194373)  
[30] AU (2013902058) 2013-06-07

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[11] **2,913,453**  
[13] C

[51] **Int.Cl. B64D 11/06 (2006.01) B60N 2/08 (2006.01)**  
[25] EN  
[54] **DUAL-FUNCTION SEAT ACTUATOR**  
[54] **ACTIONNEUR DE SIEGE DOUBLE FONCTION**  
[72] HOOVER, DOUGLAS E., US  
[72] FERGUSON, KEITH M., US  
[73] AMI INDUSTRIES, INC., US  
[86] (2913453)  
[87] (2913453)  
[22] 2015-11-25  
[30] US (14/618,052) 2015-02-10

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[11] **2,914,178**  
[13] C

[51] **Int.Cl. C07D 401/06 (2006.01) A61K 31/445 (2006.01) A61P 35/00 (2006.01) C07D 211/88 (2006.01) C07D 215/26 (2006.01) C07D 231/56 (2006.01) C07D 239/54 (2006.01) C07D 265/18 (2006.01) C07D 277/36 (2006.01) C07D 401/12 (2006.01) C07D 403/06 (2006.01) C07D 471/04 (2006.01)**  
[25] EN  
[54] **DEOXYURIDINE TRIPHOSPHATASE INHIBITORS**  
[54] **INHIBITEURS DE LA DESOXYURIDINE TRIPHOSPHATASE**  
[72] LADNER, ROBERT D., US  
[72] GIETHLEN, BRUNO, FR  
[73] UNIVERSITY OF SOUTHERN CALIFORNIA, US  
[85] 2015-07-06  
[86] 2014-01-03 (PCT/US2014/010247)  
[87] (WO2014/107622)  
[30] US (61/749,791) 2013-01-07  
[30] US (61/874,643) 2013-09-06

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[11] **2,915,694**  
[13] C

[51] **Int.Cl. A61N 1/378 (2006.01) H02J 50/10 (2016.01) H02J 50/23 (2016.01) A61N 1/375 (2006.01) H02J 7/02 (2016.01)**  
[25] EN  
[54] **WIRELESS RECHARGING SYSTEM AND METHOD FOR FLEXIBLE IMPLANTABLE SUBCUTANEOUS MEDICAL DEVICE**  
[54] **SYSTEME DE RECHARGE SANS FIL ET PROCEDE POUR DISPOSITIF MEDICAL IMPLANTABLE SOUS-CUTANE SOUPLE**  
[72] AMIR, JACK, IL  
[72] MOCHA, MOTY, IL  
[72] STROMMER, GERA, IL  
[72] KELLEY, JAMES, US  
[72] BRODER, AVRAHAM, IL  
[73] NEWPACE LTD., IL  
[86] (2915694)  
[87] (2915694)  
[22] 2015-12-22  
[30] US (62/095,080) 2014-12-22

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[11] **2,916,503**  
[13] C

[51] **Int.Cl. G06Q 10/0631 (2023.01) G06Q 50/08 (2012.01) G06Q 10/0639 (2023.01)**  
[25] EN  
[54] **WORK PROJECT SYSTEMS AND METHODS**  
[54] **SYSTEMES DE PROJET DE TRAVAIL ET METHODES**  
[72] NORTON, PATRICK EDWARD, US  
[72] GADHOKE, RANJEET HARJINDER, US  
[73] ZACHRY INTELLECTUAL PROPERTY COMPANY, LLC, US  
[86] (2916503)  
[87] (2916503)  
[22] 2015-12-30  
[30] US (62/216,221) 2015-09-09

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[11] **2,919,220**  
[13] C

[51] **Int.Cl. C07C 51/353 (2006.01) C07C 1/20 (2006.01) C07C 1/207 (2006.01) C07C 59/347 (2006.01)**  
[25] EN  
[54] **METHOD FOR CATALYTIC CONVERSION OF KETOACIDS AND HYDROTREATMENT TO HYDROCARBONS**  
[54] **PROCEDE DE CONVERSION CATALYTIQUE DE CETOACIDES ET HYDROTRAITEMENT DESTINE AUX HYDROCARBURES**  
[72] MYLLYOJA, JUKKA, FI  
[72] PIILOLA, RAMI, FI  
[72] SELANTAU, MAARIA, FI  
[72] KARVINIEN, ESKO, FI  
[73] NESTE OYJ, FI  
[86] (2919220)  
[87] (2919220)  
[22] 2016-01-28  
[30] EP (EP15153266.0) 2015-01-30

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[11] **2,919,224**  
[13] C

[51] **Int.Cl. C07C 51/353 (2006.01) C07C 1/20 (2006.01) C07C 1/207 (2006.01) C07C 59/347 (2006.01)**  
[25] EN  
[54] **METHOD FOR CATALYTIC CONVERSION OF KETOACIDS VIA KETOACID DIMER INTERMEDIATE AND HYDROTREATMENT TO HYDROCARBONS**  
[54] **PROCEDE DE CONVERSION CATALYTIQUE DE CETOACIDES AU MOYEN D'INTERMEDIAIRE ATTENUANT LE CETOACIDE ET HYDROTRAITEMENT DESTINE AUX HYDROCARBURES**  
[72] MYLLYOJA, JUKKA, FI  
[72] PIILOLA, RAMI, FI  
[72] SELANTAU, MAARIA, FI  
[72] KALDSTROM, MATS, FI  
[72] LINDBLAD, MARINA, FI  
[72] IKONEN, ELIAS, FI  
[73] NESTE OYJ, FI  
[86] (2919224)  
[87] (2919224)  
[22] 2016-01-28  
[30] EP (EP15153265.2) 2015-01-30

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[11] **2,920,103**  
[13] C

[51] **Int.Cl. G01W 1/00 (2006.01)**  
[25] EN  
[54] **REAL-TIME AUTONOMOUS WEATHER AND SPACE WEATHER MONITORING SURVEILLANCE METEOROLOGIQUE ET SURVEILLANCE DE LA METEOROLOGIE DE L'ESPACE AUTONOMES ET EN TEMPS REEL**

[72] REYNOLDS, ADAM SCOTT, US  
[72] AZEEM, SYED MOHAMMED IRFAN, US  
[72] CROWLEY, GEOFFREY, US  
[73] ATMOSPHERIC & SPACE TECHNOLOGY RESEARCH ASSOCIATES LLC, US

[85] 2016-02-01  
[86] 2014-08-01 (PCT/US2014/049472)  
[87] (WO2015/017824)  
[30] US (61/861,948) 2013-08-02  
[30] US (61/901,426) 2013-11-07

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[11] **2,920,127**  
[13] C

[51] **Int.Cl. H04B 7/005 (2006.01) H04B 7/185 (2006.01)**  
[25] EN  
[54] **EQUALIZATION METHOD FOR A PARSIMONIOUS COMMUNICATION CHANNEL AND DEVICE IMPLEMENTING THE METHOD**

[54] **METHODE D'EGALISATION D'UN CANAL DE COMMUNICATION PARCIMONIEUX ET DISPOSITIF DE MISE EN OEUVRE DE LA METHODE**

[72] RADDADI, BILEL, FR  
[72] GADAT, BENJAMIN, FR  
[72] POUILLIAT, CHARLY, FR  
[72] THOMAS, NATHALIE, FR  
[72] BOUCHERET, MARIE-LAURE, FR  
[73] THALES, FR  
[73] INSTITUT NATIONAL POLYTECHNIQUE DE TOULOUSE, FR  
[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR

[86] (2920127)  
[87] (2920127)  
[22] 2016-02-05  
[30] FR (1500232) 2015-02-06

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[11] **2,920,301**  
[13] C

[51] **Int.Cl. G09B 9/02 (2006.01) G09B 9/08 (2006.01) G09B 9/48 (2006.01)**  
[25] EN  
[54] **UNMANNED VEHICLE SIMULATION**

[54] **SIMULATION DE VEHICULE SANS PILOTE**

[72] HALES, SIMON A., US  
[72] TROWBRIDGE, TEDDY T., US  
[73] INSITU, INC., US

[85] 2016-02-02  
[86] 2014-08-28 (PCT/US2014/053226)  
[87] (WO2015/073102)  
[30] US (61/872,243) 2013-08-30  
[30] US (14/453,555) 2014-08-06

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[11] **2,920,569**  
[13] C

[51] **Int.Cl. F24F 11/89 (2018.01) F24F 11/35 (2018.01) A62C 2/24 (2006.01) F16K 31/05 (2006.01) F16K 31/14 (2006.01) F24F 13/15 (2006.01)**  
[25] EN  
[54] **HVAC DAMPER CONTROL**

[54] **COMMANDE DE REGISTRE CVCA**

[72] PAAVILAINEN, RISTO, FI  
[72] MAKSIMAINEN, JUKKA, FI  
[73] HALTON MARINE OY, FI

[86] (2920569)  
[87] (2920569)  
[22] 2016-02-10  
[30] EP (15157393.8) 2015-03-03

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[11] **2,920,577**  
[13] C

[51] **Int.Cl. B65D 88/66 (2006.01) B65G 65/40 (2006.01) E04B 5/43 (2006.01)**  
[25] EN  
[54] **VIBRATORY FLOOR WITH CONTROLLED ATMOSPHERE, FOR COHESIVE PRODUCTS**

[54] **PLANCHER VIBRATOIRE A ATMOSPHERE CONTROLEE DESTINE A DES PRODUITS COHESIFS**

[72] PONCET, JEAN-CLAUDE, FR  
[73] VIBRAFLOOR SAS, FR

[86] (2920577)  
[87] (2920577)  
[22] 2016-02-11

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[11] **2,920,971**  
[13] C

[51] **Int.Cl. G01N 21/41 (2006.01) E21B 49/08 (2006.01) G01N 21/77 (2006.01) G01N 33/28 (2006.01) G01V 8/02 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR DETERMINING PROPERTIES OF AN OIL MATERIAL**

[54] **SYSTEME ET METHODE PERMETTANT DE DETERMINER LES PROPRIETES D'UNE MATIERE D'HUILE**

[72] FADAEI, HOSSEIN, CA  
[72] OOMS, MATTHEW DAVID, CA  
[72] SINTON, DAVID ALLAN, CA  
[73] FADAEI, HOSSEIN, CA  
[73] OOMS, MATTHEW DAVID, CA  
[73] SINTON, DAVID ALLAN, CA

[86] (2920971)  
[87] (2920971)  
[22] 2016-02-15  
[30] US (62/115,907) 2015-02-13

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[11] **2,922,042**  
[13] C

[51] **Int.Cl. F04C 18/344 (2006.01) F04C 25/02 (2006.01) F04C 29/12 (2006.01)**  
[25] EN  
[54] **HIGH VOLUME VACUUM PUMP FOR CONTINUOUS OPERATION**

[54] **POMPE A VIDE A GRAND VOLUME DESTINEE A UNE OPERATION EN CONTINU**

[72] ROBILLARD, BRUCE, CA  
[73] CLAY VALLEY HOLDINGS INC., CA

[86] (2922042)  
[87] (2922042)  
[22] 2016-02-29  
[30] US (14/959,022) 2015-12-04

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[11] **2,923,916**  
[13] C

[51] **Int.Cl. G01R 19/00 (2006.01) H02J 13/00 (2006.01)**  
[25] EN  
[54] **CURRENT TRANSDUCER WITH OFFSET CANCELLATION**  
[54] **TRANSDUCTEUR DE COURANT DOTE D'ANNULATION DE DECALAGE**  
[72] WALLACE, DANIEL ROBERT, US  
[72] KERN, JOHN MICHAEL, US  
[72] YOUNG, RICHARD, US  
[72] ROSS, BRIAN TIMOTHY, US  
[73] GENERAL ELECTRIC COMPANY, US  
[86] (2923916)  
[87] (2923916)  
[22] 2016-03-17  
[30] US (14/676,423) 2015-04-01

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[11] **2,925,790**  
[13] C

[51] **Int.Cl. B23D 45/18 (2006.01) A01D 34/73 (2006.01) A01G 23/091 (2006.01)**  
[25] EN  
[54] **CUTTING DEVICE TOOTH MOUNTING ARRANGEMENT**  
[54] **AMENAGEMENT D'INSTALLATION DE DENT DE DISPOSITIF DE COUPE**  
[72] DISABATINO, BENJAMIN, CA  
[73] DEERE & COMPANY, US  
[86] (2925790)  
[87] (2925790)  
[22] 2016-03-31  
[30] US (14/861,094) 2015-09-22

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[11] **2,925,964**  
[13] C

[51] **Int.Cl. C02F 1/42 (2006.01) B01J 49/07 (2017.01) B01J 41/00 (2006.01) C01B 19/00 (2006.01) C02F 1/28 (2006.01) C02F 1/44 (2006.01) C02F 1/461 (2006.01) C02F 1/50 (2006.01) C02F 1/52 (2006.01)**  
[25] EN  
[54] **REMOVAL OF DISSOLVED SELENIUM FROM AQUEOUS SOLUTIONS**  
[54] **ELIMINATION DE SELENIUM DISSOUS DE SOLUTIONS AQUEUSES**  
[72] KRATOCHVIL, DAVID, CA  
[72] MOHAMMADI, FARZAD, CA  
[72] LITTLEJOHN, PATRICK, CA  
[72] SANGUINETTI, DAVID, CA  
[73] BQE WATER INC., CA  
[85] 2016-03-31  
[86] 2014-10-03 (PCT/CA2014/050962)  
[87] (WO2015/048907)  
[30] US (61/887,263) 2013-10-04  
[30] US (61/888,908) 2013-10-09

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[11] **2,926,495**  
[13] C

[51] **Int.Cl. A63F 5/00 (2006.01) G07F 17/32 (2006.01)**  
[25] EN  
[54] **SYLLABIC ROULETTE GAME WITH SOLMIZATION, AND METHOD**  
[54] **JEU DE ROULETTE SYLLABIQUE AVEC SOLMISATION, ET PROCEDE**  
[72] FISHER, DONALD, US  
[72] LANGTIM, MELISSA, US  
[72] KRICH, DOUGLAS, US  
[72] GARMANN, DARLENE MARIE, US  
[72] FOOTE, STEPHEN, US  
[73] CG TECHNOLOGY, L.P., US  
[86] (2926495)  
[87] (2926495)  
[22] 2007-12-05  
[62] 2,709,614

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[11] **2,926,845**  
[13] C

[51] **Int.Cl. C07D 413/14 (2006.01) A61K 31/5377 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **SALT AND CRYSTAL FORMS OF PLK-4 INHIBITOR**  
[54] **SEL ET FORMES CRISTALLINES D'UN INHIBITEUR DE PLK-4**  
[72] SAMPSON, PETER BRENT, CA  
[72] FEHER, MIKLOS, US  
[72] PAULS, HEINZ W., CA  
[73] UNIVERSITY HEALTH NETWORK, CA  
[85] 2016-04-08  
[86] 2014-10-17 (PCT/CA2014/051001)  
[87] (WO2015/054793)  
[30] US (61/892,564) 2013-10-18

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[11] **2,927,873**  
[13] C

[51] **Int.Cl. A01K 5/02 (2006.01)**  
[25] EN  
[54] **A METHOD FOR DISTRIBUTING FEED OVER A PLURALITY OF SEPARATE FEEDING LOCATIONS AND A FEEDING SYSTEM THEREFOR**  
[54] **PROCEDE DE DISTRIBUTION D'ALIMENTS POUR ANIMAUX SUR UNE PLURALITE D'EMPLACEMENTS D'ALIMENTATION DISTINCTS ET SYSTEME D'ALIMENTATION ASSOCIE**  
[72] VAN DEN BERG, KAREL, NL  
[73] LELY PATENT N.V., NL  
[85] 2016-04-18  
[86] 2014-09-29 (PCT/NL2014/050664)  
[87] (WO2015/065171)  
[30] NL (2011722) 2013-11-01

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[11] **2,929,605**  
[13] C

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **INFORMATION MARKERS FOR HEART PROSTHESES AND METHODS OF USING SAME**  
[54] **MARQUEURS D'INFORMATION POUR PROTHESES CARDIAQUES ET LEURS PROCEDES D'UTILISATION**  
[72] BAPAT, VINAYAK, GB  
[72] RYAN, TIMOTHY, US  
[73] GUY'S AND ST. THOMAS' NHS FOUNDATION TRUST, GB  
[73] MEDTRONIC, INC., US  
[85] 2016-05-03  
[86] 2014-11-14 (PCT/US2014/065692)  
[87] (WO2015/073815)  
[30] US (61/904,565) 2013-11-15

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[11] **2,929,655**  
[13] C

[51] **Int.Cl. C07C 323/59 (2006.01) A61K 31/165 (2006.01) A61K 31/198 (2006.01) A61K 31/215 (2006.01) A61K 31/27 (2006.01) A61K 31/426 (2006.01) A61K 31/495 (2006.01) A61P 25/00 (2006.01) A61P 25/18 (2006.01) C07D 241/08 (2006.01) C07D 277/14 (2006.01)**  
[25] EN  
[54] **SUBSTITUTED N-ACETYL-L-CYSTEINE DERIVATIVES AND RELATED COMPOUNDS**  
[54] **DERIVES DE N-ACETYL-L-CYSTEINE SUBSTITUEE ET COMPOSES ASSOCIES**  
[72] NEARY, MICHAEL, US  
[72] NIEMAN, JAMES, CA  
[72] TANIS, STEVEN, US  
[72] LAWTON, DANIEL, US  
[72] SMITH, GARRY, US  
[73] PROMENTIS PHARMACEUTICALS, INC., US  
[85] 2016-05-04  
[86] 2014-11-07 (PCT/US2014/064581)  
[87] (WO2015/070034)  
[30] US (61/902,052) 2013-11-08  
[30] US (61/902,669) 2013-11-11

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[11] **2,929,688**  
[13] C

[51] **Int.Cl. A61K 31/225 (2006.01) A61K 9/00 (2006.01) A61K 31/192 (2006.01)**  
[25] EN  
[54] **SOLID COMPOSITIONS OF TRIGLYCERIDES AND USES THEREOF**  
[54] **COMPOSITIONS SOLIDES DE TRIGLYCERIDES ET LEURS UTILISATIONS**  
[72] KLOPP, JOHN, US  
[72] MORRIS, GABRIELLE, US  
[72] KAKKIS, EMIL, US  
[72] JUNGLES, STEVEN, US  
[73] ULTRAGENYX PHARMACEUTICAL INC., US  
[85] 2016-05-04  
[86] 2014-11-14 (PCT/US2014/065693)  
[87] (WO2015/073816)  
[30] US (61/904,369) 2013-11-14

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[11] **2,929,874**  
[13] C

[51] **Int.Cl. A61B 5/24 (2021.01) A61N 1/05 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR DETECTING A NEURAL RESPONSE IN A NEURAL MEASUREMENT**  
[54] **PROCEDE ET DISPOSITIF DE DETECTION D'UNE REPONSE NEURALE DANS UNE MESURE NEURALE**  
[72] SINGLE, PETER SCOTT VALLACK, AU  
[72] KARANTONIS, DEAN MICHAEL, AU  
[73] SALUDA MEDICAL PTY LTD, AU  
[85] 2016-05-06  
[86] 2014-11-22 (PCT/AU2014/050369)  
[87] (WO2015/074121)  
[30] AU (2013904519) 2013-11-22

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[11] **2,930,628**  
[13] C

[51] **Int.Cl. F02M 13/08 (2006.01) F02D 19/06 (2006.01) F16K 31/06 (2006.01)**  
[25] EN  
[54] **BATTERYLESS DUAL FUEL ENGINE WITH LIQUID FUEL CUT-OFF**  
[54] **MOTEUR A ESSENCE DOUBLE SANS BATTERIE A COUPURE DE CARBURANT LIQUIDE**  
[72] COLLIE, KENDALL J., US  
[72] SARDER, MARK J., US  
[72] SOTIRIADES, ALEKO D., US  
[72] DEHN, JAMES J., US  
[72] JENISON, LEIGH, US  
[72] SATO, HIROAKI, US  
[73] CHAMPION POWER EQUIPMENT, US  
[86] (2930628)  
[87] (2930628)  
[22] 2016-05-18  
[30] US (14/738,060) 2015-06-12  
[30] US (14/925,441) 2015-10-28

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[11] **2,931,224**  
[13] C

[51] **Int.Cl. A61L 27/16 (2006.01) A61F 2/08 (2006.01) A61L 27/18 (2006.01) C08L 25/04 (2006.01) C08L 67/04 (2006.01)**  
[25] FR  
[54] **RESORBABLE BIOMIMETIC PROSTHETIC LIGAMENT**  
[54] **LIGAMENT PROTHETIQUE BIOMIMETIQUE RESORBABLE**  
[72] BRULEZ, BERNARD, FR  
[72] MIGONNEY, VERONIQUE, FR  
[72] GUILARD, ROGER, FR  
[73] L.A.R.S. - LABORATOIRE D'APPLICATION ET DE RECHERCHE SCIENTIFIQUE, FR  
[85] 2016-05-19  
[86] 2014-11-21 (PCT/FR2014/052992)  
[87] (WO2015/075397)  
[30] FR (1361522) 2013-11-22

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[11] **2,931,412**

[13] C

- [51] **Int.Cl. B29C 45/76 (2006.01)**  
[25] EN  
[54] **MANUFACTURING PROCESS CONTROL SYSTEMS AND METHODS**  
[54] **MECANISMES DE COMMANDE DE PROCEDE DE FABRICATION ET METHODES**  
[72] STONE, ASHLEY, DE  
[73] MEYER, EDO, DE  
[86] (2931412)  
[87] (2931412)  
[22] 2016-05-27

[11] **2,932,290**

[13] C

- [51] **Int.Cl. A61K 9/00 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS COMPRISING ANTIOXIDANT, FLUID DISPENSERS, AND METHODS INVOLVING THE SAME**  
[54] **COMPOSITIONS COMPRENANT UN ANTIOXYDANT, DES DISTRIBUTEURS DE LIQUIDE, ET PROCEDES IMPLIQUANT CEUX-CI**  
[72] SONG, XIAOPING, US  
[72] PEER, CLARISA, US  
[72] YUM, SU IL, US  
[73] DURECT CORPORATION, US  
[85] 2016-05-30  
[86] 2014-12-08 (PCT/US2014/069135)  
[87] (WO2015/085312)  
[30] US (61/913,139) 2013-12-06

[11] **2,932,644**

[13] C

- [51] **Int.Cl. G06Q 10/063 (2023.01) G06F 17/00 (2019.01)**  
[25] EN  
[54] **DATA PROCESSOR FOR PROJECT DATA**  
[54] **DISPOSITIF DE TRAITEMENT DE DONNEES DESTINE AUX DONNEES DE PROJET**  
[72] SHARMA, VIBHU S., IN  
[72] KAULGUD, VIKRANT S., IN  
[72] MANIAR, PARIKSHIT, IN  
[72] VOHRA, SANJEEV, IN  
[72] MITTAL, SANJAY, IN  
[72] SANTHARAM, ARVINDAN THOPPE, IN  
[72] BRINKLEY, MICHAEL A., IN  
[72] VIRDI, GURDEEP, IN  
[72] DURAISAMY SOUNDRAPANDIAN, PRADEEPKUMAR, IN  
[73] ACCENTURE GLOBAL SERVICES LIMITED, IE  
[86] (2932644)  
[87] (2932644)  
[22] 2016-06-10  
[30] IN (2953/CHE/2015) 2015-06-12  
[30] IN (2953/CHE/2015) 2015-11-24

[11] **2,932,942**

[13] C

- [51] **Int.Cl. G01N 23/046 (2018.01)**  
[25] FR  
[54] **NON-INTRUSIVE MEASUREMENT OF THE VOLUME DENSITY OF A PHASE IN A PART**  
[54] **MESURE NON INTRUSIVE DE LA DENSITE VOLUMIQUE D'UNE PHASE DANS UNE PIECE**  
[72] MORARD, VINCENT, FR  
[72] PARRA, ESTELLE, FR  
[72] TOURAI, DAVID, FR  
[73] SAFRAN, FR  
[85] 2016-06-06  
[86] 2014-12-03 (PCT/FR2014/053147)  
[87] (WO2015/086956)  
[30] FR (1362554) 2013-12-13

[11] **2,934,135**

[13] C

- [51] **Int.Cl. C07D 471/04 (2006.01) A61K 31/4162 (2006.01) A61K 31/52 (2006.01) C07D 473/34 (2006.01) C07D 473/38 (2006.01) C07D 487/04 (2006.01)**  
[25] EN  
[54] **ISOCHROMENE DERIVATIVES AS PHOSPHOINOSITIDE 3-KINASES INHIBITORS**  
[54] **DERIVES D'ISOCHROMENE UTILES EN TANT QU'INHIBITEURS DES PHOSPHOINOSITIDE 3-KINASES**  
[72] BIAGETTI, MATTEO, IT  
[72] CAPELLI, ANNA MARIA, IT  
[72] ACCETTA, ALESSANDRO, IT  
[72] CARZANIGA, LAURA, IT  
[73] CHIESI FARMACEUTICI S.P.A., IT  
[85] 2016-06-16  
[86] 2014-12-17 (PCT/EP2014/078288)  
[87] (WO2015/091685)  
[30] EP (13197986.6) 2013-12-18

[11] **2,934,469**

[13] C

- [51] **Int.Cl. G01L 9/00 (2006.01) G08B 13/20 (2006.01) H01H 35/32 (2006.01)**  
[25] EN  
[54] **DETECTOR UTILIZING AN ADJUSTMENT SCREW AND A BELLOWS**  
[54] **DETECTEUR EMPLOYANT UNE VIS DE REGLAGE ET UN SOUFFLET**  
[72] FRASURE, DAVID, US  
[72] WALLACE, STEVEN, US  
[73] KIDDE TECHNOLOGIES INC., US  
[86] (2934469)  
[87] (2934469)  
[22] 2016-06-28  
[30] US (14/755,321) 2015-06-30

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[11] **2,934,956**  
[13] C

[51] **Int.Cl. H04N 21/258 (2011.01) H04H 60/33 (2009.01) H04N 21/466 (2011.01) H04N 21/4782 (2011.01)**

[25] EN

[54] **TRACKING PIXELS AND COOKIES FOR TELEVISION EVENT VIEWING**

[54] **SUIVI DE PIXELS ET DE TEMOINS POUR UNE VISUALISATION D'EVENEMENT DE TELEVISION**

[72] NEUMEIER, ZEEV, US

[72] COLLETTE, MICHAEL, JR., US

[72] HOARTY, LEO W., US

[73] INSCAPE DATA, INC., US

[85] 2016-06-22

[86] 2014-12-23 (PCT/US2014/072255)

[87] (WO2015/100372)

[30] US (61/920,086) 2013-12-23

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[11] **2,934,997**  
[13] C

[51] **Int.Cl. C12N 15/82 (2006.01) C07K 14/195 (2006.01) C07K 14/405 (2006.01) C07K 19/00 (2006.01) C12N 15/31 (2006.01)**

[25] EN

[54] **PLANTS WITH ENHANCED PHOTOSYNTHESIS AND METHODS OF MANUFACTURE THEREOF**

[54] **PLANTES DOTEES D'UNE PHOTOSYNTHESE AMELIOREE ET PROCEDES POUR LES PRODUIRE**

[72] SCHNELL, DANNY J., US

[72] CANAKCI, MINE O., US

[72] PAULOSE, BIBIN, US

[72] DACOSTA, MICHELLE, US

[73] THE UNIVERSITY OF MASSACHUSETTS, US

[85] 2016-06-22

[86] 2014-12-24 (PCT/US2014/072347)

[87] (WO2015/103074)

[30] US (61/922,141) 2013-12-31

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[11] **2,936,118**  
[13] C

[51] **Int.Cl. G21C 9/004 (2006.01)**

[25] EN

[54] **PASSIVELY INITIATED DEPRESSURIZATION VALVE FOR LIGHT WATER REACTORS**

[54] **VANNE DE DEPRESSURISATION DECLENCHEE DE MANIERE PASSIVE POUR DES REACTEURS A EAU LEGERE**

[72] WATSON, RONALD C., US

[72] MALLOY, JOHN D., III, US

[73] BWXT MPOWER, INC., US

[85] 2016-07-06

[86] 2015-01-06 (PCT/US2015/010214)

[87] (WO2015/142407)

[30] US (61/924,038) 2014-01-06

[30] US (14/296,831) 2014-06-05

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[11] **2,936,158**  
[13] C

[51] **Int.Cl. C12N 15/11 (2006.01) A61K 31/7088 (2006.01)**

[25] EN

[54] **USE OF MIR-135 OR PRECURSOR THEREOF FOR THE TREATMENT AND DIAGNOSIS OF A BIPOLAR DISEASE**

[54] **UTILISATION DE MIR-135 OU UN PRECURSEUR CONNEXE POUR LE TRAITEMENT OU LE DIAGNOSTIC D'UN TROUBLE BIPOLAIRE**

[72] CHEN, ALON, IL

[72] ISSLER, ORNA, IL

[73] YEDA RESEARCH AND DEVELOPMENT CO. LTD., IL

[85] 2016-07-07

[86] 2015-02-05 (PCT/IL2015/050132)

[87] (WO2015/118537)

[30] US (61/935,912) 2014-02-05

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[11] **2,936,207**  
[13] C

[51] **Int.Cl. F01D 25/18 (2006.01) F01D 25/16 (2006.01) F02C 7/06 (2006.01) F16C 33/66 (2006.01)**

[25] EN

[54] **OIL SCUPPER SYSTEM FOR BEARING HOUSING OF GAS TURBINE ENGINE**

[54] **SYSTEME DE DALOT D'HUILE DESTINE AU LOGEMENT DE PALIER D'UN MOTEUR DE TURBINE A GAZ**

[72] LEFEBVRE, GUY, CA

[72] DUROCHER, ERIC, CA

[73] PRATT & WHITNEY CANADA CORP., CA

[86] (2936207)

[87] (2936207)

[22] 2016-07-13

[30] US (14/831,320) 2015-08-20

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[11] **2,936,615**  
[13] C

[51] **Int.Cl. C07C 271/22 (2006.01) A61K 49/00 (2006.01) C07K 1/13 (2006.01) C07K 2/00 (2006.01)**

[25] EN

[54] **MULTIPLE CYCLOADDITION REACTIONS FOR LABELING OF MOLECULES**

[54] **REACTIONS DE CYCLOADDITION MULTIPLE POUR LE MARQUAGE DE MOLECULES**

[72] LEMKE, EDWARD, DE

[72] SCHULTZ, CARSTEN, DE

[72] PLASS, TILLMANN, DE

[72] NIKIC, IVANA, DE

[72] HOFFMAN, JAN-ERIK, DE

[72] VALLE ARAMBURU, IKER, DE

[73] EUROPEAN MOLECULAR BIOLOGY LABORATORY, DE

[85] 2016-07-12

[86] 2015-01-14 (PCT/EP2015/050555)

[87] (WO2015/107064)

[30] EP (14151175.8) 2014-01-14



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[11] **2,936,800**  
[13] C

[51] **Int.Cl. A61B 5/145 (2006.01) H01F 5/00 (2006.01)**  
[25] EN  
[54] **A REMOTELY POWERED, MULTISITE SENSING SYSTEM WITH A SHARED, TWO-WIRE BUS FOR POWER AND COMMUNICATION**  
[54] **SYSTEME DE DETECTION MULTISITE ALIMENTE A DISTANCE A BUS PARTAGE BIFILAIRE DESTINE A L'ALIMENTATION EN ENERGIE ET A LA COMMUNICATION**  
[72] DEHENNIS, ANDREW, US  
[73] SENSEONICS, INCORPORATED, US  
[85] 2016-07-13  
[86] 2015-01-12 (PCT/US2015/011016)  
[87] (WO2015/106198)  
[30] US (61/926,636) 2014-01-13

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[11] **2,937,459**  
[13] C

[51] **Int.Cl. F28C 1/00 (2006.01)**  
[25] EN  
[54] **MODULAR HEAT EXCHANGE TOWER AND METHOD OF ASSEMBLING SAME**  
[54] **TOUR D'ECHANGE DE CHALEUR MODULAIRE ET METHODE D'ASSEMBLAGE ASSOCIEE**  
[72] MAURER, SCOTT, US  
[72] HINK, PAUL, US  
[73] SPX COOLING TECHNOLOGIES, INC., US  
[86] (2937459)  
[87] (2937459)  
[22] 2016-07-29  
[30] US (14/821,062) 2015-08-07

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[11] **2,938,012**  
[13] C

[51] **Int.Cl. B29C 65/50 (2006.01) E04D 15/04 (2006.01) G05G 15/08 (2006.01)**  
[25] EN  
[54] **TAPE APPLICATOR ASSEMBLY AND TAPE ASSEMBLY**  
[54] **ENSEMBLE APPLICATEUR DE RUBAN ET ENSEMBLE RUBAN**  
[72] KRETZ, DANIEL T., US  
[72] COVEY, JASON P., US  
[72] HARKLESS, JONATHAN D., US  
[73] GAFFTECH, LLC, US  
[85] 2016-07-26  
[86] 2015-01-21 (PCT/US2015/012170)  
[87] (WO2015/116446)  
[30] US (14/166,656) 2014-01-28  
[30] US (14/167,557) 2014-01-29  
[30] US (62/057,846) 2014-09-30  
[30] US (62/084,474) 2014-11-25

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[11] **2,939,666**  
[13] C

[51] **Int.Cl. G06Q 30/08 (2012.01) G06Q 50/08 (2012.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR THE CREATION, SUBMISSION AND EVALUATION OF CONSTRUCTION BID PACKAGES**  
[54] **PROCEDES ET SYSTEMES DESTINES A LA CREATION, LA SOUMISSION ET L'EVALUATION DE DOSSIERS D'APPELS D'OFFRES DE CONSTRUCTION**  
[72] ALLIN, PATRICK J., US  
[72] KHADIR, MATEEN, US  
[72] TURRINELLI, FRANCO, US  
[73] TEXTURA CORPORATION, US  
[85] 2016-08-12  
[86] 2015-02-27 (PCT/US2015/018106)  
[87] (WO2015/131103)  
[30] US (61/946,155) 2014-02-28

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[11] **2,940,144**  
[13] C

[51] **Int.Cl. C07D 231/56 (2006.01) A61K 31/395 (2006.01) A61K 31/416 (2006.01) A61K 31/4178 (2006.01) A61K 31/42 (2006.01) A61K 31/4245 (2006.01) A61K 31/425 (2006.01) A61K 31/427 (2006.01) A61K 31/4439 (2006.01) A61K 31/497 (2006.01) A61K 31/501 (2006.01) A61K 31/506 (2006.01) A61P 35/04 (2006.01) C07D 401/12 (2006.01) C07D 403/12 (2006.01) C07D 405/04 (2006.01) C07D 405/12 (2006.01) C07D 409/12 (2006.01) C07D 413/12 (2006.01) C07D 417/12 (2006.01) C07D 471/04 (2006.01)**  
[25] EN  
[54] **SUBSTITUTED INDAZOL-3-YL DERIVATIVES AND PHARMACEUTICAL COMPOSITIONS THEREOF USEFUL AS INHIBITOR OF FASCIN**  
[54] **DERIVES D'INDAZOL-3-YL SUBSTITUES ET COMPOSITIONS PHARMACEUTIQUES CONNEXES UTILES COMME INHIBITEURS DE LA FASCINE**  
[72] HUANG, XIN-YUN, US  
[72] SHUE, CHRISTY YOUNG, US  
[73] CORNELL UNIVERSITY, US  
[73] NOVITA PHARMACEUTICALS, INC., US  
[85] 2016-08-18  
[86] 2015-02-19 (PCT/US2015/016686)  
[87] (WO2015/127125)  
[30] US (61/942,554) 2014-02-20

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[11] **2,940,217**  
[13] C

[51] **Int.Cl. C12N 15/63 (2006.01) C12N 15/113 (2010.01) C12N 5/10 (2006.01) C12N 15/00 (2006.01) C12N 15/10 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR SITE DIRECTED GENOMIC MODIFICATION**

[54] **COMPOSITIONS ET PROCEDES DE MODIFICATION GENOMIQUE DIRIGEE**

[72] BROWER-TOLAND, BRENT, US  
[72] KOURANOV, ANDREI Y., US  
[72] KUEHN, ROSEMARIE, US  
[72] LAWRENCE, RICHARD J., US  
[72] NAGY, ERVIN D., US  
[72] RYMARQUIS, LINDA, US  
[72] VEENA, VEENA, US  
[73] MONSANTO TECHNOLOGY LLC, US

[85] 2016-08-18  
[86] 2015-02-27 (PCT/US2015/018104)  
[87] (WO2015/131101)  
[30] US (61/945,700) 2014-02-27

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[11] **2,941,695**  
[13] C

[51] **Int.Cl. F15B 5/00 (2006.01) F16K 31/06 (2006.01) G05D 16/20 (2006.01)**

[25] EN

[54] **ELECTROPNEUMATIC CONVERTERS FOR CONTROLLING A VALVE**

[54] **CONVERTISSEURS ELECTROPNEUMATIQUES POUR CONTROLER UNE SOUPEPE**

[72] GASSMAN, GEORGE W., US  
[73] FISHER CONTROLS INTERNATIONAL LLC, US

[85] 2016-09-02  
[86] 2015-03-18 (PCT/US2015/021138)  
[87] (WO2015/142976)  
[30] US (61/955,110) 2014-03-18

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[11] **2,941,944**  
[13] C

[51] **Int.Cl. C12N 5/04 (2006.01) A23L 7/10 (2016.01) A01H 1/00 (2006.01) A01N 25/32 (2006.01) A23J 1/12 (2006.01) C08B 30/04 (2006.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **WHEAT VARIETY XW12Q**

[54] **VARIETE DE BLE XW12Q**

[72] CLARKSON, ROBERT LEWIS, US  
[72] LASKAR, WILLIAM JOSEPH, US  
[72] LIVELY, KYLE JAY, US  
[72] MARSHALL, GREGORY CHARLES, US

[73] PIONEER HI-BRED INTERNATIONAL, INC., US

[86] (2941944)  
[87] (2941944)  
[22] 2016-09-14  
[30] US (15/245,356) 2016-08-24

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[11] **2,942,080**  
[13] C

[51] **Int.Cl. E01F 13/02 (2006.01) E01F 15/02 (2006.01) E01F 15/14 (2006.01)**

[25] EN

[54] **PROTECTIVE BARRIER**

[54] **BARRIERE DE PROTECTION**

[72] MCCUE, DAVID S., US  
[72] USTACH, THOMAS, US  
[72] STRATFORD, TIMOTHY DAVID, GB  
[73] MCCUE CORPORATION, US

[85] 2016-09-08  
[86] 2015-03-16 (PCT/US2015/020706)  
[87] (WO2015/139023)  
[30] US (61/953,190) 2014-03-14  
[30] US (62/073,308) 2014-10-31

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[11] **2,942,626**  
[13] C

[51] **Int.Cl. A61L 24/00 (2006.01) A61K 9/00 (2006.01) A61M 5/14 (2006.01) A61N 5/06 (2006.01) A61P 9/14 (2006.01) A61L 27/54 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND DEVICES FOR SCLEROTHERAPY USING LIGHT HARDENING GLUES**

[54] **COMPOSITIONS ET DISPOSITIFS POUR LA SCLEROTHERAPIE A L'AIDE DE COLLES DURCISSANT A LA LUMIERE**

[72] RAGG, JOHANN CHRISTOF, DE  
[73] SWISS VX VENENTHERAPIE UND FORSCHUNG GMBH, CH

[85] 2016-09-13  
[86] 2015-03-27 (PCT/EP2015/056760)  
[87] (WO2015/144898)  
[30] EP (14162466.8) 2014-03-28  
[30] EP (14164393.2) 2014-04-11

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[11] **2,942,808**  
[13] C

[51] **Int.Cl. B29C 53/08 (2006.01) B29C 53/40 (2006.01) B32B 5/18 (2006.01) B32B 7/12 (2006.01) B32B 27/30 (2006.01) B32B 37/12 (2006.01) F16L 9/14 (2006.01) F24F 13/02 (2006.01)**

[25] EN

[54] **CLAD DUCT AND METHOD FOR PRODUCING A CLAD DUCT**

[54] **CONDUITE GAINEE ET METHODE DE FABRICATION**

[72] LANCIAUX, FRAN, US  
[73] LANCIAUX, FRAN, US

[85] 2016-09-14  
[86] 2014-03-17 (PCT/US2014/000053)  
[87] (WO2014/149136)  
[30] US (61/852,240) 2013-03-15

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[11] **2,943,429**  
[13] C

[51] **Int.Cl. B01D 69/12 (2006.01) B01D 67/00 (2006.01) B01D 71/06 (2006.01) C02F 1/44 (2006.01) B01D 71/76 (2006.01)**

[25] EN

[54] **PROCESS FOR MAKING MEMBRANES**

[54] **PROCEDE DE FABRICATION DE MEMBRANES**

[72] GRZELAKOWSKI, MARIUSZ PIOTR, US

[73] VANDSTROM APS, DK

[85] 2016-09-21

[86] 2015-03-24 (PCT/EP2015/056292)

[87] (WO2015/144724)

[30] GB (1405390.4) 2014-03-26

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[11] **2,943,625**  
[13] C

[51] **Int.Cl. A01N 37/02 (2006.01) A01N 25/02 (2006.01) A01P 7/02 (2006.01) A01P 7/04 (2006.01)**

[25] FR

[54] **USE OF ONE OR MORE FATTY ACID ESTERS AS INSECTICIDE AND/OR ARACHNICIDE**

[54] **UTILISATION D'ESTER(S) D'ACIDE(S) GRAS COMME INSECTICIDE ET/OU ARACHNICIDE**

[72] RAVIER, PIERRE, FR

[72] CHATILLON, MATTHIEU, FR

[72] BARREAU, SEBASTIEN, FR

[73] OLEON NV, BE

[85] 2016-09-22

[86] 2015-03-24 (PCT/FR2015/050734)

[87] (WO2015/145057)

[30] FR (1452607) 2014-03-26

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[11] **2,944,229**  
[13] C

[51] **Int.Cl. G01N 33/573 (2006.01) G01N 33/58 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **METHOD FOR DETECTING PROTEIN MODIFICATIONS USING SPECIFIC ANTIBODIES**

[54] **PROCEDE DE DETECTION DE MODIFICATIONS PROTEIQUES EN UTILISANT DES ANTICORPS SPECIFIQUES**

[72] JAEHRLING, FRANK, DE

[72] BLADT, FRIEDHELM, DE

[72] KUEHR, JESSICA, DE

[73] MERCK PATENT GMBH, DE

[85] 2016-09-28

[86] 2015-02-27 (PCT/EP2015/000469)

[87] (WO2015/149903)

[30] EP (14001200.6) 2014-03-31

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[11] **2,944,853**  
[13] C

[51] **Int.Cl. G06Q 40/02 (2023.01) G06F 3/14 (2006.01) G06F 17/00 (2019.01)**

[25] EN

[54] **IMPROVED COMPUTING DEVICE AND METHOD FOR THE TEMPORAL ARRANGEMENT OF DATA**

[54] **APPAREIL INFORMATIQUE AMELIORE ET METHODE D'ARRANGEMENT TEMPOREL DE DONNEES**

[72] MILLER, ROBERT KYLE, CA

[72] GANDHI, RAJEEV KUMAR, CA

[72] JETHWA, RAKESH THOMAS, CA

[72] CHAN, PAUL MON-WAH, CA

[72] LEE, JOHN JONG SUK, CA

[73] THE TORONTO-DOMINION BANK, CA

[86] (2944853)

[87] (2944853)

[22] 2016-10-11

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[11] **2,944,976**  
[13] C

[51] **Int.Cl. B63B 1/28 (2006.01) B63B 1/26 (2006.01)**

[25] EN

[54] **WATERCRAFT HAVING MOVABLE HYDROFOILS**

[54] **VEHICULE MARIN A AILES PORTANTES MOBILES**

[72] SCHNAUFFER, PETER, DE

[73] SCHNAUFFER, PETER, DE

[85] 2016-10-05

[86] 2015-04-07 (PCT/EP2015/057473)

[87] (WO2015/162000)

[30] DE (10 2014 105 883.6) 2014-04-25

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[11] **2,945,462**  
[13] C

[51] **Int.Cl. H01S 3/131 (2006.01) H01S 3/067 (2006.01) H01S 3/0941 (2006.01) H01S 3/17 (2006.01) H01S 5/0683 (2006.01)**

[25] EN

[54] **MID-INFRARED LASER SYSTEM, MID-INFRARED OPTICAL AMPLIFIER, AND METHOD OF OPERATING A MID-INFRARED LASER SYSTEM**

[54] **SYSTEME LASER MI-INFRAROUGE, AMPLIFICATEUR OPTIQUE MI-INFRAROUGE ET METHODE D'EXPLOITATION D'UN SYSTEME LASER MI-INFRAROUGE**

[72] BERNIER, MARTIN, CA

[72] VALLEE, REAL, CA

[72] FORTIN, VINCENT, CA

[72] GAUTHIER, JEAN-CHRISTOPHE, CA

[72] DUVAL, SIMON, CA

[73] UNIVERSITE LAVAL, CA

[86] (2945462)

[87] (2945462)

[22] 2016-10-14

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[11] **2,945,695**  
[13] C

[51] **Int.Cl. H01L 33/44 (2010.01) H01L 25/075 (2006.01)**  
[25] EN  
[54] **LIGHTING DEVICE HAVING A PATTERNED CONFORMAL COATING DOPED WITH A LUMINESCENT MATERIAL**  
[54] **DISPOSITIF D'ECLAIRAGE COMPORTANT UN REVETEMENT CONFORME A MOTIF DOPE AVEC UN MATERIAU LUMINESCENT**  
[72] PEREZ-BOLIVAR, CESAR, US  
[72] REDWINE, MICHAEL, US  
[73] GROTE INDUSTRIES, LLC, US  
[85] 2016-07-27  
[86] 2015-02-10 (PCT/US2015/015145)  
[87] (WO2015/156902)  
[30] US (14/251,022) 2014-04-11

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[11] **2,946,186**  
[13] C

[51] **Int.Cl. E06B 1/52 (2006.01)**  
[25] EN  
[54] **CONCEALABLE FLUSH WALL DOOR STRUCTURAL FRAME AND FLUSH WALL DOOR ASSEMBLY INCLUDING SAME**  
[54] **CADRE STRUCTUREL DE PORTE AFFLEURANTE ENCASTRABLE ET PORTE AFFLEURANTE COMPORTANT LEDIT CADRE**  
[72] ROCHON, DANIEL, CA  
[72] TURCOTTE, MARIO, CA  
[72] ROCHON, STEVE, CA  
[73] INDUSTRIES DORR INC., CA  
[86] (2946186)  
[87] (2946186)  
[22] 2016-10-21  
[30] US (62/244,486) 2015-10-21

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[11] **2,946,645**  
[13] C

[51] **Int.Cl. A47L 9/14 (2006.01)**  
[25] EN  
[54] **VACUUM BAG**  
[54] **SAC D'ASPIRATEUR**  
[72] BLACKWELL, JAMES P., JR., US  
[72] CREVLING, ROBERT LENT, JR., US  
[72] MILLER, JONATHAN, US  
[73] SHOP VAC CORPORATION, US  
[85] 2016-10-20  
[86] 2015-01-05 (PCT/US2015/010125)  
[87] (WO2015/187205)  
[30] US (14/295,025) 2014-06-03

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[11] **2,947,425**  
[13] C

[51] **Int.Cl. C07C 261/00 (2006.01) C07C 269/00 (2006.01) C07C 277/00 (2006.01) C07C 279/00 (2006.01)**  
[25] EN  
[54] **INHIBITORS OF CREATINE TRANSPORT AND USES THEREOF**  
[54] **INHIBITEURS DE TRANSPORT DE LA CREATINE ET LEURS UTILISATIONS**  
[72] MARTINEZ, EDUARDO J., US  
[72] TAVAZOIE, SOHAIL F., US  
[73] INSPIRNA, INC., US  
[85] 2016-10-28  
[86] 2015-04-30 (PCT/US2015/028633)  
[87] (WO2015/168465)  
[30] US (61/986,723) 2014-04-30

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[11] **2,947,700**  
[13] C

[51] **Int.Cl. B23K 9/28 (2006.01)**  
[25] EN  
[54] **FLEXIBLE WIRE GUIDE SYSTEM**  
[54] **MECANISME GUIDE-FIL FLEXIBLE**  
[72] COOPER, EDWARD L., US  
[72] HAYES, STEVEN J., US  
[73] ELCO ENTERPRISES, INC., US  
[86] (2947700)  
[87] (2947700)  
[22] 2016-11-07  
[30] US (62/251,990) 2015-11-06

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[11] **2,947,775**  
[13] C

[51] **Int.Cl. A61L 27/56 (2006.01) C12N 5/077 (2010.01) A61F 2/28 (2006.01) A61K 35/32 (2015.01)**  
[25] EN  
[54] **STRUCTURAL POROUS BIOMATERIAL AND IMPLANT FORMED OF SAME**  
[54] **BIOMATERIAU POREUX DE STRUCTURE ET PROTHESE FORMEE A PARTIR DE CELUI-CI**  
[72] PASINI, DAMIANO, CA  
[72] TANZER, MICHAEL, CA  
[72] ARABNEJAD, SAJAD KHANOKI, CA  
[72] JOHNSTON, BURNETT, CA  
[73] THE ROYAL INSTITUTION FOR THE ADVANCEMENT OF LEARNING/MCGILL UNIVERSITY, CA  
[85] 2016-11-02  
[86] 2015-05-04 (PCT/CA2015/050384)  
[87] (WO2015/164982)  
[30] US (61/987,950) 2014-05-02

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[11] **2,948,318**  
[13] C

[51] **Int.Cl. B29D 11/00 (2006.01) G02B 1/10 (2015.01) C09K 3/10 (2006.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING AND COATING A LENS**  
[54] **METHODE DE PRODUCTION ET DE REVETEMENT D'UNE LENTILLE**  
[72] PIOTROWSKI, DANIEL, CH  
[72] ULRICH, RENE JOSEF, CH  
[73] INTERGLASS TECHNOLOGY AG, CH  
[86] (2948318)  
[87] (2948318)  
[22] 2016-11-14  
[30] CH (1688/15) 2015-11-19

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[11] **2,948,333**  
[13] C

[51] **Int.Cl. B62D 25/06 (2006.01) B62D 27/02 (2006.01) B62D 29/04 (2006.01) B62D 65/06 (2006.01)**  
[25] EN  
[54] **ROOF ATTACHMENT METHOD FOR AN APPLIED COMPOSITION ROOF**  
[54] **PROCEDE DE FIXATION DE TOIT POUR UN TOIT COMPOSITE APPLIQUE**  
[72] RODDY, STEPHEN R., US  
[72] KAPADIA, AMEIL A., US  
[72] MARTIN, MARK C., US  
[72] PLAUMAN, MATTHEW R., US  
[73] MAGNA EXTERIORS INC., CA  
[85] 2016-11-07  
[86] 2015-05-06 (PCT/US2015/029472)  
[87] (WO2015/171767)  
[30] US (61/989,182) 2014-05-06

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[11] **2,948,668**  
[13] C

[51] **Int.Cl. E06B 9/24 (2006.01) G02F 1/163 (2006.01)**  
[25] EN  
[54] **CONTROL METHOD FOR TINTABLE WINDOWS**  
[54] **PROCEDE DE COMMANDE DESTINE A DES FENETRES POUVANT ETRE TEINTEES**  
[72] BROWN, STEPHEN C., US  
[73] VIEW, INC., US  
[85] 2016-11-09  
[86] 2015-05-07 (PCT/US2015/029675)  
[87] (WO2015/171886)  
[30] US (61/991,375) 2014-05-09

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[11] **2,949,236**  
[13] C

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 38/16 (2006.01) A61K 38/17 (2006.01) A61K 38/28 (2006.01) A61K 39/395 (2006.01) A61P 3/08 (2006.01) A61P 3/10 (2006.01) C07K 14/575 (2006.01) C07K 14/62 (2006.01) C07K 16/24 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL COMPOSITIONS AND METHODS FOR FABRICATION OF SOLID MASSES COMPRISING POLYPEPTIDES AND/OR PROTEINS**

[54] **COMPOSITIONS PHARMACEUTIQUES ET PROCEDES DE FABRICATION DE MASSES SOLIDES COMPRENANT DES POLYPEPTIDES ET/OU DES PROTEINES**

[72] MORALES, MERCEDES, US  
[72] IMRAN, MIR, US  
[72] KORUPOLU, RADHIKA, US  
[72] HASHIM, MIR, US  
[73] RANI THERAPEUTICS, LLC, US  
[85] 2016-11-15  
[86] 2015-05-15 (PCT/US2015/031239)  
[87] (WO2015/176031)  
[30] US (61/993,907) 2014-05-15  
[30] US (62/156,105) 2015-05-01  
[30] US (62/159,134) 2015-05-08

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[11] **2,949,360**  
[13] C

[51] **Int.Cl. F16P 3/14 (2006.01) B60W 60/00 (2020.01) E01F 13/00 (2006.01) E21F 17/00 (2006.01) G05D 1/02 (2020.01)**

[25] EN

[54] **SAFETY SYSTEM FOR AUTOMATED OPERATION OF MINING VEHICLES AND METHOD FOR SUCH A SAFETY SYSTEM**

[54] **SYSTEME DE SECURITE POUR LE FONCTIONNEMENT AUTOMATISE DE VEHICULES MINIER ET PROCEDE POUR UN TEL SYSTEME DE SECURITE**

[72] HENDEBERG, RICHARD, SE  
[73] EPIROC ROCK DRILLS AKTIEBOLAG, SE  
[85] 2016-11-16  
[86] 2015-05-29 (PCT/SE2015/050627)  
[87] (WO2015/187081)  
[30] SE (1450691-9) 2014-06-05

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[11] **2,949,369**  
[13] C

[51] **Int.Cl. A61K 35/06 (2006.01) A61K 35/60 (2006.01)**

[25] EN

[54] **FOOD AND BEVERAGE COMPOSITIONS INFUSED WITH LIPOPHILIC ACTIVE AGENTS AND METHODS OF USE THEREOF**

[54] **COMPOSITIONS D'ALIMENTS ET DE BOISSONS DANS LESQUELLES ONT ETE INFUSEES DES CANNABINOIDES, ET LEURS PROCEDES D'UTILISATION**

[72] WASHINGTON, MARIAN E., US  
[72] REILLO, MICHELLE, US  
[73] POVIVA CORP., US  
[85] 2016-11-16  
[86] 2015-06-10 (PCT/US2015/035128)  
[87] (WO2015/191728)  
[30] US (62/010,601) 2014-06-11  
[30] US (62/037,706) 2014-08-15  
[30] US (62/153,835) 2015-04-28  
[30] US (62/161,314) 2015-05-14  
[30] US (62/161,324) 2015-05-14

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[11] **2,949,510**  
[13] C

[51] **Int.Cl. A63G 31/00 (2006.01) A63G 7/00 (2006.01) B61L 23/00 (2006.01)**

[25] EN

[54] **VIRTUAL ATTRACTION CONTROLLER**

[54] **CONTROLEUR D'ATTRACTION VIRTUEL**

[72] VANCE, ERIC, US  
[72] MAYCOCK, MARK, CA  
[73] UNIVERSAL CITY STUDIOS LLC, US  
[85] 2016-11-17  
[86] 2015-05-18 (PCT/US2015/031384)  
[87] (WO2015/179298)  
[30] US (14/284,270) 2014-05-21

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[11] **2,950,105**  
[13] C

[51] **Int.Cl. H02S 20/30 (2014.01) H02S 10/40 (2014.01) B64G 1/44 (2006.01)**

[25] EN

[54] **DEPLOYABLE STRUCTURE COMPRISING A SET OF SOLAR GENERATORS, SYSTEM FOR DEPLOYING SUCH A DEPLOYABLE STRUCTURE AND SATELLITE COMPRISING SUCH A SYSTEM**

[54] **STRUCTURE DEPLOYABLE COMPORTANT UN ENSEMBLE DE GENERATEURS SOLAIRES, SYSTEME DE DEPLOIEMENT D'UNE TELLE STRUCTURE DEPLOYABLE ET SATELLITE COMPORTANT UN TEL SYSTEME**

[72] BAUDASSE, YANNICK, FR  
[72] VEZAIN, STEPHANE, FR  
[72] BARDEL, OLIVIER, FR  
[72] STANEK, DIDIER, FR  
[73] THALES, FR  
[86] (2950105)  
[87] (2950105)  
[22] 2016-11-30  
[30] FR (1502511) 2015-12-02

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[11] **2,951,046**  
[13] C

[51] **Int.Cl. C12P 21/02 (2006.01) C12N 5/071 (2010.01) B01D 63/04 (2006.01) C07K 1/34 (2006.01) C12M 1/36 (2006.01) C12M 3/00 (2006.01) C12M 3/06 (2006.01) C12P 1/00 (2006.01) C12P 21/00 (2006.01)**

[25] EN

[54] **METHODS FOR HARVESTING MAMMALIAN CELL CULTURES**

[54] **METHODES DE RECOLTE DE CULTURES DE CELLULES DE MAMMIFERES**

[72] GOUDAR, CHETAN, US  
[72] COLE, SEAN, US  
[72] SABO, NICOLE, US  
[72] LIN, HENRY, US  
[72] LULL, JONATHAN, US  
[72] THARMALINGAM, THARMALA, US  
[73] AMGEN INC., US  
[85] 2016-12-01  
[86] 2015-06-04 (PCT/US2015/034297)  
[87] (WO2015/188009)  
[30] US (62/007,588) 2014-06-04

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[11] **2,951,106**  
[13] C

[51] **Int.Cl. F01C 21/08 (2006.01) F01C 1/22 (2006.01) F01C 19/02 (2006.01)**  
[25] EN  
[54] **ROTARY ENGINE ROTOR**  
[54] **ROTOR DE MOTEUR ROTATIF**  
[72] RICHMOND, ROY, GB  
[72] BIDDULPH, CHRIS, GB  
[72] BAGNELL, JON, GB  
[73] UAV ENGINES LTD, GB  
[85] 2016-12-02  
[86] 2016-02-10 (PCT/EP2016/052786)  
[87] (WO2016/128437)  
[30] EP (15154727.0) 2015-02-11

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[11] **2,951,378**  
[13] C

[51] **Int.Cl. G01N 3/02 (2006.01) G01N 3/18 (2006.01)**  
[25] EN  
[54] **AIRFLOW DIVERTER FOR REDUCED SPECIMEN TEMPERATURE GRADIENT**  
[54] **DEFLECTEUR D'ECOULEMENT D'AIR POUR OBTENIR UN GRADIENT REDUIT DE TEMPERATURE D'ECHANTILLON**  
[72] SAARI, BYRON JOHN, US  
[72] MEYBAUM, PAUL ERIC, US  
[73] MTS SYSTEMS CORPORATION, US  
[85] 2016-12-06  
[86] 2015-06-08 (PCT/US2015/034697)  
[87] (WO2015/188184)  
[30] US (62/008,796) 2014-06-06

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[11] **2,951,418**  
[13] C

[51] **Int.Cl. G05D 1/02 (2020.01) B60W 50/14 (2020.01) H04W 4/024 (2018.01) H04W 4/029 (2018.01) E21F 17/00 (2006.01) H01Q 3/00 (2006.01) H01Q 9/04 (2006.01) H04N 7/18 (2006.01) G01S 5/14 (2006.01)**  
[25] EN  
[54] **COMMUNICATION UNIT IN A MINING MACHINE**  
[54] **UNITE DE COMMUNICATION DANS UNE MACHINE D'EXPLOITATION MINIERE**  
[72] SANTOS, WESLEY, SE  
[73] EPIROC ROCK DRILLS AKTIEBOLAG, SE  
[85] 2016-12-06  
[86] 2015-06-01 (PCT/SE2015/050634)  
[87] (WO2015/195026)  
[30] SE (1450741-2) 2014-06-16

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[11] **2,952,167**  
[13] C

[51] **Int.Cl. G08B 21/02 (2006.01) H04W 4/12 (2009.01) H04W 4/021 (2018.01) A61G 99/00 (2006.01) G08B 21/04 (2006.01) G08B 25/10 (2006.01) H04B 5/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND DEVICE FOR MANAGEMENT OF MEDICATION DELIVERY DEVICES**  
[54] **SYSTEME ET DISPOSITIF DE GESTION DE DISPOSITIFS D'ADMINISTRATION DE MEDICAMENTS**  
[72] BORG, ERIK HELGE, SE  
[72] CHERLER, CRISTIAN, CA  
[72] CHINNICK, JOHN, CA  
[72] EDWARDS, RICHARD, CA  
[72] FISHER, MICHAEL, CA  
[72] LEYN, ALEXANDER, CA  
[72] MCINNIS, PAUL, CA  
[72] ORZEL, STEVEN, CA  
[72] WOLTER, HEINZ, CA  
[72] STAHLBAUM, JACOB, CA  
[73] ATERICA INC., CA  
[85] 2016-12-13  
[86] 2015-06-15 (PCT/IB2015/001416)  
[87] (WO2015/189700)  
[30] US (62/012,147) 2014-06-13

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[11] **2,952,264**  
[13] C

[51] **Int.Cl. B61L 23/00 (2006.01) B61L 19/00 (2006.01)**  
[25] EN  
[54] **A RAIL CROSSOVER CONTROL SYSTEM**  
[54] **SYSTEME DE COMMANDE DE CROISEMENT DE RAILS**  
[72] DA COSTA, ILIDIO GOUVEIA, AU  
[72] GODBER, ANTHONY MICHAEL, AU  
[72] KANAKIS, JAMES PETER, AU  
[72] MAHARAJ, ARVIND, AU  
[72] PEREIRA, TIBERIO VIRGILIO NOGUEIRA, AU  
[73] TECHNOLOGICAL RESOURCES PTY. LIMITED, AU  
[85] 2016-12-14  
[86] 2015-06-16 (PCT/AU2015/000356)  
[87] (WO2015/192169)  
[30] AU (2014902300) 2014-06-16

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[11] **2,953,131**  
[13] C

[51] **Int.Cl. G06F 3/041 (2006.01)**  
[25] EN  
[54] **TACTILE TOUCH SENSOR SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE POUR UN CAPTEUR TACTILE**  
[72] ROSENBERG, ILYA DANIEL, US  
[72] ZARRAGA, JOHN AARON, US  
[73] SENSEL, INC., US  
[85] 2016-12-20  
[86] 2015-06-25 (PCT/US2015/037831)  
[87] (WO2015/200726)  
[30] US (14/314,662) 2014-06-25  
[30] US (62/025,589) 2014-07-17  
[30] US (14/498,478) 2014-09-26  
[30] US (14/499,090) 2014-09-27  
[30] US (14/499,001) 2014-09-26

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[11] **2,953,198**  
[13] C

[51] **Int.Cl. C07D 453/02 (2006.01) A61K 31/439 (2006.01) A61P 11/00 (2006.01) C07D 409/14 (2006.01)**  
[25] EN  
[54] **AMINOESTER DERIVATIVES**  
[54] **DERIVES AMINOESTERS**  
[72] ARMANI, ELISABETTA, IT  
[72] AMARI, GABRIELE, IT  
[72] CAPALDI, CARMELIDA, IT  
[72] BLACKABY, WESLEY, IT  
[72] LINNEY, IAN, IT  
[72] VAN DE POEL, HERVE, IT  
[72] BAKER-GLENN, CHARLES, IT  
[72] TRIVEDI, NAIMISHA, IT  
[73] CHIESI FARMACEUTICI S.P.A., IT  
[85] 2016-12-02  
[86] 2015-06-03 (PCT/EP2015/062417)  
[87] (WO2015/185649)  
[30] EP (14171266.1) 2014-06-05

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[11] **2,953,398**  
[13] C

[51] **Int.Cl. C10G 45/02 (2006.01) C10G 1/00 (2006.01)**  
[25] EN  
[54] **PROCESSES FOR CONVERTING BIOMASS TO BTX WITH LOW SULFUR, NITROGEN AND OLEFIN CONTENT VIA A CATALYTIC FAST PYROLYSIS PROCESS**  
[54] **PROCEDES POUR LA CONVERSION DE BIOMASSE EN BTX A FAIBLE TENEUR EN SOUFRE, EN AZOTE ET EN OLEFINES PAR L'INTERMEDIAIRE D'UN PROCEDE DE PYROLYSE CATALYTIQUE RAPIDE**  
[72] SORENSEN, CHARLES M., US  
[72] SONG, RUOZHI, US  
[72] MAZANEC, TERRY J., US  
[73] ANELLOTECH, INC., US  
[85] 2016-12-21  
[86] 2015-07-01 (PCT/US2015/038833)  
[87] (WO2016/004206)  
[30] US (62/019,868) 2014-07-01

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[11] **2,954,071**  
[13] C

[51] **Int.Cl. A61M 5/20 (2006.01) A61M 5/31 (2006.01)**  
[25] EN  
[54] **AUTOINJECTOR WITH LOW ENERGY PLUNGER LOADING**  
[54] **AUTO-INJECTEUR AVEC CHARGEMENT DE PISTON DE FAIBLE ENERGIE**  
[72] FOLK, CHRISTOPHER R., US  
[72] GIBSON, SCOTT R., US  
[72] INTOCCIA, BRIAN J., US  
[73] AMGEN INC., US  
[85] 2016-12-30  
[86] 2015-06-26 (PCT/US2015/038049)  
[87] (WO2016/003813)  
[30] US (62/019,729) 2014-07-01

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[11] **2,954,165**  
[13] C

[51] **Int.Cl. G06Q 20/40 (2012.01) G06Q 20/34 (2012.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR DYNAMICALLY DETECTING AND PREVENTING CONSUMER FRAUD**  
[54] **SYSTEMES ET PROCEDES DE DETECTION ET DE PREVENTION DYNAMIQUES DE FRAUDE A LA CONSOMMATION**  
[72] IVEY, HENRY, US  
[72] APPANA, RAJIV VENKATARAMANA, US  
[72] RAMSEY, PATRICK, US  
[72] YEH, THEODORE, US  
[73] BLACKHAWK NETWORK, INC., US  
[85] 2017-01-03  
[86] 2015-07-01 (PCT/US2015/038868)  
[87] (WO2016/004227)  
[30] US (62/019,975) 2014-07-02

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[11] **2,954,667**  
[13] C

[51] **Int.Cl. A61K 31/662 (2006.01) A61K 31/665 (2006.01) A61K 35/74 (2015.01) A61P 31/04 (2006.01)**  
[25] EN  
[54] **PHOSPHONIC ACID COMPOUNDS AND SCREENING METHOD**  
[54] **COMPOSES D'ACIDE PHOSPHONIQUE ET PROCEDE DE CRIBLAGE**  
[72] METCALF, WILLIAM W., US  
[72] JU, KOU-SAN, US  
[72] GAO, JIANGTAO, CN  
[72] DOROGHAZI, JAMES R., US  
[72] LABEDA, DAVID P., US  
[72] VAN DER DONK, WILFRED A., US  
[73] THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS, US  
[85] 2017-01-09  
[86] 2015-07-21 (PCT/US2015/041344)  
[87] (WO2016/014539)  
[30] US (62/027,381) 2014-07-22

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[11] **2,954,808**  
[13] C

[51] **Int.Cl. A61L 9/04 (2006.01)**  
[25] EN  
[54] **VOLATILE SUBSTANCE EVAPORATOR**  
[54] **EVAPORATEUR DE SUBSTANCE VOLATILE**  
[72] GOBBER, CEDRIC, ES  
[72] MAYOR SANS, FERNANDO, ES  
[72] MASO SABATE, JORDI, ES  
[73] ZOBELE ESPANA, S.A., ES  
[85] 2017-01-11  
[86] 2015-07-10 (PCT/ES2015/070541)  
[87] (WO2016/005646)  
[30] ES (P201431051) 2014-07-11

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[11] **2,955,622**  
[13] C

[51] **Int.Cl. B60N 2/52 (2006.01) A47C 3/30 (2006.01) B63B 29/00 (2006.01)**  
[25] EN  
[54] **ANTI-FATIGUE SHOCK MITIGATION SYSTEM**  
[54] **SYSTEME D'ATTENUATION DES CHOCS ANTI-FATIGUE**  
[72] BEASLEY, TODD, CA  
[72] JUAN, ALEJANDRO J., CA  
[72] LARSEN, SVEN, CA  
[72] TARDIFF, DALE, CA  
[73] 1721012 ALBERTA LTD., CA  
[85] 2017-01-18  
[86] 2015-07-20 (PCT/IB2015/001730)  
[87] (WO2016/009276)  
[30] US (62/026,333) 2014-07-18

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[11] **2,957,900**  
[13] C

[51] **Int.Cl. C08G 81/02 (2006.01) A61K 47/34 (2017.01) A61K 49/00 (2006.01)**  
[25] EN  
[54] **AMPHIPHILIC BLOCK COPOLYMERS FOR DELIVERY OF ACTIVE AGENTS**  
[54] **COPOLYMERES SEQUENCES AMPHIPHILES POUR LA LIBERATION D'AGENTS ACTIFS**  
[72] HENNINK, WILHELMUS EVERHARDUS, NL  
[72] SHI, YANG, NL  
[72] VAN NOSTRUM, CORNELUS FRANCISCUS, NL  
[73] RHEINISCH-WESTFALISCHE TECHNISCHE HOCHSCHULE (RWTH) AACHEN, DE  
[85] 2017-02-10  
[86] 2015-08-11 (PCT/NL2015/050574)  
[87] (WO2016/024861)  
[30] NL (2013317) 2014-08-11

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[11] **2,958,435**  
[13] C

[51] **Int.Cl. B01J 32/00 (2006.01) B01J 21/12 (2006.01) B01J 27/135 (2006.01) B01J 35/00 (2006.01) B01J 37/00 (2006.01) B01J 37/02 (2006.01) B01J 37/04 (2006.01) B01J 37/08 (2006.01) B01J 37/26 (2006.01) C08F 4/00 (2006.01) C08F 10/00 (2006.01)**

[25] EN  
[54] **FLUORINATED CATALYST SUPPORTS AND CATALYST SYSTEMS**  
[54] **SUPPORTS CATALYTIQUES FLUORES ET SYSTEMES CATALYTIQUES**

[72] MOORHOUSE, JOHN H., US  
[72] CANN, KEVIN J., US  
[72] CAO, PHUONG A., US  
[72] GOODE, MARK G., US  
[72] HARLAN, C. JEFF, US  
[72] MARIOTT, WESLEY R., US  
[73] UNIVATION TECHNOLOGIES, LLC, US  
[85] 2017-02-15  
[86] 2014-08-19 (PCT/US2014/051695)  
[87] (WO2016/028276)

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[11] **2,959,149**  
[13] C

[51] **Int.Cl. B60S 3/06 (2006.01)**

[25] EN  
[54] **ACTIVE SITE MARKETING VEHICLE WASH SYSTEM**  
[54] **SYSTEME DE LAVAGE DE VEHICULE COMMERCIAL DE SITE ACTIF**

[72] BELANGER, MICHAEL J., US  
[72] PRATER, CURTIS S., US  
[73] BELANGER, INC., US  
[85] 2017-02-23  
[86] 2015-08-20 (PCT/US2015/045992)  
[87] (WO2016/036514)  
[30] US (62/045,208) 2014-09-03  
[30] US (14,687,704) 2015-04-15  
[30] US (14/695,773) 2015-04-24

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[11] **2,959,747**  
[13] C

[51] **Int.Cl. C07D 401/12 (2006.01) A61K 31/405 (2006.01) A61K 31/437 (2006.01) A61K 31/454 (2006.01) A61K 31/4545 (2006.01) A61K 31/4709 (2006.01) A61K 31/498 (2006.01) C07D 209/10 (2006.01) C07D 401/14 (2006.01) C07D 403/10 (2006.01) C07D 403/12 (2006.01) C07D 471/04 (2006.01)**

[25] EN  
[54] **COMPOUNDS AS CRTH2 ANTAGONIST AND USES THEREOF**  
[54] **COMPOSES EN TANT QU'ANTAGONISTES DE CRTH2 ET UTILISATIONS DE CEUX-CI**

[72] ZHANG, YINGJUN, CN  
[72] YU, TIANZHU, CN  
[72] LIU, BING, CN  
[72] ZHANG, XIANGYU, CN  
[72] ZHANG, SHIGUO, CN  
[72] CHENG, CHANGCHUNG, CN  
[72] ZHANG, JIANCUN, CN  
[73] SUNSHINE LAKE PHARMA CO., LTD., CN  
[85] 2017-03-02  
[86] 2015-09-11 (PCT/CN2015/089455)  
[87] (WO2016/037591)  
[30] CN (201410465498.9) 2014-09-13

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[11] **2,959,769**  
[13] C

[51] **Int.Cl. G01V 1/28 (2006.01) G01V 1/30 (2006.01)**

[25] EN  
[54] **MULTIPLES MITIGATION AND IMAGING WITH INCOMPLETE SEISMIC DATA**  
[54] **ATTENUATION ET IMAGERIE DE MULTIPLES A L'AIDE DE DONNEES SISMIQUES INCOMPLETES**

[72] RICKETT, JAMES E., GB  
[72] KOSTOV, CLEMENT, US  
[72] MAKINEN, ANNA MARJATTA, GB  
[73] SCHLUMBERGER CANADA LIMITED, CA  
[85] 2017-03-01  
[86] 2015-09-04 (PCT/US2015/048456)  
[87] (WO2016/037022)  
[30] US (62/046,026) 2014-09-04

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[11] **2,959,808**  
[13] C

[51] **Int.Cl. B01D 45/16 (2006.01)**

[25] EN  
[54] **FILTERING DEVICE FOR DUST AND OTHER POLLUTANTS**  
[54] **DISPOSITIF DE FILTRAGE DE LA POUSSIERE ET D'AUTRES POLLUANTS**

[72] DI NOI, ANGELO, IT  
[73] DI NOI, ANGELO, IT  
[73] RIZZO, ROCCO, IT  
[85] 2017-03-01  
[86] 2015-09-01 (PCT/IB2015/056638)  
[87] (WO2016/035013)  
[30] IT (BR2014A000005) 2014-09-02

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[11] **2,960,163**  
[13] C

[51] **Int.Cl. C09D 177/00 (2006.01) C09D 7/61 (2018.01) C09D 193/04 (2006.01) C09D 5/33 (2006.01)**

[25] EN  
[54] **HIGH CONTENT POLYAMIDE HOT-APPLIED THERMOPLASTIC COMPOSITION**  
[54] **COMPOSITION THERMOPLASTIQUE APPLIQUEE A CHAUD, A HAUTE TENEUR EN POLYAMIDE**

[72] GREER, ROBERT W., US  
[72] HENDERSON, DERRON, US  
[72] WILKINS, VINCE, US  
[73] FLINT TRADING, INC., US  
[73] GREER, ROBERT W., US  
[73] HENDERSON, DERRON, US  
[73] WILKINS, VINCE, US  
[85] 2017-03-03  
[86] 2015-08-28 (PCT/US2015/047484)  
[87] (WO2016/036601)  
[30] US (14/475,701) 2014-09-03

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[11] **2,961,149**  
[13] C

[51] **Int.Cl. F16K 17/02 (2006.01) F16K 1/52 (2006.01) F16K 17/168 (2006.01) F16K 31/64 (2006.01) G05D 7/01 (2006.01)**

[25] EN

[54] **FLOW-RATE DYNAMIC BALANCING CONTROL VALVE**

[54] **VANNE DE REGULATION A EQUILIBRAGE DYNAMIQUE DU DEBIT**

[72] ROSA BRUSIN, MARCO, IT

[72] ALBERGANTI, GIACOMO, IT

[72] ARRUS, PAOLO, IT

[72] ZOPPIS, CESARE, IT

[72] TORREGGIANI, ROBERTO, IT

[73] GIACOMINI S.P.A., IT

[85] 2017-03-13

[86] 2016-05-18 (PCT/IB2016/052899)

[87] (WO2017/021789)

[30] IT (UB2015A002864) 2015-08-05

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[11] **2,961,753**  
[13] C

[51] **Int.Cl. C01F 11/18 (2006.01) D21C 5/02 (2006.01) D21H 17/67 (2006.01)**

[25] EN

[54] **PROCESS FOR PREPARING A PCC COMPOSITE PRODUCT**

[54] **PROCEDE DE PREPARATION D'UN PRODUIT COMPOSITE DE PCC**

[72] SOHARA, JOSEPH ANDREW, US

[72] AARI, ARI, FI

[73] SPECIALTY MINERALS (MICHIGAN) INC., US

[85] 2017-03-17

[86] 2015-09-24 (PCT/US2015/051998)

[87] (WO2016/053755)

[30] US (62/057,045) 2014-09-29

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[11] **2,964,318**  
[13] C

[51] **Int.Cl. A63C 13/00 (2006.01) A43C 15/06 (2006.01)**

[25] EN

[54] **SNOWSHOE**

[54] **RAQUETTE A NEIGE**

[72] BEHRENS, ROBERT ERWIN, IT

[72] LOCATELLI, MARCO, IT

[73] BEHRENS, ROBERT ERWIN, IT

[85] 2017-04-11

[86] 2015-10-15 (PCT/IB2015/057911)

[87] (WO2016/059581)

[30] IT (TO2014A000841) 2014-10-15

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[11] **2,965,302**  
[13] C

[51] **Int.Cl. C05G 3/90 (2020.01) C01G 3/06 (2006.01) C05G 3/00 (2020.01)**

[25] EN

[54] **IMPROVED SOLVENT SYSTEMS FOR DICYANDIAMIDE AND/OR ALKYL THIOPHOSPHORIC TRIAMIDE AND USE IN AGRICULTURAL APPLICATIONS**

[54] **SYSTEMES DE SOLVANTS AMELIORES POUR LE DICYANDIAMIDE ET/OU LE TRIAMIDE ALKYLTHIOPHOSPHORIQUE ET LEUR UTILISATION DANS DES APPLICATIONS AGRICOLES**

[72] MCKNIGHT, MICHELLE, US

[72] VIELLIARD, ANTOINE, US

[72] ORTIZ-SUAREZ, MARIVI, US

[72] ARMISEN, SAMANTHA, US

[72] MOREAU, CHLOE, US

[73] RHODIA OPERATIONS, FR

[85] 2017-04-20

[86] 2015-10-21 (PCT/US2015/056614)

[87] (WO2016/064973)

[30] US (62/066,513) 2014-10-21

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[11] **2,965,712**  
[13] C

[51] **Int.Cl. A61M 5/32 (2006.01) A61M 5/34 (2006.01) A61M 5/50 (2006.01)**

[25] EN

[54] **RETRACTABLE NEEDLE SYRINGE**

[54] **SERINGUE A AIGUILLE RETRACTABLE**

[72] CASTANON, SCOTT E., US

[72] WOLOSCHUK, RALPH E., CA

[72] TERRY, WARREN MARC, US

[73] L.O.M. LABORATORIES INC., CA

[85] 2017-04-25

[86] 2015-10-30 (PCT/CA2015/051113)

[87] (WO2016/065484)

[30] US (62/073,748) 2014-10-31

[30] US (62/105,624) 2015-01-20

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[11] **2,966,078**  
[13] C

[51] **Int.Cl. G09G 3/20 (2006.01)**

[25] EN

[54] **DEGRADATION CONTROL OF DISPLAY PIXELS FOR A HIGH DEFINITION DISPLAY**

[54] **REGULATION DE DEGRADATION DE PIXELS D'AFFICHAGE POUR UN AFFICHAGE A HAUTE DEFINITION**

[72] VAN DEN HERIK, BEN, LU

[72] DE BOER, MARTIN, LU

[73] GRASS VALLEY CANADA, CA

[85] 2017-04-27

[86] 2015-10-29 (PCT/EP2015/075184)

[87] (WO2016/066775)

[30] US (14/526,924) 2014-10-29

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[11] **2,966,424**  
[13] C

[51] **Int.Cl. A61L 27/20 (2006.01) A61F 2/00 (2006.01) A61K 8/73 (2006.01) A61L 27/18 (2006.01) A61L 27/50 (2006.01) A61Q 19/08 (2006.01)**

[25] EN

[54] **METHOD FOR IMPROVING DURATION OF EFFECT OF DERMAL FILLER TREATMENT**

[54] **PROCEDE POUR AMELIORER LA DUREE D'EFFET DE TRAITEMENT DE COMPLEMENT DERMIQUE**

[72] MURPHY, DIANE K., US

[72] PARADKAR-MITRAGOTRI, DEEPALI, US

[73] ALLERGAN, INC., US

[85] 2017-04-28

[86] 2015-10-30 (PCT/US2015/058485)

[87] (WO2016/070132)

[30] US (62/073,786) 2014-10-31

[30] US (62/115,705) 2015-02-13

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[11] **2,966,555**  
[13] C

[51] **Int.Cl. G06T 7/00 (2017.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR CO-EXPRESSION ANALYSIS IN IMMUNOSCORE COMPUTATION**  
[54] **SYSTEMES ET PROCEDES POUR ANALYSE DE CO-EXPRESSION DANS UN CALCUL DE L'IMMUNOSCORE**  
[72] BARNES, MICHAEL, US  
[72] SINGH, SHALINI, US  
[72] CHEN, TING, US  
[72] CHEFD'HOTEL, CHRISTOPHE, US  
[72] TUBBS, ALISA, US  
[73] VENTANA MEDICAL SYSTEMS, INC., US  
[85] 2017-05-02  
[86] 2015-12-30 (PCT/EP2015/081399)  
[87] (WO2016/107896)  
[30] US (62/098,075) 2014-12-30  
[30] US (62/253,179) 2015-11-10

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[11] **2,966,727**  
[13] C

[51] **Int.Cl. H04L 9/40 (2022.01) H04L 41/0803 (2022.01) H04L 41/0816 (2022.01) H04L 61/5014 (2022.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR AUTOMATIC DEVICE DETECTION, DEVICE MANAGEMENT, AND REMOTE ASSISTANCE**  
[54] **SYSTEMES ET PROCEDES DE DETECTION AUTOMATIQUE DE DISPOSITIF, DISPOSITIF DE GESTION, ET ASSISTANCE A DISTANCE**  
[72] CEBERE, BOGDAN-CONSTANTIN, RO  
[72] MIRCESCU, DANIEL-ALEXANDRU, RO  
[73] BITDEFENDER IPR MANAGEMENT LTD, CY  
[85] 2017-05-03  
[86] 2015-12-11 (PCT/RO2015/050013)  
[87] (WO2016/093724)  
[30] US (62/090,547) 2014-12-11  
[30] US (62/180,390) 2015-06-16  
[30] US (62/217,310) 2015-09-11

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[11] **2,967,065**  
[13] C

[51] **Int.Cl. A61B 5/00 (2006.01) G16H 10/20 (2018.01) G06Q 50/00 (2012.01) G06Q 99/00 (2006.01) G16H 50/30 (2018.01)**  
[25] EN  
[54] **A SYSTEM AND A METHOD FOR GENERATING STRESS LEVEL AND STRESS RESILIENCE LEVEL INFORMATION FOR AN INDIVIDUAL**  
[54] **SYSTEME ET PROCEDE DE GENERATION D'INFORMATIONS DE NIVEAU DE STRESS ET DE NIVEAU DE RESISTANCE AU STRESS D'UN INDIVIDU**  
[72] WILD, TRAVIS LEIGH, AU  
[72] FOSTER, STEPHEN AARON, AU  
[73] GLOBAL STRESS INDEX PTY LTD, AU  
[85] 2017-05-10  
[86] 2015-11-11 (PCT/AU2015/050703)  
[87] (WO2016/074036)  
[30] AU (2014904521) 2014-11-11

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[11] **2,967,210**  
[13] C

[51] **Int.Cl. B65D 85/804 (2006.01) B31B 50/00 (2017.01)**  
[25] EN  
[54] **CONTAINMENT BODY FOR MAKING A CAPSULE FOR MAKING BEVERAGES AND METHOD FOR MAKING CAPSULES WITH DIFFERENT QUANTITIES OF POWDERED FOOD SUBSTANCE USING A SINGLE TYPE OF CONTAINMENT BODY**  
[54] **CORPS DE CONTENANT POUR REALISER UNE CAPSULE POUR REALISER DES BOISSONS, ET PROCEDE POUR REALISER DES CAPSULES AVEC DES QUANTITES DIFFERENTES DE SUBSTANCE ALIMENTAIRE EN Poudre A L'AIDE D'UN TYPE UNIQUE DE CORPS DE CONTENANT**  
[72] ACCURSI, GIOVANNI, IT  
[73] CAFFITALY SYSTEM S.P.A., IT  
[85] 2017-05-10  
[86] 2015-11-20 (PCT/IB2015/059015)  
[87] (WO2016/087981)  
[30] IT (VR2014A000302) 2014-12-03

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[11] **2,967,415**  
[13] C

[51] **Int.Cl. C08F 2/34 (2006.01) B01J 8/18 (2006.01) G05B 17/00 (2006.01)**  
[25] EN  
[54] **METHODS OF MONITORING AND CONTROLLING THE MELT INDEX OF A POLYOLEFIN PRODUCT DURING PRODUCTION**  
[54] **PROCEDES DE CONTROLE ET DE COMMANDE DE L'INDICE DE FUSION D'UN PRODUIT DE POLYOLEFINE PENDANT LA PRODUCTION**  
[72] SAVATSKY, BRUCE J., US  
[72] THOMAS, DANIEL N. JR., US  
[72] LYNN, TIMOTHY R., US  
[73] UNIVATION TECHNOLOGIES, LLC, US  
[85] 2017-05-10  
[86] 2015-11-24 (PCT/US2015/062355)  
[87] (WO2016/085945)  
[30] US (62/084,235) 2014-11-25

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[11] **2,967,481**  
[13] C

[51] **Int.Cl. A61B 5/06 (2006.01) A61B 5/055 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR DEVICE TRACKING VIA MAGNETIC RESONANCE IMAGING WITH LIGHT-MODULATED MAGNETIC SUSCEPTIBILITY MARKERS**  
[54] **SYSTEME ET PROCEDE DE SUIVI DE DISPOSITIF PAR IMAGERIE PAR RESONANCE MAGNETIQUE A L'AIDE DE MARQUEURS A SUSCEPTIBILITE MAGNETIQUE A MODULATION DE LUMIERE**  
[72] CUNNINGHAM, CHARLES, CA  
[73] SUNNYBROOK RESEARCH INSTITUTE, CA  
[85] 2017-05-11  
[86] 2015-11-12 (PCT/CA2015/051173)  
[87] (WO2016/074085)  
[30] US (62/078,794) 2014-11-12

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[11] **2,967,502**

[13] C

- [51] **Int.Cl. H02K 3/30 (2006.01)**  
[25] EN  
[54] **VERY HIGH TEMPERATURE ELECTRICAL WINDING**  
[54] **ENROULEMENT ELECTRIQUE POUR TRES HAUTES TEMPERATURES**  
[72] HEAD, PHILIP, GB  
[72] MANSIR, HASSAN, GB  
[73] CORETEQ SYSTEMS LTD, GB  
[85] 2017-05-11  
[86] 2014-11-17 (PCT/EP2014/074798)  
[87] (WO2015/071466)  
[30] GB (1320245.2) 2013-11-15

[11] **2,967,737**

[13] C

- [51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/415 (2006.01) A61K 31/4245 (2006.01) A61K 31/4439 (2006.01) A61K 31/444 (2006.01) A61K 31/454 (2006.01) A61K 31/4709 (2006.01) A61K 31/506 (2006.01) A61K 31/5377 (2006.01) C07D 231/38 (2006.01) C07D 401/10 (2006.01) C07D 403/10 (2006.01) C07D 403/12 (2006.01) C07D 405/14 (2006.01) C07D 409/14 (2006.01) C07D 413/10 (2006.01) C07D 413/14 (2006.01) C07D 417/06 (2006.01) C07D 417/10 (2006.01) C07D 417/14 (2006.01)**  
[25] EN  
[54] **N-((HET)ARYLMETHYL)-HETEROARYL-CARBOXAMIDES COMPOUNDS AS PLASMA KALLIKREIN INHIBITORS**  
[54] **COMPOSES N-((HET)ARYLMETHYL)-HETEROARYL-CARBOXAMIDES EN TANT QU'INHIBITEURS DE KALLIKREINE**  
[72] EVANS, DAVID MICHAEL, GB  
[72] DAVIE, REBECCA LOUISE, GB  
[72] EDWARDS, HANNAH JOY, GB  
[72] HODGSON, SIMON TEANBY, GB  
[73] KALVISTA PHARMACEUTICALS LIMITED, GB  
[85] 2017-05-12  
[86] 2015-11-26 (PCT/GB2015/053613)  
[87] (WO2016/083818)  
[30] GB (1421085.0) 2014-11-27

[11] **2,967,743**

[13] C

- [51] **Int.Cl. A47J 43/12 (2006.01) A23L 5/00 (2016.01) A23P 30/40 (2016.01) A23L 2/54 (2006.01) A47J 31/44 (2006.01) A47J 43/07 (2006.01)**  
[25] EN  
[54] **DEVICE FOR PROCESSING LIQUIDS THROUGH STEAM**  
[54] **DISPOSITIF DE TRAITEMENT DE LIQUIDES PAR LE BIAIS DE VAPEUR**  
[72] ADRIAENS, JAN, BE  
[73] SCHUILENBURG NV, BE  
[85] 2017-05-12  
[86] 2015-11-17 (PCT/IB2015/058899)  
[87] (WO2016/079680)  
[30] BE (2014/5074) 2014-11-19

[11] **2,967,795**

[13] C

- [51] **Int.Cl. E04G 7/14 (2006.01) B21B 1/16 (2006.01) E04G 7/12 (2006.01) E04G 7/16 (2006.01)**  
[25] EN  
[54] **SCAFFOLDING SYSTEM, AS WELL AS A COUPLER OF SUCH SYSTEM AND A METHOD FOR THE MANUFACTURE OF THE COUPLER**  
[54] **SYSTEME D'ECHAFAUDAGE, ET ELEMENT D'ASSEMBLAGE D'UN TEL SYSTEME ET PROCEDE DE FABRICATION DE CET ELEMENT D'ASSEMBLAGE**  
[72] VAN DOOREN, ANTONIUS MARTINUS GERARDUS, NL  
[73] VAN THIEL UNITED B.V., NL  
[85] 2017-05-12  
[86] 2015-11-13 (PCT/NL2015/050797)  
[87] (WO2016/076723)  
[30] NL (2013802) 2014-11-14

[11] **2,967,916**

[13] C

- [51] **Int.Cl. E05B 15/00 (2006.01) E05C 1/08 (2006.01)**  
[25] EN  
[54] **SLIDING BOLT LATCH AND USE THEREOF**  
[54] **VERROU A PENE COULISSANT ET SON UTILISATION**  
[72] BRAZ, ALIK ALEXANDER, IL  
[73] BRAZ, ALIK ALEXANDER, IL  
[85] 2017-05-15  
[86] 2016-01-18 (PCT/IB2016/050232)  
[87] (WO2016/113722)  
[30] US (62/104,770) 2015-01-18

[11] **2,967,966**

[13] C

- [51] **Int.Cl. H01P 1/161 (2006.01) H01Q 13/02 (2006.01) H01Q 13/10 (2006.01)**  
[25] EN  
[54] **COMPACT MULTIFREQUENCY DUAL-POLARIZATION RADIOFREQUENCY EXCITER FOR A PRIMARY ANTENNA SOURCE AND A PRIMARY ANTENNA SOURCE EQUIPPED WITH SUCH A RADIOFREQUENCY EXCITER**  
[54] **DISPOSITIF D'EXCITATION DE RADIOFREQUENCE A POLARISATION DOUBLE MULTIFREQUENCE COMPACT DESTINE A UNE SOURCE D'ANTENNE PRIMAIRE ET UNE SOURCE D'ANTENNE PRIMAIRE EQUIPEE D'UN TEL DISPOSITIF D'EXCITATION DE RADIOFREQUENCE**  
[72] CARTAILLAC, ERWAN, FR  
[72] MADER, PHILIPPE, FR  
[73] THALES, FR  
[86] (2967966)  
[87] (2967966)  
[22] 2017-05-23  
[30] FR (16 00832) 2016-05-24

[11] **2,968,624**

[13] C

- [51] **Int.Cl. B67D 1/04 (2006.01) B67D 1/08 (2006.01)**  
[25] EN  
[54] **PRESSURISED LIQUID DISPENSER WITH THREE WAY VALVE FOR VENTING A CONTAINER**  
[54] **DISTRIBUTEUR DE LIQUIDE SOUS PRESSION A SOUPEPE A TROIS VOIES POUR LA VENTILATION D'UN CONTENANT**  
[72] VALLES, VANESSA, BE  
[72] PEIRSMAN, DANIEL, BE  
[72] VANDEKERCKHOVE, STIJN, BE  
[73] ANHEUSER-BUSCH INBEV S.A., BE  
[85] 2017-05-23  
[86] 2015-11-30 (PCT/EP2015/078028)  
[87] (WO2016/087353)  
[30] EP (14195625.0) 2014-12-01

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[11] **2,968,659**  
[13] C

[51] **Int.Cl. A01N 43/80 (2006.01) A01N 57/20 (2006.01) A01P 13/00 (2006.01)**  
[25] EN  
[54] **PYROXASULFONE AND GLUTAMINE SYNTHESIS INHIBITOR COMPOSITIONS FOR WEED CONTROL**  
[54] **COMPOSITIONS DE PYROXASULFONE ET D'INHIBITEUR DE SYNTHÈSE DE GLUTAMINE POUR LA LUTTE CONTRE LES MAUVAISES HERBES**  
[72] REFSSELL, DAWN, US  
[73] VALENT U.S.A. LLC, US  
[85] 2017-05-23  
[86] 2015-11-20 (PCT/US2015/061784)  
[87] (WO2016/085793)  
[30] US (62/083,512) 2014-11-24

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[11] **2,968,694**  
[13] C

[51] **Int.Cl. A61K 31/47 (2006.01) A61P 33/06 (2006.01)**  
[25] EN  
[54] **REGIMENS OF TAFENOQUINE FOR PREVENTION OF MALARIA IN MALARIA-NAIVE SUBJECTS**  
[54] **REGIMES A BASE DE TAFENOQUINE POUR LA PREVENTION DU PALUDISME CHEZ DES PERSONNES NON ATTEINTES DU PALUDISME**  
[72] SMITH, BRYAN L., US  
[72] JONES, JOHN P., US  
[72] SHMUKLARSKY, MOSHE, US  
[72] BUDDA, BALASUBRAHMANYAM, US  
[72] DOW, GEOFFREY S., US  
[73] 60 DEGREES PHARMACEUTICALS, LLC, US  
[73] THE GOVERNMENT OF THE UNITED STATES AS REPRESENTED BY THE SECRETARY OF THE ARMY, US  
[85] 2017-05-23  
[86] 2015-12-02 (PCT/US2015/063425)  
[87] (WO2016/089995)  
[30] US (62/086,355) 2014-12-02

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[11] **2,968,879**  
[13] C

[51] **Int.Cl. A61B 34/30 (2016.01) A61B 34/20 (2016.01) A61B 34/32 (2016.01) A61B 90/98 (2016.01) A61B 5/00 (2006.01) B25J 9/18 (2006.01)**  
[25] EN  
[54] **HAND GUIDED AUTOMATED POSITIONING DEVICE CONTROLLER**  
[54] **DISPOSITIF DE COMMANDE DE DISPOSITIF DE POSITIONNEMENT AUTOMATISE GUIDE MANUELLEMENT**  
[72] HYNNA, KAI, CA  
[72] DYER, KELLY, CA  
[72] PIRON, CAMERON, CA  
[73] SYNAPTIVE MEDICAL INC., CA  
[85] 2017-05-25  
[86] 2014-11-25 (PCT/CA2014/051123)  
[87] (WO2016/082019)

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[11] **2,968,978**  
[13] C

[51] **Int.Cl. C07H 15/256 (2006.01) A23L 27/00 (2016.01) A23L 27/30 (2016.01) C07H 15/24 (2006.01)**  
[25] EN  
[54] **NOVEL DITERPENE GLYCOSIDE, COMPOSITIONS AND PURIFICATION METHODS**  
[54] **NOUVEAU GLYCOSIDE DE DITERPENE, COMPOSITIONS ET PROCÉDES DE PURIFICATION**  
[72] PRAKASH, INDRA, US  
[72] BUNDERS, CYNTHIA, US  
[73] THE COCA-COLA COMPANY, US  
[85] 2017-05-25  
[86] 2015-11-25 (PCT/US2015/062605)  
[87] (WO2016/086097)  
[30] US (62/084,875) 2014-11-26

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[11] **2,969,134**  
[13] C

[51] **Int.Cl. C09K 23/00 (2022.01) C09K 8/035 (2006.01) C09K 8/36 (2006.01) E21B 43/22 (2006.01)**  
[25] EN  
[54] **EMULSIFIER PARTICLES AND METHODS FOR MAKING AND USING SAME**  
[54] **PARTICULES D'EMULSIFIANT ET PROCÉDES POUR LES FABRIQUER ET LES UTILISER**  
[72] REDIGER, RICHARD A., US  
[73] INGEVITY SOUTH CAROLINA, LLC, US  
[85] 2017-05-26  
[86] 2015-11-26 (PCT/US2015/062815)  
[87] (WO2016/086212)  
[30] US (62/085,314) 2014-11-27

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[11] **2,969,317**  
[13] C

[51] **Int.Cl. B01D 63/02 (2006.01) B01D 19/00 (2006.01) B01D 61/00 (2006.01) B41J 2/19 (2006.01)**  
[25] EN  
[54] **HOLLOW-FIBER DEGASSING MODULE AND INKJET PRINTER**  
[54] **MODULE DE DEGAZAGE A FIBRES CREUSES ET IMPRIMANTE A JET D'ENCRE**  
[72] SUGANUMA, YOUHEI, JP  
[72] OI, KAZUMI, JP  
[73] DIC CORPORATION, JP  
[85] 2017-05-30  
[86] 2015-12-09 (PCT/JP2015/084572)  
[87] (WO2016/104155)  
[30] JP (2014-260807) 2014-12-24

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[11] **2,969,394**  
[13] C

[51] **Int.Cl. C01B 32/00 (2017.01) C01B 3/00 (2006.01)**  
[25] EN  
[54] **CARBON MATERIAL FOR HYDROGEN STORAGE AND METHODS FOR USING AND PRODUCING SUCH MATERIAL**  
[54] **MATERIAU DE CARBONE POUR LE STOCKAGE D'HYDROGENE ET METHODES D'UTILISATION ET DE PRODUCTION D'UN TEL MATERIAU**  
[72] IMASHIRO, YASUO, JP  
[72] KOBAYASHI, RIEKO, JP  
[72] OSUGA, NORIKO, JP  
[72] OZAKI, JUN-ICHI, JP  
[72] KUJIRAI, HIROTAKA, JP  
[72] KOBAYASHI, SETSURA, JP  
[73] NISSHINBO HOLDINGS INC., JP  
[73] NATIONAL UNIVERSITY CORPORATION GUNMA UNIVERSITY, JP  
[85] 2017-05-31  
[86] 2015-11-30 (PCT/JP2015/083612)  
[87] (WO2016/088715)  
[30] JP (2014-246814) 2014-12-05

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[11] **2,969,461**  
[13] C

[51] **Int.Cl. E05B 65/462 (2017.01) A61G 12/00 (2006.01) A61J 7/00 (2006.01)**  
[25] EN  
[54] **MANAGING MEDICATIONS AT THE BEDSIDE**  
[54] **GESTION DE MEDICAMENTS AU CHEVET DU PATIENT**  
[72] LATORRACA, GARY, US  
[72] LARRABEE, KELLY, US  
[72] UTECH, THOMAS, US  
[72] URANKAR, JITENDRA, US  
[72] ELDREDGE, GUY, US  
[72] BURGESS, BRENDAN, US  
[72] JASKELA, MARIA, US  
[73] CAREFUSION 303, INC., US  
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[86] 2015-12-04 (PCT/US2015/064105)  
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[30] US (62/088,503) 2014-12-05

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[25] EN  
[54] **ORAL CARE COMPOSITIONS COMPRISING ZINC AND CITRATE IONS**  
[54] **COMPOSITIONS DE SOINS BUCCAUX COMPRENANT DES IONS DE ZINC ET DE CITRATE**  
[72] JARACZ, STANISLAV, US  
[72] TRIVEDI, HARSH M., US  
[72] SCHAEFFER-KORBYLO, LYNDASAY, US  
[73] COLGATE-PALMOLIVE COMPANY, US  
[85] 2017-06-01  
[86] 2015-12-15 (PCT/US2015/065879)  
[87] (WO2016/100381)  
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[51] **Int.Cl. C10G 11/04 (2006.01) C10G 11/16 (2006.01)**  
[25] EN  
[54] **CATALYTIC PYROLYSIS METHOD AND APPARATUS**  
[54] **PROCEDE ET APPAREIL DE PYROLYSE CATALYTIQUE**  
[72] PEREZ-CORDOVA, RAMON, US  
[73] RACIONAL ENERGY & ENVIRONMENT COMPANY, US  
[85] 2017-06-02  
[86] 2015-12-03 (PCT/US2015/063582)  
[87] (WO2016/090068)  
[30] US (62/087,148) 2014-12-03  
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[51] **Int.Cl. H02K 7/02 (2006.01) F16F 15/30 (2006.01)**  
[25] EN  
[54] **DEVICES AND METHODS FOR INCREASING ENERGY AND/OR POWER DENSITY IN COMPOSITE FLYWHEEL ENERGY STORAGE SYSTEMS**  
[54] **DISPOSITIFS ET PROCEDES POUR AUGMENTER LA DENSITE DE PUISSANCE ET/OU L'ENERGIE DANS DES SYSTEMES DE STOCKAGE D'ENERGIE A VOLANT D'INERTIE COMPOSITE**  
[72] GROVES, SCOTT ERIC, US  
[72] AULT, STANLEY K., US  
[73] MANAGEMENT SERVICES GROUP, INC., DOING BUSINESS AS (DBA) GLOBAL TECHNICAL SYSTEMS, US  
[85] 2017-06-02  
[86] 2015-12-01 (PCT/US2015/063165)  
[87] (WO2016/089855)  
[30] US (14/557,752) 2014-12-02  
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[25] EN  
[54] **CALIBRATED DOSE CONTROL**  
[54] **COMMANDE DE DOSE GRADUEE**  
[72] BOWEN, ADAM, US  
[72] MONSEES, JAMES, US  
[72] ATKINS, ARIEL, US  
[72] INGEBRETHSEN, BRADLEY, US  
[72] LEON DUQUE, ESTEBAN, US  
[73] JUUL LABS, INC., US  
[85] 2017-06-02  
[86] 2015-12-04 (PCT/US2015/064088)  
[87] (WO2016/090303)  
[30] US (62/088,464) 2014-12-05  
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[25] EN

[54] **MODULATORS OF CA2+ RELEASE-ACTIVATED CA2+ (CRAC) CHANNELS AND PHARMACEUTICAL USES THEREOF**

[54] **MODULATEURS DE CANAUX CALCIQUES CA2+ ACTIVES PAR LA LIBERATION DE CALCIUM CA2+ (CRAC) ET LEURS UTILISATIONS PHARMACEUTIQUES**

[72] GREENBERG, MILTON L., US

[72] RANSOM, JOHN T., US

[72] WHITE, CLAYTON A., US

[72] MUZAFFERY, OMED S., US

[72] NEWMAN, ANDREW C., US

[73] VIVREON BIOSCIENCES, LLC, US

[85] 2017-06-02

[86] 2016-01-11 (PCT/US2016/012909)

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[30] US (62/103,033) 2015-01-13

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[13] C

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[25] EN

[54] **MACROMOLECULAR TRANSITION METAL COMPLEXES FOR TREATMENT OF CANCER AND PROCESS FOR THEIR PREPARATION**

[54] **COMPLEXES DE METAL DE TRANSITION MACROMOLECULAIRES POUR LE TRAITEMENT DU CANCER ET LEUR PROCEDE DE PREPARATION**

[72] ANSELMO VIEGAS GARCIA, MARIA HELENA, PT

[72] MARQUES VALENTE, ANDREIA, PT

[72] FERREIRA MORAIS, TANIA SOFIA, PT

[72] ANTUNES TOMAZ DINIZ, ANA ISABEL, PT

[73] FACULDADE DE CIENCIAS DA UNIVERSIDADE DE LISBOA, PT

[85] 2017-06-06

[86] 2015-12-07 (PCT/IB2015/002312)

[87] (WO2016/087932)

[30] PT (108082) 2014-12-06

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[13] C

[51] **Int.Cl. A24F 40/50 (2020.01) A61M 15/06 (2006.01)**

[25] EN

[54] **INHALING DEVICE WITH USER RECOGNITION BASED ON INHALATION BEHAVIOUR**

[54] **DISPOSITIF D'INHALATION A RECONNAISSANCE D'UTILISATEUR BASEE SUR UN COMPORTEMENT D'INHALATION**

[72] THORENS, MICHEL, CH

[73] PHILIP MORRIS PRODUCTS S.A., CH

[85] 2017-06-09

[86] 2015-12-01 (PCT/EP2015/078212)

[87] (WO2016/091658)

[30] EP (14197310.7) 2014-12-11

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[13] C

[51] **Int.Cl. G01N 23/20 (2018.01) A44C 17/00 (2006.01) A44C 19/00 (2006.01) G01N 23/046 (2018.01) G01N 23/20025 (2018.01)**

[25] EN

[54] **A METHOD OF GENERATING A FINGERPRINT FOR A GEMSTONE USING X-RAY IMAGING**

[54] **PROCEDE DE GENERATION D'UNE EMPREINTE DIGITALE POUR UNE PIERRE PRECIEUSE AU MOYEN DE L'IMAGERIE PAR RAYONS X**

[72] REISCHIG, PETER, GB

[73] REISCHIG, PETER, GB

[85] 2017-06-09

[86] 2015-12-09 (PCT/GB2015/053768)

[87] (WO2016/092300)

[30] GB (1421837.4) 2014-12-09

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[13] C

[51] **Int.Cl. G06F 40/20 (2020.01) G06F 40/274 (2020.01) G06F 40/279 (2020.01) G10L 15/18 (2013.01)**

[25] EN

[54] **METHODS FOR UNDERSTANDING INCOMPLETE NATURAL LANGUAGE QUERY**

[54] **PROCEDES POUR LA COMPREHENSION D'INTERROGATION EN LANGAGE NATUREL INCOMPLETE**

[72] SARIKAYA, RUHI, US

[72] DEREK LIU, XIAOHU, US

[73] MICROSOFT TECHNOLOGY LICENSING, LLC, US

[85] 2017-06-12

[86] 2016-01-22 (PCT/US2016/014409)

[87] (WO2016/118794)

[30] US (62/107,213) 2015-01-23

[30] US (14/622,119) 2015-02-13

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[13] C

[51] **Int.Cl. A63B 5/11 (2006.01) A63B 24/00 (2006.01)**  
[25] EN  
[54] **TRAMPOLINE WIRING LOOM AND MAT SENSOR ATTACHMENT SYSTEM**  
[54] **HARNAIS DE CABLES ET SYSTEME DE FIXATION DE CAPTEUR DE TAPIS DE TRAMPOLINE**  
[72] HOWE, JOHN ROBERT, NZ  
[72] TRIMBOY, NEIL ADRIAN, NZ  
[72] SHARPLIN, NIGEL JAMES, NZ  
[72] MORRISON, STEVEN PAUL, NZ  
[72] STEPHENS, LOGAN ALEXANDER, NZ  
[72] MCGRANE, RHIANNON EMRYS, NZ  
[73] TGOMA NZ LIMITED, NZ  
[85] 2017-06-14  
[86] 2015-12-21 (PCT/IB2015/059813)  
[87] (WO2016/098084)  
[30] US (62/094,157) 2014-12-19

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[13] C

[51] **Int.Cl. G06Q 50/18 (2012.01) G06Q 40/06 (2012.01)**  
[25] EN  
[54] **A METHOD FOR MACHINE-CONTROLLED LEGAL PORTFOLIO MONITORING**  
[54] **PROCEDE POUR UNE SURVEILLANCE DE PORTEFEUILLE LEGALE COMMANDEE PAR UNE MACHINE**  
[72] HANSEN, PETER K., US  
[72] KRAGH, LARS, US  
[73] BATTEA CLASS ACTION SERVICES, LLC, US  
[85] 2017-06-15  
[86] 2015-12-15 (PCT/US2015/065697)  
[87] (WO2016/100276)  
[30] US (62/091,685) 2014-12-15

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[13] C

[51] **Int.Cl. C08L 33/00 (2006.01) C08L 1/02 (2006.01) D21H 11/18 (2006.01) D21H 17/25 (2006.01) D21H 21/10 (2006.01) D21H 21/20 (2006.01)**  
[25] EN  
[54] **A METHOD FOR PRODUCING INTERPENETRATING POLYMER NETWORK MATERIAL, A PRODUCT THEREOF AND USE OF THE PRODUCT**  
[54] **PROCEDE DE PRODUCTION DE MATERIAU A RESEAUX POLYMERES INTERPENETRES, PRODUIT ASSOCIE ET UTILISATION DUDIT PRODUIT**  
[72] CARCELLER, ROSA, FI  
[72] LUNDIN, TOM, FI  
[72] HIETANIEMI, MATTI, FI  
[73] KEMIRA OYJ, FI  
[85] 2017-06-19  
[86] 2015-12-03 (PCT/FI2015/050849)  
[87] (WO2016/102753)  
[30] FI (20146134) 2014-12-22

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[13] C

[51] **Int.Cl. G01J 3/42 (2006.01) G01N 21/63 (2006.01) G02B 21/24 (2006.01) G02B 26/06 (2006.01)**  
[25] FR  
[54] **METHOD FOR REFOCUSING AN OPTICAL ASSEMBLY**  
[54] **PROCEDE DE RE-FOCALISATION D'UN MONTAGE OPTIQUE**  
[72] DEVOS, ARNAUD, FR  
[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[73] UNIVERSITE DE LILLE 1, FR  
[73] ISEN, FR  
[85] 2017-06-20  
[86] 2015-12-22 (PCT/EP2015/080932)  
[87] (WO2016/102540)  
[30] FR (1463250) 2014-12-23

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[13] C

[51] **Int.Cl. B01D 53/04 (2006.01) B01D 53/26 (2006.01) B60T 17/00 (2006.01)**  
[25] EN  
[54] **DEVICE FOR ATTENUATING AN EXHAUST-GAS NOISE, SYSTEM COMPRISING A DEVICE OF SAID TYPE, SORPTION DRYER HAVING A DEVICE OF SAID TYPE, AND METHOD FOR ATTENUATING AN EXHAUST-GAS NOISE**  
[54] **DISPOSITIF PERMETTANT D'ATTENUER LE BRUIT D'UN GAZ D'ECHAPPEMENT, SYSTEME COMPRENANT LEDIT DISPOSITIF, DESSICCATEUR A SORPTION MUNI DUDIT DISPOSITIF ET PROCEDE PERMETTANT D'ATTENUER LE BRUIT D'UN GAZ D'ECHAPPEMENT**  
[72] WALDSCHMIDT-SCHROER, SYLKE, DE  
[72] AMTMANN, TILL, DE  
[73] DONALDSON FILTRATION DEUTSCHLAND GMBH, DE  
[85] 2017-06-21  
[86] 2015-09-02 (PCT/EP2015/001767)  
[87] (WO2016/102033)  
[30] DE (10 2014 018 932.5) 2014-12-22

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[11] **2,971,984**  
[13] C

[51] **Int.Cl. A47J 37/06 (2006.01)**  
[25] FR  
[54] **COOKING APPARATUS WITH CUSHIONED PANEL**  
[54] **APPAREIL DE CUISSON A PANNEAU AMORTI**  
[72] VOLATIER, SEBASTIEN, FR  
[72] GOYON, ANNABELLE, FR  
[73] SEB S.A., FR  
[85] 2017-06-22  
[86] 2016-01-05 (PCT/FR2016/050008)  
[87] (WO2016/110639)  
[30] FR (1550068) 2015-01-06

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[51] **Int.Cl. C12M 1/22 (2006.01) C12N 5/071 (2010.01) C12M 1/00 (2006.01) C12M 1/32 (2006.01) C12M 3/00 (2006.01)**  
[25] EN  
[54] **MICROSTRUCTURED THIN HYDROGEL FILMS**  
[54] **FILMS D'HYDROGEL MINCES MICROSTRUCTURES**  
[72] HOHNEL, SYLKE, CH  
[72] BRANDENBERG, NATHALIE, CH  
[72] LUTOLF, MATTHIAS, CH  
[73] ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE (EPFL), CH  
[85] 2017-06-22  
[86] 2014-12-22 (PCT/IB2014/067242)  
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[51] **Int.Cl. E21B 34/02 (2006.01) E21B 23/01 (2006.01) E21B 33/03 (2006.01)**  
[25] EN  
[54] **BACK PRESSURE VALVE**  
[54] **SOUPAPE DE CONTRE-PRESSION**  
[72] COCKER, JOHN JOSEPH, III, US  
[73] CAMERON TECHNOLOGIES LIMITED, NL  
[85] 2017-06-29  
[86] 2015-12-08 (PCT/US2015/064560)  
[87] (WO2016/109133)  
[30] US (14/586,357) 2014-12-30

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[13] C  
[51] **Int.Cl. E21B 17/10 (2006.01) E21B 7/20 (2006.01) E21B 23/00 (2006.01)**  
[25] EN  
[54] **TURNED-DOWN CENTRALIZER SUB ASSEMBLY**  
[54] **SOUS-ENSEMBLE CENTREUR TOURNE VERS LE BAS**  
[72] ROGER, GREG P., US  
[72] MUSSELWHITE, JEFF, US  
[72] LIRETTE, BRENT JAMES, US  
[72] LEVIE, IAIN, US  
[73] INNOVEX DOWNHOLE SOLUTIONS, INC., US  
[85] 2017-06-29  
[86] 2015-12-22 (PCT/US2015/067351)  
[87] (WO2016/109331)  
[30] US (62/098,399) 2014-12-31

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[13] C  
[51] **Int.Cl. G01D 5/20 (2006.01) F16C 41/00 (2006.01)**  
[25] FR  
[54] **BEARING COMPRISING AN ANGULAR MOVEMENT SENSOR**  
[54] **ROULEMENT COMPRENANT UN CAPTEUR DE DEPLACEMENT ANGULAIRE**  
[72] MANIOULOUX, YOHAN, FR  
[72] LEBEDEV, GOR, FR  
[73] HUTCHINSON, FR  
[85] 2017-07-05  
[86] 2016-01-13 (PCT/FR2016/050055)  
[87] (WO2016/113501)  
[30] FR (1550232) 2015-01-13

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[13] C  
[51] **Int.Cl. G01N 29/02 (2006.01) G01N 21/15 (2006.01)**  
[25] EN  
[54] **METHOD OF OBTAINING OR MAINTAINING OPTICAL TRANSMITTANCE INTO DEAERATED LIQUID**  
[54] **PROCEDE D'OBTENTION OU DE MAINTIEN DE TRANSMITTANCE OPTIQUE DANS UN LIQUIDE DESAERE**  
[72] HICKS, PETER D., US  
[72] LI, HUI, US  
[72] BRADLEY, MICHAEL E., US  
[72] MURCIA, MICHAEL J., US  
[72] SCHWARTZ, JOE L., US  
[73] ECOLAB USA INC., US  
[85] 2017-07-05  
[86] 2016-01-08 (PCT/US2016/012611)  
[87] (WO2016/112264)  
[30] US (14/592,219) 2015-01-08

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[13] C  
[51] **Int.Cl. F16J 15/40 (2006.01) F02F 11/00 (2006.01) F04B 39/00 (2006.01) F04B 53/14 (2006.01) F16J 9/08 (2006.01) F16J 15/46 (2006.01) F16J 15/56 (2006.01)**  
[25] FR  
[54] **SEALING DEVICE WITH FLUID CUSHION**  
[54] **DISPOSITIF D'ETANCHEITE A COUSSIN DE FLUIDE**  
[72] RABHI, VIANNEY, FR  
[73] RABHI, VIANNEY, FR  
[85] 2017-07-20  
[86] 2016-01-26 (PCT/FR2016/050152)  
[87] (WO2016/120556)  
[30] FR (1550763) 2015-01-30

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[13] C  
[51] **Int.Cl. B43L 3/00 (2006.01) B42B 5/12 (2006.01) B42D 1/00 (2006.01) B42D 3/12 (2006.01) B42D 13/00 (2006.01) B42F 3/06 (2006.01) B42F 13/40 (2006.01) C09K 11/00 (2006.01) F21K 2/00 (2006.01) F21V 33/00 (2006.01)**  
[25] EN  
[54] **PHOTOLUMINESCENT WRITING PAD AND NOTEPAD OR NOTEBOOK**  
[54] **BLOC D'ECRITURE PHOTOLUMINESCENT ET BLOC-NOTES OU CARNET DE NOTES**  
[72] KINNUNEN, KALLE, FI  
[73] KINNUNEN, KALLE, FI  
[85] 2017-07-20  
[86] 2016-02-02 (PCT/FI2016/050066)  
[87] (WO2016/124820)  
[30] FI (20150037) 2015-02-04



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[13] C

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[25] EN  
[54] **SUBSTITUTED TRIAZOLES AND METHODS RELATING THERETO**  
[54] **TRIAZOLES SUBSTITUES ET PROCEDES ASSOCIES**

[72] WILLIAMS, JOHN P., US  
[72] SLEE, DEBORAH, US  
[72] MOORJANI, MANISHA, US  
[72] ASHWEEK, NEIL J., US  
[73] NEUROCRINE BIOSCIENCES, INC., US  
[85] 2017-07-31  
[86] 2016-01-29 (PCT/US2016/015740)  
[87] (WO2016/123533)  
[30] US (62/110,415) 2015-01-30  
[30] US (62/259,314) 2015-11-24

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[13] C

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[25] EN  
[54] **TREATMENT OF FACIOSCAPULOHUMERAL DYSTROPHY**  
[54] **TRAITEMENT DE LA DYSTROPHIE FACIO-SCAPULO-HUMERALE**

[72] DUMONCEAUX, JULIE, FR  
[72] VOIT, THOMAS, GB  
[72] MARIOT, VIRGINIE, FR  
[73] ASSOCIATION INSTITUT DE MYOLOGIE, FR  
[73] INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, FR  
[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[73] SORBONNE UNIVERSITE, FR  
[85] 2017-08-02  
[86] 2016-02-08 (PCT/EP2016/052652)  
[87] (WO2016/124793)  
[30] EP (EP15305184.2) 2015-02-06

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[13] C

[51] **Int.Cl. G06F 21/31 (2013.01) G06F 21/32 (2013.01) G06F 21/33 (2013.01) G06Q 20/36 (2012.01) G06Q 20/40 (2012.01)**

[25] EN  
[54] **APPARATUS, SYSTEM, AND METHODS FOR A BLOCKCHAIN IDENTITY TRANSLATOR**  
[54] **APPAREIL, SYSTEME ET METHODES DE TRADUCTION D'IDENTITE DE REGISTRE DE TRANSACTIONS**

[72] JUTLA, DAWN N., CA  
[72] BODORIK, PETER, CA  
[72] MALCOLM, ROHAN V., JM  
[73] PEER LEDGER INC., CA  
[86] (2975843)  
[87] (2975843)  
[22] 2017-08-09  
[30] US (62/373,337) 2016-08-10

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[11] **2,975,849**  
[13] C

[51] **Int.Cl. G01S 5/16 (2006.01) B64D 7/00 (2006.01) B64D 47/00 (2006.01) F41G 3/14 (2006.01) F41H 11/00 (2006.01) F41H 13/00 (2006.01) G01S 5/18 (2006.01)**

[25] FR  
[54] **AIRPORT EQUIPMENT FOR GUNSHOT DETECTION AND PILOTAGE SUPPORT**  
[54] **EQUIPEMENT AEROPORTE DE DETECTION DE TIRS ET D'AIDE AU PILOTAGE**

[72] COLENTIER, SYLVIE, FR  
[72] KLING, EMMANUEL, FR  
[72] REYMOND, GEORGES-OLIVIER, FR  
[72] NEGRONI, SYLVAIN, FR  
[73] SAFRAN ELECTRONICS & DEFENSE SAS, FR  
[85] 2017-08-03  
[86] 2016-03-14 (PCT/EP2016/055404)  
[87] (WO2016/142549)  
[30] FR (15 00470) 2015-03-12

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[13] C

[51] **Int.Cl. F16K 15/02 (2006.01) F16K 1/52 (2006.01)**

[25] EN  
[54] **NOZZLE CHECK VALVE**  
[54] **CLAPET ANTI-RETOUR DE BUSE**

[72] DURST, CHRISTIAN, DE  
[72] PRESTON, TIMOTHY JAMES, GB  
[73] GOODWIN PLC, GB  
[85] 2017-08-09  
[86] 2016-02-17 (PCT/GB2016/050392)  
[87] (WO2016/135453)  
[30] GB (1503056.2) 2015-02-24

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[13] C

[51] **Int.Cl. G10K 11/26 (2006.01) G06F 3/01 (2006.01) G06F 3/16 (2006.01) H04R 1/40 (2006.01)**

[25] EN  
[54] **PERCEPTIONS IN A HAPTIC SYSTEM**  
[54] **PERCEPTIONS DANS UN SYSTEME HAPTIQUE**

[72] LONG, BENJAMIN JOHN OLIVER, GB  
[72] CARTER, THOMAS ANDREW, GB  
[72] SUBRAMANIAN, SRIRAM, GB  
[72] BLENKINSOPP, ROBERT CHARLES, GB  
[72] SEAH, SUE ANN, GB  
[72] FRIER, WILLIAM THIERRY ALAIN, GB  
[73] ULTRAHAPTICS IP LIMITED, GB  
[85] 2017-08-10  
[86] 2016-02-19 (PCT/GB2016/050421)  
[87] (WO2016/132144)  
[30] US (62/118,560) 2015-02-20  
[30] US (62/193,234) 2015-07-16  
[30] US (62/206,393) 2015-08-18  
[30] US (62/275,216) 2016-01-05

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[11] **2,976,769**  
[13] C

[51] **Int.Cl. G01N 21/25 (2006.01) G06T 7/40 (2017.01)**  
[25] EN  
[54] **MODEL-BASED METHODS AND APPARATUS FOR CLASSIFYING AN INTERFERENT IN SPECIMENS**  
[54] **PROCEDES REPOSANT SUR UN MODELE ET APPAREIL POUR UNE CLASSIFICATION D'UN INTERFERENT DANS DES ECHANTILLONS**  
[72] PARK, JINHYEONG, US  
[72] CHANG, YAO-JEN, US  
[72] WU, WEN, US  
[72] CHEN, TERRENCE, US  
[72] POLLACK, BENJAMIN, US  
[73] SIEMENS HEALTHCARE DIAGNOSTICS INC., US  
[85] 2017-08-15  
[86] 2016-02-16 (PCT/US2016/018062)  
[87] (WO2016/133900)  
[30] US (62/117,263) 2015-02-17

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[11] **2,976,884**  
[13] C

[51] **Int.Cl. G06Q 50/04 (2012.01) G05B 19/418 (2006.01)**  
[25] EN  
[54] **SCHEDULE MANAGEMENT SYSTEM**  
[54] **SYSTEME DE GESTION DE CALENDRIER**  
[72] MURANAKA, SHIARU, JP  
[72] YONEDA, KENJI, JP  
[72] UTSUMI, HIROSHI, JP  
[73] SHIBUYA CORPORATION, JP  
[85] 2017-08-16  
[86] 2016-01-22 (PCT/JP2016/051795)  
[87] (WO2016/132812)  
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[51] **Int.Cl. H04N 7/18 (2006.01) A61B 1/04 (2006.01) G01N 21/00 (2006.01)**  
[25] EN  
[54] **AN INSPECTION SYSTEM FOR REMOTELY INSPECTING INTERNAL LOCATIONS OF A STRUCTURE**  
[54] **SYSTEME D'INSPECTION POUR INSPECTER A DISTANCE DES LIEUX INTERNES D'UNE STRUCTURE**  
[72] WALDIE, JAMES MURRAY ANDREW, AU  
[73] BAE SYSTEMS AUSTRALIA LIMITED, AU  
[85] 2017-08-17  
[86] 2016-01-29 (PCT/AU2016/050050)  
[87] (WO2016/134412)  
[30] AU (2015900630) 2015-02-23

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[13] C

[51] **Int.Cl. H02H 3/26 (2006.01) G01R 31/08 (2020.01) H02H 7/26 (2006.01)**  
[25] EN  
[54] **A PROTECTION APPARATUS**  
[54] **APPAREIL DE PROTECTION**  
[72] HA, HENGXU, GB  
[72] SRI GOPALA KRISHNA MURTHI, SANKARA SUBRAMANIAN, GB  
[73] GENERAL ELECTRIC TECHNOLOGY GMBH, CH  
[85] 2017-08-17  
[86] 2016-02-25 (PCT/EP2016/054029)  
[87] (WO2016/135266)  
[30] EP (15275054.3) 2015-02-27

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[11] **2,977,111**  
[13] C

[51] **Int.Cl. G11B 27/031 (2006.01) G11B 27/10 (2006.01)**  
[25] EN  
[54] **TOOLBOXES, SYSTEMS, KITS AND METHODS RELATING TO SUPPLYING PRECISELY TIMED, SYNCHRONIZED MUSIC**  
[54] **COFFRES A OUTILS, SYSTEMES, TROUSSES ET METHODES VISANT LA PRODUCTION DE MUSIQUE SYNCHRONISEE A UN MOMENT PRECIS**  
[72] ZONNEFELD, WENDA B., US  
[73] ZONNEFELD, WENDA B., US  
[86] (2977111)  
[87] (2977111)  
[22] 2017-08-23  
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[13] C

[51] **Int.Cl. H01M 50/574 (2021.01) A61M 5/00 (2006.01) A61M 5/178 (2006.01)**  
[25] EN  
[54] **PULL TAB ASSEMBLIES AND RELATED METHODS**  
[54] **ESEMBLES LANGUETTES DE TIRAGE ET PROCEDE ASSOCIES**  
[72] WEIR, STEVEN, US  
[72] JOHNSON, BLAINE, US  
[72] STANGER, GREGG B., US  
[73] MERIT MEDICAL SYSTEMS, INC., US  
[85] 2017-08-23  
[86] 2016-03-03 (PCT/US2016/020574)  
[87] (WO2016/141123)  
[30] US (62/128,029) 2015-03-04

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[13] C

[51] **Int.Cl. A61B 10/02 (2006.01)**  
[25] EN  
[54] **DAMPENED BIOPSY DEVICE AND METHOD OF USE**  
[54] **DISPOSITIF DE BIOPSIE A IMPACT ET PROCEDE D'UTILISATION**  
[72] SNOW, JEREMY W., US  
[73] MERIT MEDICAL SYSTEMS, INC., US  
[85] 2017-08-24  
[86] 2016-03-01 (PCT/US2016/020165)  
[87] (WO2016/140937)  
[30] US (62/128,166) 2015-03-04

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[11] **2,978,027**  
[13] C

[51] **Int.Cl. G01H 11/08 (2006.01) B82Y 15/00 (2011.01) A61B 5/00 (2006.01)**  
[25] FR  
[54] **PIEZOELECTRIC SENSOR AND INSTRUMENT INCLUDING SUCH A SENSOR**  
[54] **CAPTEUR PIEZOELECTRIQUE ET INSTRUMENT COMPORTANT UN TEL CAPTEUR**  
[72] ROUXEL, DIDIER, FR  
[72] VINCENT, BRICE, FR  
[72] BADIE, LAURENT, FR  
[73] UNIVERSITE DE LORRAINE, FR  
[85] 2017-08-28  
[86] 2016-03-24 (PCT/FR2016/050650)  
[87] (WO2016/151252)  
[30] FR (1552487) 2015-03-25

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[13] C

[51] **Int.Cl. G06F 21/57 (2013.01) G06F 11/30 (2006.01)**  
[25] EN  
[54] **AUTOMATED INFORMATION TECHNOLOGY SUBSTANTIVE TESTING OF SECURITY COMPLIANCE WITHIN A USER'S CONTEXT**  
[54] **TEST DE TECHNOLOGIE DE L'INFORMATION SUBSTANTIF AUTOMATISE DE LA CONFORMITE DE SECURITE DANS UN CONTEXTE D'UTILISATEUR**  
[72] NOLAN, EUGENE SEAN, AU  
[73] INTROSPECTUS PTY LTD, AU  
[86] (2978831)  
[87] (2978831)  
[22] 2017-09-12

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[11] **2,979,027**  
[13] C

[51] **Int.Cl. E04B 1/70 (2006.01)**  
[25] EN  
[54] **METHOD, ARRANGEMENT, LID AND ADAPTER FOR DRYING A WATER DAMAGED FLOOR**  
[54] **PROCEDE, AGENCEMENT, COUVERCLE ET ADAPTATEUR POUR SECHER UN PLANCHER ENDOMMAGE PAR L'EAU**  
[72] ASBERG, JOHAN, SE  
[73] REDDO FLOOR SOLUTIONS AB, SE  
[85] 2017-09-07  
[86] 2016-03-09 (PCT/SE2016/000010)  
[87] (WO2016/144229)  
[30] SE (1530033-8) 2015-03-12

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[11] **2,979,112**  
[13] C

[51] **Int.Cl. A61K 33/34 (2006.01) A61K 9/48 (2006.01) A61K 31/047 (2006.01) A61K 31/05 (2006.01) A61K 31/202 (2006.01) A61K 31/355 (2006.01) A61K 31/375 (2006.01) A61K 33/30 (2006.01) A61P 3/02 (2006.01) A61P 27/02 (2006.01)**  
[25] EN  
[54] **EYE HEALTH COMPOSITION**  
[54] **COMPOSITION POUR LA SANTE OCULAIRE**  
[72] OLMIERE, CELINE, FR  
[72] MERCIER, FABRICE, FR  
[73] LABORATOIRES THEA, FR  
[85] 2017-09-08  
[86] 2016-03-25 (PCT/FR2016/050697)  
[87] (WO2016/151269)  
[30] FR (1552483) 2015-03-25

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[11] **2,979,322**  
[13] C

[51] **Int.Cl. F16L 1/20 (2006.01)**  
[25] EN  
[54] **PIPE ASSEMBLY STATION**  
[54] **POSTE D'ASSEMBLAGE DE TUYAU**  
[72] DANNEY, LAURENT, AE  
[73] SHANGHAI ZHENHUA HEAVY INDUSTRIES CO., LTD., CN  
[85] 2017-09-11  
[86] 2016-03-10 (PCT/EP2016/055184)  
[87] (WO2016/142488)  
[30] GB (1504056.1) 2015-03-10

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[13] C

[51] **Int.Cl. G07C 9/00 (2020.01) G07B 15/04 (2006.01)**  
[25] EN  
[54] **SYSTEM, METHOD AND COMPUTER PROGRAM FOR AN ACCESS CONTROL SYSTEM**  
[54] **SYSTEME, PROCEDE ET PROGRAMME INFORMATIQUE POUR SYSTEME DE COMMANDE D'ACCES**  
[72] KARAM, ANTHONY, AU  
[72] LALETIN, GREGORI ALEXANDRAVICH, AU  
[72] WALSH, KEVIN JOHN, AU  
[73] TMA CAPITAL AUSTRALIA PTY LTD, AU  
[85] 2017-09-21  
[86] 2016-01-12 (PCT/AU2016/050008)  
[87] (WO2016/123662)  
[30] AU (2015100112) 2015-02-02  
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[11] **2,980,939**  
[13] C

[51] **Int.Cl. A01K 67/033 (2006.01) A01K 67/00 (2006.01)**  
[25] FR  
[54] **METHOD FOR INSECT BREEDING**  
[54] **PROCEDE D'ELEVAGE D'INSECTES**  
[72] COMPARAT, SOLENE, FR  
[72] HUBERT, ANTOINE, FR  
[72] BERRO, FABRICE, FR  
[72] LEVON, JEAN-GABRIEL, FR  
[73] YNSECT, FR  
[85] 2017-09-26  
[86] 2016-04-12 (PCT/FR2016/050843)  
[87] (WO2016/166465)  
[30] FR (1553208) 2015-04-13

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[11] **2,981,086**  
[13] C

[51] **Int.Cl. B60R 1/27 (2022.01) B60R 11/04 (2006.01) B60W 40/02 (2006.01) G06T 11/60 (2006.01)**  
[25] EN  
[54] **IMAGE SYNTHESIZER AND A METHOD FOR SYNTHESIZING AN IMAGE**  
[54] **SYNTHETISEUR D'IMAGES ET PROCEDE DE SYNTHESE D'UNE IMAGE**  
[72] NEMETH, HUBA, HU  
[72] GYORI, MARTON, HU  
[73] KNORR-BREMSE SYSTEME FUR NUTZFAHRZEUGE GMBH, DE  
[85] 2017-09-27  
[86] 2016-03-22 (PCT/EP2016/056287)  
[87] (WO2016/156118)  
[30] EP (15161697.6) 2015-03-30

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[11] **2,981,218**  
[13] C

[51] **Int.Cl. C10G 27/02 (2006.01) C10G 27/12 (2006.01)**  
[25] EN  
[54] **PROCESS FOR MANAGING SULPHUR SPECIES**  
[54] **PROCEDE DE CONTROLE D'ESPECES SOUFREES**  
[72] PORTER, TERRY, CA  
[72] SIH, BRYAN, CA  
[73] CESH INTERNATIONAL TECHNOLOGY KFT, HU  
[85] 2017-09-28  
[86] 2016-06-17 (PCT/IB2016/053627)  
[87] (WO2016/203449)  
[30] US (62/181,023) 2015-06-17

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[11] **2,981,871**  
[13] C

[51] **Int.Cl. A01F 12/44 (2006.01) A01D 41/02 (2006.01) A01D 41/06 (2006.01) A01D 41/12 (2006.01)**

[25] EN

[54] **MATERIAL CONVEYANCE SYSTEM IN A COMBINE HARVESTER**

[54] **SYSTEME DE TRANSPORT DE MATERIAU DANS UNE MOISSONNEUSE-BATTEUSE**

[72] BILDE, MORTEN, DK

[72] DURING, KENNETH, DK

[72] MARDEN, DAVID, GB

[73] AGCO INTERNATIONAL GMBH, CH

[85] 2017-10-04

[86] 2016-04-07 (PCT/EP2016/057665)

[87] (WO2016/166016)

[30] GB (1506557.6) 2015-04-17

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[13] C

[51] **Int.Cl. A23L 33/185 (2016.01) A23L 33/19 (2016.01) A23P 10/00 (2016.01) B01J 13/04 (2006.01) C08J 3/12 (2006.01)**

[25] EN

[54] **A METHOD OF PRODUCING MICROPARTICLES OF THE TYPE HAVING A CROSSLINKED, AGGREGATED PROTEIN MATRIX BY SPRAY DRYING**

[54] **PROCEDE DE PRODUCTION DE MICROPARTICULES DU TYPE A MATRICE DE PROTEINES AGREGEES, RETICULEES PAR SECHAGE PAR PULVERISATION**

[72] BLEIEL, SINEAD, IE

[72] PEREZ GOMEZ DE CADINANOS, MARIA LUZ, IE

[72] KENT, ROBERT, IE

[73] ANABIO TECHNOLOGIES LIMITED, IE

[85] 2017-10-05

[86] 2016-05-23 (PCT/EP2016/061622)

[87] (WO2016/185053)

[30] GB (1508745.5) 2015-05-21

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[13] C

[51] **Int.Cl. A61K 31/40 (2006.01) A61K 31/4178 (2006.01) A61K 31/5377 (2006.01) A61K 31/573 (2006.01) A61P 1/08 (2006.01)**

[25] EN

[54] **COMBINATIONS OF AMISULPRIDE AND ANOTHER ANTI-EMETIC FOR TREATING NAUSEA AND VOMITING**

[54] **COMBINAISONS D'AMISULPRIDE ET AUTRE ANTI-EMETIQUE POUR LE TRAITEMENT DE LA NAUSEE ET DES VOMISSEMENTS**

[72] GILBERT, JULIAN CLIVE, GB

[72] GRISTWOOD, ROBERT WILLIAM, GB

[72] FOX, GABRIEL, GB

[73] ACACIA PHARMA LIMITED, GB

[85] 2017-10-10

[86] 2016-04-11 (PCT/GB2016/050998)

[87] (WO2016/162695)

[30] GB (1506116.1) 2015-04-10

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[11] **2,982,264**  
[13] C

[51] **Int.Cl. C09D 123/26 (2006.01) C09D 129/10 (2006.01)**

[25] EN

[54] **BINDER FOR COATING OF PLASTIC SUBSTRATES WITHOUT CHEMICAL OR PHYSICAL PRETREATMENT**

[54] **LIANT DESTINE AU REVETEMENT DE SUBSTRATS EN MATIERE PLASTIQUE SANS PRETRAITEMENT CHIMIQUE NI PHYSIQUE**

[72] POSCH, MICHAEL, CH

[72] POSCH, FABIO, CH

[73] PPT IP AG, LI

[85] 2017-10-10

[86] 2016-05-09 (PCT/EP2016/060310)

[87] (WO2016/180768)

[30] DE (102015005783.9) 2015-05-09

[30] DE (102015005784.7) 2015-05-09

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[30] DE (102015111283.3) 2015-07-13

[30] EP (15186510.2) 2015-09-23

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[11] **2,982,482**  
[13] C

[51] **Int.Cl. C22C 21/00 (2006.01) C22C 21/10 (2006.01)**

[25] EN

[54] **IMPROVED THICK WROUGHT 7XXX ALUMINUM ALLOYS, AND METHODS FOR MAKING THE SAME**

[54] **ALLIAGES D'ALUMINIUM DE SERIE 7XXX CORROYES EPAIS AMELIORES ET PROCEDES DE PRODUCTION**

[54] **CORRESPONDANTS**

[72] BOSELLI, JULIEN, US

[72] LIN, JEN C., US

[72] JAMES, MARK A., US

[72] BRAY, GARY H., US

[72] BROCKENBROUGH, JOHN R., US

[73] ARCONIC TECHNOLOGIES LLC, US

[85] 2017-10-11

[86] 2016-05-09 (PCT/US2016/031525)

[87] (WO2016/183030)

[30] US (62/159,768) 2015-05-11

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[11] **2,982,487**  
[13] C

[51] **Int.Cl. C09D 5/12 (2006.01) C23C 22/06 (2006.01) C23C 22/78 (2006.01) C23F 11/173 (2006.01)**

[25] EN

[54] **POLYMER-CONTAINING PRE-RINSE PRIOR TO A CONVERSION TREATMENT**

[54] **PRERINCAGE CONTENANT DU POLYMERE POUR UN TRAITEMENT DE CONVERSION**

[72] CORNEN, SOPHIE, DE

[72] WAPNER, KRISTOF, DE

[72] POSNER, RALF, DE

[72] HENZE, NATASCHA, DE

[72] LILL, KIRSTEN AGNES, DE

[72] MAAS, MICHIEL GERARD, DE

[73] HENKEL AG & CO. KGAA, DE

[85] 2017-10-12

[86] 2016-04-01 (PCT/EP2016/057220)

[87] (WO2016/165958)

[30] DE (102015206812.9) 2015-04-15

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[13] C

[51] **Int.Cl. C07D 239/48 (2006.01) A61K 31/505 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **CRYSTALLINE FGFR4 INHIBITOR COMPOUND AND USES THEREOF**

[54] **COMPOSE INHIBITEUR DE FGFR4 CRISTALLIN ET UTILISATIONS DE CELUI-CI**

[72] MONIZ, GEORGE, US  
[72] SANDERS, KRISTEN, US  
[72] CHANDA, ARANI, US  
[72] YOSHIDA, KENSHI, JP  
[72] HAO, MING-HONG, US  
[72] REYNOLDS, DOMINIC, US  
[72] PRAJAPATI, SUDEEP, US  
[72] SELVARAJ, ANAND, US  
[72] SATOH, TAKASHI, US  
[72] WANG, JOHN, US  
[73] EISAI R&D MANAGEMENT CO., LTD., JP

[85] 2017-10-12  
[86] 2016-04-13 (PCT/US2016/027334)  
[87] (WO2016/168331)  
[30] US (62/147,313) 2015-04-14

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[11] **2,982,793**  
[13] C

[51] **Int.Cl. H01S 5/024 (2006.01) F41H 13/00 (2006.01)**

[25] EN

[54] **OPTICAL THERMAL PROFILE**  
[54] **PROFIL THERMIQUE OPTIQUE**

[72] EIFERT, ANDREW, US  
[72] WILSON, ERIC, US  
[72] WHITE, RUSSELL, US  
[72] BLACKWELDER, MARK JON, US  
[73] ROLLS-ROYCE NORTH AMERICAN TECHNOLOGIES INC., US  
[73] ROLLS-ROYCE CORPORATION, US

[86] (2982793)  
[87] (2982793)  
[22] 2017-10-18  
[30] US (15/398380) 2017-01-04

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[11] **2,983,165**  
[13] C

[51] **Int.Cl. B81C 1/00 (2006.01) B81B 7/00 (2006.01)**

[25] EN

[54] **WAFER LEVEL MEMS PACKAGE INCLUDING DUAL SEAL RING**  
[54] **GROUPE DE MEMS AU NIVEAU DE LA PLAQUETTE INCLUANT UNE DOUBLE BAGUE D'ETANCHEITE**

[72] DIEP, BUU Q., US  
[72] KENNEDY, ADAM M., US  
[72] KOCIAN, THOMAS ALLAN, US  
[72] LAMB, MARK, US  
[73] RAYTHEON COMPANY, US

[85] 2017-10-16  
[86] 2016-04-20 (PCT/US2016/028338)  
[87] (WO2016/209339)  
[30] US (14/748,482) 2015-06-24

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[11] **2,983,170**  
[13] C

[51] **Int.Cl. A61G 5/00 (2006.01) A61G 5/10 (2006.01) B62B 3/14 (2006.01)**

[25] EN

[54] **NESTABLE TRANSPORT DEVICE**  
[54] **DISPOSITIF DE TRANSPORT EMBOITABLE**

[72] BOD, FRANK, NL  
[73] BERGH SPECIAL PRODUCTS BV, NL

[85] 2017-10-17  
[86] 2016-04-20 (PCT/NL2016/050279)  
[87] (WO2016/171554)  
[30] NL (2014714) 2015-04-24

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[11] **2,983,728**  
[13] C

[51] **Int.Cl. F25B 39/04 (2006.01) F24F 13/30 (2006.01) F28D 1/04 (2006.01) F28F 1/00 (2006.01) F28F 9/00 (2006.01)**

[25] EN

[54] **MANIFOLD DESIGN TO ELIMINATE FRACTURES ON MULTISTAGE HEAT EXCHANGER COILS**  
[54] **MODELE DE COLLECTEUR SERVANT A ELIMINER LES FRACTURES DANS LES SERPENTINS D'ECHANGEUR DE CHALEUR MULTIETAGE**

[72] BYERS, TATE, US  
[72] HIM, AYLAN, US  
[72] RUHLANDER, GREGORY, US  
[72] MORALES, CLAUDIA A., US  
[72] MACKEY, DAVID, US  
[73] LENNOX INDUSTRIES INC., US

[86] (2983728)  
[87] (2983728)  
[22] 2017-10-25  
[30] US (15/337,810) 2016-10-28

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[11] **2,983,806**  
[13] C

[51] **Int.Cl. G01N 1/04 (2006.01) G01N 1/10 (2006.01) G01N 21/01 (2006.01) G01N 21/63 (2006.01) G01N 27/00 (2006.01)**

[25] EN

[54] **PORTABLE ORGANIC MOLECULAR SENSING DEVICE AND RELATED SYSTEMS AND METHODS**  
[54] **DISPOSITIF PORTABLE DE DETECTION MOLECULAIRE ORGANIQUE ET SYSTEMES ET PROCEDES ASSOCIES**

[72] WOLTER, HEINZ, CA  
[72] LEYN, ALEXANDER, CA  
[72] FISHER, MICHAEL, CA  
[72] BORG, ERIK HELGE, SE  
[72] OSUCH, CHRISTOPHER, CA  
[72] VILK, GREGORY JOHN ADAMS, CA  
[72] WRIGHT, EVAN, CA  
[72] BLANCHARD, DARIAN, CA  
[73] ATERICA INC., CA

[85] 2017-10-24  
[86] 2016-04-28 (PCT/CA2016/050492)  
[87] (WO2016/172800)  
[30] US (62/153,922) 2015-04-28

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[11] **2,984,304**  
[13] C

[51] **Int.Cl. H04M 3/436 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR AUTOMATICALLY CONDUCTING RISK ASSESSMENTS FOR TELEPHONY COMMUNICATIONS**  
[54] **SYSTEMES ET METHODES DE REALISATION AUTOMATIQUE D'EVALUATIONS DU RISQUE DESTINES A DES COMMUNICATIONS TELEPHONIQUES**  
[72] KENT, SEAN J., US  
[72] CARTWRIGHT, KEN, US  
[72] SINGLA, AMIT, US  
[72] MOHAN, SRIKANTH, US  
[72] FLORACK, PAUL, US  
[73] TRANSACTION NETWORK SERVICES, INC., US  
[86] (2984304)  
[87] (2984304)  
[22] 2017-11-01  
[30] US (62/415,982) 2016-11-01

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[11] **2,984,362**  
[13] C

[51] **Int.Cl. G01S 13/10 (2006.01) G01S 17/10 (2020.01)**  
[25] EN  
[54] **METHOD FOR MEASURING A DISTANCE**  
[54] **PROCEDE DE MESURE DE L'ELOIGNEMENT**  
[72] RIEGER, PETER, AT  
[72] ULLRICH, ANDREAS, AT  
[73] RIEGL LASER MEASUREMENT SYSTEMS GMBH, AT  
[85] 2017-10-30  
[86] 2016-06-14 (PCT/AT2016/050196)  
[87] (WO2016/201469)  
[30] AT (A 50491/2015) 2015-06-15

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[11] **2,984,615**  
[13] C

[51] **Int.Cl. C07D 295/096 (2006.01) A61K 31/495 (2006.01) A61P 25/18 (2006.01) A61P 25/24 (2006.01) A61P 25/28 (2006.01) C07D 207/28 (2006.01)**  
[25] EN  
[54] **VORTIOXETINE PYROGLUTAMATE**  
[54] **PYROGLUTAMATE DE VORTIOXETINE**  
[72] DE DIEGO, HEIDI LOPEZ, DK  
[72] CHRISTENSEN, KIM LASSE, DK  
[72] HOLM, RENE, DK  
[72] KATEB, JENS, SE  
[73] H. LUNDBECK A/S, DK  
[85] 2017-10-31  
[86] 2016-05-11 (PCT/EP2016/060540)  
[87] (WO2016/180870)  
[30] DK (PA 2015 00284) 2015-05-13

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[11] **2,984,683**  
[13] C

[51] **Int.Cl. E04F 13/08 (2006.01) H02B 1/04 (2006.01) H02G 3/02 (2006.01) H05K 7/02 (2006.01)**  
[25] FR  
[54] **MODULAR STRUCTURE, MODULE FOR SUCH A MODULAR STRUCTURE AND METHOD FOR PRODUCING SUCH A MODULAR STRUCTURE**  
[54] **STRUCTURE MODULAIRE, MODULE POUR UNE TELLE STRUCTURE MODULAIRE ET PROCEDE DE REALISATION D'UNE TELLE STRUCTURE MODULAIRE**  
[72] LAMOUREUX, BRUNO, LU  
[73] O.PARTICIPATIONS SAS, FR  
[85] 2017-10-31  
[86] 2016-04-20 (PCT/LU2016/000001)  
[87] (WO2016/163865)  
[30] FR (1552531) 2015-03-26

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[11] **2,984,740**  
[13] C

[51] **Int.Cl. F25B 25/02 (2006.01) F25B 40/02 (2006.01)**  
[25] EN  
[54] **ABSORPTION SUBCOOLER FOR A REFRIGERATION SYSTEM**  
[54] **REFROIDISSEUR SECONDAIRE D'ABSORPTION DESTINE A UN SYSTEME DE REFRIGERATION**  
[72] WILKERSON, CARLTON, US  
[72] EDWARDS, BUCKY WILLIAM (DECEASED), US  
[72] ALI, MASOOD, US  
[73] HEATCRAFT REFRIGERATION PRODUCTS LLC, US  
[86] (2984740)  
[87] (2984740)  
[22] 2017-11-06  
[30] US (15/346,329) 2016-11-08

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[11] **2,985,151**  
[13] C

[51] **Int.Cl. A61M 1/02 (2006.01) A61M 1/36 (2006.01)**  
[25] EN  
[54] **MULTIPLE BLOOD BAG SYSTEM**  
[54] **SYSTEME A POCHE DE SANG MULTIPLES**  
[72] VINCENT, EMMANUEL, FR  
[72] BOHEC, PIERRE, FR  
[72] GACHELIN, JEREMIE, FR  
[73] AENITIS TECHNOLOGIES, FR  
[85] 2017-11-06  
[86] 2016-05-04 (PCT/EP2016/060090)  
[87] (WO2016/177832)  
[30] EP (15166846.4) 2015-05-07

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[13] C

[51] **Int.Cl. A61K 48/00 (2006.01) C12N 9/14 (2006.01) C12N 15/864 (2006.01)**  
[25] EN  
[54] **NUCLEIC ACID CONSTRUCTS AND GENE THERAPY VECTORS FOR USE IN THE TREATMENT OF WILSON'S DISEASE AND OTHER CONDITIONS**  
[54] **CONSTRUCTIONS D'ACIDE NUCLEIQUE ET VECTEURS DE THERAPIE GENIQUE A UTILISER DANS LE TRAITEMENT DE LA MALADIE DE WILSON ET D'AUTRES CONDITIONS**  
[72] MURILLO SAUCA, OIHANA, ES  
[72] GONZALEZ ASEGUINOLAZA, GLORIA, ES  
[72] HERNANDEZ ALCOCEBA, RUBEN, ES  
[73] FUNDACION PARA LA INVESTIGACION MEDICA APLICADA, ES  
[85] 2017-06-15  
[86] 2015-12-17 (PCT/EP2015/080357)  
[87] (WO2016/097219)  
[30] EP (14382531.3) 2014-12-17

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[13] C

[51] **Int.Cl. E21B 17/042 (2006.01)**  
[25] EN  
[54] **THREADED COUPLING END FOR A PERCUSSION DRILL STRING COMPONENT**  
[54] **EXTREMITE A RACCORD FILETE POUR ELEMENT DE TRAIN DE TIGES DE FORAGE A PERCUSSION**  
[72] WICKSTROM, DAVID, SE  
[72] NORMAN, ANDREAS, SE  
[73] SANDVIK INTELLECTUAL PROPERTY AB, SE  
[85] 2017-11-21  
[86] 2016-05-19 (PCT/EP2016/061292)  
[87] (WO2016/188857)  
[30] EP (15168925.4) 2015-05-22

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[11] **2,987,025**  
[13] C

[51] **Int.Cl. D01F 9/16 (2006.01) C08B 16/00 (2006.01) D01D 1/02 (2006.01) D01D 5/28 (2006.01) D01D 10/02 (2006.01) D01F 2/00 (2006.01) D01F 8/02 (2006.01) D02J 1/22 (2006.01)**  
[25] EN  
[54] **A FIBER AND A PROCESS FOR THE MANUFACTURE THEREOF**  
[54] **FIBRE ET SON PROCESSUS DE FABRICATION**  
[72] GAROFF, NIKLAS, SE  
[72] PROTZ, ROBERT, DE  
[72] ERDMANN, JENS, DE  
[72] GANSTER, JOHANNES, DR., DE  
[72] LEHMANN, ANDRE, DR., DE  
[73] STORA ENSO OYJ, FI  
[85] 2017-11-23  
[86] 2016-06-09 (PCT/IB2016/053401)  
[87] (WO2016/199060)  
[30] SE (1550794-0) 2015-06-11

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[13] C

[51] **Int.Cl. C23F 11/14 (2006.01)**  
[25] EN  
[54] **2-SUBSTITUTED IMIDAZOLE AND BENZIMIDAZOLE CORROSION INHIBITORS**  
[54] **INHIBITEURS DE CORROSION A BASE D'IMIDAZOLE ET DE BENZIMIDAZOLE DISUBSTITUES**  
[72] RANE, DEEPAK, IN  
[72] SEETHARAMAN, JOTHIBASU, IN  
[72] ATKINS, JEFFERY M., US  
[72] HARBINDU, ANAND, IN  
[72] ANANT, PIYUSH, IN  
[72] SIVASWAMY, VAIDEESWARAN, IN  
[72] CHERUKU, PRADEEP, US  
[73] ECOLAB USA INC., US  
[85] 2017-11-23  
[86] 2016-05-27 (PCT/US2016/034629)  
[87] (WO2016/191672)  
[30] US (62/167,697) 2015-05-28

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[13] C

[51] **Int.Cl. C01F 11/02 (2006.01) C04B 2/04 (2006.01) C04B 2/06 (2006.01)**  
[25] EN  
[54] **PROCESS FOR MANUFACTURING HIGHLY POROUS SLAKED LIME AND PRODUCT THEREBY OBTAINED**  
[54] **PROCEDE DE FABRICATION D'HYDROXYDE DE CALCIUM HAUTEMENT POREUX ET PRODUIT AINSI OBTENU**  
[72] CHINI, STEPHAN, DE  
[72] LORGUILLOUX, MARION, BE  
[72] NYSSEN, OLIVIER, BE  
[72] FRANCOISSE, OLIVIER, BE  
[73] S.A. LHOIST RECHERCHE ET DEVELOPPEMENT, BE  
[85] 2017-11-30  
[86] 2016-08-12 (PCT/EP2016/069211)  
[87] (WO2017/029209)  
[30] EP (15181104.9) 2015-08-14

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[11] **2,988,147**  
[13] C

[51] **Int.Cl. C07D 413/14 (2006.01) A61K 31/4439 (2006.01) A61P 9/00 (2006.01) C07D 401/04 (2006.01) C07D 413/04 (2006.01) C07D 417/14 (2006.01)**  
[25] EN  
[54] **4-HYDROXY-3-(HETEROARYL)PYRIDINE-2-ONE APJ AGONISTS FOR USE IN THE TREATMENT OF CARDIOVASCULAR DISORDERS**  
[54] **AGONISTES D'APJ 4-HYDROXY-3-(HETEROARYL)PYRIDINE-2-ONE A UTILISER DANS LE TRAITEMENT DE TROUBLES CARDIO-VASCULAIRES**  
[72] JOHNSON, JAMES A., US  
[72] KIM, SOONG-HOON, US  
[72] LAWRENCE, R. MICHAEL, US  
[72] MYERS, MICHAEL C., US  
[72] CHAO, HANNGUANG J., US  
[72] PHILLIPS, MONIQUE, US  
[72] JIANG, JI, US  
[73] BRISTOL-MYERS SQUIBB COMPANY, US  
[85] 2017-12-01  
[86] 2016-06-02 (PCT/US2016/035482)  
[87] (WO2016/196771)  
[30] US (62/170,215) 2015-06-03

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[13] C

[51] **Int.Cl. B64D 45/00 (2006.01) B64C 3/50 (2006.01) B64C 9/16 (2006.01) B64C 9/22 (2006.01) B64C 13/10 (2006.01)**

[25] EN

[54] **INDICATING SYSTEMS, DEVICES AND METHODS FOR HIGH-LIFT FLIGHT CONTROL SURFACES OF AIRCRAFT**

[54] **PROCEDES, DISPOSITIFS ET SYSTEMES D'INDICATION POUR SURFACES DE COMMANDE DE VOL A PORTANCE ELEVEE D'AERONEF**

[72] OUELLETTE, BENOIT, CA  
[73] BOMBARDIER INC., CA  
[85] 2017-12-07  
[86] 2016-06-07 (PCT/IB2016/053331)  
[87] (WO2016/199016)  
[30] US (62/174,739) 2015-06-12

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[11] **2,988,867**  
[13] C

[51] **Int.Cl. A47B 96/00 (2006.01) F21S 4/20 (2016.01) A47B 47/00 (2006.01) A47B 97/00 (2006.01) F21V 33/00 (2006.01) H01R 24/00 (2011.01)**

[25] EN

[54] **LOAD MODULE FOR INSERTING INTO A TUBE OF A THREE-DIMENSIONAL SUPPORTING TUBE STRUCTURE OF A FURNITURE SYSTEM**

[54] **MODULE CONSOMMATEUR A INSTALLER DANS UN TUBE D'UNE STRUCTURE TUBULAIRE PORTEUSE TRIDIMENSIONNELLE D'UN SYSTEME DE MEUBLE**

[72] SCHARER, ALEXANDER, CH  
[72] DIENES, THOMAS, CH  
[72] KRENGER, STEFAN, CH  
[73] USM U. SCHARER SOHNE AG, CH  
[85] 2017-12-08  
[86] 2016-06-13 (PCT/EP2016/063498)  
[87] (WO2016/207008)  
[30] EP (15405042.1) 2015-06-23

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[11] **2,989,122**  
[13] C

[51] **Int.Cl. B01D 53/94 (2006.01) B01D 53/56 (2006.01) B01J 29/068 (2006.01) F01N 3/10 (2006.01) F01N 3/20 (2006.01)**

[25] EN

[54] **EXHAUST GAS TREATMENT SYSTEM**

[54] **SYSTEME DE TRAITEMENT DE GAZ D'ECHAPPEMENT**

[72] XUE, WEN-MEI, US  
[72] HOCHMUTH, JOHN K., US  
[73] BASF CORPORATION, US  
[85] 2017-12-11  
[86] 2016-06-10 (PCT/US2016/036958)  
[87] (WO2016/201276)  
[30] US (62/174,862) 2015-06-12

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[11] **2,989,706**  
[13] C

[51] **Int.Cl. A61M 5/32 (2006.01) A61M 5/178 (2006.01) A61M 5/28 (2006.01)**

[25] FR

[54] **SYRINGE COMPRISING A BONDED NEEDLE**

[54] **SERINGUE A AIGUILLE COLLEE**

[72] ANEAS, ANTOINE, FR  
[73] BIOCORP PRODUCTION, FR  
[85] 2017-12-15  
[86] 2016-06-22 (PCT/EP2016/064374)  
[87] (WO2016/207196)  
[30] FR (1555748) 2015-06-23

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[11] **2,989,916**  
[13] C

[51] **Int.Cl. F25B 29/00 (2006.01) F24D 3/12 (2006.01) F24D 3/18 (2006.01) F25B 6/04 (2006.01) F25B 9/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR REUSING WASTE HEAT OF A TRANSCRITICAL REFRIGERATION SYSTEM**

[54] **SYSTEME ET PROCEDE POUR REUTILISER LA CHALEUR PERDUE D'UN SYSTEME DE REFRIGERATION TRANSCRITIQUE**

[72] ZHA, SHITONG, US  
[73] HEATCRAFT REFRIGERATION PRODUCTS LLC, US  
[86] (2989916)  
[87] (2989916)  
[22] 2017-12-21  
[30] US (15/397,284) 2017-01-03

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[11] **2,990,636**  
[13] C

[51] **Int.Cl. C02F 1/44 (2006.01)**

[25] EN

[54] **METHODS OF DEWATERING OF ALCOHOLIC SOLUTIONS VIA FORWARD OSMOSIS AND RELATED SYSTEMS**

[54] **PROCEDES DE DESHYDRATATION DE SOLUTIONS ALCOOLIQUES PAR OSMOSE INVERSE ET SYSTEMES CORRESPONDANTS**

[72] BENTON, CHARLES, US  
[72] BAKAJIN, OLGICA, US  
[72] KLARE, JENNIFER, US  
[72] REVANUR, RAVINDRA, US  
[73] PORIFERA, INC., US  
[85] 2017-12-21  
[86] 2016-06-24 (PCT/US2016/039377)  
[87] (WO2016/210337)  
[30] US (62/184,159) 2015-06-24

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[11] **2,991,373**  
[13] C

[51] **Int.Cl. G05B 11/00 (2006.01) B60W 40/10 (2012.01) B60W 50/00 (2006.01) B64C 13/00 (2006.01) G05D 1/02 (2020.01)**

[25] EN

[54] **METHODS AND APPARATUS TO PERFORM OBSERVER-BASED CONTROL OF A VEHICLE**

[54] **METHODES ET APPAREIL SERVANT A EXECUTER UN CONTROLE DE VEHICULE FONDE SUR L'OBSERVATEUR**

[72] LAVRETSKY, EUGENE, US  
[72] WISE, KEVIN, US  
[73] THE BOEING COMPANY, US  
[86] (2991373)  
[87] (2991373)  
[22] 2018-01-08  
[30] US (15/465,066) 2017-03-21

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[13] C

[51] **Int.Cl. G01N 37/00 (2006.01) C22B 3/02 (2006.01) C22B 3/24 (2006.01) G01B 11/02 (2006.01) G01F 23/02 (2006.01) G01F 23/292 (2006.01) G01N 5/04 (2006.01) G01B 7/02 (2006.01)**

[25] EN

[54] **A MEASUREMENT APPARATUS FOR MEASURING A VOLUME OF A DESIRED SOLID COMPONENT IN A SAMPLE VOLUME OF A SOLID-LIQUID SLURRY**

[54] **APPAREIL DE MESURE D'UN VOLUME D'UN COMPOSANT SOLIDE DESIRE DANS UN VOLUME D'UN ECHANTILLON DE BOUE SOLIDE-LIQUIDE**

[72] MCGRATH, TERESA DIANE HAYWARD, AU

[72] HUBBLE, MARK ROBERT, AU

[72] MCCALLUM, WILLIAM JOHN, AU

[72] STAUNTON, WILLIAM PATRICK, AU

[73] CURTIN UNIVERSITY, AU

[85] 2018-01-08

[86] 2015-07-13 (PCT/AU2015/000410)

[87] (WO2017/008097)

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[11] **2,992,388**  
[13] C

[51] **Int.Cl. A01F 15/07 (2006.01)**

[25] EN

[54] **A BALE WRAPPING APPARATUS AND A METHOD FOR WRAPPING A BALE MADE FROM A CROP PRODUCT**

[54] **APPAREIL D'ENRUBANNAGE DE BALLE ET PROCEDE D'ENRUBANNAGE D'UNE BALLE FABRIQUEE A PARTIR D'UN PRODUIT DE RECOLTE**

[72] BAKER, TIM, GB

[73] KVERNELAND GROUP RAVENNA S.R.L., IT

[85] 2018-01-12

[86] 2016-07-28 (PCT/EP2016/068029)

[87] (WO2017/017201)

[30] EP (15178648.0) 2015-07-28

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[11] **2,992,547**  
[13] C

[51] **Int.Cl. E05D 3/02 (2006.01) E05D 5/10 (2006.01) E05D 11/10 (2006.01)**

[25] EN

[54] **HINGE**

[54] **CHARNIERE**

[72] SIEK, TADEUSZ, PL

[73] VTS SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA, PL

[85] 2018-01-15

[86] 2016-04-14 (PCT/PL2016/050011)

[87] (WO2017/010897)

[30] PL (P.413125) 2015-07-14

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[11] **2,992,574**  
[13] C

[51] **Int.Cl. F21K 99/00 (2016.01) F21V 7/00 (2006.01) F21V 15/01 (2006.01) F21V 23/00 (2015.01)**

[25] EN

[54] **LOW PROFILE CLAMP**

[54] **PINCE A PROFIL BAS**

[72] SCARLATA, ANDREW FRANCIS, US

[72] LJUCA, MEVZAD, US

[73] EATON INTELLIGENT POWER LIMITED, IE

[85] 2018-01-15

[86] 2016-07-12 (PCT/US2016/041838)

[87] (WO2017/014987)

[30] US (14/801,918) 2015-07-17

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[11] **2,992,644**  
[13] C

[51] **Int.Cl. H02S 30/10 (2014.01) H02S 20/32 (2014.01)**

[25] EN

[54] **STACKING SPACER, PHOTOVOLTAIC MODULE FRAME AND TRACKING DEVICE ASSEMBLY**

[54] **ESPACEUR D'EMPILEMENT, CADRE DE MODULE PHOTOVOLTAIQUE ET ENSEMBLE DISPOSITIF DE SUIVI**

[72] SCHMIDT, CHRISTOPH, DE

[72] LANGE, GERRIT, DE

[72] AIPPERSPACH, WOLFGANG, DE

[73] SAINT-AUGUSTIN CANADA ELECTRIC INC., CA

[85] 2018-01-16

[86] 2016-07-11 (PCT/CA2016/050806)

[87] (WO2017/008150)

[30] DE (102015213396.6) 2015-07-16

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[11] **2,992,849**  
[13] C

[51] **Int.Cl. A61K 9/00 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR NANOPARTICLE LYOPHILE FORMS**

[54] **COMPOSITIONS ET PROCEDES POUR FORMES DE SUBSTANCE LYOPHILE DE NANOPARTICULES**

[72] YING, WENBIN, US

[72] ADAMI, ROGER, US

[72] WANG, YUWEI, US

[72] YIN, HAIQING, US

[72] WANG, LIPING, US

[72] LIU, DONG, US

[73] NITTO DENKO CORPORATION, JP

[85] 2018-01-17

[86] 2016-07-22 (PCT/US2016/043537)

[87] (WO2017/015552)

[30] US (62/195,356) 2015-07-22

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[11] **2,993,359**  
[13] C

[51] **Int.Cl. G01R 33/022 (2006.01) G01V 3/08 (2006.01)**

[25] EN

[54] **MEASURING INSTRUMENTS, SYSTEMS AND MAGNETIC GRADIOMETERS**

[54] **INSTRUMENTS DE MESURE, SYSTEMES ET GRADIOMETRES MAGNETIQUES**

[72] CLARK, DAVID ALAN, US

[73] COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, AU

[85] 2018-01-23

[86] 2016-07-22 (PCT/AU2016/050655)

[87] (WO2017/015704)

[30] AU (2015902956) 2015-07-24

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[11] **2,993,894**  
[13] C

[51] **Int.Cl. B66C 23/40 (2006.01) B66D 1/08 (2006.01) B66D 1/12 (2006.01) B66D 1/14 (2006.01) B66D 1/46 (2006.01)**

[25] EN  
[54] **MOBILE SHAFT WINCH**  
[54] **TREUIL DE Puits MOBILE**  
[72] KOSTERKE, UWE, DE  
[72] WEST, MARKUS, DE  
[73] OLKO-MASCHINENTECHNIK GMBH, DE  
[85] 2018-01-26  
[86] 2016-09-13 (PCT/EP2016/071481)  
[87] (WO2017/055069)  
[30] DE (10 2015 116 505.8) 2015-09-29

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[11] **2,994,116**  
[13] C

[51] **Int.Cl. F25B 25/00 (2006.01) F25B 5/00 (2006.01) F25B 6/00 (2006.01) F25B 7/00 (2006.01)**

[25] EN  
[54] **COOLING SYSTEM**  
[54] **SYSTEME DE REFROIDISSEMENT**  
[72] PEREIRA ZIMMERMANN, AUGUSTO J., US  
[72] AUSTIN, ROBERT H., JR., US  
[73] HEATCRAFT REFRIGERATION PRODUCTS LLC, US  
[86] (2994116)  
[87] (2994116)  
[22] 2018-02-07  
[30] US (15/432,550) 2017-02-14

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[11] **2,994,539**  
[13] C

[51] **Int.Cl. F25B 25/00 (2006.01) F25B 5/00 (2006.01) F25B 6/00 (2006.01) F25B 7/00 (2006.01)**

[25] EN  
[54] **COOLING SYSTEM**  
[54] **SYSTEME DE REFROIDISSEMENT**  
[72] PEREIRA ZIMMERMANN, AUGUSTO J., US  
[72] AUSTIN, ROBERT H., JR., US  
[73] HEATCRAFT REFRIGERATION PRODUCTS LLC, US  
[86] (2994539)  
[87] (2994539)  
[22] 2018-02-08  
[30] US (15/432,506) 2017-02-14

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[11] **2,994,716**  
[13] C

[51] **Int.Cl. G01R 29/16 (2006.01) G01W 1/00 (2006.01) H02J 3/26 (2006.01)**

[25] EN  
[54] **GEOMAGNETIC STORM WARNING**  
[54] **AVERTISSEMENT DE TEMPETE GEOMAGNETIQUE**  
[72] BASU, CHUMKI, IN  
[72] GUILLON, SEBASTIEN, CA  
[72] KAMWA, INNOCENT, CA  
[72] PADMANABAN, MANIKANDAN, IN  
[72] CAUCHON, LUC, CA  
[73] INTERNATIONAL BUSINESS MACHINES CORPORATION, US  
[73] HYDRO-QUEBEC, CA  
[86] (2994716)  
[87] (2994716)  
[22] 2018-02-12  
[30] US (15/433,407) 2017-02-15

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[11] **2,994,755**  
[13] C

[51] **Int.Cl. B32B 5/24 (2006.01) A41D 31/08 (2019.01) A41D 31/00 (2019.01)**

[25] EN  
[54] **METHOD FOR MANUFACTURING A FLAME-RESISTANT TEXTILE MATERIAL FOR PROTECTIVE CLOTHING, FLAME-RESISTANT TEXTILE MATERIAL, AND PROTECTIVE CLOTHING MADE THEREOF**  
[54] **PROCEDE DE PRODUCTION D'UNE MATIERE TEXTILE DIFFICILEMENT INFLAMMABLE POUR VETEMENT DE PROTECTION, MATIERE TEXTILE DIFFICILEMENT INFLAMMABLE ET VETEMENT DE PROTECTION REALISE A PARTIR DE CELLE-CI**  
[72] GSTETTNER, ALEXANDER, AT  
[73] TRANS-TEXTIL GMBH, DE  
[85] 2018-02-05  
[86] 2016-07-27 (PCT/EP2016/067882)  
[87] (WO2017/025328)  
[30] DE (10 2015 010 524.8) 2015-08-13

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[11] **2,995,926**  
[13] C

[51] **Int.Cl. G01N 19/08 (2006.01)**

[25] EN  
[54] **A WEAR GAUGE**  
[54] **UNE JAUGE D'USURE**  
[72] GASSON, GARY C, ZA  
[73] SOUTHERN CROSS TRADING 5 (PTY) LTD., ZA  
[86] (2995926)  
[87] (2995926)  
[22] 2018-02-22  
[30] ZA (2017/03419) 2017-05-17

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[11] **2,996,671**  
[13] C

[51] **Int.Cl. G01F 9/00 (2006.01) B24B 49/00 (2012.01) E21B 43/12 (2006.01) E21B 43/26 (2006.01) E21C 37/12 (2006.01) F02M 37/04 (2006.01)**

[25] EN  
[54] **CONTROL SYSTEM**  
[54] **SYSTEME DE COMMANDE**  
[72] OLIVER, JAMES, AU  
[72] PAECH, SIMON BENJAMIN, AU  
[73] OLITEK PTY LTD, AU  
[85] 2018-02-26  
[86] 2015-08-28 (PCT/AU2015/050503)  
[87] (WO2017/035557)

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[13] C

[51] **Int.Cl. G01S 15/89 (2006.01) A61B 8/00 (2006.01) G01S 7/523 (2006.01)**

[25] EN  
[54] **SYSTEMS AND METHODS OF COMBINED PHASED-ARRAY AND FRESNEL ZONE PLATE BEAMFORMING EMPLOYING DELAY-CORRECTED FRESNEL SUB-APERTURES**  
[54] **SYSTEMES ET PROCEDES POUR RESEAUX DE PHASE COMBINES ET FORMATION DE FAISCEAU A LAME DE FRESNEL ZONEE UTILISANT DES SOUS-OUVERTURES DE FRESNEL A RETARD CORRIGE**  
[72] BROWN, JEREMY, CA  
[72] LATHAM, KATHERINE, CA  
[73] DALHOUSIE UNIVERSITY, CA  
[85] 2018-02-27  
[86] 2016-02-25 (PCT/CA2016/050193)  
[87] (WO2017/041166)  
[30] US (62/215,548) 2015-09-08  
[30] US (62/237,414) 2015-10-05

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[11] **2,996,858**  
[13] C

[51] **Int.Cl. G01N 1/02 (2006.01) A61F 13/40 (2006.01)**  
[25] EN  
[54] **DEVICE FOR COLLECTING, TRANSFERRING AND STORING SAMPLES OF BIOLOGICAL AND/OR CHEMICAL MATERIAL**  
[54] **DISPOSITIF DE COLLECTE, DE TRANSFERT ET DE STOCKAGE D'ECHANTILLONS DE MATERIEL BIOLOGIQUE ET/OU CHIMIQUE**  
[72] CARAGIULI, GABRIELE, IT  
[72] MARTELLO, GIORGIO, IT  
[72] TAINI, ANDREA, IT  
[73] COPAN ITALIA S.P.A., IT  
[85] 2018-02-27  
[86] 2016-08-18 (PCT/IB2016/054943)  
[87] (WO2017/033099)  
[30] IT (102015000046892) 2015-08-27

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[25] EN  
[54] **HYDROCARBON SOLUBLE/DISPERSIBLE HEMIFORMALS AS HYDROGEN SULFIDE SCAVENGERS**  
[54] **HEMIFORMALS DOUES DE SOLUBILITE/DISPERSION DANS DES HYDROCARBURES A TITRE DE PIEGEURS DE SULFURE D'HYDROGENE**  
[72] RANA, GEETA, US  
[72] BURRELL, CHRISTOPHER THOMAS, US  
[73] ECOLAB USA INC., US  
[85] 2018-02-28  
[86] 2016-08-12 (PCT/US2016/046832)  
[87] (WO2017/044250)  
[30] US (62/215,547) 2015-09-08

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[25] EN  
[54] **YEAST CELL WALL DERIVED FLAVOUR**  
[54] **AROME DERIVE DE LA PAROI DE CELLULES DE LEVURE**  
[72] MOREL, BERNADETTE THERESIA, NL  
[72] VAN DEN BERG, MARCO ALEXANDER, NL  
[73] DSM IP ASSETS B.V., NL  
[85] 2018-03-05  
[86] 2016-09-15 (PCT/EP2016/071802)  
[87] (WO2017/050629)  
[30] EP (15186044.2) 2015-09-21

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[13] C

[51] **Int.Cl. F24F 11/50 (2018.01) H04B 3/03 (2006.01)**  
[25] EN  
[54] **HVAC SIGNALING SYSTEM AND METHOD**  
[54] **SYSTEME DE SIGNALEMENT CVCA ET METHODE**  
[72] USELTON, ROBERT B. "DUTCH", US  
[73] LENNOX INDUSTRIES INC., US  
[86] (2997818)  
[87] (2997818)  
[22] 2018-03-08  
[30] US (15/453,392) 2017-03-08

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[25] EN  
[54] **CHILD SEAT HAVING AN OBJECT HOLDER**  
[54] **SIEGE POUR ENFANT DOTE D'UN PORTE-OBJET**  
[72] WILLIAMS, BRUCE L., US  
[72] SELLERS, GREGORY S., US  
[73] WONDERLAND NURSERYGOODS COMPANY LIMITED, HK  
[86] (2997867)  
[87] (2997867)  
[22] 2016-01-05  
[62] 2,916,737  
[30] US (62/101,563) 2015-01-09  
[30] US (62/243,922) 2015-10-20

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[13] C

[51] **Int.Cl. B01D 27/08 (2006.01) B01D 35/30 (2006.01) B01D 61/02 (2006.01) B01D 61/08 (2006.01) E03B 7/07 (2006.01)**  
[25] EN  
[54] **CARTRIDGE ACCUMULATOR**  
[54] **ACCUMULATEUR A CARTOUCHE**  
[72] MEZA, HUMBERTO, US  
[73] FLOW CONTROL LLC., US  
[85] 2018-03-09  
[86] 2016-09-14 (PCT/US2016/051671)  
[87] (WO2017/048802)  
[30] US (62/218,314) 2015-09-14  
[30] US (PCT/US16/34789) 2016-05-27

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[13] C

[51] **Int.Cl. A47J 31/60 (2006.01)**  
[25] EN  
[54] **CLEANING SYSTEM FOR AN APPARATUS FOR DISPENSING LIQUID FOODSTUFFS**  
[54] **SYSTEME DE NETTOYAGE POUR UN DISPOSITIF DESTINE A DISTRIBUER DES PRODUITS ALIMENTAIRES LIQUIDES**  
[72] VETTERLI, HEINZ, CH  
[72] TURI, MARIANO, CH  
[73] FRANKE KAFFEEMASCHINEN AG, CH  
[85] 2018-03-13  
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[87] (WO2017/046230)  
[30] DE (10 2015 217 964.8) 2015-09-18

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[13] C  
[51] **Int.Cl. A47L 13/59 (2006.01)**  
[25] EN  
[54] **SPONGE CLEANING AND  
DISINFECTING DEVICE**  
[54] **DISPOSITIF DE NETTOYAGE ET  
DE DESINFECTION D'EPONGE**  
[72] MAITLAND, TOD, US  
[72] FLANNERY, MATTHEW, US  
[72] LOGAN, JOSEPH, US  
[73] SPONGEBATH LLC, US  
[85] 2018-03-15  
[86] 2015-09-15 (PCT/US2015/050145)  
[87] (WO2016/044245)  
[30] US (62/050,560) 2014-09-15

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[13] C  
[51] **Int.Cl. A61K 39/00 (2006.01) C07K  
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[25] EN  
[54] **BINDING MOLECULES WITH  
MODIFIED J-CHAIN**  
[54] **MOLECULES DE LIAISON A  
CHAINE J MODIFIEE**  
[72] KEYT, BRUCE, US  
[72] PRESTA, LEONARD GEORGE, US  
[72] BALIGA, RAMESH, US  
[73] IGM BIOSCIENCES, INC., US  
[85] 2018-03-20  
[86] 2016-09-30 (PCT/US2016/055041)  
[87] (WO2017/059380)  
[30] US (62/235,518) 2015-09-30

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[13] C  
[51] **Int.Cl. F02B 77/04 (2006.01) F02M  
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[25] FR  
[54] **SYSTEM FOR DESCALING AN  
INTERNAL COMBUSTION  
ENGINE**  
[54] **SYSTEME DE DECALAMINAGE  
D'UN MOTEUR A COMBUSTION  
INTERNE**  
[72] LE POLLES, SEBASTIEN ALAIN, FR  
[73] FLEX FUEL - ENERGY  
DEVELOPMENT, FR  
[85] 2018-03-28  
[86] 2016-09-30 (PCT/FR2016/052503)  
[87] (WO2017/055768)  
[30] FR (1502059) 2015-10-02

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[13] C  
[51] **Int.Cl. B65D 83/08 (2006.01) B01L  
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B65D 25/00 (2006.01) B65D 25/04  
(2006.01) B65D 25/10 (2006.01) B65D  
41/16 (2006.01) G01N 1/20 (2006.01)**  
[25] EN  
[54] **TEST ELEMENT RETENTION  
DIVIDERS**  
[54] **DIVISEURS DE RETENTION  
D'ELEMENT DE TEST**  
[72] NORMAN, ISAAC A., US  
[72] CHAN, FRANK A., US  
[73] F. HOFFMANN-LA ROCHE AG, CH  
[85] 2018-04-11  
[86] 2016-12-07 (PCT/US2016/065462)  
[87] (WO2017/100375)  
[30] US (62/264,351) 2015-12-08

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[13] C  
[51] **Int.Cl. F16B 5/02 (2006.01) F16B 5/06  
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[25] FR  
[54] **SYSTEM FOR COVERING AND  
PROTECTING BURIED PIPES OR  
CABLES**  
[54] **SYSTEME DE RECOUVREMENT  
ET DE PROTECTION DE  
CONDUITES OU CABLES  
ENTERRES**  
[72] JOUBEAUX, YANNICK, FR  
[73] JOUBEAUX, YANNICK, FR  
[85] 2018-04-25  
[86] 2015-12-09 (PCT/FR2015/053397)  
[87] (WO2016/097535)  
[30] FR (14/63032) 2014-12-19

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[13] C  
[51] **Int.Cl. A23G 3/32 (2006.01) A23L  
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A23L 2/58 (2006.01)**  
[25] EN  
[54] **CARAMEL DERIVED COLOR  
WITH INCREASED BRIGHTNESS**  
[54] **COULEUR DERIVEE DU  
CARAMEL PRESENTANT UNE  
BRILLANCE AUGMENTEE**  
[72] CHANFORAN, CELINE, FR  
[72] MANE, CARINE, FR  
[72] JOUENNE, ERIC, FR  
[73] OTERRA A/S, DK  
[85] 2018-05-03  
[86] 2016-11-10 (PCT/EP2016/077219)  
[87] (WO2017/081129)  
[30] EP (15193817.2) 2015-11-10  
[30] EP (16190713.4) 2016-09-27

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[13] C  
[51] **Int.Cl. B01L 3/00 (2006.01) G01N  
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[25] EN  
[54] **TEST CELL AND MEASURING  
METHOD**  
[54] **CUVETTE ET PROCEDE DE  
MESURE**  
[72] BEHNK, HOLGER, DE  
[73] BEHNK, HOLGER, DE  
[85] 2018-05-09  
[86] 2016-11-16 (PCT/EP2016/077797)  
[87] (WO2017/097553)  
[30] EP (15199277.3) 2015-12-10

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[13] C  
[51] **Int.Cl. A01K 5/02 (2006.01)**  
[25] EN  
[54] **WET/DRY ANIMAL FEEDER**  
[54] **DISPOSITIF D'ALIMENTATION  
HUMIDE OU SECHE POUR  
ANIMAUX**  
[72] ZIMMERMAN, AUSTIN DEAN, US  
[73] THE GSI GROUP LLC, US  
[85] 2018-05-15  
[86] 2016-11-10 (PCT/US2016/061357)  
[87] (WO2017/087250)  
[30] US (62/255,588) 2015-11-16

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[11] **3,005,784**  
[13] C  
[51] **Int.Cl. G01N 33/68 (2006.01)**  
[25] EN  
[54] **LACTOFERRIN FOR USE IN THE  
DIAGNOSIS OR PROGNOSIS OF  
ALZHEIMER'S DISEASE, OR IN  
THE DIAGNOSIS OF  
PARKINSON'S DISEASE**  
[54] **LACTOFERRINE POUR  
UTILISATION DANS LE  
DIAGNOSTIC OU LE PRONOSTIC  
DE LA MALADIE D'ALZHEIMER,  
OU DANS LE DIAGNOSTIC DE LA  
MALADIE DE PARKINSON**  
[72] CARRO DIAZ, EVA MARIA, ES  
[73] GEROA DIAGNOSTICS, S.L., ES  
[85] 2018-05-18  
[86] 2016-11-17 (PCT/EP2016/078060)  
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[30] EP (15195662.0) 2015-11-20

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[11] **3,008,538**

[13] C

- [51] **Int.Cl. B08B 3/02 (2006.01) B05B 1/00 (2006.01) B05B 15/00 (2018.01)**  
[25] EN  
[54] **MODULAR POWER WASHER SYSTEM, METHOD AND KIT THEREFOR**  
[54] **SYSTEME DE LAVEUSE A PRESSION MODULAIRE, PROCEDE ET KIT CORRESPONDANTS**  
[72] RICKEY, TODD, CN  
[72] ESCHRICH, SVEN, CN  
[73] TECHTRONIC CORDLESS GP, US  
[85] 2018-06-14  
[86] 2016-02-22 (PCT/CN2016/074288)  
[87] (WO2017/143497)

[11] **3,008,599**

[13] C

- [51] **Int.Cl. F16K 11/085 (2006.01) F16K 31/68 (2006.01)**  
[25] EN  
[54] **VALVE DEVICE WITH FAIL-SAFE MECHANISM**  
[54] **DISPOSITIF DE VANNE DOTE DE MECANISME A SECURITE INTEGREE**  
[72] MOROTA, JUNICHI, JP  
[72] SUDA, HIROSHI, JP  
[73] NIPPON THERMOSTAT CO., LTD., JP  
[85] 2018-06-14  
[86] 2016-10-05 (PCT/JP2016/079585)  
[87] (WO2017/130468)  
[30] JP (2016-014996) 2016-01-29

[11] **3,008,747**

[13] C

- [51] **Int.Cl. C07D 403/12 (2006.01) A61K 31/4025 (2006.01) A61K 31/407 (2006.01) A61P 25/28 (2006.01) A61P 35/00 (2006.01) C07D 207/09 (2006.01) C07D 401/12 (2006.01) C07D 403/14 (2006.01) C07D 413/12 (2006.01) C07D 417/12 (2006.01) C07D 417/14 (2006.01) C07D 471/04 (2006.01) C07D 487/04 (2006.01)**  
[25] EN  
[54] **NOVEL COMPOUNDS**  
[54] **NOUVEAUX COMPOSES**  
[72] KEMP, MARK IAN, GB  
[72] STOCKLEY, MARTIN LEE, GB  
[72] MADIN, ANDREW, GB  
[73] MISSION THERAPEUTICS LIMITED, GB  
[85] 2018-06-15  
[86] 2016-12-16 (PCT/GB2016/053971)  
[87] (WO2017/103614)  
[30] GB (1522267.2) 2015-12-17

[11] **3,009,102**

[13] C

- [51] **Int.Cl. G05B 19/418 (2006.01) G01B 11/245 (2006.01) G06K 7/10 (2006.01)**  
[25] EN  
[54] **PERCEPTION SYSTEMS AND METHODS FOR IDENTIFYING AND PROCESSING A VARIETY OF OBJECTS**  
[54] **SYSTEMES DE PERCEPTION ET PROCEDES D'IDENTIFICATION ET DE TRAITEMENT DE DIVERS OBJETS**  
[72] WAGNER, THOMAS, US  
[72] AHEARN, KEVIN, US  
[72] COHEN, BENJAMIN, US  
[72] DAWSON-HAGGERTY, MICHAEL, US  
[72] GEYER, CHRISTOPHER, US  
[72] KOLETSCSKA, THOMAS, US  
[72] MARONEY, KYLE, US  
[72] MASON, MATTHEW, US  
[72] PRICE, GENE TEMPLE, US  
[72] ROMANO, JOSEPH, US  
[72] SMITH, DANIEL, US  
[72] SRINIVASA, SIDDHARTHA, US  
[72] VELAGAPUDI, PRASANNA, US  
[72] ALLEN, THOMAS, US  
[73] BERKSHIRE GREY OPERATING COMPANY, INC., US  
[85] 2018-06-18  
[86] 2016-12-15 (PCT/US2016/066786)  
[87] (WO2017/106423)  
[30] US (62/269,640) 2015-12-18  
[30] US (15/228,692) 2016-08-04

[11] **3,009,134**

[13] C

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[25] FR  
[54] **PLASTER-BASED ACOUSTIC BOARD**  
[54] **PLAQUE ACOUSTIQUE A BASE DE PLATRE**  
[72] CHUDA, KATARZYNA, FR  
[72] DEMATHIEU-ROELTGEN, CAROLINE, FR  
[72] CHOPIN, VERONIQUE, FR  
[73] SAINT-GOBAIN PLACO, FR  
[85] 2018-06-18  
[86] 2017-01-11 (PCT/FR2017/050057)  
[87] (WO2017/121954)  
[30] FR (1650245) 2016-01-13

[11] **3,010,006**

[13] C

- [51] **Int.Cl. A01K 39/012 (2006.01)**  
[25] EN  
[54] **POULTRY FEEDER**  
[54] **MANGEOIRE POUR VOLAILLE**  
[72] LOO, SOAK KIAN, MY  
[72] MOHAMAD, ZUBER BIN, MY  
[72] TEH, CHING CHUA, MY  
[72] GOH, BAK YAN, MY  
[73] THE GSI GROUP LLC, US  
[85] 2018-06-27  
[86] 2016-12-22 (PCT/US2016/068247)  
[87] (WO2017/116964)  
[30] US (62/273,270) 2015-12-30

[11] **3,010,507**

[13] C

- [51] **Int.Cl. G02B 5/28 (2006.01) G02B 1/02 (2006.01) G01D 5/26 (2006.01)**  
[25] EN  
[54] **OPTICAL FILTER**  
[54] **FILTRE OPTIQUE**  
[72] SWITZER, JAMES, III, US  
[72] OCKENFUSS, GEORG J., US  
[73] VIAVI SOLUTIONS INC., US  
[86] (3010507)  
[87] (3010507)  
[22] 2018-07-05  
[30] US (15/657,515) 2017-07-24

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[13] C

[51] **Int.Cl. A61K 31/551 (2006.01) A61K 31/517 (2006.01)**  
[25] EN  
[54] **USE OF N-BENZOYL-2-PHENYL-3-PHENYLCARBAMOYL-PIPERIDIN DERIVATIVE FOR TREATING COMPLEMENT 3 GLOMERULOPATHY**  
[54] **UTILISATION D'UN DERIVE DE N-BENZOYL-2-PHENYLE-3-PHENYLCARBAMOYL-PIPERIDINE POUR LE TRAITEMENT DE LA GLOMERULOPATHIE C3**  
[72] BEKKER, PETRUS, US  
[73] CHEMOCENTRYX, INC., US  
[85] 2018-07-05  
[86] 2017-01-12 (PCT/US2017/013132)  
[87] (WO2017/123716)  
[30] US (62/278,788) 2016-01-14  
[30] US (62/280,346) 2016-01-19  
[30] US (62/347,450) 2016-06-08  
[30] US (62/397,527) 2016-09-21

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[13] C

[51] **Int.Cl. H01J 49/42 (2006.01) H01J 49/00 (2006.01)**  
[25] EN  
[54] **SEGMENTED LINEAR ION TRAP FOR ENHANCED ION ACTIVATION AND STORAGE**  
[54] **PIEGE A IONS LINEAIRE SEGMENTE POUR ACTIVATION ET STOCKAGE D'IONS AMELIORES**  
[72] RAPTAKIS, EMMANUEL, GB  
[72] PAPANASTASIOU, DIMITRIS, GR  
[73] FASMATECH SCIENCE AND TECHNOLOGY LTD, GB  
[85] 2018-07-30  
[86] 2017-02-02 (PCT/GB2017/050253)  
[87] (WO2017/134436)  
[30] US (15/015,101) 2016-02-03

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[13] C

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[25] EN  
[54] **HINGE CONSTRUCTION FOR HINGABLY CONNECTING DEVICE MEMBERS TO ONE ANOTHER, IN PARTICULAR FOR A SPECULUM**  
[54] **CONSTRUCTION DE CHARNIERE PERMETTANT DE RELIER PAR CHARNIERE DES ELEMENTS DE DISPOSITIF LES UNS AUX AUTRES, EN PARTICULIER POUR UN SPECULUM**  
[72] ROELOFFS, BOB, NL  
[73] BRIDEA IP LIMITED, CN  
[85] 2018-07-31  
[86] 2017-01-31 (PCT/NL2017/050059)  
[87] (WO2017/135813)  
[30] NL (2016213) 2016-02-03

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[13] C

[51] **Int.Cl. F28F 1/32 (2006.01) F28F 1/30 (2006.01) F28F 3/02 (2006.01) F28F 7/00 (2006.01) F28F 13/12 (2006.01)**  
[25] EN  
[54] **ARROWHEAD FIN FOR HEAT EXCHANGE TUBING**  
[54] **AILETTE A FORME DE POINTE DE FLECHE POUR TUBULURE D'ECHANGE DE CHALEUR**  
[72] BUGLER, THOMAS W., US  
[72] LIBERT, JEAN-PIERRE, US  
[72] HUBER, MARK, US  
[72] REILLY, AARON, US  
[73] EVAPCO, INC., US  
[85] 2018-08-03  
[86] 2017-02-06 (PCT/US2017/016689)  
[87] (WO2017/136819)  
[30] US (62/291,196) 2016-02-04  
[30] US (15/425,454) 2017-02-06

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[11] **3,016,008**  
[13] C

[51] **Int.Cl. G21D 1/00 (2006.01) F22B 37/00 (2006.01)**  
[25] EN  
[54] **METHOD OF CORROSION RATE CONTROL OF NUCLEAR POWER PLANT PROCESS CIRCUIT EQUIPMENT**  
[54] **METHODE DE CONTROLE DE LA RAPIDITE DE CORROSION D'UN EQUIPEMENT DE CIRCUIT DE TRAITEMENT D'UNE CENTRALE NUCLEAIRE**  
[72] STYAZHKIN, PAVEL SEMENOVICH, RU  
[72] PINEZHSKIY, STANISLAV OLEGOVICH, RU  
[72] ATAMANOVA, NATAL'YA ANDREEVNA, RU  
[72] KRITSKIY, VLADIMIR GEORGIEVICH, RU  
[72] PROKHOROV, NIKOLAY ALEKSANDROVICH, RU  
[72] NIKOLAEV, FEDOR VLADIMIROVICH, RU  
[73] JOINT STOCK COMPANY SCIENTIFIC RESEARCH AND DESIGN INSTITUTE FOR ENERGY, RU  
[73] JOINT STOCK COMPANY "SCIENCE AND INNOVATIONS", RU  
[85] 2018-12-21  
[86] 2017-11-11 (PCT/RU2017/000472)  
[87] (WO2019/013661)

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[11] **3,016,901**  
[13] C

[51] **Int.Cl. A61K 51/10 (2006.01) C07K 16/28 (2006.01) C07K 16/40 (2006.01)**  
[25] EN  
[54] **STABILIZED RADIOLABELED ANTI-CD45 IMMUNOGLOBULIN COMPOSITIONS**  
[54] **COMPOSITIONS D'IMMUNOGLOBULINES ANTI-CD45 RADIO-MARQUEES STABILISEES**  
[72] DAVE, KAUSHIK J., US  
[72] SHARMA, SHUBH D., US  
[73] ACTINIUM PHARMACEUTICALS, INC., US  
[85] 2018-09-06  
[86] 2017-03-07 (PCT/US2017/021076)  
[87] (WO2017/155937)  
[30] US (62/304,537) 2016-03-07

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[11] **3,016,977**  
[13] C

[51] **Int.Cl. H04L 9/08 (2006.01) H04B 10/70 (2013.01)**  
[25] EN  
[54] **CHIP-BASED QUANTUM KEY DISTRIBUTION**  
[54] **DISTRIBUTION DE CLE QUANTIQUE A BASE DE PUCE**  
[72] GODFREY, MARK, GB  
[72] THOMPSON, MARK, GB  
[72] SIBSON, PHILIP, GB  
[73] THE UNIVERSITY OF BRISTOL, GB  
[85] 2018-09-06  
[86] 2016-03-08 (PCT/GB2016/050634)  
[87] (WO2016/142701)  
[30] GB (1504047.0) 2015-03-10

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[11] **3,017,085**  
[13] C

[51] **Int.Cl. G06F 17/00 (2019.01) G06F 15/16 (2006.01)**  
[25] EN  
[54] **DATA MODELLING AND FLOW ENGINE FOR BUILDING AUTOMATED FLOWS WITHIN A CLOUD BASED DEVELOPMENTAL PLATFORM**  
[54] **MODELISATION DE DONNEES ET MOTEUR DE FLUX DE DONNEES SERVANT AUX FLUX DE DONNEES A L'INTERIEUR D'UNE PLATEFORME DE DEVELOPPEMENT NUAGIQUE**  
[72] NELSON, HARRY THOMAS, US  
[72] TUCKER, CHRISTOPHER, US  
[72] SARBORA, RUSSELL SAMUEL, US  
[72] ZHANG, QIAN, US  
[72] ALVARADO JIMENEZ, ALBERTO, US  
[72] SOLAEGUI, JUELL, US  
[72] SOLIS, CARL, US  
[73] SERVICENOW, INC., US  
[86] (3017085)  
[87] (3017085)  
[22] 2018-09-11  
[30] US (15/913,537) 2018-03-06  
[30] US (15/815,476) 2017-11-16  
[30] US (15/723,011) 2017-10-02  
[30] US (62/557,427) 2017-09-12

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[11] **3,017,456**  
[13] C

[51] **Int.Cl. A63B 5/11 (2006.01) A63B 21/02 (2006.01) F16F 7/00 (2006.01)**  
[25] EN  
[54] **TRAMPOLINE SUSPENSION MOUNT AND CONNECTION SYSTEM**  
[54] **SUPPORT DE SUSPENSION DE TRAMPOLINE ET SYSTEME DE CONNEXION**  
[72] SCHUELER, LUKE, US  
[72] SCHUELER, CODY, US  
[73] FLYING SQUIRREL SPORTS, LLC., US  
[85] 2018-09-11  
[86] 2016-03-15 (PCT/US2016/022434)  
[87] (WO2017/155555)  
[30] US (15/068,093) 2016-03-11

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[11] **3,018,186**  
[13] C

[51] **Int.Cl. G16B 20/00 (2019.01) G16B 30/00 (2019.01) G16B 50/00 (2019.01)**  
[25] EN  
[54] **GENETIC VARIANT-PHENOTYPE ANALYSIS SYSTEM AND METHODS OF USE**  
[54] **SYSTEME D'ANALYSE DE PHENOTYPE-VARIANT GENETIQUE ET PROCEDES D'UTILISATION**  
[72] REID, JEFFREY, US  
[72] GOTTESMAN, OMRI, US  
[72] HABEGGER, LUKAS, US  
[72] CAJES, BRIAN, US  
[72] STAPLES, JEFFREY, US  
[72] MAXWELL, EVAN, US  
[73] REGENERON PHARMACEUTICALS, INC., US  
[85] 2018-09-17  
[86] 2017-03-29 (PCT/US2017/024810)  
[87] (WO2017/172958)  
[30] US (62/314,684) 2016-03-29  
[30] US (62/362,660) 2016-07-15  
[30] US (62/467,547) 2017-03-06

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[11] **3,019,136**  
[13] C

[51] **Int.Cl. H01H 71/02 (2006.01) H02G 1/04 (2006.01) H02G 7/05 (2006.01)**  
[25] EN  
[54] **A BOOM MOUNTABLE BREAKER AND METHODS OF USING SAME**  
[54] **DISJONCTEUR POUVANT ETRE MONTE SUR UNE PERCHE ET SES PROCEDES D'UTILISATION**  
[72] O'CONNELL, DANIEL NEIL, CA  
[72] WABNEGGER, DAVID KARL, CA  
[73] QUANTA ASSOCIATES, L.P., US  
[85] 2018-09-26  
[86] 2017-03-31 (PCT/US2017/025502)  
[87] (WO2017/173343)  
[30] US (62/316,232) 2016-03-31

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[11] **3,022,937**  
[13] C

[51] **Int.Cl. H01R 11/15 (2006.01)**  
[25] EN  
[54] **LOCKING GROUNDING CLAMP**  
[54] **PINCE DE MISE A LA TERRE A VERROUILLAGE**  
[72] QUAEDEVLIIEG, PHILLIP HOWARD, CA  
[72] WABNEGGER, DAVID KARL, CA  
[72] TOTH, JANOS CSABA, CA  
[72] O'CONNELL, DANIEL NEIL, CA  
[73] QUANTA ASSOCIATES, L.P., US  
[85] 2018-11-01  
[86] 2017-05-02 (PCT/US2017/030621)  
[87] (WO2017/192575)  
[30] US (62/330,377) 2016-05-02

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[11] **3,023,654**  
[13] C

[51] **Int.Cl. A61M 25/01 (2006.01)**  
[25] EN  
[54] **MAGNETIC SHIELD FOR MEDICAL DEVICES**  
[54] **ECRAN MAGNETIQUE POUR DISPOSITIFS MEDICAUX**  
[72] MA, YIPING, US  
[72] O'BRYAN, JEFFREY C., US  
[72] ISAACSON, S. RAY, US  
[73] BECTON, DICKINSON AND COMPANY, US  
[85] 2018-11-08  
[86] 2017-05-08 (PCT/US2017/031572)  
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[30] US (15/154,348) 2016-05-13

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[11] **3,024,181**  
[13] C

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/407 (2006.01) A61P 7/00 (2006.01) C07D 519/00 (2006.01)**

[25] EN

[54] **PYRROLOPYRROLE COMPOSITIONS AS PYRUVATE KINASE (PKR) ACTIVATORS**

[54] **COMPOSITIONS DE PYRROLOPYRROLE EN TANT QU'ACTIVATEURS DE LA PYRUVATE KINASE (PKR)**

[72] ERICSSON, ANNA, US  
[72] GREEN, NEAL, US  
[72] GUSTAFSON, GARY, US  
[72] HAN, BINGSONG, US  
[72] LANCIA, DAVID R., JR., US  
[72] MITCHELL, LORNA, US  
[72] RICHARD, DAVID, US  
[72] SHELEKHIN, TATIANA, US  
[72] SMITH, CHASE C., US  
[72] WANG, ZHONGGUO, US  
[72] ZHENG, XIAOZHANG, US  
[73] NOVO NORDISK HEALTH CARE AG, CH  
[85] 2018-11-13  
[86] 2018-03-20 (PCT/US2018/023405)  
[87] (WO2018/175474)  
[30] US (62/473,751) 2017-03-20

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[11] **3,024,420**  
[13] C

[51] **Int.Cl. G01N 27/622 (2021.01) H01J 49/04 (2006.01) H01J 49/10 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR SPATIAL COMPRESSION AND INCREASED MOBILITY RESOLUTION OF IONS**

[54] **PROCEDE ET APPAREIL DE COMPRESSION SPATIALE ET DE RESOLUTION DE MOBILITE ACCRUE D'IONS**

[72] IBRAHIM, YEHIA M., US  
[72] GARIMELLA, SANDILYA, US  
[72] SMITH, RICHARD D., US  
[73] BATTELLE MEMORIAL INSTITUTE, US  
[85] 2018-11-15  
[86] 2017-04-20 (PCT/US2017/028626)  
[87] (WO2017/200695)  
[30] US (15/157,217) 2016-05-17

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[11] **3,025,054**  
[13] C

[51] **Int.Cl. C04B 7/12 (2006.01) C04B 7/13 (2006.01) C04B 14/04 (2006.01) C04B 28/04 (2006.01) C04B 28/06 (2006.01)**

[25] EN

[54] **SUPPLEMENTARY CEMENTITIOUS MATERIAL MADE OF ALUMINIUM SILICATE AND DOLOMITE**

[54] **MATERIAU CIMENTAIRE SUPPLEMENTAIRE FAIT EN SILICATE D'ALUMINIUM ET DOLOMITE**

[72] BULLERJAHN, FRANK, DE  
[72] ZAJAC, MACIEJ, DE  
[72] NIED, DOMINIK, DE  
[73] HEIDELBERGCEMENT AG, DE  
[85] 2018-11-21  
[86] 2017-05-23 (PCT/EP2017/062418)  
[87] (WO2017/202849)  
[30] EP (16171112.2) 2016-05-24

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[11] **3,025,079**  
[13] C

[51] **Int.Cl. C07C 2/38 (2006.01) B01J 29/14 (2006.01) B01J 29/24 (2006.01) B01J 29/46 (2006.01) B01J 29/72 (2006.01) B01J 29/85 (2006.01) C07C 11/08 (2006.01) C07C 11/167 (2006.01)**

[25] EN

[54] **PROCESS FOR THE OLIGOMERIZATION OF ACETYLENE IN THE PRESENCE OF HYDROGEN AND A SOLID CATALYST**

[54] **PROCEDE D'OLIGOMERISATION D'ACETYLENE EN PRESENCE D'HYDROGENE ET D'UN CATALYSEUR SOLIDE**

[72] SCHUETH, FERDI, DE  
[72] TROTUS, IOAN-TEODOR, DE  
[73] STUDIENGESELLSCHAFT KOHLE MBH, DE  
[85] 2018-11-21  
[86] 2017-05-30 (PCT/EP2017/063016)  
[87] (WO2017/211620)  
[30] DE (10 2016 110 371.3) 2016-06-06

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[11] **3,025,416**  
[13] C

[51] **Int.Cl. G02B 6/036 (2006.01) H01S 3/067 (2006.01) H01S 3/091 (2006.01) G02B 27/10 (2006.01)**

[25] EN

[54] **AMPLIFICATION OPTICAL FIBER, FIBER LASER DEVICE, AND OPTICAL RESONATOR**

[54] **AMPLIFICATION DE FIBRE OPTIQUE, DISPOSITIF DE FIBRE OPTIQUE ET RESONATEUR OPTIQUE**

[72] KITAHARA, RINTARO, JP  
[72] MIYAUCHI, HIDENORI, JP  
[73] FUJIKURA LTD., JP  
[86] (3025416)  
[87] (3025416)  
[22] 2018-11-27  
[30] JP (2018-069801) 2018-03-30

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[11] **3,026,839**  
[13] C

[51] **Int.Cl. G01W 1/10 (2006.01) G06Q 50/06 (2012.01) H02G 1/02 (2006.01)**

[25] EN

[54] **STORM OUTAGE MANAGEMENT SYSTEM**

[54] **SYSTEME DE GESTION DE PANNE ATTRIBUABLE A UNE TEMPETE**

[72] SHAFER, JASON, US  
[73] DISASTER TECHNOLOGIES INCORPORATED, US  
[86] (3026839)  
[87] (3026839)  
[22] 2018-12-07  
[30] US (62/595689) 2017-12-07



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[11] **3,029,181**  
[13] C

- [51] **Int.Cl. G01M 3/00 (2006.01) G21F 7/00 (2006.01)**  
[25] EN  
[54] **LEAKAGE CONTROL SYSTEM FOR SPENT FUEL COOLING POOL**  
[54] **SYSTEME DE CONTROLE DE FUITE DE BASSIN DE REFROIDISSEMENT DE COMBUSTIBLEEPUISE**  
[72] ISAYEV, SERGUEY IVANOVICH, RU  
[72] NOVIKOV, DENIS SERGUEYEVICH, RU  
[73] JOINT-STOCK COMPANY SCIENTIFIC RESEARCH AND DESIGN INSTITUTE FOR ENERGY TECHNOLOGIES ATOMPROMKT, RU  
[73] JOINT STOCK COMPANY "SCIENCE AND INNOVATIONS" ("SCIENCE AND INNOVATIONS", JSC), RU  
[85] 2018-12-21  
[86] 2016-09-30 (PCT/RU2016/000653)  
[87] (WO2018/063022)

[11] **3,029,442**  
[13] C

- [51] **Int.Cl. A01K 79/00 (2006.01) B65G 53/30 (2006.01) F04F 1/00 (2006.01) F04F 5/10 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR PUMPING A LIQUID CONTAINING PARTICLES; PREFERABLY FISH IN WATER**  
[54] **PROCEDE ET SYSTEME DE POMPAGE DE LIQUIDE CONTENANT DES PARTICULES ; DE PREFERENCE UN POISSON DANS L'EAU**  
[72] JENSEN, INGMAR, NO  
[73] MELBU SYSTEMS AS, NO  
[85] 2018-12-07  
[86] 2016-06-10 (PCT/NO2016/050124)  
[87] (WO2017/213511)

[11] **3,030,810**  
[13] C

- [51] **Int.Cl. G06Q 20/38 (2012.01) G06Q 30/04 (2012.01)**  
[25] EN  
[54] **METHOD FOR ISSUING, REDEEMING, REFUNDING, SETTling AND REVOKING ELECTRONIC VOUCHER BY MANAGING BALANCE DATABASE BY BLOCKS IN BLOCKCHAIN, AND SERVER EMPLOYING SAME**  
[54] **PROCEDE D'EMISSION, DE REMBOURSEMENT, D'ACQUITTEMENT, DE REGLEMENT ET DE REVOCATION D'UN COUPON ELECTRONIQUE PAR GESTION D'UNE BASE DE DONNEES D'EQUILIBRE PAR BLOCS DANS UNE CHAINE DE BLOCS, ET SERVEUR L'UTILISANT**  
[72] SONG, JOO HAN, KR  
[72] HONG, JAY WU, KR  
[72] UHR, JOON SUN, KR  
[73] COINPLUG, INC., KR  
[85] 2019-01-11  
[86] 2017-10-11 (PCT/KR2017/011210)  
[87] (WO2018/070784)  
[30] KR (10-2016-0131086) 2016-10-11

[11] **3,031,517**  
[13] C

- [51] **Int.Cl. E03B 1/02 (2006.01) G06Q 50/06 (2012.01) G01M 3/26 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR MODEL-BASED CONTROL OF A WATER DISTRIBUTION SYSTEM**  
[54] **PROCEDE ET APPAREIL DESTINES A LA COMMANDE BASEE SUR UN MODELE D'UN SYSTEME DE DISTRIBUTION D'EAU**  
[72] SHAFIEE, MICHAEL, US  
[73] SENSUS USA INC., US  
[85] 2019-01-21  
[86] 2017-07-28 (PCT/US2017/044398)  
[87] (WO2018/026651)  
[30] US (15/226,597) 2016-08-02

[11] **3,031,668**  
[13] C

- [51] **Int.Cl. H01R 13/6591 (2011.01) B29C 65/02 (2006.01) B29C 65/16 (2006.01) B29C 65/48 (2006.01) B32B 5/00 (2006.01)**  
[25] EN  
[54] **CABLE HAVING SHIELDING TAPE WITH CONDUCTIVE SHIELDING SEGMENTS**  
[54] **CABLE DOTE D'UNE BANDE DE BLINDAGE POURVUE DE SEGMENTS DE BLINDAGE CONDUCTEURS**  
[72] KUSUMA, ROY B., US  
[72] THWAITES, STEPHEN A., US  
[72] BROWN, SCOTT M., US  
[72] MALKEMUS, JAMES D., US  
[72] FAUSZ, DAVID M., US  
[73] GENERAL CABLE TECHNOLOGIES CORPORATION, US  
[85] 2019-01-22  
[86] 2017-07-26 (PCT/US2017/043898)  
[87] (WO2018/022725)  
[30] US (62/366,701) 2016-07-26  
[30] US (15/659,900) 2017-07-26

[11] **3,034,237**  
[13] C

- [51] **Int.Cl. H04W 28/02 (2009.01) H04L 47/20 (2022.01) H04L 47/22 (2022.01) H04L 47/263 (2022.01) H04L 61/256 (2022.01) H04B 7/185 (2006.01)**  
[25] EN  
[54] **DEVICE SHAPING IN A COMMUNICATIONS NETWORK**  
[54] **MISE EN FORME DE DISPOSITIF DANS UN RESEAU DE COMMUNICATION**  
[72] WRIGHT, SHERIDAN, US  
[72] KHANNA, BAKUL, US  
[73] VIASAT, INC., US  
[85] 2019-02-15  
[86] 2017-08-11 (PCT/US2017/046506)  
[87] (WO2018/038939)  
[30] US (62/379,055) 2016-08-24

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[11] **3,034,417**  
[13] C

[51] **Int.Cl. G06Q 30/0202 (2023.01) G06Q 10/04 (2023.01) G06N 20/00 (2019.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR GENERATING CUSTOMER DECISION TREE THROUGH MACHINE LEARNING**  
[54] **METHODE ET SYSTEME POUR GENERER UN ARBRE DECISIONNEL PAR LE BIAIS DE L'APPRENTISSAGE MACHINE**  
[72] T, JEISOBERS, IN  
[73] TATA CONSULTANCY SERVICES LIMITED, IN  
[86] (3034417)  
[87] (3034417)  
[22] 2019-02-19  
[30] IN (201821024236) 2018-06-29

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[11] **3,035,439**  
[13] C

[51] **Int.Cl. H04L 67/00 (2022.01) G06Q 20/38 (2012.01) H04L 9/30 (2006.01)**  
[25] EN  
[54] **ENFORCING RESTRICTIONS ON CRYPTOGRAPHICALLY SECURE EXCHANGES OF DATA USING PERMISSIONED DISTRIBUTED LEDGERS**  
[54] **APPLICATION DE RESTRICTIONS SUR LA GESTION D'ECHANGES DE DONNEES SECURISES DE MANIERE CRYPTOGRAPHIQUE AU MOYEN DE LIVRES DISTRIBUES AVEC AUTORISATION**  
[72] DUNJIC, MILOS, CA  
[72] CHOW, ARTHUR CARROLL, CA  
[72] TAX, DAVID SAMUEL, CA  
[72] ROUHANI, ARMON, CA  
[72] JOHEB, ASAD, CA  
[72] HATHERLY, SARA, CA  
[72] AJMANI, KEITH SANJAY, CA  
[72] JOHNSON, LIONEL, CA  
[72] LIU, YUBING, CA  
[73] THE TORONTO-DOMINION BANK, CA  
[86] (3035439)  
[87] (3035439)  
[22] 2019-03-01  
[30] US (16/281,718) 2019-02-21  
[30] US (16/288,867) 2019-02-28

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[11] **3,035,613**  
[13] C

[51] **Int.Cl. A41B 9/04 (2006.01)**  
[25] EN  
[54] **GARMENT WITH INNER PANEL**  
[54] **VETEMENT DOTE D'UN PANNEAU INTERNE**  
[72] WAITZ, SANDRA ANN, US  
[72] SHANNON, CATHERINE, US  
[73] HBI BRANDED APPAREL ENTERPRISES, LLC, US  
[85] 2019-02-28  
[86] 2017-08-23 (PCT/US2017/048223)  
[87] (WO2018/044651)  
[30] US (62/381,986) 2016-08-31  
[30] US (15/681,951) 2017-08-21

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[11] **3,035,675**  
[13] C

[51] **Int.Cl. A61K 48/00 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITION CONTAINING MTOR INHIBITOR FOR TREATING MACULAR DEGENERATION**  
[54] **COMPOSITION PHARMACEUTIQUE CONTENANT UN INHIBITEUR DE MTOR POUR LE TRAITEMENT DE LA DEGENERESCENCE MACULAIRE**  
[72] LEE, YOUNG-ILL, KR  
[72] LEE, STEVEN HYUN SEUNG, KR  
[72] PARK, TAE KWANN, KR  
[73] CDMOGEN CO., LTD., KR  
[85] 2019-03-01  
[86] 2017-03-17 (PCT/KR2017/002943)  
[87] (WO2018/048046)  
[30] KR (10-2016-0116310) 2016-09-09  
[30] KR (10-2017-0033986) 2017-03-17

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[11] **3,035,756**  
[13] C

[51] **Int.Cl. C09D 5/02 (2006.01)**  
[25] EN  
[54] **ACOUSTICALLY TRANSPARENT COATING**  
[54] **REVETEMENT ACOUSTIQUEMENT TRANSPARENT**  
[72] BURY, RAFAEL, US  
[72] LI, DONGHONG, US  
[72] HULKA, SAMUEL D., US  
[73] USG INTERIORS, LLC, US  
[85] 2019-03-04  
[86] 2017-09-06 (PCT/US2017/050225)  
[87] (WO2018/048865)  
[30] US (15/258,159) 2016-09-07

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[11] **3,037,401**  
[13] C

[51] **Int.Cl. H01B 7/04 (2006.01) H01B 7/18 (2006.01)**  
[25] EN  
[54] **CABLE WITH LIGHTWEIGHT TENSILE ELEMENTS**  
[54] **CABLE A ELEMENTS DE TRACTION LEGRS**  
[72] CONSONNI, ENRICO MARIA, IT  
[72] MIRAMONTI, GIANNI, IT  
[72] DE RAI, LUCA GIORGIO MARIA, IT  
[72] VEGGETTI, PAOLO, IT  
[73] PRYSMIAN S.P.A., IT  
[85] 2019-03-19  
[86] 2016-09-29 (PCT/EP2016/073197)  
[87] (WO2018/059685)

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[11] **3,038,418**  
[13] C

[51] **Int.Cl. E03C 1/322 (2006.01) E03C 1/02 (2006.01)**  
[25] EN  
[54] **ARRANGEMENT FOR THE INSTALLATION AND WALL MOUNTING OF A WASHBASIN OR THE LIKE**  
[54] **DISPOSITIF POUR L'INSTALLATION ET LE MONTAGE MURAL D'UN LAVABO OU ANALOGUE**  
[72] RATHAMMER, ANDRE, AT  
[73] RATHAMMER, ANDRE, AT  
[73] FECHTER, HARALD, AT  
[85] 2019-03-26  
[86] 2017-10-02 (PCT/EP2017/074957)  
[87] (WO2018/065355)  
[30] AT (A50895/2016) 2016-10-04

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[11] **3,038,783**  
[13] C

[51] **Int.Cl. C09K 8/524 (2006.01) C10L 10/16 (2006.01)**  
[25] EN  
[54] **PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS**  
[54] **COMPOSITIONS DE SUPPRESSION DE PARAFFINE ET PROCEDES**  
[72] KUNDU, KOUSIK, US  
[72] GARNER, SUSAN AMY, US  
[73] CHAMPIONX USA, INC., US  
[85] 2019-03-27  
[86] 2017-09-28 (PCT/US2017/053903)  
[87] (WO2018/064272)  
[30] US (62/401,402) 2016-09-29

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[11] **3,039,539**

[13] C

- [51] **Int.Cl. G06Q 20/32 (2012.01)**  
[25] EN  
[54] **WISH LIST USER INTERFACE WITHIN A WEB BROWSER THAT ALERTS USERS TO CHANGES IN PRICES**  
[54] **INTERFACE UTILISATEUR DE LISTE DE SOUHAITS DANS UN NAVIGATEUR WEB QUI ALERTE LES UTILISATEURS DE CHANGEMENTS DE PRIX**  
[72] DOUBINSKI, SERGE, US  
[72] CHEN, DIANA, US  
[72] VYRVICH, ANDREY, US  
[73] RAKUTEN GROUP, INC., JP  
[85] 2019-04-04  
[86] 2017-10-12 (PCT/US2017/056346)  
[87] (WO2018/071673)  
[30] US (62/407,962) 2016-10-13

[11] **3,039,635**

[13] C

- [51] **Int.Cl. A61M 11/00 (2006.01) A24F 47/00 (2020.01) A61M 15/06 (2006.01)**  
[25] EN  
[54] **HAND-HELD VAPORIZER DEVICE**  
[54] **DISPOSITIF DE VAPORISATION PORTATIF**  
[72] MILLER, AUSTEN CHARLES, GB  
[72] GLAUSER, YANN, GB  
[73] THE GREEN LABS GROUP INC., US  
[85] 2019-04-05  
[86] 2017-10-09 (PCT/GB2017/053049)  
[87] (WO2018/065793)  
[30] GB (1617121.7) 2016-10-07  
[30] GB (1706948.5) 2017-05-02

[11] **3,039,678**

[13] C

- [51] **Int.Cl. B03D 1/14 (2006.01) B01D 15/02 (2006.01) B01D 37/02 (2006.01) B03C 1/01 (2006.01) B03D 1/016 (2006.01) B03D 1/02 (2006.01)**  
[25] EN  
[54] **NON-FLOTATION BASED RECOVERY OF MINERAL BEARING ORE USING HYDROPHOBIC PARTICLE COLLECTION IN A PIPELINE SECTION**  
[54] **RECUPERATION SANS FLOTTATION DE MINÉRAI CONTENANT DES MINÉRAUX A L'AIDE D'UNE COLLECTE DE PARTICULES HYDROPHOBES DANS UNE SECTION DE CANALISATION**  
[72] FERNALD, MARK R., US  
[72] ROTHMAN, PAUL J., US  
[72] KERSEY, ALAN D., US  
[73] CIDRA CORPORATE SERVICES LLC, US  
[85] 2019-04-05  
[86] 2017-10-10 (PCT/US2017/055836)  
[87] (WO2018/068049)  
[30] US (62/405,303) 2016-10-07  
[30] US (62/405,569) 2016-10-07

[11] **3,040,780**

[13] C

- [51] **Int.Cl. A01M 1/22 (2006.01) B65F 1/16 (2006.01)**  
[25] EN  
[54] **ELECTRIFIED GARBAGE CONTAINER COVER**  
[54] **COUVERCLE ELECTRIFIÉ DE CONTENEUR A ORDURES**  
[72] MILLER, EVE, CA  
[73] MILLER, EVE, CA  
[85] 2019-04-16  
[86] 2017-10-19 (PCT/CA2017/051242)  
[87] (WO2018/072022)  
[30] US (62/410,478) 2016-10-20

[11] **3,041,370**

[13] C

- [51] **Int.Cl. D04H 3/02 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR MAKING SPUNBOND FROM CONTINUOUS FILAMENTS**  
[54] **APPAREIL ET METHODE DE FABRICATION D'UN NON-TISSE FILE-LIE A PARTIR DE FILAMENTS CONTINUS**  
[72] NITSCHKE, MICHAEL, DE  
[72] NEUENHOFER, MARTIN, DE  
[72] FREY, DETLEF, DE  
[72] NOACK, CHRISTINE, DE  
[73] REIFENHAUSER GMBH & CO. KG MASCHINENFABRIK, DE  
[86] (3041370)  
[87] (3041370)  
[22] 2019-04-26  
[30] EP (18 174 513.4) 2018-05-28

**Canadian Patents Issued  
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[11] **3,041,980**  
[13] C

[51] **Int.Cl. A61K 38/51 (2006.01) A61K 38/17 (2006.01) A61K 38/20 (2006.01) A61P 29/00 (2006.01) C12N 15/12 (2006.01) C12N 15/24 (2006.01) C12N 15/60 (2006.01) C12N 15/85 (2006.01)**

[25] EN

[54] **COMPOSITION FOR ALLEVIATING OR TREATING PAIN COMPRISING TWO OR MORE SELECTED FROM THE GENES THAT CODE FOR: GLUTAMATE DECARBOXYLASE (GAD), INTERLEUKIN-10 (IL-10) AND GLIAL CELL-DERIVED NEUROTROPHIC FACTOR (GDNF)**

[54] **COMPOSITION POUR SOULAGER OU TRAITER LA DOULEUR COMPRENANT AU MOINS DEUX GENES SELECTIONNES PARMIS LES GENES QUI CODENT : LE GLUTAMATE DECARBOXYLASE (GAD), L'INTERLEUKINE 10 (IL-10) ET LE FACTEUR NEUROTROPHIQUE DERIVE DE CELLULES GLIALES (GDNF)**

[72] KIM, SUJEONG, KR  
[72] CHOI, HEONSIK, KR  
[72] KWON, YEJIN, KR  
[72] KIM, MINJUNG, KR  
[72] KIM, MINJU, KR  
[72] KIM, DAEWOOK, KR  
[72] PARK, JANGJOON, KR  
[72] CHO, JONGHO, KR  
[72] LEE, SOONDONG, KR  
[72] KIM, JOONSUNG, KR  
[72] SIM, YEOMOON, KR  
[73] KOLON LIFE SCIENCE, INC., KR  
[85] 2019-04-26  
[86] 2017-10-31 (PCT/KR2017/012136)  
[87] (WO2018/080277)  
[30] KR (10-2016-0143519) 2016-10-31

[11] **3,043,985**  
[13] C

[51] **Int.Cl. G01N 33/483 (2006.01)**

[25] EN

[54] **APPARATUS AND METHODS FOR CONTROLLING INSERTION OF A MEMBRANE CHANNEL INTO A MEMBRANE**

[54] **APPAREIL ET PROCEDES DE COMMANDE D'INSERTION D'UN CANAL DE MEMBRANE DANS UNE MEMBRANE**

[72] GARALDE, DANIEL, US  
[72] CLARKE, JAMES, GB  
[72] JENNISON, MIKE, GB  
[72] HERON, ANDREW, GB  
[73] OXFORD NANOPORE TECHNOLOGIES PLC, GB  
[85] 2019-05-15  
[86] 2017-11-24 (PCT/GB2017/053538)  
[87] (WO2018/096348)  
[30] GB (1619930.9) 2016-11-24

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[11] **3,044,395**  
[13] C

[51] **Int.Cl. E21B 43/26 (2006.01) E21B 33/127 (2006.01)**

[25] EN

[54] **PERFORATION BLOCKING SLEEVE FOR WELL RESTIMULATION**

[54] **MANCHON DE BLOCAGE DE PERFORATION POUR RESTIMULATION DE Puits**

[72] POTTS, JEFFREY ROBERT, US  
[72] PARKEY, DEWEY LAVONNE, JR., US  
[72] GEORGE, MATTHEW LANDON, US  
[73] BAKER HUGHES OILFIELD OPERATIONS, LLC, US  
[85] 2019-05-17  
[86] 2017-11-22 (PCT/US2017/063045)  
[87] (WO2018/098303)  
[30] US (15/358,609) 2016-11-22

[11] **3,044,863**  
[13] C

[51] **Int.Cl. C12P 5/02 (2006.01)**

[25] EN

[54] **PROCESS FOR PRODUCTION OF BIOGAS FROM FIBROUS SUBSTRATE**

[54] **PROCEDE DE PRODUCTION DE BIOGAZ A PARTIR D'UN SUBSTRAT CONTENANT DES FIBRES**

[72] LUDTKE, OLIVER, DE  
[72] SCHLIMBACH, MICHAEL, DE  
[73] VERBIO VEREINIGTE BIOENERGIE AG, DE  
[85] 2019-05-24  
[86] 2016-11-30 (PCT/EP2016/079215)  
[87] (WO2018/099547)

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[11] **3,044,886**  
[13] C

[51] **Int.Cl. E05B 47/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR CONTROLLING A LOCK**

[54] **SYSTEMES ET PROCEDES DE COMMANDE D'UN VERROU**

[72] HU, ZHIFENG, CN  
[73] BEIJING QISHENG SCIENCE AND TECHNOLOGY CO., LTD., CN  
[85] 2019-05-24  
[86] 2017-11-09 (PCT/CN2017/110169)  
[87] (WO2018/095222)  
[30] CN (201611059241.9) 2016-11-25  
[30] CN (201611153363.4) 2016-12-14  
[30] CN (201611155484.2) 2016-12-14  
[30] CN (201611151128.3) 2016-12-14

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[11] **3,044,910**  
[13] C

[51] **Int.Cl. H01M 8/021 (2016.01) H01M 8/0217 (2016.01) H01M 8/0228 (2016.01) H01M 8/124 (2016.01)**

[25] EN

[54] **IMPROVED CONTACT BETWEEN INTERCONNECT AND CELL IN SOLID OXIDE CELL STACKS**

[54] **CONTACT AMELIORE ENTRE UNE INTERCONNEXION ET UNE CELLULE DANS DES EMPILEMENTS DE CELLULES A OXYDE SOLIDE**

[72] NORBY, TOBIAS HOLT, DK

[72] BLENNOW, BENGT PETER GUSTAV, DK

[72] KUNGAS, RAINER, DK

[72] RASS-HANSEN, JEPPE, DK

[72] HEIREDAL-CLAUSEN, THOMAS, DK

[73] TOPSOE A/S, DK

[85] 2019-05-24

[86] 2017-12-01 (PCT/EP2017/081233)

[87] (WO2018/108581)

[30] DK (PA 2016 00772) 2016-12-16

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[11] **3,045,100**  
[13] C

[51] **Int.Cl. E03D 9/08 (2006.01)**

[25] EN

[54] **TOILET HAVING A BIDET SHOWER**

[54] **TOILETTE EQUIPEE D'UNE DOUCHE DE BIDET**

[72] ETHIER, DENIS, CA

[73] ETHIER, DENIS, CA

[86] (3045100)

[87] (3045100)

[22] 2019-06-04

[30] GB (1809139.7) 2018-06-04

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[11] **3,045,198**  
[13] C

[51] **Int.Cl. H04W 16/18 (2009.01) H04W 24/02 (2009.01) H04W 88/00 (2009.01)**

[25] EN

[54] **AUTO-CONFIGURATION METHOD AND APPARATUS, AND BASE STATION**

[54] **PROCEDE ET DISPOSITIF DE CONFIGURATION AUTOMATIQUE ET STATION DE BASE**

[72] SHI, ZIJUAN, CN

[72] LI, YAO, CN

[72] WEN, CHANGCHUN, CN

[73] HUAWAI TECHNOLOGIES CO., LTD., CN

[85] 2019-05-28

[86] 2016-11-28 (PCT/CN2016/107465)

[87] (WO2018/094726)

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[11] **3,045,353**  
[13] C

[51] **Int.Cl. E05B 47/00 (2006.01) G05B 19/045 (2006.01) G05D 3/14 (2006.01)**

[25] EN

[54] **CONTROL CIRCUIT AND CONTROL METHOD FOR SMART LOCK**

[54] **CIRCUIT DE COMMANDE ET PROCEDE DE COMMANDE POUR LE VERROUILLAGE INTELLIGENT**

[72] GAO, SHUNDE, CN

[72] CHEN, YEXIN, CN

[73] SHENZHEN KAADAS INTELLIGENT TECHNOLOGY CO., LTD, CN

[86] (3045353)

[87] (3045353)

[22] 2019-06-06

[30] CN (201811240780.1) 2018-10-23

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[11] **3,046,423**  
[13] C

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 40/40 (2020.01) A24F 40/57 (2020.01) H05B 3/02 (2006.01)**

[25] EN

[54] **AN ELECTRICALLY HEATED SMOKING SYSTEM WITH HEATER**

[54] **SYSTEME POUR FUMER CHAUFFE ELECTRIQUEMENT MUNI D'UN RECHAUFFEUR**

[72] GREIM, OLIVIER, CH

[72] PLOJOUX, JULIEN, CH

[72] RUSCIO, DANI, CH

[73] PHILIP MORRIS PRODUCTS S.A., CH

[86] (3046423)

[87] (3046423)

[22] 2010-10-28

[62] 2,778,903

[30] EP (09252501.3) 2009-10-29

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[11] **3,048,296**  
[13] C

[51] **Int.Cl. G10H 1/00 (2006.01)**

[25] EN

[54] **ARRANGEMENT AND METHOD FOR THE CONVERSION OF AT LEAST ONE DETECTED FORCE FROM THE MOVEMENT OF A SENSING UNIT INTO AN AUDITORY SIGNAL**

[54] **AGENCEMENT ET PROCEDE DE CONVERSION D'AU MOINS UNE FORCE DETECTEE DU MOUVEMENT D'UNE UNITE DE DETECTION EN SIGNAL AUDITIF**

[72] NAUER, ROGER, CH

[72] RUPP, THOMAS, CH

[72] HELLAT, ROLF, CH

[72] SCHAUB, MARKUS, CH

[73] MICTIC AG, CH

[85] 2019-06-25

[86] 2017-12-22 (PCT/EP2017/084490)

[87] (WO2018/115488)

[30] CH (01742/16) 2016-12-25

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[11] **3,049,455**  
[13] C

[51] **Int.Cl. C12Q 1/6855 (2018.01) C12Q 1/6869 (2018.01) C12N 15/10 (2006.01)**

[25] EN

[54] **SEQUENCING ADAPTER MANUFACTURE AND USE**

[54] **FABRICATION ET UTILISATION D'ADAPTATEUR DE SEQUENCAGE**

[72] JENSEN, TAYLOR, US

[72] ELLISON, CHRISTOPHER, US

[73] SEQUENOM, INC., US

[85] 2019-07-04

[86] 2018-01-22 (PCT/US2018/014710)

[87] (WO2018/136881)

[30] US (62/448,601) 2017-01-20

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[11] **3,049,881**  
[13] C

[51] **Int.Cl. H01M 10/48 (2006.01) H01M 10/637 (2014.01)**

[25] EN

[54] **TEMPERATURE AND VOLTAGE CONTROLLED MULTI-LEVEL BATTERY ELECTROLYTE LEVEL MONITOR**

[54] **SYSTEME DE SURVEILLANCE DU NIVEAU D'ELECTROLYTE DANS UNE PILE MULTINIVEAU DONT LA TEMPERATURE ET LA TENSION SONT VERIFIEES**

[72] MIROSHNICHENKO, IVAN, CA

[73] MIROSHNICHENKO, IVAN, CA

[86] (3049881)

[87] (3049881)

[22] 2019-07-16

[30] US (62702673) 2018-07-24

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[11] **3,050,822**  
[13] C

[51] **Int.Cl. C12Q 1/6876 (2018.01) C12Q 1/6844 (2018.01) B01J 19/00 (2006.01) C07H 21/04 (2006.01) C12N 15/00 (2006.01) C12P 19/34 (2006.01) C12Q 1/68 (2018.01) C40B 50/06 (2006.01)**

[25] EN

[54] **METHODS AND REAGENTS FOR SYNTHESISING POLYNUCLEOTIDE MOLECULES**

[54] **PROCEDES ET REACTIFS DE SYNTHESE DE MOLECULES POLYNUCLEOTIDIQUES**

[72] MILTON, JOHN, GB

[72] NAYYAR, SOBIA, GB

[72] RIEDL, JAN, GB

[72] OGAKI, RYOSUKE, GB

[73] OXFORD NANOPORE TECHNOLOGIES PLC, GB

[85] 2019-07-18

[86] 2018-01-19 (PCT/GB2018/050165)

[87] (WO2018/134616)

[30] GB (1700937.4) 2017-01-19

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[11] **3,051,476**  
[13] C

[51] **Int.Cl. H04W 4/80 (2018.01)**

[25] EN

[54] **WIRELESS LOCATOR SYSTEM**

[54] **SYSTEME DE LOCALISATION SANS FIL**

[72] HELMS, DAVID, US

[72] WALLACE, MARC, US

[72] YODER, SCOTT, US

[72] NGUYEN, FRANCIS, US

[73] RADIUS NETWORKS, INC., US

[85] 2019-07-23

[86] 2018-02-01 (PCT/US2018/016336)

[87] (WO2018/144664)

[30] US (62/453,872) 2017-02-02

[30] US (15/884,132) 2018-01-30

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[11] **3,051,526**  
[13] C

[51] **Int.Cl. E21B 7/14 (2006.01) E21B 29/02 (2006.01)**

[25] EN

[54] **MATERIAL REMOVAL METHODS AND ASSOCIATED APPARATUS**

[54] **APPAREIL THERMIQUE ET PROCEDES ASSOCIES**

[72] CARDNO, BRUCE, GB

[72] RAY, PAUL, GB

[73] CLEARWELL TECHNOLOGY LTD, GB

[85] 2019-07-24

[86] 2018-01-18 (PCT/GB2018/050151)

[87] (WO2018/138479)

[30] GB (1701224.6) 2017-01-25

[30] GB (1712344.9) 2017-08-01

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[11] **3,051,633**  
[13] C

[51] **Int.Cl. G05B 15/02 (2006.01)**

[25] EN

[54] **ELECTRONIC CONTROL SYSTEM FOR A NUMBER OF ELECTROSTATIC PRECIPITATORS**

[54] **ELECTRONIQUE DE COMMANDE POUR PLUSIEURS FILTRES ELECTROSTATIQUES**

[72] OBERHAENSLI, RENE, CH

[73] CLEAN AIR ENTERPRISE AG, CH

[85] 2019-07-25

[86] 2018-01-29 (PCT/EP2018/052090)

[87] (WO2018/138315)

[30] CH (00096/17) 2017-01-30

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[11] **3,051,653**  
[13] C

[51] **Int.Cl. G06N 20/00 (2019.01)**

[25] EN

[54] **IMPROVED MACHINE LEARNING CLASSIFICATION WITH MODEL QUALITY PREDICTION**

[54] **CLASSIFICATION D'APPRENTISSAGE AUTOMATIQUE AMELIOREE AVEC PREDICTION DE QUALITE DU MODELE**

[72] JAYARAMAN, BASKAR, US

[73] SERVICENOW, INC., US

[86] (3051653)

[87] (3051653)

[22] 2019-08-09

[30] US (16/059,700) 2018-08-09

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[11] **3,051,711**  
[13] C

[51] **Int.Cl. G01N 27/904 (2021.01) G01M 13/021 (2019.01) G01N 27/9013 (2021.01)**

[25] EN

[54] **FORM-FITTING EDDY CURRENT ARRAY SENSOR AND METHOD OF USE THEREOF**

[54] **CAPTEUR A RESEAU DE COURANT DE FOUCAULT A AJUSTEMENT DE FORME ET SON PROCEDE D'UTILISATION**

[72] SHUMKA, THOMAS, CA

[72] SHUMKA, JASON, CA

[73] GLOBAL PHYSICAL ASSET MANAGEMENT, INC., CA

[85] 2019-07-26

[86] 2018-01-15 (PCT/CA2018/000009)

[87] (WO2018/137022)

[30] CA (2956749) 2017-01-27

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[11] **3,052,133**  
[13] C

[51] **Int.Cl. B24C 1/10 (2006.01) B24B 27/00 (2006.01) B24C 1/04 (2006.01) B24C 3/32 (2006.01) B25J 13/08 (2006.01)**

[25] EN

[54] **PART MANUFACTURING SYSTEM AND PART MANUFACTURING METHOD**

[54] **SYSTEME DE FABRICATION DE PIECE ET PROCEDE DE FABRICATION DE PIECE**

[72] KOZAKI, TAKASHI, JP

[72] AKANUMA, KOSUKE, JP

[72] KAGA, HIDEAKI, JP

[72] IWATA, KYOICHI, JP

[72] IKEDA, SEIYA, JP

[73] MITSUBISHI HEAVY INDUSTRIES, LTD., JP

[73] SINTOKOGIO, LTD., JP

[85] 2019-07-30

[86] 2018-02-14 (PCT/JP2018/005123)

[87] (WO2018/151168)

[30] JP (2017-026204) 2017-02-15

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[11] **3,054,919**  
[13] C

[51] **Int.Cl. D04B 1/10 (2006.01) A41C 3/00 (2006.01) D04B 1/24 (2006.01)**

[25] EN

[54] **UPPER-TORSO GARMENT WITH TUBULAR-JACQUARD KNIT STRUCTURE**

[54] **VETEMENT DE TORSO SUPERIEUR AYANT UNE STRUCTURE DE TRICOT JACQUARD TUBULAIRE**

[72] RENDONE, NICOLE, US

[72] DIAZ, JOSUE, US

[72] STAUB, ANDREA J., US

[72] MONTGOMERY, PAUL R., US

[72] MECKLEY, VIRGINIA, US

[73] NIKE INNOVATE C.V., US

[85] 2019-08-28

[86] 2017-05-03 (PCT/US2017/030861)

[87] (WO2018/203894)

[30] US (15/584,938) 2017-05-02

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[11] **3,055,611**  
[13] C

[51] **Int.Cl. B31D 5/00 (2017.01) B65D 81/05 (2006.01)**

[25] EN

[54] **DUNNAGE CONVERSION MACHINE, METHOD, AND PRODUCT WITH A POLYGONAL CROSS-SECTION**

[54] **MACHINE, PROCEDE ET PRODUIT DE CONVERSION DE FARDAGE AYANT UNE SECTION TRANSVERSALE POLYGONALE**

[72] CHEICH, ROBERT C., US

[72] WAGNER, DENNIS, US

[73] RANPAK CORP., US

[85] 2019-08-28

[86] 2018-02-28 (PCT/US2018/020067)

[87] (WO2018/160607)

[30] US (62/464,646) 2017-02-28

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[11] **3,056,922**  
[13] C

[51] **Int.Cl. B65G 1/137 (2006.01) G06Q 10/087 (2023.01) B07C 5/34 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR PROCESSING OBJECTS, INCLUDING AUTOMATED RADIAL PROCESSING STATIONS**

[54] **SYSTEMES ET PROCEDES DE TRAITEMENT D'OBJETS, COMPRENANT DES STATIONS DE TRAITEMENT RADIALES AUTOMATISEES**

[72] WAGNER, THOMAS, US

[72] AHEARN, KEVIN, US

[72] AMEND, JOHN RICHARD, JR., US

[72] COHEN, BENJAMIN, US

[72] DAWSON-HAGGERTY, MICHAEL, US

[72] FORT, WILLIAM HARTMAN, US

[72] GEYER, CHRISTOPHER, US

[72] KING, JENNIFER EILEEN, US

[72] KOLETSCSKA, THOMAS, US

[72] KOVAL, MICHAEL CAP, US

[72] MARONEY, KYLE, US

[72] MASON, MATTHEW T., US

[72] MCMAHAN, WILLIAM CHU-HYON, US

[72] PRICE, GENE TEMPLE, US

[72] ROMANO, JOSEPH, US

[72] SMITH, DANIEL, US

[72] SRINIVASA, SIDDHARTHA, US

[72] VELAGAPUDI, PRASANNA, US

[72] ALLEN, THOMAS, US

[73] BERKSHIRE GREY OPERATING COMPANY, INC., US

[85] 2019-09-17

[86] 2018-03-22 (PCT/US2018/023755)

[87] (WO2018/175717)

[30] US (62/474,797) 2017-03-22

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[11] **3,058,473**  
[13] C

[51] **Int.Cl. F21S 8/08 (2006.01) F21S 9/04 (2006.01) F21V 21/00 (2006.01) F21V 21/116 (2006.01) F21V 21/22 (2006.01) F21V 21/30 (2006.01)**

[25] EN

[54] **IMPROVED ELEVATED STRUCTURE-MOUNTED LIGHTING SYSTEM**

[54] **SYSTEME D'ECLAIRAGE AMELIORE MONTE SUR UNE STRUCTURE ELEVEE**

[72] ALLISON, JOSHUA C., US  
[72] HAALAND, JOSH, US  
[72] IVANOFF, JESSICA, US  
[73] C&M OILFIELD RENTALS, LLC, US  
[85] 2019-09-27  
[86] 2018-07-19 (PCT/US2018/042795)  
[87] (WO2019/177653)  
[30] US (62/643,663) 2018-03-15  
[30] US (16/009,032) 2018-06-14

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[11] **3,060,089**  
[13] C

[51] **Int.Cl. G06T 7/20 (2017.01) G06T 5/00 (2006.01) G06T 7/00 (2017.01)**

[25] EN

[54] **PLAYER INPUT MOTION COMPENSATION BY ANTICIPATING MOTION VECTORS**

[54] **COMPENSATION DE MOUVEMENT D'ENTREE D'UN JOUEUR PAR ANTICIPATION DE VECTEURS DE MOUVEMENT**

[72] KOPIETZ, MICHAEL, DE  
[73] ZENIMAX MEDIA INC., US  
[85] 2019-10-15  
[86] 2018-04-20 (PCT/US2018/028620)  
[87] (WO2018/195461)  
[30] US (62/488,526) 2017-04-21  
[30] US (62/634,464) 2018-02-23  
[30] US (62/640,945) 2018-03-09  
[30] US (62/644,164) 2018-03-16

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[11] **3,060,937**  
[13] C

[51] **Int.Cl. E21B 43/12 (2006.01) E21B 47/12 (2012.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR CONTROLLING ARTIFICIAL LIFT UNITS**

[54] **SYSTEME ET METHODE POUR CONTROLER DES UNITES DE LEVAGE ARTIFICIELLES**

[72] NIMBALKAR, MANOJ M., US  
[72] VENKATESH, BIMAL, US  
[72] ACKERMAN, RYAN S., US  
[72] CALDER, DEAN A., US  
[73] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US  
[86] (3060937)  
[87] (3060937)  
[22] 2019-11-06  
[30] US (62/931,071) 2019-11-05

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[11] **3,059,149**  
[13] C

[51] **Int.Cl. E21B 17/042 (2006.01)**

[25] EN

[54] **CONNECTING SUCKER RODS WITH COUPLINGS HAVING DRY FILM LUBRICATION**

[54] **RACCORDEMENT DE TIGES DE POMPAGE AUX RACCORDS AYANT UNE LUBRIFICATION A PELLICULE SECHE**

[72] LEMBCKE, JEFFREY L., US  
[72] STACHOWIAK, JOHN E., JR., US  
[72] GALLE, JUSTIN R., US  
[73] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US  
[86] (3059149)  
[87] (3059149)  
[22] 2019-10-18  
[30] US (16/170,825) 2018-10-25

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[11] **3,060,885**  
[13] C

[51] **Int.Cl. C07D 405/04 (2006.01) C07D 413/04 (2006.01) C07D 417/04 (2006.01) C07F 9/44 (2006.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **SECONDARY AMINE-SUBSTITUTED COUMARIN COMPOUNDS AND THEIR USES AS FLUORESCENT LABELS**

[54] **COMPOSES COUMARINES SUBSTITUES PAR UNE AMINE SECONDAIRE ET LEURS UTILISATIONS EN TANT QUE MARQUEURS FLUORESCENTS**

[72] ROMANOV, NIKOLAI NIKOLAEVICH, GB  
[72] MCCAULEY, PATRICK, GB  
[72] ANASTASI, CAROLE, GB  
[72] WU, XIAOLIN, GB  
[72] HYNES, NIALL, GB  
[73] ILLUMINA CAMBRIDGE LIMITED, GB  
[85] 2019-10-18  
[86] 2018-10-16 (PCT/GB2018/052971)  
[87] (WO2019/077331)  
[30] GB (1716931.9) 2017-10-16

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[11] **3,061,613**  
[13] C

[51] **Int.Cl. A61K 35/742 (2015.01) C07D 309/10 (2006.01) C08K 5/13 (2006.01) C12N 1/20 (2006.01)**

[25] EN

[54] **COMPOSITIONS FOR MANAGEMENT OF HELICOBACTER PYLORI INFECTIONS**

[54] **COMPOSITIONS POUR LA PRISE EN CHARGE DES INFECTIONS A HELICOBACTER PYLORI**

[72] MAJEED, MUHAMMED, US  
[72] NAGABHUSHANAM, KALYANAM, US  
[72] ARUMUGAM, SIVAKUMAR, IN  
[72] ALI, FURQAN, IN  
[72] MAJEED, SHAHEEN, US  
[73] SAMI LABS LIMITED, IN  
[85] 2019-10-25  
[86] 2018-06-06 (PCT/US2018/036192)  
[87] (WO2018/226781)  
[30] US (62/516,066) 2017-06-06



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13 juin 2023**

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[11] **3,061,739**  
[13] C

[51] **Int.Cl. F16K 31/05 (2006.01) F16K 31/04 (2006.01) F16K 31/16 (2006.01) F16K 31/50 (2006.01) F16K 37/00 (2006.01)**

[25] EN

[54] **PROPORTIONAL CONTROL VALVE SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE DE SOUPEPE DE COMMANDE PROPORTIONNELLE**

[72] PARTHASARATHY, ANAND, US

[72] CHARLES, SCOTT, US

[73] ADS SERVICES, LLC, US

[85] 2019-10-28

[86] 2018-04-30 (PCT/US2018/030196)

[87] (WO2018/201136)

[30] US (62/491,344) 2017-04-28

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[11] **3,065,228**  
[13] C

[51] **Int.Cl. A01H 6/82 (2018.01) A23L 19/00 (2016.01) A01H 1/00 (2006.01) A01H 1/02 (2006.01) A01H 1/04 (2006.01) A01H 5/00 (2018.01) A01H 5/08 (2018.01) A01H 5/10 (2018.01) C12N 5/04 (2006.01)**

[25] EN

[54] **FERTILISATION INDEPENDENT FRUIT FORMATION IN TOMATO**

[54] **FORMATION DE FRUIT INDEPENDANTE DE LA FERTILISATION DANS UN PLANT DE TOMATE**

[72] VAN DUN, CORNELIS MARIA PETRUS, NL

[72] EGGINK, PIETER MARTIJN, NL

[72] DRAGER, DORTHE BETTINA, NL

[73] RIJK ZWAAN ZAADTEELT EN ZAADHANDEL B.V., NL

[86] (3065228)

[87] (3065228)

[22] 2010-06-21

[62] 2,763,940

[30] EP (09163385.9) 2009-06-22

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[11] **3,065,563**  
[13] C

[51] **Int.Cl. A61K 31/352 (2006.01) A61K 31/05 (2006.01) A61K 36/04 (2006.01) A61P 25/20 (2006.01)**

[25] EN

[54] **SLEEP DISORDER COMPOSITIONS AND TREATMENTS THEREOF**

[54] **COMPOSITION CONTRE L'APNEE DU SOMMEIL ET TRAITEMENTS ASSOCIES**

[72] GORDON, MARA, US

[72] SMITH, STEWART, US

[72] WASHER, STEWART, AU

[72] WASHER, PATRIZIA, AU

[72] KARELIS, HARRY, AU

[73] ZELIRA THERAPEUTICS OPERATIONS PTY LTD, AU

[85] 2019-11-29

[86] 2018-06-19 (PCT/AU2018/050604)

[87] (WO2018/232448)

[30] AU (2017902338) 2017-06-19

[30] AU (2017904818) 2017-11-29

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[11] **3,065,594**  
[13] C

[51] **Int.Cl. C02F 1/52 (2006.01) B01J 20/22 (2006.01) C02F 1/26 (2006.01) C02F 1/28 (2006.01) C09K 3/32 (2006.01)**

[25] EN

[54] **SEQUESTERING AGENTS, KITS THEREFOR, AND METHODS OF USING SEQUESTERING AGENTS AND KITS THEREFOR**

[54] **SEQUESTRANTS, KITS ASSOCIES, ET PROCEDES D'UTILISATION DE SEQUESTRANTS ET DE KITS ASSOCIES**

[72] CARLSON, MICHAEL, CA

[72] DUONG, FRANCK, CA

[73] CARBONET NANOTECHNOLOGIES INC., CA

[85] 2019-11-29

[86] 2018-06-01 (PCT/CA2018/050664)

[87] (WO2018/218374)

[30] US (62/514,208) 2017-06-02

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[11] **3,066,592**  
[13] C

[51] **Int.Cl. E06B 3/50 (2006.01)**

[25] EN

[54] **SLIDE AND PIVOT FENESTRATION UNIT**

[54] **MODULE DE FENETRAGE COULISSANT ET A PIVOT**

[72] BERNHAGEN, TODD A., US

[72] SCHRODER, PAUL D., US

[72] ERICKSON, NATHAN, US

[73] PELLA CORPORATION, US

[86] (3066592)

[87] (3066592)

[22] 2020-01-06

[30] US (62/790,381) 2019-01-09

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[11] **3,066,968**  
[13] C

[51] **Int.Cl. C07H 21/04 (2006.01) C12N 15/11 (2006.01)**

[25] EN

[54] **IMPROVED PROCESS FOR PREPARING IMETELSTAT**

[54] **PROCEDE AMELIORE POUR PREPARER DE L'IMETELSTAT**

[72] MUSLEHIDDINOGLU, JALE, BE

[72] GALA, DINESH, BE

[72] ALBANEZE-WALKER, JENNIFER ELIZABETH, BE

[73] GERON CORPORATION, US

[85] 2019-12-11

[86] 2018-07-09 (PCT/EP2018/068485)

[87] (WO2019/011829)

[30] EP (17180426.3) 2017-07-10

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[11] **3,068,973**  
[13] C

[51] **Int.Cl. C09K 11/07 (2006.01) G01N 33/52 (2006.01)**

[25] EN

[54] **ULTRA-SENSITIVE CHEMILUMINESCENT SUBSTRATES FOR PEROXIDASE**

[54] **SUBSTRATS CHEMILUMINESCENTS ULTRASENSIBLES POUR PEROXYDASES**

[72] DELLA CIANA, LEOPOLDO, IT  
[72] BIAGINI, LORENZO, IT  
[72] JANSEN, THOMAS PAUL, IT  
[72] PERCIACCANTE, ROSSANA, IT  
[72] VARGIOLU, MANUELA, IT  
[72] VETTRAINO, MARINA ELEONORA, IT

[73] CYANAGEN S.R.L., IT

[86] (3068973)  
[87] (3068973)  
[22] 2020-01-17  
[30] IT (10201900000959) 2019-01-22

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[11] **3,069,580**  
[13] C

[51] **Int.Cl. C12N 9/12 (2006.01) C12Q 1/6858 (2018.01) C12Q 1/686 (2018.01) C12N 15/54 (2006.01)**

[25] EN

[54] **DNA POLYMERASE WITH INCREASED GENE MUTATION SPECIFICITY AND PCR BUFFER COMPOSITION FOR INCREASING ACTIVITY THEREOF**

[54] **ADN POLYMERASE PRESENTANT UNE SPECIFICITE DE MUTATION GENIQUE ACCRUE ET COMPOSITION TAMPON DE PCR PERMETTANT D'ACCROITRE L'ACTIVITE DE LADITE ADN POLYMERASE**

[72] LEE, BYUNG CHUL, KR  
[72] PARK, IL HYUN, KR  
[72] LEE, HUY HO, KR  
[73] GENECAS CO., LTD., KR

[85] 2020-01-09  
[86] 2018-05-31 (PCT/KR2018/006246)  
[87] (WO2019/013451)  
[30] KR (10-2017-0088373) 2017-07-12  
[30] KR (10-2017-0088376) 2017-07-12

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[11] **3,069,724**  
[13] C

[51] **Int.Cl. E21B 44/00 (2006.01) E21B 7/06 (2006.01) E21B 41/00 (2006.01)**

[25] EN

[54] **ITERATIVE REAL-TIME STEERING OF A DRILL BIT ORIENTATION ITERATIVE EN TEMPS REEL D'UN TREPAN**

[72] MADASU, SRINATH, US  
[72] RANGARAJAN, KESHAVA PRASAD, US

[72] SAMUEL, ROBELLO, US  
[72] RAIZADA, NISHANT, US  
[73] LANDMARK GRAPHICS CORPORATION, US

[85] 2020-01-10  
[86] 2017-08-21 (PCT/US2017/047748)  
[87] (WO2019/040039)

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[11] **3,070,562**  
[13] C

[51] **Int.Cl. H01H 37/58 (2006.01) H01H 37/66 (2006.01)**

[25] EN

[54] **A SWITCH**

[54] **INTERRUPTEUR**

[72] PALMER, ANDREW JOSEPH, NZ  
[72] LOGAN, SAMUEL JAMES, NZ  
[73] MAGGMA GROUP IP LIMITED, NZ

[85] 2020-01-20  
[86] 2018-07-27 (PCT/NZ2018/050105)  
[87] (WO2019/022622)  
[30] NZ (734124) 2017-07-28

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[11] **3,072,007**  
[13] C

[51] **Int.Cl. G06F 15/00 (2006.01) B67D 7/04 (2010.01) B67D 7/14 (2010.01) G05B 99/00 (2006.01)**

[25] EN

[54] **BRIDGING CIRCUIT AND CONTROL SYSTEM FOR AUTOMATIC CONTROL OF FLUID DISPENSERS, ARTICLE DISPENSERS, AND RELATED SYSTEMS**

[54] **CIRCUIT DE PONTAGE ET SYSTEME DE COMMANDE POUR LA COMMANDE AUTOMATIQUE DE DISTRIBUTEURS DE FLUIDE, DE DISTRIBUTEURS D'ARTICLES ET DE SYSTEMES ASSOCIES**

[72] WANG, ZHI, CA  
[72] WANG, KEVIN CHRISTOPHER, CA  
[73] WIZ-TEC EMS, INC., CA

[85] 2020-02-04  
[86] 2018-08-17 (PCT/IB2018/001134)  
[87] (WO2019/034937)  
[30] US (62/546,557) 2017-08-17  
[30] US (62/605,585) 2017-08-21

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[11] **3,072,316**  
[13] C

[51] **Int.Cl. G06Q 10/063 (2023.01) G06Q 50/30 (2012.01) G06F 16/23 (2019.01) G06F 16/24 (2019.01) G06Q 10/087 (2023.01) G06Q 10/20 (2023.01) G06Q 30/01 (2023.01) G06Q 30/0601 (2023.01) G06K 7/10 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR MANAGING DATA RELATED TO VEHICLE(S)**

[54] **SYSTEMES ET PROCEDES DE GESTION DE DONNEES RELATIVES A UN OU PLUSIEURS VEHICULES**

[72] POPLI, VIREN, IN  
[72] SINGH, PARDEEP, IN  
[73] MAHINDRA & MAHINDRA LIMITED, IN

[85] 2020-02-06  
[86] 2018-08-08 (PCT/IN2018/050519)  
[87] (WO2019/030775)  
[30] IN (201711028211) 2017-08-08

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13 juin 2023**

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[11] **3,072,590**  
[13] C

[51] **Int.Cl. C09D 5/02 (2006.01) C09D 7/40 (2018.01) C09D 5/04 (2006.01) E04B 1/84 (2006.01) E04B 9/00 (2006.01) E04B 9/04 (2006.01)**

[25] EN

[54] **ACOUSTICALLY TRANSPARENT SANDABLE COATING**

[54] **REVETEMENT ACOUSTIQUEMENT TRANSPARENT POUVANT ETRE SABLE**

[72] HULKA, SAMUEL D., US  
[72] GULBRANDSEN, PEDER J., US  
[72] BURY, RAFAEL, US  
[73] USG INTERIORS, LLC, US  
[85] 2020-02-10  
[86] 2018-08-14 (PCT/US2018/046638)  
[87] (WO2019/036434)  
[30] US (15/677,345) 2017-08-15

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[11] **3,073,011**  
[13] C

[51] **Int.Cl. C07K 14/575 (2006.01) A61K 38/00 (2006.01)**

[25] EN

[54] **ACYLATED OXYNTOMODULIN PEPTIDE ANALOG**

[54] **ANALOGUE PEPTIDIQUE D'OXYNTOMODULINE ACYLEE**

[72] YANG, JAE-SUNG, KR  
[72] LEE, KYUNG-SEOK, KR  
[72] CHAE, YU-NA, KR  
[72] BAEK, GYE-RIM, KR  
[72] KIM, TAE-HYOUNG, KR  
[72] JUNG, ILL-HUN, KR  
[72] RYU, CHAE-LIM, KR  
[72] IM, WEON-BIN, KR  
[73] DONG-A ST CO., LTD., KR  
[85] 2020-02-13  
[86] 2018-08-16 (PCT/KR2018/009425)  
[87] (WO2019/035672)  
[30] KR (10-2017-0103798) 2017-08-16  
[30] KR (10-2018-0095717) 2018-08-16

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[11] **3,073,582**  
[13] C

[51] **Int.Cl. A61M 5/24 (2006.01) A61M 5/28 (2006.01) A61M 5/31 (2006.01) A61M 5/50 (2006.01)**

[25] EN

[54] **MEDICAMENT INJECTOR AND INTERCHANGEABLE CARTRIDGES THEREFOR**

[54] **INJECTEUR DE MEDICAMENTS ET SES CARTOUCHES INTERCHANGEABLES**

[72] KIM, DAVID SANGHYUCK, CA  
[72] TAK, DAMIEN, CA  
[73] DIFINITY SOLUTIONS INC., CA  
[86] (3073582)  
[87] (3073582)  
[22] 2020-02-25  
[30] US (62810121) 2019-02-25

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[11] **3,074,127**  
[13] C

[51] **Int.Cl. H04N 19/176 (2014.01)**

[25] EN

[54] **METHODS AND APPARATUSES FOR CODING AND DECODING MODE INFORMATION AND ELECTRONIC DEVICE**

[54] **PROCEDE D'ENCODAGE ET DE CODAGE D'INFORMATIONS DE MODE, DISPOSITIF CORRESPONDANT ET APPAREIL ELECTRONIQUE**

[72] XU, ZHANGLEI, CN  
[72] ZHU, JIANQING, CN  
[73] FUJITSU LIMITED, JP  
[85] 2020-02-27  
[86] 2017-12-06 (PCT/CN2017/114781)  
[87] (WO2019/109264)

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[11] **3,074,560**  
[13] C

[51] **Int.Cl. H04W 72/40 (2023.01) H04W 72/25 (2023.01) H04W 72/52 (2023.01) H04W 4/40 (2018.01)**

[25] EN

[54] **TECHNIQUES AND APPARATUSES FOR AUTONOMOUS RESOURCE SELECTION FOR VEHICLE-TO-EVERYTHING (V2X) TRANSMISSIONS**

[54] **TECHNIQUES ET APPAREILS DE SELECTION DE RESSOURCES AUTONOME POUR TRANSMISSIONS DE VEHICULE VERS TOUT (V2X)**

[72] SANTHANAM, ARVIND, US  
[72] HOOVER, SCOTT, US  
[72] MU, YUNSONG, US  
[72] WANG, YUANBO, US  
[72] XIAO, GANG, US  
[72] LIU, HAIQIN, US  
[72] RAO, SUBRAMANYA, US  
[72] TANI, TAOUFIK, US  
[72] LU, FENG, US  
[73] QUALCOMM INCORPORATED, US  
[85] 2020-03-02  
[86] 2018-07-26 (PCT/US2018/043924)  
[87] (WO2019/070332)  
[30] US (62/567,045) 2017-10-02  
[30] US (15/850,539) 2017-12-21

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[11] **3,074,969**  
[13] C

[51] **Int.Cl. G01N 21/64 (2006.01) G16H 50/50 (2018.01) G16H 50/70 (2018.01) A61B 5/00 (2006.01) G01N 33/53 (2006.01) G06T 7/00 (2017.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR TREATING, DIAGNOSING AND PREDICTING THE OCCURRENCE OF A MEDICAL CONDITION**

[54] **SYSTEMES ET METHODES DE TRAITEMENT, DIAGNOSTIC ET PREDICTION DE L'OCCURRENCE D'UN ETAT MEDICAL**

[72] DONOVAN, MICHAEL, US  
[72] KHAN, FAISAL, US  
[72] FERNANDEZ, GERARDO, US  
[72] TABESH, ALI, US  
[72] MESA-TEJADA, RICARDO, US  
[72] CARDON-CARDO, CARLOS, US  
[72] COSTA, JOSE, US  
[72] FOGARASI, STEPHEN, US  
[72] VENGRENYUK, YEVGEN, US  
[73] FUNDACAO D. ANNA SOMMER CHAMPALIMAUD E DR. CARLOS MONTEZ CHAMPALIMAUD, PT

[86] (3074969)  
[87] (3074969)  
[22] 2009-07-27  
[62] 2,731,747  
[30] US (61/135,925) 2008-07-25  
[30] US (61/135,926) 2008-07-25  
[30] US (61/190,537) 2008-08-28  
[30] US (61/204,606) 2009-01-07  
[30] US (61/217,832) 2009-06-04

[11] **3,075,006**  
[13] C

[51] **Int.Cl. B01D 9/04 (2006.01) A23L 33/105 (2016.01) A23P 10/40 (2016.01) A61K 9/14 (2006.01) A61K 36/185 (2006.01)**

[25] EN

[54] **RAW CANNABIS SATIVA WATER SOLUBLE POWDER PRODUCTION PROCESS**

[54] **PROCEDE DE PRODUCTION DE POUVRE SOLUBLE DANS L'EAU DE CANNABIS BRUT SATIVA**

[72] HEBBELINCK, SEBASTIEN, US  
[73] APAX OTC BUSINESS DEVELOPMENT LLC, US

[86] (3075006)  
[87] (3075006)  
[22] 2020-03-09  
[30] US (62/815,924) 2019-03-08

[11] **3,075,085**  
[13] C

[51] **Int.Cl. G06Q 50/10 (2012.01) G06Q 50/06 (2012.01)**

[25] EN

[54] **INDUSTRIAL ASSET INTELLIGENCE**

[54] **INTELLIGENCE DE BIENS INDUSTRIELS**

[72] HOURNBuckle, BOBBY DALE, JR., US  
[72] KROHN, MATTHEW HARVEY, US  
[72] ROSENBERG, MARK, US  
[72] MERRY, TARA, US  
[72] DASU, NAREN PRADYUMNA, US  
[72] CAMPOS, MARY, US  
[72] GARCIA, WILLIAMS, US  
[72] NUDELMAN, GRIGORY, US  
[73] WAYGATE TECHNOLOGIES USA, LP, US

[85] 2020-03-05  
[86] 2018-09-14 (PCT/US2018/051205)  
[87] (WO2019/055864)

[11] **3,075,317**  
[13] C

[51] **Int.Cl. F21K 9/232 (2016.01) F21K 9/61 (2016.01) F21V 17/16 (2006.01)**

[25] EN

[54] **LED BULB HAVING LIGHT GUIDE BODY**

[54] **AMPOULE A DEL COMPRENANT UN CORPS DE GUIDAGE DE LUMIERE**

[72] ZHAO, HUANXING, CN  
[73] CHANGZHOU FUXING ELECTRICAL APPLIANCE CO., LTD, CN

[85] 2020-03-09  
[86] 2018-08-13 (PCT/CN2018/100153)  
[87] (WO2019/034012)  
[30] CN (201710701221.5) 2017-08-16

[11] **3,076,049**  
[13] C

[51] **Int.Cl. B25B 23/00 (2006.01) B25B 13/48 (2006.01)**

[25] EN

[54] **TOOL EXTENSION**

[54] **RALLONGE POUR OUTIL**

[72] GAINES, PRESTON T., US  
[72] ANDERSON, JONATHAN I., US  
[73] SNAP-ON INCORPORATED, US

[86] (3076049)  
[87] (3076049)  
[22] 2020-03-17  
[30] US (16/514,252) 2019-07-17

[11] **3,076,718**  
[13] C

[51] **Int.Cl. H02N 1/00 (2006.01)**

[25] EN

[54] **INTERACTING COMPLEX ELECTRIC FIELDS AND STATIC ELECTRIC FIELDS TO EFFECT MOTION**

[54] **CHAMPS ELECTRIQUES COMPLEXES ET CHAMPS ELECTRIQUES STATIQUES INTERAGISSANT POUR PRODUIRE UN MOUVEMENT**

[72] BANDURIC, RICHARD, US  
[73] BANDURIC, RICHARD, US  
[86] (3076718)  
[87] (3076718)  
[22] 2013-06-28  
[62] 2,874,666  
[30] US (13/543,688) 2012-07-06

[11] **3,077,980**  
[13] C

[51] **Int.Cl. G06N 10/40 (2022.01) G06N 10/80 (2022.01) H10N 69/00 (2023.01) H10N 60/12 (2023.01)**

[25] EN

[54] **SYSTEMS, METHODS AND APPARATUS FOR ACTIVE COMPENSATION OF QUANTUM PROCESSOR ELEMENTS**

[54] **SYSTEMES, PROCEDES ET APPAREIL PERMETTANT UNE COMPENSATION ACTIVE D'ELEMENTS DE PROCESSEUR QUANTIQUE**

[72] HARRIS, RICHARD, CA  
[72] BERKLEY, ANDREW, CA  
[72] JOHANSSON, JAN, CA  
[72] JOHNSON, MARK, CA  
[72] AMIN, MOHAMMAD, CA  
[72] BUNYK, PAUL, CA  
[73] D-WAVE SYSTEMS INC., CA

[86] (3077980)  
[87] (3077980)  
[22] 2009-09-03  
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[30] US (61/094,002) 2008-09-03

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[13] C

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[54] **PRIVACY MODE FOR A WIRELESS AUDIO DEVICE**  
[54] **MODE DE CONFIDENTIALITE POUR UN DISPOSITIF AUDIO SANS FIL**  
[72] BAKER, RHODES, US  
[72] KARC, JEFFREY, US  
[72] KNODE, GALEN, US  
[72] NEWMAN, ROBERT C., JR., US  
[72] NILL, JOHN, US  
[73] LUTRON TECHNOLOGY COMPANY LLC, US  
[85] 2020-04-01  
[86] 2018-12-14 (PCT/US2018/065861)  
[87] (WO2019/118933)  
[30] US (62/598,792) 2017-12-14

[11] **3,078,987**  
[13] C

- [51] **Int.Cl. G08B 17/10 (2006.01) G08B 17/117 (2006.01) G08B 21/02 (2006.01) G08B 25/01 (2006.01)**  
[25] EN  
[54] **FIRE DETECTION SYSTEM**  
[54] **SYSTEME DE DETECTION D'INCENDIE**  
[72] WEDIG, KURT JOSEPH, US  
[72] PARENT, DANIEL RALPH, US  
[73] ONEEVENT TECHNOLOGIES, INC., US  
[85] 2020-04-10  
[86] 2018-10-10 (PCT/US2018/055281)  
[87] (WO2019/075110)  
[30] US (62/570,774) 2017-10-11

[11] **3,078,997**  
[13] C

- [51] **Int.Cl. G06F 17/00 (2019.01) G06F 16/904 (2019.01) G06F 3/14 (2006.01)**  
[25] EN  
[54] **USING AN OBJECT MODEL OF HETEROGENEOUS DATA TO FACILITATE BUILDING DATA VISUALIZATIONS**  
[54] **UTILISATION D'UN MODELE D'OBJET DE DONNEES HETEROGENES PERMETTANT DE FACILITER DES VISUALISATIONS DE DONNEES DE CONSTRUCTION**  
[72] TALBOT, JUSTIN, US  
[72] HAU, ROGER, US  
[72] CORY, DANIEL, US  
[72] OH, JIYOUNG, US  
[72] ROBERTS, TERESA, US  
[73] TABLEAU SOFTWARE, LLC, US  
[85] 2020-04-09  
[86] 2018-08-01 (PCT/US2018/044878)  
[87] (WO2019/074570)  
[30] US (62/569,976) 2017-10-09  
[30] US (15/911,026) 2018-03-02

[11] **3,079,360**  
[13] C

- [51] **Int.Cl. F27B 3/08 (2006.01) F27B 3/20 (2006.01) F27D 11/10 (2006.01) H05B 7/10 (2006.01)**  
[25] EN  
[54] **MELTING FURNACE WITH SIMULTANEOUSLY ROTATABLE AND MOVABLE ELECTRODE ROD**  
[54] **FOUR DE FUSION POURVU D'UNE TIGE D'ELECTRODE ROTATIVE ET DEPLACABLE SIMULTANEMENT**  
[72] DEMIRCI, CIHANGIR, DE  
[72] EL-RABATI, ROS, DE  
[72] ROBINSON, DAVID, GB  
[73] SMS GROUP GMBH, DE  
[85] 2020-04-16  
[86] 2018-11-07 (PCT/EP2018/080389)  
[87] (WO2019/091994)  
[30] DE (10 2017 219 826.5) 2017-11-08

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[13] C

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[25] EN  
[54] **COMPACT COIL ASSEMBLY FOR A VACUUM ARC REMELTING SYSTEM**  
[54] **ENSEMBLE DE BOBINE COMPACT POUR SYSTEME DE REFUSION A L'ARC SOUS VIDE**  
[72] PATEL, ASHISH D., US  
[72] SENSENIG, JEREMY L., US  
[72] MCFARLAND, ROBERT JAMES, JR., US  
[72] PHILLIPS, JAMES LEROY, US  
[73] TITANIUM METALS CORPORATION, US  
[85] 2020-04-16  
[86] 2018-10-17 (PCT/US2018/056302)  
[87] (WO2019/079463)  
[30] US (62/573,229) 2017-10-17

[11] **3,079,480**  
[13] C

- [51] **Int.Cl. H04W 76/18 (2018.01) H04L 67/141 (2022.01)**  
[25] EN  
[54] **INITIATING ESTABLISHMENT OF PROTOCOL DATA UNIT SESSION METHOD AND TERMINAL DEVICE**  
[54] **AMORCAGE DE L'ETABLISSEMENT DE SESSION D'UNITE DE DONNEES DU PROTOCOLE, METHODE ET TERMINAL**  
[72] TANG, HAI, CN  
[73] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN  
[85] 2020-04-17  
[86] 2017-10-20 (PCT/CN2017/107168)  
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[25] EN

[54] **PHARMACEUTICAL ORAL FORMULATION COMPRISING BACTERIA**

[54] **FORMULATION PHARMACEUTIQUE ORALE COMPRENANT DES BACTERIES**

[72] SCHWINTNER, CAROLE, FR

[72] ROBIN, MARIANNE, FR

[72] DUBUISSON, JEAN-FRANCOIS, FR

[72] AFFAGARD, HERVE, FR

[72] MICHENET, CEDRIC, FR

[72] BARDY, AMANDINE, FR

[73] MAAT PHARMA, FR

[73] BIOCDEX, FR

[85] 2020-04-20

[86] 2018-11-16 (PCT/EP2018/081650)

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[51] **Int.Cl. A23L 27/50 (2016.01) A23L 27/00 (2016.01) A23L 27/24 (2016.01) A23L 27/29 (2016.01)**

[25] EN

[54] **RAW LIQUID FOR SEASONING AND METHOD FOR MANUFACTURING SEASONING**

[54] **LIQUIDE BRUT POUR ASSAISONNEMENT ET METHODE DE PRODUCTION D'ASSAISONNEMENT**

[72] KATAYAMA, HIROSHI, JP

[72] KUNITAKE, YURI, JP

[72] HANADA, YOICHI, JP

[72] FUJIMORI, RYO, JP

[72] OOKUBO, KAZUMA, JP

[72] MOTOJIMA, YOSHIHIRO, JP

[73] KIKKOMAN CORPORATION, JP

[85] 2020-04-23

[86] 2018-10-26 (PCT/JP2018/039991)

[87] (WO2019/083041)

[30] JP (2017-208410) 2017-10-27

[30] JP (2017-208411) 2017-10-27

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[30] JP (2017-208413) 2017-10-27

[30] JP (2018-112279) 2018-06-12

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[11] **3,080,222**  
[13] C

[51] **Int.Cl. A61M 5/158 (2006.01) A61M 25/02 (2006.01) A61M 25/06 (2006.01)**

[25] EN

[54] **INFUSION DEVICE WITH AUTOMATIC INSERTION AND INTRODUCER NEEDLE RETRACTION**

[54] **DISPOSITIF DE PERFUSION A INSERTION ET RETRACTION AUTOMATIQUE D'AIGUILLE D'INTUBATEUR**

[72] SONDEREGGER, RALPH, US

[72] HARDING, WESTON, US

[73] BECTON, DICKINSON AND COMPANY, US

[86] (3080222)

[87] (3080222)

[22] 2012-02-08

[62] 2,828,873

[30] US (61/441,258) 2011-02-09

[30] US (61/448,975) 2011-03-03

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[13] C

[51] **Int.Cl. G02B 21/26 (2006.01) G01N 15/10 (2006.01) G01N 35/00 (2006.01)**

[25] EN

[54] **SAMPLE PROCESSING IMPROVEMENTS FOR MICROSCOPY**

[54] **AMELIORATIONS DE TRAITEMENT D'ECHANTILLON DESTINEES A LA MICROSCOPIE**

[72] FINE, ALAN MARC, CA

[72] MACAULAY, HERSHEL, CA

[72] HYMES-VANDERMEULEN, NOAH, CA

[73] ALENTIC MICROSCIENCE INC., CA

[86] (3080335)

[87] (3080335)

[22] 2014-06-25

[62] 2,953,620

[30] US (61/839,735) 2013-06-26

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[11] **3,080,477**  
[13] C

[51] **Int.Cl. F16K 15/20 (2006.01) F16K 15/06 (2006.01)**

[25] EN

[54] **INFLATION VALVE**

[54] **VALVE DE GONFLAGE**

[72] KONANTAMBIGI, SUNIL MADHUKAR, IN

[73] SIGNODE INDIA LIMITED, IN

[85] 2020-04-27

[86] 2018-08-30 (PCT/IN2018/050561)

[87] (WO2019/082198)

[30] IN (201741038287) 2017-10-27

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[11] **3,081,018**  
[13] C

[51] **Int.Cl. A61M 36/06 (2006.01) A61M 5/00 (2006.01)**

[25] EN

[54] **INFUSION SYSTEMS INCLUDING COMPUTER-FACILITATED MAINTENANCE AND/OR OPERATION AND METHODS OF USE**

[54] **SYSTEMES D'INFUSION OFFRANT L'ENTRETIEN ET/OU L'OPERATION ET/OU L'OPERATION ET LES METHODES D'UTILISATION**

[72] ZODDA, JULIUS P., US

[72] HUNTER, KATHRYN M., US

[72] FONTAINE, AARON M., US

[72] HIDEM, STEPHEN E., US

[72] MCDONALD, PATRICK M., US

[72] GELBACH, JANET L., US

[72] SWENSON, ROLF E., US

[72] MCDANIEL, KIMBERLY J., US

[73] BRACCO DIAGNOSTICS INC., US

[86] (3081018)

[87] (3081018)

[22] 2009-06-11

[62] 2,989,597

[30] US (12/137,356) 2008-06-11

[30] US (12/137,363) 2008-06-11

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[13] C

[51] **Int.Cl. F16J 13/06 (2006.01) F16J 13/18 (2006.01) F16J 13/24 (2006.01) F17C 1/00 (2006.01)**

[25] EN

[54] **CLOSURE FOR PRESSURE VESSEL OR PIPELINE**

[54] **FERMETURE POUR UN RECIPIENT SOUS PRESSION OU UN PIPELINE**

[72] KOZAK, KEITH ALAN, CA

[73] IN-LINE FLOW PRODUCTS LTD., CA

[86] (3081278)

[87] (3081278)

[22] 2020-05-23

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[11] **3,081,570**  
[13] C

[51] **Int.Cl. E01C 9/08 (2006.01) A47G 27/02 (2006.01) E01C 5/22 (2006.01) E04B 5/02 (2006.01) E04C 2/40 (2006.01) E04C 3/29 (2006.01)**

[25] EN

[54] **STRUCTURAL REINFORCED COMPOSITE CONSTRUCTION MAT**

[54] **ENSEMBLE A TAPIS DESTINE A ETRE UTILISE DANS LA CONSTRUCTION ET PROCEDE DE CONSTRUCTION OU DE REPARATION DE CELUI-CI**

[72] BROWN, CLAUDE, JR., US

[72] CRANE, DAVID C., US

[72] COMBS, ROBERT E., US

[73] PLASTIC TIES TECHNOLOGIES LLC, US

[85] 2020-05-01

[86] 2018-11-03 (PCT/US2018/059106)

[87] (WO2019/090186)

[30] US (62/581,254) 2017-11-03

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[13] C

[51] **Int.Cl. A47J 43/04 (2006.01) A47J 43/08 (2006.01) B26D 3/11 (2006.01)**

[25] EN

[54] **SPIRALIZER MIXER ATTACHMENT**

[54] **ACCESSOIRE DE BATTEUR SPIRALEUR**

[72] FUNG, KAM FAI, CN

[73] CONAIR LLC, US

[85] 2020-05-07

[86] 2018-11-07 (PCT/US2018/059569)

[87] (WO2019/094429)

[30] US (15/806,998) 2017-11-08

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[13] C

[51] **Int.Cl. C22B 9/16 (2006.01) F02M 26/28 (2016.01) F02M 26/29 (2016.01) F02M 26/32 (2016.01) F02M 26/72 (2016.01) F23D 11/36 (2006.01) F23D 14/78 (2006.01) F28D 7/16 (2006.01)**

[25] EN

[54] **FLUID COOLED HOUSING SYSTEM FOR INSTRUMENTS OF A METAL MAKING FURNACE**

[54] **SYSTEME DE BOITIER REFROIDI PAR FLUIDE POUR INSTRUMENTS D'UN FOUR METALLURGIQUE**

[72] BOYLE, DENNIS B., US

[72] CIVITARESE, VINCENT J., US

[73] BERRY METAL COMPANY, US

[85] 2020-05-15

[86] 2018-11-16 (PCT/US2018/061691)

[87] (WO2019/099951)

[30] US (62/586,894) 2017-11-16

[30] US (62/719,245) 2018-08-17

[30] US (62/730,298) 2018-09-12

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[13] C

[51] **Int.Cl. G08G 1/09 (2006.01) G08G 1/0962 (2006.01) G08G 1/0968 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR ADAPTING AUGMENTED SWITCHING WARNING**

[54] **PROCEDE ET SYSTEME D'ADAPTATION D'AVERTISSEMENT DE COMMUTATION AUGMENTE**

[72] ZHENG, HAO, US

[72] DALY JR., TIMOTHY PATRICK, US

[72] LIU, DAVID WANQIAN, US

[73] PLUSAI, INC., US

[85] 2020-05-25

[86] 2017-12-19 (PCT/IB2017/058177)

[87] (WO2019/122969)

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[11] **3,083,648**  
[13] C

[51] **Int.Cl. C10L 1/04 (2006.01) C10G 3/00 (2006.01) C10G 45/00 (2006.01) C10L 1/08 (2006.01)**

[25] EN

[54] **PREPARATION OF A FUEL BLEND**

[54] **PREPARATION D'UN MELANGE DE CARBURANTS**

[72] NORTIO, JENNI, FI

[72] KIISKI, ULLA, FI

[72] SAIKKONEN, PIRJO, FI

[73] NESTE OYJ, FI

[85] 2020-05-26

[86] 2018-11-22 (PCT/FI2018/050849)

[87] (WO2019/102069)

[30] FI (20176062) 2017-11-27

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[11] **3,084,696**  
[13] C

[51] **Int.Cl. B60W 50/08 (2020.01) G16Z 99/00 (2019.01) G10L 15/10 (2006.01) G10L 17/00 (2013.01)**

[25] EN

[54] **VEHICLE OPERATION ASSISTANCE DEVICE**

[54] **DISPOSITIF D'ASSISTANCE D'OPERATION DE VEHICULE**

[72] NISHIYAMA, JO, JP

[72] INOUE, HIROFUMI, JP

[72] TERAGUCHI, TAKEHITO, JP

[72] KASAI, JUN, JP

[73] NISSAN MOTOR CO., LTD., JP

[85] 2020-05-15

[86] 2017-11-17 (PCT/JP2017/041460)

[87] (WO2019/097674)

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[13] C

[51] **Int.Cl. C07D 401/04 (2006.01) A61K 31/465 (2006.01) A61P 25/34 (2006.01)**  
[25] EN  
[54] **PREPARATION OF RACEMIC NICOTINE BY REACTION OF ETHYL NICOTINATE WITH N-VINYLPYRROLIDONE IN THE PRESENCE OF AN ALCOHOLATE BASE AND SUBSEQUENT PROCESS STEPS**  
[54] **PREPARATION DE NICOTINE RACEMIQUE PAR REACTION DE NICOTINATE D'ETHYLE AVEC DE LA N-VINYLPYRROLIDONE EN PRESENCE D'UNE BASE D'ALCOOLATE, ET ETAPES DE TRAITEMENT SUIVANTES**  
[72] WEBER, BEAT, CH  
[72] LOTHSCUTZ, CHRISTIAN, CH  
[72] PAN, BEN, CN  
[73] SIEGFRIED AG, CH  
[73] CONTRAF-NICOTEX-TOBACCO GMBH, DE  
[85] 2020-06-09  
[86] 2018-12-18 (PCT/EP2018/085437)  
[87] (WO2019/121644)  
[30] EP (17210187.5) 2017-12-22

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[11] **3,086,052**  
[13] C

[51] **Int.Cl. G09F 9/33 (2006.01)**  
[25] EN  
[54] **LED DISPLAY MODULE AND LED DISPLAYER**  
[54] **MODULE D'AFFICHAGE A DEL ET ECRAN D'AFFICHAGE A DEL**  
[72] LI, MANTIE, CN  
[72] ZHU, JUNXUE, CN  
[72] XUE, YUANTING, CN  
[72] HUANG, DAOHUA, CN  
[73] LEDMAN OPTOELECTRONIC CO., LTD., CN  
[85] 2020-06-17  
[86] 2018-01-05 (PCT/CN2018/071601)  
[87] (WO2019/134127)

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[11] **3,086,719**  
[13] C

[51] **Int.Cl. A24F 47/00 (2020.01)**  
[25] EN  
[54] **ELECTRICALLY OPERATED AEROSOL GENERATION SYSTEM**  
[54] **SYSTEME DE GENERATION D'AEROSOL A COMMANDE ELECTRIQUE**  
[72] ROGAN, ANDREW ROBERT JOHN, GB  
[73] JT INTERNATIONAL S.A., CH  
[85] 2020-06-23  
[86] 2018-12-28 (PCT/EP2018/097112)  
[87] (WO2019/129868)  
[30] EP (17211090.0) 2017-12-29

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[11] **3,086,754**  
[13] C

[51] **Int.Cl. C12N 15/864 (2006.01) A61K 35/76 (2015.01) C12N 5/10 (2006.01) C12N 7/01 (2006.01) C12N 15/35 (2006.01)**  
[25] EN  
[54] **RECOMBINANT ADENO-ASSOCIATED VIRUS 9**  
[54] **VIRUS RECOMBINANT 9 ASSOCIE AUX ADENOVIRUS**  
[72] KASPAR, BRIAN K., US  
[72] BURGHEES, ARTHUR, US  
[72] PORENSKY, PAUL, US  
[72] FOUST, KEVIN, US  
[73] NATIONWIDE CHILDREN'S HOSPITAL, US  
[73] OHIO STATE INNOVATION FOUNDATION, US  
[86] (3086754)  
[87] (3086754)  
[22] 2013-07-31  
[62] 2,880,653  
[30] US (61/678,458) 2012-08-01

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[11] **3,087,401**  
[13] C

[51] **Int.Cl. A01F 12/26 (2006.01) A01F 12/24 (2006.01)**  
[25] EN  
[54] **COMBINE HARVESTER CONCAVE FRAME ASSEMBLY**  
[54] **ENSEMBLE CHASSIS CONCAVE DE MOISSONNEUSE-BATTEUSE**  
[72] ROBERTSON, BRIAN G., US  
[73] ROBERTSON, BRIAN G., US  
[85] 2020-06-24  
[86] 2018-12-21 (PCT/US2018/067256)  
[87] (WO2019/133517)  
[30] US (15/856,381) 2017-12-28  
[30] US (15/856,402) 2017-12-28  
[30] US (16/115,331) 2018-08-28

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[11] **3,087,611**  
[13] C

[51] **Int.Cl. B01J 29/18 (2006.01) B01J 29/26 (2006.01)**  
[25] EN  
[54] **ORGANIC BASE MODIFIED COMPOSITE CATALYST AND METHOD FOR PRODUCING ETHYLENE BY HYDROGENATION OF CARBON MONOXIDE**  
[54] **CATALYSEUR COMPOSITE MODIFIE A BASE ORGANIQUE ET PROCEDE POUR PRODUIRE DES ETHYLENES PAR L'HYDROGENATION DE MONOXYDE DE CARBONE**  
[72] PAN, XIULIAN, CN  
[72] JIAO, FENG, CN  
[72] BAO, XINHE, CN  
[73] DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES, CN  
[85] 2020-07-03  
[86] 2019-01-28 (PCT/CN2019/073387)  
[87] (WO2019/144953)  
[30] CN (201810079670.5) 2018-01-26



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[13] C

[51] **Int.Cl. B25B 23/00 (2006.01)**  
[25] EN  
[54] **TORQUE WRENCH AND REACTION ARM ASSEMBLY**  
[54] **CLE DYNAMOMETRIQUE ET ENSEMBLE BRAS DE REACTION**  
[72] QUICKE, STEPHEN, GB  
[73] ENERPAC UK LTD, GB  
[85] 2020-07-06  
[86] 2018-01-15 (PCT/GB2018/050102)  
[87] (WO2018/130854)  
[30] GB (1700597.6) 2017-01-13

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[11] **3,087,782**  
[13] C

[51] **Int.Cl. A01G 24/44 (2018.01) A01G 24/20 (2018.01) A01H 4/00 (2006.01) C12N 5/00 (2006.01)**  
[25] EN  
[54] **NUTRIENT MEDIUM FOR AUTOMATED CULTIVATION OF PLANTS**  
[54] **MILIEU NUTRITIF POUR LA PRODUCTION AUTOMATISEE DE PLANTES**  
[72] VON RUNDSTEDT, FRIEDERIKE, DE  
[73] ROBOTEC PTC GMBH, DE  
[85] 2020-07-03  
[86] 2019-01-10 (PCT/EP2019/050511)  
[87] (WO2019/137981)  
[30] DE (10 2018 100 485.0) 2018-01-10

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[11] **3,087,814**  
[13] C

[51] **Int.Cl. H04B 17/11 (2015.01) H04B 17/21 (2015.01) H04B 7/06 (2006.01) H04L 25/02 (2006.01)**  
[25] EN  
[54] **BEAMFORMING CALIBRATION**  
[54] **ETALONNAGE DE FORMATION DE FAISCEAU**  
[72] ANANTH, SHARATH, US  
[72] STANG, PASCAL, US  
[73] SOFTBANK CORP., JP  
[85] 2020-05-11  
[86] 2018-11-05 (PCT/US2018/059185)  
[87] (WO2019/094324)  
[30] US (15/810,909) 2017-11-13  
[30] US (15/810,841) 2017-11-13  
[30] US (15/810,753) 2017-11-13  
[30] US (15/810,659) 2017-11-13

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[11] **3,089,058**  
[13] C

[51] **Int.Cl. H01L 31/0352 (2006.01) G01J 1/44 (2006.01) H01L 27/144 (2006.01) H01L 27/146 (2006.01) H01L 31/028 (2006.01) H01L 31/036 (2006.01)**  
[25] EN  
[54] **VOLTAGE-MODE PHOTSENSITIVE DEVICE**  
[54] **DISPOSITIF PHOTSENSIBLE EN MODE TENSION**  
[72] ALLEN, MARK, GB  
[72] BESSONOV, ALEXANDER, GB  
[72] RYHANEN, TAPANI, FI  
[73] EMBERION OY, FI  
[85] 2020-07-20  
[86] 2019-01-24 (PCT/FI2019/050054)  
[87] (WO2019/145607)  
[30] GB (1801336.7) 2018-01-26

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[11] **3,089,577**  
[13] C

[51] **Int.Cl. A61B 5/15 (2006.01) A61B 5/153 (2006.01) A61B 5/157 (2006.01)**  
[25] EN  
[54] **BIOLOGICAL FLUID COLLECTION AND STABILIZATION SYSTEM**  
[54] **SYSTEME DE COLLECTE ET DE STABILISATION DE FLUIDE BIOLOGIQUE**  
[72] EDELHAUSER, ADAM, US  
[72] WILKINSON, BRADLEY M., US  
[73] BECTON, DICKINSON AND COMPANY, US  
[85] 2020-07-23  
[86] 2019-02-04 (PCT/US2019/016520)  
[87] (WO2019/156932)  
[30] US (62/626,904) 2018-02-06

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[11] **3,089,852**  
[13] C

[51] **Int.Cl. B23K 9/173 (2006.01) B23K 9/29 (2006.01) B23K 9/32 (2006.01)**  
[25] EN  
[54] **NOZZLE ASSEMBLY HAVING MULTIPLE ATTACHMENT METHODS**  
[54] **ENSEMBLE BUSE AYANT DE MULTIPLES PROCEDES DE FIXATION**  
[72] CENTNER, ROBERT J., US  
[73] ILLINOIS TOOL WORKS INC., US  
[85] 2020-07-28  
[86] 2019-02-06 (PCT/US2019/016746)  
[87] (WO2019/156996)  
[30] US (62/626,752) 2018-02-06  
[30] US (16/262,581) 2019-01-30

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[11] **3,090,050**  
[13] C

[51] **Int.Cl. C10G 3/00 (2006.01) C07C 1/20 (2006.01) C10L 1/06 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR THE PRODUCTION OF A SYNTHETIC GASOLINE**  
[54] **PROCEDE ET INSTALLATION DE PRODUCTION D'UNE ESSENCE SYNTHETIQUE**  
[72] ENGELMANN, JOACHIM, DE  
[72] ENGELMANN, JORG, DE  
[72] SEIDEL, PETRA, DE  
[73] CHEMIEANLAGENBAU CHEMNITZ GMBH, DE  
[85] 2020-07-29  
[86] 2019-02-15 (PCT/EP2019/053801)  
[87] (WO2019/158687)  
[30] DE (10 2018 103 552.7) 2018-02-16

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[11] **3,090,738**  
[13] C

[51] **Int.Cl. C07D 403/06 (2006.01) A61K 31/506 (2006.01) A61P 1/10 (2006.01) A61P 25/00 (2006.01) A61P 29/00 (2006.01)**  
[25] EN  
[54] **SYNTHESIS AND SALT FORMS OF (R)-5-((E)-2-(PYRROLIDIN-3-YLVINYL)PYRIMIDINE**  
[54] **SYNTHESE ET LES FORMES SALINES DE (R)((E)PYRROLIDIN-3-YLVINYL)PYRIMIDINE**  
[72] AKIREDDY, SRINIVASA RAO, US  
[72] BHATTI, BALWINDER SINGH, US  
[72] CUTHBERTSON, TIMOTHY J., US  
[72] DULL, GARY MAURICE, US  
[72] MILLER, CRAIG HARRISON, US  
[72] MITCHENER, JOSEPH PIKE, JR., US  
[72] MUNOZ, JULIO A., US  
[72] OTTEN, PIETER ALBERT, US  
[73] OYSTER POINT PHARMA, INC., US  
[86] (3090738)  
[87] (3090738)  
[22] 2009-11-30  
[62] 2,742,366  
[30] US (61/118,796) 2008-12-01

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[11] **3,090,910**  
[13] C

[51] **Int.Cl. B65D 81/05 (2006.01)**  
[25] EN  
[54] **EDGE PROTECTOR AND METHOD OF MANUFACTURING SAME**  
[54] **PROTECTEUR DE BORD ET SON PROCEDE DE FABRICATION**  
[72] JETTE, MARTIN F., US  
[72] BURTON, MATHEW S., US  
[72] CAMACHO, RENE GUERRERO, US  
[72] RICE, RANDALL JOHN, US  
[73] SIGNODE INDUSTRIAL GROUP LLC, US  
[85] 2020-08-10  
[86] 2019-02-13 (PCT/US2019/017773)  
[87] (WO2019/168672)  
[30] US (62/637,559) 2018-03-02  
[30] US (16/273,725) 2019-02-12

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[11] **3,091,118**  
[13] C

[51] **Int.Cl. A23L 33/105 (2016.01) C12J 1/00 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS FOR RETARDING RANCIDITY IN OIL-BASED FOOD SAUCES AND DRESSINGS**  
[54] **COMPOSITIONS POUR RETARDER LA RANCIDITE DANS DES SAUCES ET SAUCES D'ASSAISONNEMENT ALIMENTAIRES A BASE D'HUILE**  
[72] TOLEDO, ROMEO, US  
[72] HULL, RICHARD S., US  
[72] KIRMACI, BILAL, US  
[72] TOLEDO, MO MUI, US  
[73] KERRY GROUP SERVICES INTERNATIONAL LIMITED, IE  
[85] 2020-08-11  
[86] 2019-02-20 (PCT/US2019/018840)  
[87] (WO2019/165002)  
[30] US (62/632,746) 2018-02-20  
[30] US (16/281,016) 2019-02-20

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[11] **3,091,159**  
[13] C

[51] **Int.Cl. H04W 8/18 (2009.01) H04W 12/77 (2021.01)**  
[25] EN  
[54] **METHOD FOR REGISTERING A MOBILE DEVICE USING A MACHINE-READABLE OPTICAL LABEL**  
[54] **PROCEDE D'ENREGISTREMENT DE DISPOSITIF MOBILE A L'AIDE D'UNE ETIQUETTE OPTIQUE LISIBLE PAR MACHINE**  
[72] TURNER, STEVEN K., US  
[72] GRZESIK, ANDRZEJ, PL  
[72] KRUEGEL, CHRIS A., US  
[73] MOTOROLA SOLUTIONS, INC., US  
[85] 2020-08-12  
[86] 2018-02-28 (PCT/PL2018/050007)  
[87] (WO2019/168419)

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[11] **3,092,501**  
[13] C

[51] **Int.Cl. C12J 1/00 (2006.01) A23L 27/40 (2016.01) A23L 33/10 (2016.01) A23P 10/40 (2016.01) A23L 3/3508 (2006.01)**  
[25] EN  
[54] **PREPARATION OF A POWDERED VINEGAR**  
[54] **PREPARATION D'UN VINAIGRE EN POUDRE**  
[72] BOEREFIJN, RENEE, NL  
[72] ORLOVIC, MARIJA, NL  
[72] VAN DER VOORT MAARSCHALK, KEES, NL  
[73] PURAC BIOCHEM B.V., NL  
[86] (3092501)  
[87] (3092501)  
[22] 2013-07-31  
[62] 2,880,180  
[30] US (61/678,133) 2012-08-01  
[30] EP (12178789.9) 2012-08-01

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[11] **3,092,534**  
[13] C

[51] **Int.Cl. E02D 29/14 (2006.01)**  
[25] EN  
[54] **HEIGHT ADJUSTMENT MECHANISM FOR A MANHOLE ASSEMBLY AND MANHOLE ASSEMBLY COMPRISING THE SAME**  
[54] **MECANISME D'AJUSTEMENT DE HAUTEUR DESTINE A UN ENSEMBLE DE TROU D'HOMME ET ENSEMBLE DE TROU D'HOMME COMPORTANT LEDIT MECANISME**  
[72] BRIEN, TREVOR, CA  
[73] BRIEN, TREVOR, CA  
[86] (3092534)  
[87] (3092534)  
[22] 2018-03-29  
[62] 2,999,627  
[30] US (62/480,419) 2017-04-01

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[11] **3,092,973**  
[13] C

[51] **Int.Cl. A21C 15/00 (2006.01) A23P 20/20 (2016.01) A21D 13/32 (2017.01) A47J 37/06 (2006.01)**  
[25] EN  
[54] **SANDWICH MAKER**  
[54] **GRILLE-SANDWICH**  
[72] WANG, FEI-CHEN, TW  
[72] CHANG, I-TING, TW  
[72] HUANG, SHYH-HARN, TW  
[73] PRESIDENT CHAIN STORE CORP., CN  
[86] (3092973)  
[87] (3092973)  
[22] 2020-09-11  
[30] TW (109210077) 2020-08-04

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[13] C

[51] **Int.Cl. B29C 64/393 (2017.01) B33Y 10/00 (2015.01) B33Y 50/00 (2015.01) B29C 64/218 (2017.01) B29C 64/30 (2017.01) B29C 64/386 (2017.01) G06F 30/10 (2020.01)**

[25] EN

[54] **WARP COMPENSATION FOR ADDITIVE MANUFACTURING**

[54] **COMPENSATION DE DEFORMATION POUR LA FABRICATION ADDITIVE**

[72] SUSNJARA, KENNETH J., US

[73] THERMWOOD CORPORATION, US

[86] (3093622)

[87] (3093622)

[22] 2020-09-18

[30] US (16/596,305) 2019-10-08

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[11] **3,094,233**  
[13] C

[51] **Int.Cl. G01N 29/44 (2006.01) E21B 47/002 (2012.01) G01N 21/954 (2006.01) G01N 27/00 (2006.01) G01N 29/265 (2006.01) G01N 37/00 (2006.01)**

[25] EN

[54] **INTELLIGENT LOCALIZED HIGH-RESOLUTION IMAGING OF TUBULARS**

[54] **IMAGERIE HAUTE-RESOLUTION LOCALISEE INTELLIGENTE DE TUBULAIRES**

[72] ROBINSON, STEPHEN, CA

[72] KOLB, KURT, CA

[73] DARKVISION TECHNOLOGIES INC, CA

[86] (3094233)

[87] (3094233)

[22] 2020-09-24

[30] GB (1914258.7) 2019-10-03

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[11] **3,094,289**  
[13] C

[51] **Int.Cl. C21D 8/12 (2006.01) C23C 24/04 (2006.01)**

[25] EN

[54] **A METHOD FOR MANUFACTURING A HIGH SILICON GRAIN-ORIENTED ELECTRICAL STEEL PLATE**

[54] **PROCEDE DE FABRICATION D'UNE TOLE D'ACIER ELECTRIQUE A GRAINS ORIENTES A HAUTE TENEUR EN SILICIUM**

[72] ZHANG, HUABING, CN

[72] CHU, SHUANGJIE, CN

[72] LI, GUOBAO, CN

[72] XIAO, WEN, CN

[72] LIU, BAOJUN, CN

[72] YANG, YONGJIE, CN

[72] SHEN, KANYI, CN

[72] HAN, DAN, CN

[72] HU, ZHINING, CN

[73] BAOSHAN IRON & STEEL CO., LTD., CN

[85] 2020-09-17

[86] 2019-03-25 (PCT/CN2019/079442)

[87] (WO2019/184838)

[30] CN (201810272499.X) 2018-03-29

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[11] **3,095,497**  
[13] C

[51] **Int.Cl. G06T 7/73 (2017.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR COMPLIANCE MONITORING**

[54] **SYSTEME ET METHODE DE SURVEILLANCE DE L'OBSERVATION**

[72] SOKHANDAN ASL, NEGIN, CA

[73] SERVICENOW CANADA INC., CA

[86] (3095497)

[87] (3095497)

[22] 2020-10-06

[30] US (62/968,918) 2020-01-31

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[11] **3,095,604**  
[13] C

[51] **Int.Cl. G01N 11/14 (2006.01) B29B 7/28 (2006.01)**

[25] EN

[54] **MEASURING PROPERTIES OF FLOUR, DOUGH, AND OTHER SOLIDS**

[54] **MESURE DES PROPRIETES D'UNE FARINE, D'UNE PATE ET D'AUTRES SOLIDES**

[72] KAUFFMAN, CHARLES, US

[72] COMBS, ASHLEY, US

[72] ROBINSON, JENNIFER S., US

[72] NELSON, DARREL, US

[72] ALDEN, IVAN ALBERTO, US

[72] DANG, JENNIFER MINH CHAU, US

[73] PERKINELMER HEALTH SCIENCES, INC., US

[85] 2020-09-29

[86] 2019-03-29 (PCT/US2019/024786)

[87] (WO2019/191560)

[30] US (62/650,967) 2018-03-30

[30] US (16/368,017) 2019-03-28

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[11] **3,095,746**  
[13] C

[51] **Int.Cl. G01V 1/28 (2006.01) G01V 1/30 (2006.01)**

[25] EN

[54] **OPTIMIZED METHODOLOGY FOR AUTOMATIC HISTORY MATCHING OF A PETROLEUM RESERVOIR MODEL WITH ENSEMBLE KALMAN FILTER**

[54] **METHODOLOGIE OPTIMISEE POUR MISE EN CORRESPONDANCE D'HISTORIQUE AUTOMATIQUE D'UN MODELE DE RESERVOIR DE PETROLE AVEC FILTRE DE KALMAN D'ENSEMBLE**

[72] ZAGAYEVSKIY, YEVGENIY, US

[72] MAO, HANZI, US

[72] VORA, HARSH BIREN, US

[72] DONG, HUI, US

[72] WONG, TERRY, US

[72] CAMILLERI, DOMINIC, US

[72] WANG, CHARLES HAI, US

[72] BECK, COURTNEY LEEANN, US

[73] LANDMARK GRAPHICS CORPORATION, US

[85] 2020-09-30

[86] 2018-05-09 (PCT/US2018/031794)

[87] (WO2019/216892)

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[11] **3,096,563**  
[13] C

[51] **Int.Cl. A62B 7/10 (2006.01) A62B 9/00 (2006.01) F04D 25/06 (2006.01) H02H 9/00 (2006.01) H02J 7/00 (2006.01)**

[25] EN

[54] **BLOWER FILTER DEVICE FOR POTENTIALLY EXPLOSIVE AREAS AND PROCESS FOR OPERATING A BLOWER FILTER DEVICE**

[54] **SYSTEME FILTRANT A VENTILATION ASSISTEE POUR ZONES A RISQUE D'EXPLOSION ET PROCEDE PERMETTANT DE FAIRE FONCTIONNER UN APPAREIL FILTRANT A VENTILATION ASSISTEE**

[72] VOLMER, ACHIM, DE  
[72] SCHULZE, MARTIN, DE  
[73] DRAGER SAFETY AG & CO. KGAA, DE

[85] 2020-10-08  
[86] 2019-04-09 (PCT/EP2019/058947)  
[87] (WO2019/197400)  
[30] DE (10 2018 002 952.3) 2018-04-11

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[11] **3,096,608**  
[13] C

[51] **Int.Cl. B62D 7/14 (2006.01) B62D 7/16 (2006.01) B62D 7/18 (2006.01)**

[25] EN

[54] **STEERABLE VEHICLE SUSPENSION WITH PNEUMATIC RETRACTORS**

[54] **SUSPENSION DE VEHICULE ORIENTABLE AVEC ECARTEURS PNEUMATIQUES**

[72] GOTTSCHALK, MICHAEL, US  
[73] WATSON & CHALIN MANUFACTURING, INC., US

[85] 2020-10-08  
[86] 2018-04-16 (PCT/US2018/027703)  
[87] (WO2019/203781)

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[11] **3,097,005**  
[13] C

[51] **Int.Cl. C07K 14/00 (2006.01) G01N 21/3577 (2014.01) C07K 1/04 (2006.01) G01N 21/27 (2006.01) G01N 21/35 (2014.01) G01N 21/84 (2006.01)**

[25] EN

[54] **AUTOMATED SYNTHESIS REACTOR SYSTEM WITH A RECIRCULATION LOOP**

[54] **SYSTEME AUTOMATISE DE REACTEUR DE SYNTHESE AVEC UNE BOUCLE DE RECIRCULATION**

[72] LUDEMANN-HOMBOURGER, OLIVIER, FR  
[72] MARTINUZZI, ISABELLE, FR  
[72] BOBIER, CHRISTELLE, SE  
[72] FRANCOMME, ERIC, FR  
[73] POLYPEPTIDE LABORATOIRES FRANCE, FR

[85] 2020-10-13  
[86] 2018-05-04 (PCT/FR2018/051142)  
[87] (WO2019/211531)

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[11] **3,097,170**  
[13] C

[51] **Int.Cl. F16L 55/07 (2006.01)**

[25] EN

[54] **DOUBLE VENTED TRANSITION ELBOW**

[54] **COUDE DE TRANSITION AERE DOUBLE**

[72] TERRY, ANDREW J., US  
[72] MASON, CHRISTOPHER WILLIAM, US  
[72] LYON, LISA, US  
[73] NIBCO INC., US

[86] (3097170)  
[87] (3097170)  
[22] 2020-10-26  
[30] US (16/744.278) 2020-01-16

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[11] **3,097,362**  
[13] C

[51] **Int.Cl. G01N 24/08 (2006.01) G01R 33/44 (2006.01)**

[25] EN

[54] **DETERMINING PERMEABILITY OF POROUS MEDIA BASED ON NUCLEAR MAGNETIC RESONANCE MEASUREMENT**

[54] **DETERMINATION DE LA PERMEABILITE D'UN MILIEU POREUX EN FONCTION D'UNE MESURE DE RESONANCE MAGNETIQUE NUCLEAIRE**

[72] KWAK, HYUNG TAE, SA  
[72] AL-HARBI, AHMAD MUBARAK, SA  
[73] SAUDI ARABIAN OIL COMPANY, SA

[85] 2020-10-15  
[86] 2019-03-29 (PCT/US2019/024753)  
[87] (WO2019/204004)  
[30] US (15/955,061) 2018-04-17

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[11] **3,098,558**  
[13] C

[51] **Int.Cl. H04W 52/38 (2009.01) H04W 16/28 (2009.01) H04W 92/20 (2009.01) H04L 27/26 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR CONTROLLING TRANSMISSION POWER IN WIRELESS COMMUNICATION SYSTEMS**

[54] **SYSTEMES ET METHODES POUR CONTROLER LA PUISSANCE D'EMISSION DANS LES SYSTEMES DE COMMUNICATION SANS FIL**

[72] TAKAHASHI, HIDEAKI, JP  
[72] UMEDA, HIROMASA, JP  
[72] ANDOU, KEI, JP  
[73] NTT DOCOMO, INC., JP

[85] 2020-10-27  
[86] 2018-05-09 (PCT/JP2018/018007)  
[87] (WO2019/215858)

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[11] **3,099,091**  
[13] C

- [51] **Int.Cl. F16J 15/18 (2006.01) F16J 15/16 (2006.01) F16K 41/02 (2006.01)**  
[25] EN  
[54] **PACKING MATERIAL CARTRIDGE**  
[54] **CARTOUCHE DE MATERIAU D'EMBALLAGE**  
[72] MAHONEY, PHILIP MICHAEL, US  
[72] FLAHERTY, ALBERT P., US  
[72] COLE, GREGORY A., US  
[73] A.W. CHESTERTON COMPANY, US  
[85] 2020-09-14  
[86] 2019-03-25 (PCT/US2019/023885)  
[87] (WO2019/183631)  
[30] US (62/647,362) 2018-03-23

[11] **3,099,169**  
[13] C

- [51] **Int.Cl. H04N 23/50 (2023.01) F16M 13/02 (2006.01) G08B 13/196 (2006.01)**  
[25] EN  
[54] **CAMERA WITH LOCKABLE AXES OF ROTATION**  
[54] **CAMERA POSSEDANT DES AXES DE ROTATION VERROUILLABLES**  
[72] CULLINGTON OKRAINETZ, CHRISTOPHER JAMES, CA  
[72] TAYLOR, NIGEL GEOFFREY, CA  
[72] WU, ANDREW LUK PO, CA  
[73] MOTOROLA SOLUTIONS, INC., US  
[86] (3099169)  
[87] (3099169)  
[22] 2020-11-13  
[30] US (16/695931) 2019-11-26

[11] **3,099,918**  
[13] C

- [51] **Int.Cl. B64C 39/06 (2006.01) B64C 27/26 (2006.01) B64C 27/30 (2006.01) B64C 29/02 (2006.01) B64D 27/02 (2006.01)**  
[25] EN  
[54] **DISTRIBUTED PROPULSION**  
[54] **PROPULSION DISTRIBUEE**  
[72] FENNY, CARLOS ALEXANDER, US  
[72] OLSON, ROHN LEE, US  
[72] ZAHASKY, ANDREW JAMES, US  
[73] BELL HELICOPTER TEXTRON INC., US  
[86] (3099918)  
[87] (3099918)  
[22] 2017-05-12  
[62] 2,967,402  
[30] US (62/336,420) 2016-05-13  
[30] US (62/336,290) 2016-05-13

[11] **3,101,463**  
[13] C

- [51] **Int.Cl. B26B 3/04 (2006.01) B26B 3/00 (2006.01) B26B 3/08 (2006.01)**  
[25] EN  
[54] **SAFETY UTILITY KNIFE**  
[54] **COUTEAU A LAME RETRACTABLE DE SECURITE**  
[72] TAKASHIMA, YOSUKE, JP  
[73] OLFA CORPORATION, JP  
[85] 2020-11-24  
[86] 2019-05-30 (PCT/JP2019/021495)  
[87] (WO2019/230876)  
[30] JP (2018-104350) 2018-05-31

[11] **3,101,583**  
[13] C

- [51] **Int.Cl. H02J 50/12 (2016.01) H01F 38/14 (2006.01)**  
[25] EN  
[54] **WIRELESS POWER TRANSMISSION WITH MODULAR OUTPUT**  
[54] **APPAREIL DE TRANSMISSION D'ENERGIE SANS FIL MUNI D'UNE SORTIE MODULAIRE**  
[72] SPRINGETT, NIGEL, DE  
[73] WIFERION GMBH, DE  
[86] (3101583)  
[87] (3101583)  
[22] 2020-12-03  
[30] EP (19216000.0) 2019-12-13

[11] **3,102,441**  
[13] C

- [51] **Int.Cl. A01K 67/027 (2006.01) C07K 16/00 (2006.01) C12N 15/85 (2006.01)**  
[25] EN  
[54] **TRANSGENIC ANIMAL FOR PRODUCING DIVERSIFIED ANTIBODIES THAT HAVE THE SAME LIGHT CHAIN I**  
[54] **ANIMAL TRANSGENIQUE POUR LA PRODUCTION D'ANTICORPS DIVERSIFIES AYANT LA MEME CHAINE LEGERE I**  
[72] LEIGHTON, PHILIP A., US  
[72] HARRIMAN, WILLIAM DON, US  
[72] ETCHES, ROBERT, US  
[73] CRYSTAL BIOSCIENCE INC., US  
[85] 2020-12-02  
[86] 2019-06-05 (PCT/US2019/035526)  
[87] (WO2019/236670)  
[30] US (62/682,651) 2018-06-08  
[30] US (62/684,529) 2018-06-13

[11] **3,102,474**  
[13] C

- [51] **Int.Cl. C07C 269/06 (2006.01) C07C 227/18 (2006.01) C07C 227/20 (2006.01) C07C 229/36 (2006.01) C07C 271/22 (2006.01) C12P 13/04 (2006.01)**  
[25] EN  
[54] **ENZYMATIC PROCESS FOR THE PREPARATION OF DROXIDOPA**  
[54] **PROCEDE ENZYMATIQUE POUR LA PREPARATION DE DROXIDOPA**  
[72] FOGAL, STEFANO, IT  
[72] STABILE, PAOLO, IT  
[72] PADOVAN, PIERLUIGI, IT  
[72] DE POLI, MATTEO, IT  
[72] RESTELLI, ANGELO, IT  
[73] F.I.S. - FABBRICA ITALIANA SINTETICI S.P.A., IT  
[85] 2020-12-03  
[86] 2019-06-07 (PCT/EP2019/064979)  
[87] (WO2019/243087)  
[30] EP (18179043.7) 2018-06-21

[11] **3,102,847**  
[13] C

- [51] **Int.Cl. B62D 63/02 (2006.01) B60K 1/04 (2019.01)**  
[25] EN  
[54] **ELECTRIC VEHICLE**  
[54] **VEHICULE ELECTRIQUE**  
[72] BERGSTROM, MARK P., US  
[72] JOHNSON, BENJAMIN M., US  
[72] HERTZBERG, BRIAN T., US  
[72] RASKE, BRENT D., US  
[72] OWEN, GARY V., US  
[72] HELGESON, DAVID D., US  
[72] JEPSEN, JEFFREY G., US  
[72] JOHNSON, ALYSSA D., US  
[73] WAEV INC., US  
[86] (3102847)  
[87] (3102847)  
[22] 2016-01-20  
[62] 2,973,358  
[30] US (62/106,175) 2015-01-21

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[54] **MODULAR INTRAOCULAR LENS DESIGNS AND METHODS**  
[54] **CONCEPTIONS DE LENTILLES INTRAOCULAIRES MODULAIRES ET PROCEDES S'Y RAPPORTANT**  
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[72] MANDAVA, NARESH, US  
[72] MCLEAN, PAUL, US  
[72] ATKINSON, ROBERT E., US  
[73] THE REGENTS OF THE UNIVERSITY OF COLORADO, A BODY CORPORATE, US  
[73] ALCON INC., CH  
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[54] **NETWORK CONFIGURATION METHOD AND COMMUNICATIONS APPARATUS**  
[54] **PROCEDE DE CONFIGURATION DE RESEAU ET DISPOSITIF DE COMMUNICATION**  
[72] LI, HUAN, CN  
[72] JIN, WEISHENG, CN  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2020-12-08  
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[87] (WO2019/237974)  
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[51] **Int.Cl. H04R 9/02 (2006.01) H04R 9/06 (2006.01)**  
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[54] **BONE CONDUCTION SPEAKER AND TESTING METHOD THEREFOR**  
[54] **HAUT-PARLEUR A CONDUCTION OSSEUSE ET SON PROCEDE DE TEST**  
[72] ZHENG, JINBO, CN  
[72] LIAO, FENGYUN, CN  
[72] ZHANG, LEI, CN  
[72] QI, XIN, CN  
[73] SHENZHEN SHOKZ CO., LTD., CN  
[85] 2020-12-11  
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[87] (WO2019/237726)  
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[51] **Int.Cl. H04W 72/00 (2023.01)**  
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[54] **ACCES AU CANAL PAR MODELE D'ACCES AU CANAL ORGANISE DE MANIERE HIERARCHIQUE**  
[72] OBERNOSTERER, FRANK, DE  
[72] MEYER, RAIMUND, DE  
[72] KILIAN, GERD, DE  
[72] BERNHARD, JOSEF, DE  
[72] WECHSLER, JOHANNES, DE  
[72] KNEISSL, JAKOB, DE  
[72] SCHLICHT, MICHAEL, DE  
[72] ROBERT, JOERG, DE  
[73] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[73] FRIEDRICH-ALEXANDER-UNIVERSITAET ERLANGEN-NUERNBERG, DE  
[85] 2020-12-17  
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[54] **PROCEDES ET COMPOSITIONS DE SEQUENCAGE D'ACIDES NUCLEIQUES**  
[72] KAIN, ROBERT C., US  
[72] LIU, XIAOHAI, GB  
[72] FENG, WENYI, US  
[72] HIRSCHBEIN, BERNARD, US  
[72] ELTOUKHY, HELMY A., US  
[72] WU, XIAOLIN, GB  
[72] SMITH, GEOFFREY PAUL, GB  
[72] BOUTELL, JONATHAN MARK, GB  
[72] JOSEPH, THOMAS, US  
[72] SMITH, RANDALL, US  
[72] SHEN, MIN-JUI RICHARD, US  
[72] TREGIDGO, CAROLYN, GB  
[72] KLAUSING, KAY, US  
[73] ILLUMINA, INC., US  
[86] (3104322)  
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[25] EN  
[54] **MOBILITY VEHICLE**  
[54] **VEHICULE DE MOBILITE**  
[72] DAVIS, JONATHAN, US  
[73] PRIDE MOBILITY PRODUCTS CORPORATION, US  
[85] 2020-12-21  
[86] 2018-07-06 (PCT/US2018/041008)  
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[25] EN  
[54] **VEHICLE STRUCTURE FOR DISPLAY**  
[54] **STRUCTURE DE VEHICULE POUR AFFICHAGE**  
[72] KATO, TOMOYUKI, JP  
[72] YOSHIDA, HIROSHI, JP  
[73] HONDA MOTOR CO., LTD., JP  
[86] (3104709)  
[87] (3104709)  
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[11] **3,104,735**  
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[25] EN  
[54] **HERB GRINDER AND ROLLING PAPER APPARATUS**  
[54] **MOULIN A FINES HERBES ET APPAREIL A ROULER LE PAPIER**  
[72] HEPBURN, ROBERT, CA  
[73] HEPBURN, ROBERT, CA  
[86] (3104735)  
[87] (3104735)  
[22] 2020-12-31  
[30] US (17/138,236) 2020-12-30

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[13] C

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[25] EN  
[54] **STEREOLITHOGRAPHY DEVICE COMPRISING CARTRIDGE UNIT**  
[54] **APPAREIL DE STEREOLITHOGRAPHIE COMPORTANT UN DISPOSITIF DE CARTOUCHE**  
[72] STADLMANN, KLAUS, AT  
[73] STADLMANN, KLAUS, AT  
[86] (3105809)  
[87] (3105809)  
[22] 2016-11-10  
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[30] AT (A 50966/2015) 2015-11-12

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[13] C

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[25] EN  
[54] **COMPOSITION COMPRISING A POLYESTER-POLYETHER POLYMER, A TRANSITION METAL CATALYST, AND AN ACTIVE MATERIAL**  
[54] **COMPOSITION COMPRENANT UN POLYMERE POLYESTER-POLYETHER, UN CATALYSEUR A BASE DE METAL DE TRANSITION ET UN MATERIAU ACTIF**  
[72] ROMEO, BERNARDO, FR  
[72] BOUKOBZA, SARAH, FR  
[73] CLARIANT PLASTICS & COATINGS LTD, CH  
[85] 2021-01-11  
[86] 2019-07-08 (PCT/EP2019/068240)  
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[25] EN  
[54] **SAFETY DEVICE FOR LADDER**  
[54] **DISPOSITIF DE SECURITE POUR ECHELLE**  
[72] PARK, SOON GYU, KR  
[72] HA, SUNG SUK, KR  
[73] IKAMPER CO., LTD., KR  
[85] 2021-01-14  
[86] 2020-12-23 (PCT/KR2020/019010)  
[87] (WO2021/206268)  
[30] KR (10-2020-0041383) 2020-04-06

[11] **3,106,329**  
[13] C

- [51] **Int.Cl. G06F 40/186 (2020.01) G06N 20/00 (2019.01) G06F 40/10 (2020.01)**  
[25] EN  
[54] **AUTOMATED GENERATION OF DOCUMENTS AND LABELS FOR USE WITH MACHINE LEARNING SYSTEMS**  
[54] **GENERATION AUTOMATISEE DE DOCUMENTS ET D'ETIQUETTES A UTILISER AVEC DES SYSTEMES D'APPRENTISSAGE MACHINE**  
[72] TAZI, SAAD, CA  
[72] LAZARUS, PATRICK, CA  
[72] PASQUERO, JEROME, CA  
[73] SERVICENOW CANADA INC., CA  
[85] 2021-01-12  
[86] 2019-07-12 (PCT/CA2019/050961)  
[87] (WO2020/010464)  
[30] US (62/696,969) 2018-07-12

[11] **3,106,645**  
[13] C

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[25] EN  
[54] **AIR FILTER**  
[54] **FILTRE A AIR**  
[72] WILLIAMS, STEVE, US  
[72] WALL, JERE JAMES, US  
[73] K&N ENGINEERING, INC., US  
[86] (3106645)  
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[25] EN

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[54] **OPTIMISATION DE FLUX DE TRAVAIL**

[72] DIAS, JONAS F., BR

[72] CIARLINI, ANGELO, BR

[72] PINHO, ROMULO D., BR

[72] GOTTIN, VINICIUS, BR

[72] MAXIMO, ANDRE, BR

[72] PACHECO, EDWARD, BR

[72] HOLMES, DAVID, GB

[72] RANGARAJAN, KESHAVA, US

[72] SENFTEN, SCOTT DAVID, US

[72] WINSTON, JOSEPH BLAKE, US

[72] WANG, XI, US

[72] WALKER, CLIFTON BRENT, US

[72] DEV, ASHWANI, US

[72] YELESHWARAPU, CHANDRA, US

[72] SRINIVASAN, NAGARAJ, US

[73] EMC IP HOLDING COMPANY LLC, US

[73] LANDMARK GRAPHICS CORPORATION, US

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[86] 2019-08-15 (PCT/US2019/046714)

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[25] EN

[54] **HORIZONTAL FRACTURING TREE**

[54] **ARBRE DE FRACTURATION HORIZONTAL**

[72] GUIDRY, KIRK PAUL, US

[72] RADWANSKI, STEFAN MAREK, US

[73] CAMERON TECHNOLOGIES LIMITED, US

[86] (3106920)

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[25] EN

[54] **STACKABLE COOKWARE SET WITH PAIRED STACKABLE COOKWARE LIDS**

[54] **BATTERIE DE CUISINE EMPILABLE COMPORTANT DES COUVERCLES DE CUISINE EMPILABLES JUMELES**

[72] MISHAN, STEVEN, US

[72] HOLLINGER, FRED, US

[73] E. MISHAN & SONS, INC., US

[86] (3106933)

[87] (3106933)

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[30] US (63/007,081) 2020-04-08

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[25] EN

[54] **FILLING EARTH AT A LOCATION WITHIN A DIG SITE USING AN EXCAVATION VEHICLE**

[54] **REEMPLISSAGE DE TERRE A UN EMLACEMENT AU SEIN D'UN SITE D'EXCAVATION A L'AIDE D'UN VEHICULE D'EXCAVATION**

[72] READY-CAMPBELL, NOAH AUSTEN, US

[72] KIKANI, GAURAV JITENDRA, US

[72] BRUDER, LUCAS, US

[72] LIANG, ANDREW XIAO, US

[72] READY-CAMPBELL, CYRUS, US

[72] SUGANTHAN, PRADEESH, US

[72] EMERICK, JAMES ALAN, US

[73] BUILT ROBOTICS INC., US

[85] 2021-01-19

[86] 2019-07-24 (PCT/US2019/043323)

[87] (WO2020/023683)

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[13] C

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[25] EN

[54] **METHOD AND DEVICE FOR COMMINUTING A PLASTIC AND FOR PRODUCING PULVERULENT MATERIAL FROM THIS PLASTIC**

[54] **PROCEDE ET DISPOSITIF POUR BROYER UNE MATIERE PLASTIQUE ET POUR PRODUIRE DES MATIERES PULVERULENTES A PARTIR DE CETTE MATIERE PLASTIQUE**

[72] OTTEN, DITTMAR, DE

[73] DRESSLER GROUP GMBH & CO. KG, DE

[85] 2021-01-20

[86] 2019-07-16 (PCT/EP2019/069103)

[87] (WO2020/025312)

[30] DE (10 2018 118 913.3) 2018-08-03

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[54] **PRINTED CIRCUIT BOARD**

[54] **CARTE DE CIRCUIT IMPRIME**

[72] FUJIMA, YOSHIKO, JP

[72] ASAI, TOSHIKI, JP

[72] MORIMOTO, YUSUKE, JP

[72] SATO, KOHEI, JP

[72] SASAKI, SHUNSUKE, JP

[73] MITSUBISHI ELECTRIC CORPORATION, JP

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[30] JP (2018-140405) 2018-07-26



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[13] C

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[25] EN  
[54] **SYSTEMS AND METHODS FOR EFFICIENTLY EXCHANGING END EFFECTOR TOOLS**  
[54] **SYSTEMES ET PROCEDES POUR ECHANGER EFFICACEMENT DES OUTILS D'EFFECTEUR D'EXTREMITE**  
[72] WAGNER, THOMAS, US  
[72] AMEND, JR., JOHN RICHARD, US  
[72] FARMER, WILLIAM, US  
[72] GAUTHIER, ANDREW, US  
[72] HINCHEY, VICTORIA, US  
[72] MARONEY, KYLE, US  
[72] MASON, MATTHEW T., US  
[72] MUSGRAVE, RICHARD, US  
[72] NASEEF, SAMUEL, US  
[72] ALLEN, THOMAS, US  
[73] BERKSHIRE GREY OPERATING COMPANY, INC., US  
[85] 2021-01-26  
[86] 2019-07-26 (PCT/US2019/043637)  
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[30] US (62/711,087) 2018-07-27  
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[11] **3,107,989**  
[13] C

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[25] EN  
[54] **POWER CONTROL METHOD AND DEVICE, TERMINAL, AND STORAGE MEDIUM**  
[54] **PROCEDE ET DISPOSITIF DE COMMANDE DE PUISSANCE, TERMINAL ET SUPPORT DE DONNEES**  
[72] ZHANG, YI, CN  
[72] HOU, XUEYING, CN  
[72] XIA, LIANG, CN  
[72] HU, LIJIE, CN  
[73] CHINA MOBILE COMMUNICATION CO., LTD RESEARCH INSTITUTE, CN  
[73] CHINA MOBILE COMMUNICATIONS GROUP CO., LTD., CN  
[85] 2021-01-28  
[86] 2019-07-30 (PCT/CN2019/098471)  
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[30] CN (201810854475.5) 2018-07-30

[11] **3,108,178**  
[13] C

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[25] EN  
[54] **CONNECTION AND FEATURES FOR INTERCHANGEABLE NOSECONE FOR A TROLLING MOTOR**  
[54] **CONNEXION ET FONCTIONNALITES DE COIFFE INTERCHANGEABLE DESTINEE A UN PROPULSEUR ELECTRIQUE**  
[72] BURTON, AARON J., US  
[72] LASTER, MATTHEW, US  
[72] CLARK, JEREMIAH, US  
[72] CRAWFORD, CHRISTOPHER DEAN, US  
[72] BAILEY, PAUL ROBERT, NZ  
[73] NAVICO HOLDING AS, NO  
[86] (3108178)  
[87] (3108178)  
[22] 2018-03-28  
[62] 2,999,528  
[30] US (62/477773) 2017-03-28  
[30] US (62/492472) 2017-05-01  
[30] US (15/834464) 2017-12-07

[11] **3,108,391**  
[13] C

- [51] **Int.Cl. A42B 3/22 (2006.01) A42B 3/10 (2006.01) A42B 3/28 (2006.01) A61F 9/06 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR HEAD PROTECTION PROVIDING AIR FLOW**  
[54] **APPAREIL DE PROTECTION DE TETE FOURNISSANT UN FLUX D'AIR**  
[72] HUH, MOON YOUNG, US  
[72] MUSKE, MITCHELL JAMES, US  
[72] SCHNEIDER, JOSEPH C., US  
[73] ILLINOIS TOOL WORKS INC., US  
[85] 2021-02-01  
[86] 2019-08-30 (PCT/US2019/049141)  
[87] (WO2020/047461)  
[30] US (62/726,148) 2018-08-31

[11] **3,109,142**  
[13] C

- [51] **Int.Cl. B08B 9/00 (2006.01) A61L 2/18 (2006.01) B08B 9/46 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR DECONTAMINATING EQUIPMENT HAVING INTERNAL CHANNELS (LUMENS)**  
[54] **APPAREIL POUR DECONTAMINER UN EQUIPEMENT AYANT DES CANAUX INTERNES (LUMIERES)**  
[72] CHOUINARD, ALAIN, CA  
[72] MARTINEAU, LOUIS, CA  
[72] VERREAU, NICOLAS, CA  
[72] ROBERT, MAXIME, CA  
[73] STERIS INC., US  
[86] (3109142)  
[87] (3109142)  
[22] 2017-07-20  
[62] 3,020,747  
[30] US (62/365,615) 2016-07-22  
[30] US (15/652,313) 2017-07-18

[11] **3,109,510**  
[13] C

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[25] EN  
[54] **TALAR BONE PLATE PLAQUE POUR ASTRAGALE**  
[72] SANDER, ELIZABETH J., US  
[72] DHILLON, BRAHAM K., US  
[72] ARMACOST, SCOTT A., US  
[73] WRIGHT MEDICAL TECHNOLOGY, INC., US  
[85] 2021-02-11  
[86] 2019-06-19 (PCT/US2019/037914)  
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[30] US (16/138,056) 2018-09-21

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[13] C

[51] **Int.Cl. G01V 5/10 (2006.01)**  
[25] EN  
[54] **NEUTRON THROUGH-PIPE MEASUREMENT, DEVICE, SYSTEM AND USE THEREOF**  
[54] **MESURE NEUTRONIQUE DANS UNE CONDUITE, DISPOSITIF, SYSTEME ET UTILISATION ASSOCIES**  
[72] KRAMER, HERMANN, CA  
[73] ROKE TECHNOLOGIES LTD., CA  
[86] (3109639)  
[87] (3109639)  
[22] 2014-02-18  
[62] 2,901,489  
[30] US (61/766,825) 2013-02-20  
[30] US (61/766,823) 2013-02-20  
[30] US (61/766,826) 2013-02-20

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[13] C

[51] **Int.Cl. A61F 13/511 (2006.01) D04H 3/07 (2012.01) D04H 3/14 (2012.01)**  
[25] EN  
[54] **SHAPED NONWOVEN**  
[54] **NON-TISSE MIS EN FORME**  
[72] ASHRAF, ARMAN, US  
[72] WEISMAN, PAUL THOMAS, US  
[73] THE PROCTER & GAMBLE COMPANY, US  
[86] (3109830)  
[87] (3109830)  
[22] 2016-12-08  
[62] 3,006,969  
[30] US (62/268,759) 2015-12-17

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[13] C

[51] **Int.Cl. F41H 7/00 (2006.01) E06B 5/00 (2006.01)**  
[25] EN  
[54] **BLAST-RESISTANT ESCAPE WINDOW**  
[54] **FENETRE D'EVACUATION RESISTANTE AUX EXPLOSIONS**  
[72] RASICO, JAMES G., US  
[72] GREEN, JOHN A., US  
[72] BEGGS, ANTHONY S., US  
[72] CAMEVALE, LOUIS A., US  
[72] WOLVERTON, GORDON J., US  
[72] NEWMAN, CRAIG A., US  
[72] GERST, DAVID M., US  
[72] NORMAN, DALE S., US  
[72] FSADNI, JEFFREY M., US  
[73] NAVISTAR DEFENSE, LLC, US  
[86] (3110370)  
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[22] 2021-02-25  
[30] US (16/845,874) 2020-04-10

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[13] C

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[25] EN  
[54] **SETTER PLATES AND MANUFACTURING METHODS FOR CERAMIC-ANODE SOLID OXIDE FUEL CELLS**  
[54] **PLAQUES D'ENFOURNEMENT ET PROCEDES DE FABRICATION POUR PILES A COMBUSTIBLE A OXYDE SOLIDE A ANODE CERAMIQUE**  
[72] PAN, KEJI, US  
[72] BISHOP, SEAN R., US  
[72] LANGDO, THOMAS, US  
[72] BLACKBURN, BRYAN M., US  
[73] REDOX POWER SYSTEMS, LLC, US  
[85] 2021-02-22  
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[25] EN  
[54] **SEAL RING FOR FOIL-SEALING A CONTAINER**  
[54] **BAGUE D'ETANCHEITE POUR FERMETURE PAR OPERCULE D'UN RECIPIENT**  
[72] GRANT, EDWARD A., US  
[73] OWENS-BROCKWAY GLASS CONTAINER INC., US  
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[87] (3111065)  
[22] 2014-05-02  
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[25] EN  
[54] **BOUNDING BOX DOUBLING AS REDACTION BOUNDARY**  
[54] **DOUBLAGE DE RECTANGLE ENGLOBANT COMME LIMITE DE REDACTION**  
[72] CHAU, ALEXANDER, CA  
[72] LEMAY, CHRISTIAN, CA  
[73] MOTOROLA SOLUTIONS, INC., US  
[85] 2021-03-02  
[86] 2019-08-26 (PCT/CA2019/051168)  
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[54] **TARGETED SURFACE  
DISINFECTION SYSTEM WITH  
PULSED UV LIGHT**  
[54] **SYSTEME DE DESINFECTION DE  
SURFACE CIBLEE A LUMIERE  
UV PULSEE**  
[72] RAMANAND, PRAKASH  
VALENTINO, CA  
[72] DHILLON, MANJINDER SINGH, CA  
[72] STEINHOFF, ADAM RAY, CA  
[72] MENON, VINOD K., US  
[73] ANGELICA HOLDINGS LLC, US  
[86] (3111940)  
[87] (3111940)  
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[25] EN  
[54] **SYSTEM AND METHOD FOR  
AUTOMATICALLY  
CONTROLLING WORK  
MACHINE INCLUDING WORK  
IMPLEMENT**  
[54] **SYSTEME ET PROCEDE DE  
COMMANDE AUTOMATIQUE DE  
MACHINE DE TRAVAIL  
COMPRENANT UN ENGIN DE  
CHANTIER**  
[72] TAKAOKA, YUKIHISA, JP  
[73] KOMATSU LTD., JP  
[85] 2021-03-05  
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[25] EN  
[54] **BIOCATALYTICAL PROCESS  
FOR THE PREPARATION OF  
ISOXAZOLYL-METHOXY-  
NICOTINIC ACIDS**  
[54] **PROCEDE BIOCATALYTIQUE  
POUR LA PREPARATION  
D'ACIDES ISOXAZOLYL-  
METHOXY-NICOTINIQUES**  
[72] DOTT, PASCAL, FR  
[72] HANLON, STEVEN PAUL, CH  
[72] HILDBRAND, STEFAN, CH  
[72] IDING, HANS, CH  
[72] THOMAS, ANDREW, CH  
[72] WALDMEIER, PIUS, CH  
[73] F. HOFFMANN-LA ROCHE AG, CH  
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[22] 2012-10-17  
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[25] FR  
[54] **METHOD FOR CONTROLLING A  
HYBRID HELICOPTER WHEN A  
POWERPLANT FAILURE  
OCCURS**  
[54] **PROCEDE DE COMMANDE D'UN  
HELICOPTERE HYBRIDE LORS  
D'UNE PANNE D'UNE  
INSTALLATION MOTRICE**  
[72] HUOT, REMY, FR  
[72] EGLIN, PAUL, FR  
[72] CONROY, ANTOINE, FR  
[73] AIRBUS HELICOPTERS, FR  
[86] (3112147)  
[87] (3112147)  
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(2006.01)**  
[25] EN  
[54] **MULTI-PHASE VFD SYSTEM  
WITH FREQUENCY  
COMPENSATED GROUND FAULT  
PROTECTION**  
[54] **SYSTEME VARIATEUR DE  
FREQUENCE (VFD) MULTIPHASE  
AVEC PROTECTION CONTRE  
LES DEFAUTS A LA TERRE DE  
FREQUENCE COMPENSEE**  
[72] LEE, TOM LIK-CHUNG, US  
[73] NEILSEN-KULJIAN, INC., US  
[86] (3112609)  
[87] (3112609)  
[22] 2021-03-18  
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[51] **Int.Cl. B64C 1/14 (2006.01)**  
[25] EN  
[54] **ACCESS DOOR FOR POSSIBLE  
USE WITH A HELICOPTER FUEL  
TANK**  
[54] **PORTE D'ACCES POUR  
UTILISATION POSSIBLE AVEC  
UN RESERVOIR DE CARBURANT  
D'HELICOPTERE**  
[72] SANNADI, AMINE, FR  
[72] PICCO, NICOLAS, FR  
[73] SAFRAN AEROSYSTEMS, FR  
[86] (3112649)  
[87] (3112649)  
[22] 2014-01-14  
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[25] EN  
[54] **ACCESS DOOR FOR POSSIBLE USE WITH A HELICOPTER FUEL TANK**  
[54] **PORTE D'ACCES POUR UTILISATION POSSIBLE AVEC UN RESERVOIR DE CARBURANT D'HELICOPTERE**  
[72] PICCO, NICOLAS, FR  
[72] SANNADI, AMINE, FR  
[73] SAFRAN AEROSYSTEMS, FR  
[86] (3112664)  
[87] (3112664)  
[22] 2014-01-14  
[62] 2,896,717  
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[25] EN  
[54] **LEAN ZONE PRESSURIZATION AND MANAGEMENT FOR UNDERLYING HYDROCARBON RECOVERY OPERATIONS**  
[54] **PRESSURISATION EN ZONE PAUVRE ET GESTION DES OPERATIONS DE RECUPERATION D'HYDROCARBURE SOUS-JACENT**  
[72] AGHABARATI, HOSSEIN, CA  
[73] SUNCOR ENERGY INC., CA  
[86] (3113483)  
[87] (3113483)  
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[25] EN  
[54] **BOWL AND METHOD OF FORMING A BOWL**  
[54] **CUVETTE ET PROCEDE DE FORMATION ASSOCIE**  
[72] ELLISON, KYLE, US  
[72] BULLOCK, DUSTIN, US  
[72] DARLING, COLIN, US  
[73] YETI COOLERS, LLC, US  
[85] 2021-03-19  
[86] 2019-09-26 (PCT/US2019/053252)  
[87] (WO2020/069189)  
[30] US (16/146,692) 2018-09-28

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[51] **Int.Cl. B22F 9/10 (2006.01)**  
[25] EN  
[54] **ROTARY DISC STRUCTURE SPECIAL FOR DROP-BY-DROP CENTRIFUGAL ATOMIZATION METHOD**  
[54] **STRUCTURE DE DISQUE ROTATIF SPECIALEMENT CONCUE POUR UN PROCEDE D'ATOMISATION CENTRIFUGE PAR GOUTTE-A-GOUTTE**  
[72] WANG, XIAOMING, CN  
[72] ZHAO, YANG, CN  
[72] REN, ZHIQIANG, CN  
[72] WANG, WENYU, CN  
[72] CHANG, QING, CN  
[72] HAN, GUOFENG, CN  
[72] ZHU, SHENG, CN  
[72] SHI, JING, CN  
[72] TENG, TAO, CN  
[72] SUN, YU, CN  
[72] QIN, ZHIYONG, CN  
[72] DONG, WEI, CN  
[72] MENG, YAO, CN  
[72] XU, FUMIN, CN  
[72] BAI, ZHAOFENG, CN  
[72] WANG, YANYANG, CN  
[72] HAN, YANG, CN  
[72] LI, GUOBIN, CN  
[73] DALIAN UNIVERSITY OF TECHNOLOGY, CN  
[73] WANG, XIAOMING, CN  
[73] ZHAO, YANG, CN  
[73] REN, ZHIQIANG, CN  
[73] WANG, WENYU, CN  
[73] CHANG, QING, CN  
[73] HAN, GUOFENG, CN  
[73] ZHU, SHENG, CN  
[73] SHI, JING, CN  
[73] TENG, TAO, CN  
[73] SUN, YU, CN  
[73] QIN, ZHIYONG, CN  
[85] 2021-03-22  
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[25] EN

[54] **MICROBIAL PRODUCTION OF FATTY AMINES**

[54] **PRODUCTION MICROBIENNE D'AMINES GRASSES**

[72] DEL CARDAYRE, STEPHEN B., US

[72] HOM, LOUIS G., US

[73] GENOMATICA, INC., US

[86] (3114049)

[87] (3114049)

[22] 2014-12-05

[62] 2,932,017

[30] US (61/912,184) 2013-12-05

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[51] **Int.Cl. A61L 31/04 (2006.01) A61F 2/86 (2013.01) A61F 5/08 (2006.01) A61L 31/14 (2006.01) A61L 31/16 (2006.01) A61M 31/00 (2006.01)**

[25] EN

[54] **SELF-EXPANDING DEVICES AND METHODS THEREFOR**

[54] **DISPOSITIFS AUTO-EXPANSIBLES ET PROCEDES LES CONCERNANT**

[72] EATON, DONALD J., US

[72] ABBATE, ANTHONY J., US

[72] HUANG, BIN, US

[72] ZALER, GAIL MEREDITH, US

[72] GALE, DAVID C., US

[72] KAUFMAN, RICHARD ERIC, US

[73] INTERSECT ENT, INC., US

[86] (3114493)

[87] (3114493)

[22] 2008-12-12

[62] 2,709,901

[30] US (61/014,653) 2007-12-18

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[13] C

[51] **Int.Cl. F16L 15/04 (2006.01) E21B 17/042 (2006.01) F16L 15/06 (2006.01)**

[25] EN

[54] **THREADED CONNECTION FOR STEEL PIPE**

[54] **RACCORD FILETE POUR TUYAU EN ACIER**

[72] OKU, YOUSUKE, JP

[72] DOUCHI, SADA0, JP

[73] NIPPON STEEL CORPORATION, JP

[73] VALLOUREC OIL AND GAS FRANCE, FR

[85] 2021-04-01

[86] 2019-07-24 (PCT/JP2019/028959)

[87] (WO2020/075366)

[30] JP (2018-192230) 2018-10-11

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[13] C

[51] **Int.Cl. H04L 69/22 (2022.01) H04W 80/00 (2009.01) H04L 45/74 (2022.01) H04L 69/06 (2022.01)**

[25] EN

[54] **INFORMATION INTERACTION MECHANISM AND NETWORK TRANSMISSION METHOD IN MULTIMEDIA SYSTEM**

[54] **MECANISME D'INTERACTION D'INFORMATIONS ET PROCEDE DE TRANSMISSION DE RESEAU DANS UN SYSTEME MULTIMEDIA**

[72] CHEN, HAO, CN

[72] LIU, NING, CN

[72] SUN, JUN, CN

[72] WANG, YANFENG, CN

[72] XU, YILING, CN

[72] ZHANG, WENJUN, CN

[72] ZHUANG, NING, CN

[73] SHANGHAI JIAO TONG UNIVERSITY, CN

[86] (3115314)

[87] (3115314)

[22] 2017-01-25

[62] 3,013,516

[30] CN (201610074442.X) 2016-02-02

[30] CN (201610074851.X) 2016-02-02

[30] CN (201610107748.0) 2016-02-26

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[13] C

[51] **Int.Cl. G06T 7/90 (2017.01)**

[25] EN

[54] **METHOD, APPARATUS AND SYSTEM FOR PRESENTING SPRAYING OPERATION**

[54] **PROCEDE, APPAREIL ET SYSTEME DE PRESENTATION DE FONCTIONNEMENT DE PULVERISATION**

[72] LI, JIXIANG, CN

[73] GUANGZHOU XAIRCRAFT TECHNOLOGY CO., LTD., CN

[85] 2021-04-07

[86] 2019-10-10 (PCT/CN2019/110465)

[87] (WO2020/078260)

[30] CN (201811217275.5) 2018-10-18

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[13] C

[51] **Int.Cl. H01L 21/02 (2006.01) H01L 21/768 (2006.01)**

[25] EN

[54] **PRECLEAN AND DIELECTRIC DEPOSITION METHODOLOGY FOR SUPERCONDUCTOR INTERCONNECT FABRICATION**

[54] **METHODOLOGIE DE PRE-NETTOYAGE ET DE DEPOT DIELECTRIQUE POUR LA FABRICATION D'INTERCONNEXION DE SUPRACONDUCTEUR**

[72] WAGNER, BRIAN PAUL, US

[72] KIRBY, CHRISTOPHER F., US

[72] RENNIE, MICHAEL, US

[72] KELLIHER, JAMES T., US

[72] LIM, KHYHOUTH, US

[73] NORTHROP GRUMMAN SYSTEMS CORPORATION, US

[85] 2021-04-07

[86] 2019-10-03 (PCT/US2019/054551)

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[13] C

[51] **Int.Cl. B60G 3/20 (2006.01) B60F 5/00 (2006.01) B60G 3/26 (2006.01) B60G 7/04 (2006.01)**

[25] EN

[54] **SUSPENSION DEVICE AND ALL-TERRAIN VEHICLE**

[54] **APPAREIL DE SUSPENSION ET VEHICULE TOUT-TERRAIN**

[72] LI, XIANG, CN

[72] CHEN, MINGTANG, CN

[73] SEGWAY TECHNOLOGY CO., LTD., CN

[86] (3116239)

[87] (3116239)

[22] 2021-04-27

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[13] C

[51] **Int.Cl. A61M 16/06 (2006.01) A61M 16/10 (2006.01)**

[25] EN

[54] **AN INTERFACE AND A METHOD OF SUPPLYING BREATHING GAS**

[54] **UNE INTERFACE ET UNE METHODE D'APPROVISIONNEMENT EN GAZ RESPIRATOIRE**

[72] TATKOV, STANISLAV, NZ

[73] FISHER & PAYKEL HEALTHCARE LIMITED, NZ

[86] (3117178)

[87] (3117178)

[22] 2010-12-22

[62] 3,062,474

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[13] C

[51] **Int.Cl. F16J 9/20 (2006.01) F02F 3/00 (2006.01) F02F 3/22 (2006.01) F16J 1/09 (2006.01)**

[25] EN

[54] **PISTON AND CYLINDER OF AN INTERNAL COMBUSTION ENGINE**

[54] **PISTON ET CYLINDRE D'UN MOTEUR A COMBUSTION INTERNE**

[72] SHAER, TALAT, DE

[72] WALDENMAIER, ULF, DE

[73] MAN ENERGY SOLUTIONS SE, DE

[85] 2021-04-28

[86] 2019-09-19 (PCT/EP2019/075169)

[87] (WO2020/099001)

[30] DE (10 2018 128 564.7) 2018-11-14

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[13] C

[51] **Int.Cl. A22C 21/00 (2006.01) A22C 15/00 (2006.01) B65G 47/36 (2006.01)**

[25] EN

[54] **A METHOD FOR HANGING POULTRY OR PARTS THEREOF ON AN OVERHEAD CONVEYOR, A SYSTEM AND AN APPARATUS**

[54] **METHODE POUR SUSPENDRE DE LA VOLAILLE OU DES PARTIES DE VOLAILLE SUR UN CONVOYEUR SUSPENDU, SYSTEME ET APPAREIL**

[72] VAN STEIJN, ALOYSIUS CHRISTIANUS, NL

[73] MEYN FOOD PROCESSING TECHNOLOGY B.V., NL

[86] (3116360)

[87] (3116360)

[22] 2021-04-23

[30] NL (2025670) 2020-05-26

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[13] C

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[25] EN

[54] **METHOD FOR ENCODING/DECODING IMAGE SIGNAL, AND DEVICE FOR SAME**

[54] **PROCEDE POUR LE CODAGE/DECODAGE D'UN SIGNAL D'IMAGE, ET DISPOSITIF ASSOCIE**

[72] LEE, BAE KEUN, KR

[73] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN

[85] 2021-04-22

[86] 2019-11-08 (PCT/KR2019/015198)

[87] (WO2020/096426)

[30] KR (10-2018-0136262) 2018-11-08

[30] KR (10-2018-0167979) 2018-12-21

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[13] C

[51] **Int.Cl. B32B 1/08 (2006.01) B29C 45/00 (2006.01)**

[25] EN

[54] **EROSION-RESISTANT INSERTS FOR FLOW EQUIPMENT**

[54] **PIECES RAPPORTEES RESISTANTES A L'EROSION POUR UN EQUIPEMENT DE CIRCULATION**

[72] FINK, DANIEL R., US

[72] KEIHANY, JULIAN, US

[73] FMC TECHNOLOGIES, INC., US

[86] (3119138)

[87] (3119138)

[22] 2021-05-19

[30] US (16/881,923) 2020-05-22

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[13] C

[51] **Int.Cl. B65D 77/06 (2006.01) B65D 47/24 (2006.01) B67B 7/00 (2006.01)**

[25] EN

[54] **BAG SIDE CONNECTOR FOR A BIB PACKAGE**

[54] **CONNECTEUR LATERAL DE SAC POUR UN EMBALLAGE DE BAVOIR**

[72] DARBY, IAN, GB

[73] LB EUROPE LIMITED, GB

[85] 2021-05-10

[86] 2019-12-05 (PCT/IB2019/060480)

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[30] GB (1819979.4) 2018-12-07

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[25] EN  
[54] **COMPLIANT MECHANISM FOR OPERATING FLIGHT CONTROL SURFACES OF A REMOTELY PILOTED AIRCRAFT**  
[54] **MECANISME CONFORME POUR EXPLOITER DES GOUVERNES DE VOL D'UN AERONEF PILOTE A DISTANCE**  
[72] PANDA, AAYUSH, CA  
[73] PANDA, AAYUSH, CA  
[86] (3119717)  
[87] (3119717)  
[22] 2021-05-27

[11] **3,119,945**

[13] C

- [51] **Int.Cl. A23N 15/08 (2006.01) A23N 7/02 (2006.01) A47J 17/02 (2006.01) A47J 17/14 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR SIMPLIFYING REMOVAL OF ONION SKIN**  
[54] **APPAREIL POUR SIMPLIFIER LE RETRAIT DE LA PEAU D'UN OIGNON**  
[72] SPENCER, PHILIP A., CN  
[73] SPENCER, PHILIP A., CN  
[85] 2021-05-13  
[86] 2020-03-24 (PCT/IB2020/052730)  
[87] (WO2020/194174)  
[30] HK (19121511.0) 2019-03-26

[11] **3,120,764**

[13] C

- [51] **Int.Cl. F42C 19/12 (2006.01) F42C 15/40 (2006.01) F42D 1/04 (2006.01)**  
[25] EN  
[54] **CONTROL CIRCUIT FOR A DETONATOR**  
[54] **CIRCUIT DE COMMANDE POUR UN DETONATEUR**  
[72] KRUGER, MICHIEL JACOBUS, ZA  
[72] MAURISSENS, DANIEL AUGUSTE, ZA  
[72] LABUSCHAGNE, ALBERTUS ABRAHAM, ZA  
[72] KOEKEMOER, ANDRE LOUIS, ZA  
[73] DETNET SOUTH AFRICA (PTY) LTD, ZA  
[85] 2021-05-20  
[86] 2020-01-27 (PCT/ZA2020/050011)  
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[30] ZA (2019/00559) 2019-01-28

[11] **3,121,033**

[13] C

- [51] **Int.Cl. A23L 33/115 (2016.01) A23L 33/12 (2016.01) A23L 33/135 (2016.01) A23L 33/17 (2016.01) A61K 9/00 (2006.01) A61K 9/10 (2006.01) A61K 9/107 (2006.01) A61K 9/127 (2006.01) A61K 31/201 (2006.01) A61K 31/202 (2006.01) A61P 1/00 (2006.01) A61P 3/00 (2006.01) A61P 9/00 (2006.01) A61P 11/00 (2006.01) A61P 17/00 (2006.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01) C12N 9/02 (2006.01)**  
[25] EN  
[54] **PREPARATION COMPRISING A PROBIOTIC STRAIN OF THE GENUS BACILLUS MEGATERIUM AND A POLYUNSATURATED FATTY ACID COMPONENT**  
[54] **PREPARATION COMPRENANT UNE SOUCHE PROBIOTIQUE DU GENRE BACILLUS MEGATERIUM ET UN COMPOSANT D'ACIDE GRAS POLYINSATURE**  
[72] SPECKMANN, BODO, DE  
[72] OCHROMBEL, INES, DE  
[72] SCHILLING, MARTIN, DE  
[72] GOMEZ, MARIO, DE  
[72] SCHWARM, MICHAEL, DE  
[72] PELZER, STEFAN, DE  
[72] KLEINBOLTING, JESSICA, DE  
[72] BERNGRUBER, THOMAS, DE  
[73] EVONIK OPERATIONS GMBH, DE  
[85] 2021-05-26  
[86] 2019-11-28 (PCT/EP2019/082924)  
[87] (WO2020/109474)  
[30] EP (18209509.1) 2018-11-30

[11] **3,121,127**

[13] C

- [51] **Int.Cl. B01L 7/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR ACTIVE WARMING OF A CARTRIDGE**  
[54] **SYSTEMES ET PROCEDES DE CHAUFFAGE ACTIF D'UNE CARTOUCHE**  
[72] NORTON, KIRKPATRICK W., US  
[73] ILLUMINA, INC., US  
[85] 2021-05-27  
[86] 2019-11-22 (PCT/US2019/062814)  
[87] (WO2020/112550)  
[30] US (62/773,737) 2018-11-30

[11] **3,122,433**

[13] C

- [51] **Int.Cl. B65D 19/18 (2006.01) B65D 19/04 (2006.01) C08J 5/12 (2006.01) C09K 3/10 (2006.01)**  
[25] EN  
[54] **LOAD BEARING STRUCTURE**  
[54] **STRUCTURE PORTEUSE**  
[72] IMBRECHT, RICK, US  
[72] LIN, CHI KONG, US  
[73] LESWEEK PTY LTD, AU  
[86] (3122433)  
[87] (3122433)  
[22] 2015-06-24  
[62] 2,977,225  
[30] US (62/017,079) 2014-06-25

[11] **3,122,744**

[13] C

- [51] **Int.Cl. G06F 40/10 (2020.01) G06F 40/40 (2020.01)**  
[25] EN  
[54] **METHODS, DEVICES AND SYSTEMS FOR DATA AUGMENTATION TO IMPROVE FRAUD DETECTION**  
[54] **METHODES, DISPOSITIFS ET SYSTEMES POUR PROCEDER A L'ENRICHISSEMENT DES DONNEES AFIN D'AMELIORER LA DETECTION DE LA FRAUDE**  
[72] GOUTAL, SEBASTIEN, US  
[72] MEYER, MAXIME MARC, CA  
[73] VADE USA, INCORPORATED, US  
[86] (3122744)  
[87] (3122744)  
[22] 2018-10-29  
[62] 3,022,443  
[30] US (16/013,581) 2018-06-20

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[13] C

[51] **Int.Cl. C01B 17/16 (2006.01) C01B 32/50 (2017.01) B01D 53/14 (2006.01) B01D 53/52 (2006.01) B01D 53/62 (2006.01) B01D 53/78 (2006.01) B01D 53/96 (2006.01) C07C 43/11 (2006.01) C07C 43/13 (2006.01) C07C 215/08 (2006.01)**

[25] EN

[54] **COMPOSITE AMINE ABSORBENT, AND DEVICE AND METHOD FOR REMOVING CO2 OR H2S, OR BOTH OF CO2 AND H2S**

[54] **SOLUTION D'ABSORPTION COMPOSITE A BASE D'AMINES ET DISPOSITIF ET PROCEDE POUR L'ELIMINATION DE CO2 OU D'H2S OU DES DEUX**

[72] TANAKA, HIROSHI, JP  
[72] HIRATA, TAKUYA, JP  
[72] TSUJIUCHI, TATSUYA, JP  
[72] KAMIJO, TAKASHI, JP  
[72] NOBORISATO, TOMOKI, JP  
[73] MITSUBISHI HEAVY INDUSTRIES ENGINEERING, LTD., JP  
[73] THE KANSAI ELECTRIC POWER CO., INC., JP

[85] 2021-07-20  
[86] 2019-12-04 (PCT/JP2019/047448)  
[87] (WO2020/153005)  
[30] JP (2019-010194) 2019-01-24

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[11] **3,128,704**  
[13] C

[51] **Int.Cl. F42B 12/02 (2006.01) F42B 5/045 (2006.01) F42B 8/04 (2006.01) F42B 12/34 (2006.01) F42B 14/06 (2006.01)**

[25] EN

[54] **ENHANCED POLYMER MARKING PROJECTILE FOR NONLETHAL CARTRIDGE**

[54] **PROJECTILE DE MARQUAGE POLYMERE AMELIORE POUR CARTOUCHE NON LETALE**

[72] LAFORTUNE, ERIC, CA  
[73] GENERAL DYNAMICS ORDNANCE AND TACTICAL SYSTEMS - CANADA, INC., CA

[85] 2021-08-30  
[86] 2020-02-25 (PCT/CA2020/050240)  
[87] (WO2020/176970)  
[30] US (62/813,357) 2019-03-04

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[11] **3,128,898**  
[13] C

[51] **Int.Cl. B01D 46/52 (2006.01) F24F 13/28 (2006.01)**

[25] EN

[54] **DUST COLLECTOR**

[54] **COLLECTEUR DE POUSSIERE**

[72] BRISEBOIS, MARTIN, CA  
[72] HOULE, DENIS, CA  
[72] SIROIS, MICHEL, CA  
[73] AIREAU QUALITE CONTROLE INC., CA

[86] (3128898)  
[87] (3128898)  
[22] 2015-10-22  
[62] 2,965,245  
[30] US (62/067,067) 2014-10-22

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[11] **3,129,184**  
[13] C

[51] **Int.Cl. C25B 15/08 (2006.01) H01M 8/04746 (2016.01) H01M 8/04791 (2016.01) C25B 1/00 (2021.01) H01M 8/02 (2016.01) H01M 8/04 (2016.01) H01M 8/06 (2016.01) H01M 8/18 (2006.01)**

[25] EN

[54] **ELECTROLYTE MANUFACTURING DEVICE AND METHOD FOR MANUFACTURING ELECTROLYTE**

[54] **DISPOSITIF DE FABRICATION D'ELECTROLYTE ET PROCEDE DE FABRICATION D'ELECTROLYTE**

[72] MATSUMURA, YUKIO, JP  
[73] LE SYSTEM CO., LTD., JP

[85] 2021-08-05  
[86] 2020-01-31 (PCT/JP2020/003807)  
[87] (WO2020/162375)  
[30] JP (2019-018747) 2019-02-05

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[11] **3,129,220**  
[13] C

[51] **Int.Cl. B65D 5/42 (2006.01) B65D 5/20 (2006.01) B65D 5/22 (2006.01) B65D 5/44 (2006.01) B65D 5/66 (2006.01)**

[25] EN

[54] **REINFORCED POLYGONAL CONTAINERS AND BLANKS FOR MAKING THE SAME**

[54] **CONTENANTS POLYGONAUX RENFORCES ET FLANS POUR LES FABRIQUER**

[72] ARMSTRONG, MAUREEN ANN, US  
[72] SMITH, KENNETH, US  
[73] WESTROCK SHARED SERVICES, LLC, US

[86] (3129220)  
[87] (3129220)  
[22] 2014-05-09  
[62] 2,912,053  
[30] US (61/822,094) 2013-05-10  
[30] US (14/062,711) 2013-10-24  
[30] US (14/274,322) 2014-05-09

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[11] **3,129,511**  
[13] C

[51] **Int.Cl. F16H 37/02 (2006.01) F16D 7/00 (2006.01) F16H 61/662 (2006.01) F16H 61/664 (2006.01)**

[25] EN

[54] **DRIVETRAIN LAYOUT WITH CVT**

[54] **AGENCEMENT DE CHAINE CINEMATIQUE AVEC TRANSMISSION A VARIATION CONTINUE**

[72] YOUNGGREN, BRUCE H., US  
[72] DUNLAP, JOEL, US  
[72] MAKI, GREGORY LEE, US  
[72] FISK, JORDAN E., US  
[72] YUDELL, ALEXANDER C., US  
[73] TEAM INDUSTRIES, INC., US

[85] 2021-08-06  
[86] 2020-02-20 (PCT/US2020/019068)  
[87] (WO2020/172428)  
[30] US (62/808,272) 2019-02-20



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[11] **3,129,631**  
[13] C

[51] **Int.Cl. A61B 8/00 (2006.01) A61B 8/08 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR DETERMINING MOTION OF AN ULTRASOUND PROBE INCLUDING A FORWARD-BACKWARD DIRECTEDNESS**

[54] **APPAREIL ET PROCÉDE POUR DÉTERMINER LE MOUVEMENT D'UNE SONDE ULTRASONORE INCLUANT UNE DIRECTIONNALITE VERS L'AVANT ET VERS L'ARRIERE**

[72] BAUER, ROBERT, DE

[72] BENDER, FREDERIK, AT

[73] PIUR IMAGING GMBH, AT

[85] 2021-08-09

[86] 2020-03-06 (PCT/EP2020/056106)

[87] (WO2020/178445)

[30] EP (19161053.4) 2019-03-06

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[11] **3,130,271**  
[13] C

[51] **Int.Cl. G01S 7/40 (2006.01) G01S 13/00 (2006.01) G01S 13/89 (2006.01) G01S 13/90 (2006.01)**

[25] EN

[54] **RADAR IMAGING BY FUSING MEASUREMENTS OF A SET OF ANTENNAS**

[54] **IMAGERIE RADAR PAR FUSION DE MESURES D'UN ENSEMBLE D'ANTENNES**

[72] MANSOUR, HASSAN, US

[72] BOUFONOS, PETROS T., US

[72] LODHI, MUHAMMAD ASAD, US

[73] MITSUBISHI ELECTRIC CORPORATION, JP

[85] 2021-08-13

[86] 2019-10-08 (PCT/JP2019/040354)

[87] (WO2020/179117)

[30] US (16/295,102) 2019-03-07

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[11] **3,131,683**  
[13] C

[51] **Int.Cl. B60L 1/00 (2006.01) B60K 17/28 (2006.01) B65F 3/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR ELECTRONIC POWER TAKE-OFF CONTROLS**

[54] **SYSTEME ET METHODE DE COMMANDE ELECTRONIQUE DE PRISE DE FORCE**

[72] KOGA, JEFFREY, US

[72] DAVIS, EMILY, US

[72] KAPPERS, JERROD, US

[72] SCHAD, VINCE, US

[72] MESSINA, ROBERT S., US

[72] YAKES, CHRISTOPHER K., US

[72] HOOVER, VINCENT, US

[72] WECKWERTH, CLINTON T., US

[72] KLEIN, ZACHARY L., US

[72] BECK, JOHN, US

[72] CHAN, BRENDAN, US

[72] WACHTER, SKYLAR A., US

[72] NASR, NADER, US

[72] SMITH, CHAD K., US

[72] GARY, LOGAN, US

[72] WENTE, DEREK A., US

[72] NAGLIK, SHAWN, US

[72] BOLTON, MIKE J., US

[72] WALLIN, JACOB, US

[72] WITTMAN, QUINCY, US

[72] RUKAS, CHRISTOPHER J., US

[72] HESS, DYLAN, US

[72] RICE, JASON, US

[72] WEI, ZHENYI, US

[72] AMIN, BASHAR, US

[72] LINSMEIER, CATHERINE, US

[72] ROCHOLL, JOSHUA D., US

[73] OSHKOSH CORPORATION, US

[86] (3131683)

[87] (3131683)

[22] 2021-09-22

[30] US (63/084,415) 2020-09-28

[30] US (17/327,336) 2021-05-21

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[13] C

[51] **Int.Cl. C23F 11/08 (2006.01) B01D 53/62 (2006.01) C23F 11/16 (2006.01)**

[25] EN

[54] **CORROSION CONTROL FOR SUPERCRITICAL CARBON DIOXIDE FLUIDS**

[54] **CONTROLE DE LA CORROSION POUR DIOXYDES DE CARBONE SUPERCRITIQUES**

[72] JACKSON, TRACEY, US

[72] RAMACHANDRAN, SUNDER, US

[72] LIU, ZHENGWEI, US

[72] STEWART-AYALA, JONATHAN, US

[73] BAKER HUGHES OILFIELD OPERATIONS LLC, US

[85] 2021-09-01

[86] 2020-03-06 (PCT/US2020/021412)

[87] (WO2020/185569)

[30] US (62/815,641) 2019-03-08

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[11] **3,133,399**  
[13] C

[51] **Int.Cl. B23K 35/36 (2006.01) B23K 9/00 (2006.01) B23K 9/02 (2006.01) B23K 9/167 (2006.01) B23K 9/23 (2006.01) B23K 9/235 (2006.01) B23K 26/00 (2014.01) B23K 35/365 (2006.01) C23C 28/00 (2006.01)**

[25] EN

[54] **A METHOD FOR THE MANUFACTURE OF AN ASSEMBLY BY TUNGSTEN INERT GAS (TIG) WELDING**

[54] **PROCÉDE DE FABRICATION D'UN ASSEMBLAGE PAR SOUDAGE AU TUNGSTENE EN ATMOSPHERE INERTE (TIG)**

[72] MANJON FERNANDEZ, ALVARO, ES

[72] PEREZ RODRIGUEZ, MARCOS, ES

[72] NORIEGA PEREZ, DAVID, ES

[72] BLANCO ROLDAN, CRISTINA, ES

[72] SUAREZ SANCHEZ, ROBERTO, ES

[72] BOHM, SIVASAMBU, GB

[73] ARCELORMITTAL, LU

[85] 2021-09-13

[86] 2020-04-16 (PCT/IB2020/053582)

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[30] IB (PCT/IB2019/053172) 2019-04-17

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[13] C

[51] **Int.Cl. A23K 20/158 (2016.01) A23K 10/30 (2016.01) A23K 20/10 (2016.01) A23K 40/00 (2016.01) A61K 9/107 (2006.01) A61K 31/05 (2006.01) A61K 31/11 (2006.01) A61K 36/53 (2006.01) A61K 36/54 (2006.01) A61K 47/36 (2006.01) A23L 29/10 (2016.01)**

[25] EN  
[54] **ESSENTIAL OIL COMPOSITIONS AND APPLICATIONS UTILIZING ESSENTIAL OILS**

[54] **COMPOSITIONS D'HUILES ESSENTIELLES ET APPLICATIONS UTILISANT DES HUILES ESSENTIELLES**

[72] LAMB, RICHARD DALE, US  
[73] RALCO NUTRITION, INC., US  
[86] (3133602)  
[87] (3133602)  
[22] 2016-05-19  
[62] 2,986,449  
[30] US (62/163,625) 2015-05-19

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[11] **3,134,200**  
[13] C

[51] **Int.Cl. C04B 28/02 (2006.01) C04B 16/04 (2006.01) C04B 18/22 (2006.01) C04B 20/10 (2006.01) C04B 24/00 (2006.01) C04B 40/00 (2006.01)**

[25] EN  
[54] **PRODUCING CEMENTITIOUS MATERIALS WITH IMPROVED HYDROPHOBICITY AND STRENGTH USING RECLAIMED WASTE SUBSTANCES**

[54] **PRODUCTION DE LIANTS HYDRAULIQUES A HYDROPHOBIE ET RESISTANCE AMELIOREES AU MOYEN DE DECHETS RECYCLES**

[72] LEE, MAW-TIEN, TW  
[72] SHEN, ZIH-YAO, TW  
[72] CHEN, CHI-YAO, TW  
[72] LEE, FU-MING, US  
[72] LEE, JOHN, TW  
[73] SHIN CHUANG TECHNOLOGY CO., LTD., CN  
[85] 2021-09-17  
[86] 2020-06-12 (PCT/US2020/037583)  
[87] (WO2021/003012)  
[30] US (16/458,771) 2019-07-01

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[11] **3,134,321**  
[13] C

[51] **Int.Cl. F21V 5/00 (2018.01)**

[25] EN  
[54] **LENS COVER HAVING LENS ELEMENT**

[54] **CABOCHON COMPORTANT UN ELEMENT DE LENTILLE**

[72] HUO, YONGFENG, CN  
[72] CAI, DENGKE, US  
[73] HGCI, INC., US  
[85] 2021-09-27  
[86] 2020-11-30 (PCT/CN2020/132703)  
[87] (WO2022/110120)

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[11] **3,134,431**  
[13] C

[51] **Int.Cl. G01N 35/00 (2006.01) B01L 7/00 (2006.01) C12M 1/00 (2006.01) C12M 1/38 (2006.01) C12Q 1/68 (2018.01) G01N 33/48 (2006.01)**

[25] EN  
[54] **BIOLOGICAL SAMPLE ANALYZER WITH COLD CONSUMABLE DETECTION**

[54] **ANALYSEUR D'ECHANTILLON BIOLOGIQUE AVEC DETECTION DE CONSOMMABLES FROIDS**

[72] ZANTOS, GEORGE, US  
[72] YEUNG, GEORGE, US  
[73] SIEMENS HEALTHCARE DIAGNOSTICS INC., US  
[85] 2021-09-20  
[86] 2020-03-16 (PCT/US2020/022909)  
[87] (WO2020/197812)  
[30] US (62/822,371) 2019-03-22

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[13] C

[51] **Int.Cl. G03G 21/16 (2006.01) G03G 15/01 (2006.01) G03G 15/08 (2006.01)**

[25] EN  
[54] **DEVELOPING CARTRIDGE**

[54] **CARTOUCHE DE DEVELOPPEMENT**

[72] HASHIMOTO, JUNICHI, JP  
[72] WANG, YUWEN, JP  
[73] BROTHER KOGYO KABUSHIKI KAISHA, JP  
[85] 2021-09-24  
[86] 2020-02-13 (PCT/JP2020/005475)  
[87] (WO2020/195293)  
[30] JP (2019-063303) 2019-03-28

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[11] **3,134,924**  
[13] C

[51] **Int.Cl. B62D 33/04 (2006.01) B60P 7/02 (2006.01)**

[25] EN  
[54] **LATCH ASSEMBLIES AND RAIL ATTACHMENT FOR A PICKUP TRUCK TONNEAU COVER**

[54] **ENSEMBLES DE VERROUILLAGE ET FIXATION DE RAIL POUR COUVRE-CAISSE DE CAMIONNETTE**

[72] ROSSI, STEVEN, CA  
[72] LOUDON, JONATHAN, CA  
[72] RICHARDSON, JULIAN, CA  
[73] WORKSPORT LTD., CA  
[85] 2021-09-24  
[86] 2020-03-25 (PCT/US2020/024737)  
[87] (WO2020/198375)  
[30] US (62/823,316) 2019-03-25

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[11] **3,135,015**  
[13] C

[51] **Int.Cl. C22C 38/04 (2006.01) C21D 8/02 (2006.01) C22C 38/02 (2006.01)**

[25] EN  
[54] **STEEL SHEET HAVING EXCELLENT TOUGHNESS, DUCTILITY AND STRENGTH, AND MANUFACTURING METHOD THEREOF**

[54] **TOLE D'ACIER PRESENTANT UNE TENACITE, UNE DUCTILITE ET UNE RESISTANCE EXCELLENTE, ET SON PROCEDE DE FABRICATION**

[72] JUNG, CORALIE, FR  
[72] PERLADE, ASTRID, FR  
[72] ZHU, KANGYING, FR  
[72] KEGEL, FREDERIC, FR  
[73] ARCELORMITTAL, LU  
[86] (3135015)  
[87] (3135015)  
[22] 2018-12-18  
[62] 3,085,539  
[30] IB (PCT/IB2017/058129) 2017-12-19

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[13] C

[51] **Int.Cl. G03G 21/18 (2006.01) G03G 15/08 (2006.01)**  
[25] EN  
[54] **DEVELOPING CARTRIDGE**  
[54] **CARTOUCHE DE DEVELOPPEMENT**  
[72] OOKA, KAZUAKI, JP  
[73] BROTHER KOGYO KABUSHIKI KAISHA, JP  
[85] 2021-09-27  
[86] 2020-02-13 (PCT/JP2020/005458)  
[87] (WO2020/195288)  
[30] JP (2019-063302) 2019-03-28

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[11] **3,138,963**  
[13] C

[51] **Int.Cl. E06B 9/32 (2006.01) E06B 9/56 (2006.01)**  
[25] EN  
[54] **BLIND LIFTING DEVICE AND A BLIND LIFTING CONTROL MODULE THEREOF**  
[54] **DISPOSITIF DE LEVAGE DE STORE ET MODULE DE COMMANDE DE LEVAGE DE STORE CONNEXE**  
[72] LEE, CHENG-HUNG, TW  
[72] CHIANG, LUNG-YI, TW  
[73] SYNCPROTO CO., LTD., TW  
[86] (3138963)  
[87] (3138963)  
[22] 2021-11-12  
[30] TW (110103296) 2021-01-28

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[11] **3,139,628**  
[13] C

[51] **Int.Cl. A61C 17/20 (2006.01)**  
[25] EN  
[54] **ACOUSTIC WAVE TYPE ELECTRIC CLEANING CARE APPLICANCE AND PRESSURE ALARM DEVICE FOR SAME**  
[54] **OUTIL ELECTRIQUE DE NETTOYAGE ET DE SOINS A ONDES ACOUSTIQUES ET DISPOSITIF D'ALERTE DE PRESSION POUR UN TEL OUTIL**  
[72] DAI, XIAOGUO, CN  
[72] XU, ZHENWU, CN  
[73] SHANGHAI SHIFT ELECTRICS CO., LTD., CN  
[85] 2021-11-25  
[86] 2020-04-08 (PCT/CN2020/083634)  
[87] (WO2020/238421)  
[30] CN (201910457281.6) 2019-05-29

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[11] **3,139,960**  
[13] C

[51] **Int.Cl. G06N 10/40 (2022.01)**  
[25] EN  
[54] **ZZZ COUPLER FOR SUPERCONDUCTING QUBITS**  
[54] **COUPLEUR ZZZ POUR BITS QUANTIQUES SUPRACONDUCTEURS**  
[72] FERGUSON, DAVID GEORGE, US  
[72] PRZYBYSZ, ANTHONY JOSEPH, US  
[72] STRAND, JOEL D., US  
[73] NORTHROP GRUMMAN SYSTEMS CORPORATION, US  
[86] (3139960)  
[87] (3139960)  
[22] 2018-01-31  
[62] 3,054,163  
[30] US (15/455,466) 2017-03-10

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[11] **3,140,634**  
[13] C

[51] **Int.Cl. F02D 19/06 (2006.01) F02D 41/00 (2006.01) F02D 41/24 (2006.01) F02D 41/26 (2006.01) F02D 41/28 (2006.01) F02D 41/30 (2006.01)**  
[25] EN  
[54] **ADAPTIVE FUEL CONTROL MODULE**  
[54] **MODULE DE COMMANDE DE CARBURANT ADAPTATIF**  
[72] TRUAX, RYAN, US  
[73] ADVANCED FUEL DYNAMICS, INC., US  
[86] (3140634)  
[87] (3140634)  
[22] 2021-11-29  
[30] US (17/122,194) 2020-12-15

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[11] **3,141,781**  
[13] C

[51] **Int.Cl. H04N 21/80 (2011.01) G06T 5/00 (2006.01) G06T 5/50 (2006.01) G06T 7/11 (2017.01)**  
[25] EN  
[54] **RECONSTRUCTION OF OBSCURED VIEWS OF CAPTURED IMAGERY USING ARBITRARY CAPTURED INPUTS**  
[54] **RECONSTRUCTION DE VUES MASQUEES D'IMAGERIE CAPTUREE A L'AIDE D'ENTREES CAPTUREES ARBITRAIRES**  
[72] THURSTON III, KIMBALL D., NZ  
[72] HILLMAN, PETER M., NZ  
[73] UNITY TECHNOLOGIES SF, US  
[85] 2021-11-24  
[86] 2020-09-30 (PCT/NZ2020/050112)  
[87] (WO2021/173003)  
[30] US (62/983,528) 2020-02-28  
[30] US (17/018,933) 2020-09-11

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[11] **3,143,180**  
[13] C

[51] **Int.Cl. E21B 47/00 (2012.01) E21B 47/107 (2012.01) G01S 15/89 (2006.01) G06N 3/02 (2006.01)**  
[25] EN  
[54] **MACHINE LEARNING MODEL FOR IDENTIFYING SURFACES IN A TUBULAR**  
[54] **MODELE D'APPRENTISSAGE AUTOMATIQUE POUR LA DETERMINATION DE SURFACES DANS UN TUBULAIRE**  
[72] MAHMOUD, ANAS, CA  
[72] KHALLAGI, SIAVASH, CA  
[73] DARKVISION TECHNOLOGIES INC, CA  
[86] (3143180)  
[87] (3143180)  
[22] 2021-12-20  
[30] GB (2100058.3) 2021-01-04

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[11] **3,143,326**  
[13] C

[51] **Int.Cl. C23F 17/00 (2006.01) C23G 1/00 (2006.01) C25D 11/16 (2006.01) C25D 11/24 (2006.01) C25F 3/20 (2006.01)**

[25] EN

[54] **NANO-POROUS ANODIC ALUMINUM OXIDE MEMBRANE FOR HEALTHCARE AND BIOTECHNOLOGY**

[54] **MEMBRANE D'OXYDE D'ALUMINIUM ANODIQUE NANO-POREUSE DE SOINS DE SANTE ET DE BIOTECHNOLOGIE**

[72] BLANCO, MARIO, US

[73] NANOPEC, INC., US

[85] 2021-12-13

[86] 2020-06-15 (PCT/US2020/037684)

[87] (WO2020/257092)

[30] US (16/442,608) 2019-06-17

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[11] **3,143,928**  
[13] C

[51] **Int.Cl. G06T 7/00 (2017.01) G06T 3/40 (2006.01)**

[25] EN

[54] **DYNAMIC IMAGE RESOLUTION ASSESSMENT**

[54] **EVALUATION DYNAMIQUE DE LA RESOLUTION D'UNE IMAGE**

[72] SU, WEI, US

[72] LIU, XIN, US

[73] HUAWEI TECHNOLOGIES CO., LTD, CN

[85] 2021-12-16

[86] 2019-06-18 (PCT/US2019/037638)

[87] (WO2020/256698)

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[11] **3,145,455**  
[13] C

[51] **Int.Cl. B25J 9/00 (2006.01)**

[25] FR

[54] **COMPACT DEVICE DESIGNED TO BE POSITIONED CLOSE TO A JOINT AND GENERAL SYSTEM COMPRISING SUCH A COMPACT DEVICE**

[54] **DISPOSITIF COMPACT DESTINE A ETRE POSITIONNE A PROXIMITE D'UNE ARTICULATION ET SYSTEME GENERAL COMPORTANT UN TEL DISPOSITIF COMPACT**

[72] GRENIER, JORDANE, FR

[72] LAROSE, PASCAL, CA

[73] SAFRAN ELECTRONICS & DEFENSE, FR

[85] 2021-12-29

[86] 2020-07-02 (PCT/EP2020/068717)

[87] (WO2021/001497)

[30] FR (FR1907331) 2019-07-02

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[11] **3,147,648**  
[13] C

[51] **Int.Cl. G16Z 99/00 (2019.01) G06K 7/14 (2006.01) G06T 17/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR VISUALLY MANAGING COMPUTING DEVICES IN A DATA CENTER**

[54] **SYSTEME ET PROCEDE DE GESTION VISUELLE DE DISPOSITIFS INFORMATIQUES DANS UN CENTRE DE DONNEES**

[72] BALAKRISHNAN, GANESH, US

[72] FULLER, THOMAS, US

[72] PONNEGANTI, CHANDRA, US

[72] MINEHAN, KRISTY-LEIGH, US

[73] CORE SCIENTIFIC, INC., US

[85] 2022-01-14

[86] 2020-07-22 (PCT/US2020/043086)

[87] (WO2021/016359)

[30] US (62/877,737) 2019-07-23

[30] US (16/707,870) 2019-12-09

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[11] **3,150,137**  
[13] C

[51] **Int.Cl. F25D 11/02 (2006.01)**

[25] EN

[54] **FREEZING SYSTEM FOR ELECTRONIC MOBILE DEVICE REPAIR**

[54] **SYSTEME DE CONGELATION DE REPARATION DE DISPOSITIFS MOBILES ELECTRONIQUES**

[72] HAJIPETROU, GEORGIOS

CHRISTODOULOY, ZA

[72] CLAUSSEN, HANS, DE

[72] KALYVAS, CHARALAMPOS, GR

[73] MOBILE ADVANCED TECHNOLOGIES, LLC, US

[85] 2022-03-03

[86] 2020-09-04 (PCT/US2020/049573)

[87] (WO2021/046474)

[30] US (62/897,183) 2019-09-06

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[11] **3,150,152**  
[13] C

[51] **Int.Cl. B29D 7/01 (2006.01) C08L 27/18 (2006.01)**

[25] EN

[54] **PREPARATION METHOD OF PTFE-BASED MEMBRANE FOR PREVENTING AND REMOVING ICES COVERING WIND TURBINE BLADES AND USE THEREOF**

[54] **PROCEDE DE PREPARATION D'UN FILM A BASE DE PTFE POUR LA PREVENTION ET L'ELIMINATION DE GLACE RECOUVRANT DES PALES DE VENTILATEUR ET SON UTILISATION**

[72] XIANG, XIN, CN

[72] LIU, JIANPING, CN

[72] WU, JIANHUA, CN

[72] SUN, ZHIYU, CN

[72] ZHU, YAWEI, CN

[72] LI, WENWEI, CN

[72] ZHAO, FANGLIANG, CN

[72] WU, HONG, CN

[72] ZHAO, JINGXIN, CN

[72] PANG, BO, CN

[72] WU, JIANPING, CN

[73] CHINA THREE GORGES CORPORATION, CN

[73] CHINA THREE GORGES RENEWABLES(GROUP)CO., LTD., CN

[73] NANJING HAOHUI HI TECH CO., LTD., CN

[85] 2022-03-03

[86] 2020-12-15 (PCT/CN2020/136608)

[87] (WO2022/011962)

[30] CN (202011221352.1) 2020-11-05

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[11] **3,153,295**

[13] C

- [51] **Int.Cl. G01N 1/08 (2006.01) B64G 1/66 (2006.01) G02B 27/18 (2006.01)**  
[25] EN  
[54] **SAMPLING METHOD AND SAMPLING SYSTEM**  
[54] **PROCEDE**  
**D'ECHANTILLONNAGE ET SYSTEME**  
**D'ECHANTILLONNAGE**  
[72] SAKAMOTO, FUMINOBU, JP  
[72] KUROSE, TOYOTOSHI, JP  
[73] KAWASAKI JUKOGYO KABUSHIKI KAISHA, JP  
[86] (3153295)  
[87] (3153295)  
[22] 2019-05-08  
[62] 3,097,102  
[30] US (62/668,989) 2018-05-09

[11] **3,153,755**

[13] C

- [51] **Int.Cl. G01R 19/25 (2006.01)**  
[25] EN  
[54] **AC/DC LEAKAGE DETECTION METHOD**  
[54] **PROCEDE DE DETECTION DE FUITE DE COURANT ALTERNATIF/COURANT CONTINU**  
[72] LIU, ZHEN, CN  
[72] WANG, JIANHUA, CN  
[73] QINGDAO TOPSCOMM COMMUNICATION CO., LTD, CN  
[85] 2022-04-05  
[86] 2020-09-30 (PCT/CN2020/119337)  
[87] (WO2021/068836)  
[30] CN (201910954739.9) 2019-10-09

[11] **3,155,636**

[13] C

- [51] **Int.Cl. G06F 3/0484 (2022.01)**  
[25] EN  
[54] **DYNAMIC TYPESETTING**  
[54] **COMPOSITION DYNAMIQUE**  
[72] KELLUM, SCOTT, US  
[72] FITZNER, ANA MONROE, US  
[73] KELLUM, SCOTT, US  
[73] FITZNER, ANA MONROE, US  
[85] 2022-03-23  
[86] 2020-09-04 (PCT/US2020/049516)  
[87] (WO2021/061378)  
[30] US (16/579,822) 2019-09-23  
[30] US (16/990,389) 2020-08-11

[11] **3,157,373**

[13] C

- [51] **Int.Cl. A61F 7/00 (2006.01) A61B 50/00 (2016.01) A61M 5/44 (2006.01)**  
[25] EN  
[54] **STERILE SOLUTION WARMING SYSTEM WITH SELF-LOCATING STERILE DRAPE**  
[54] **SYSTEME DE CHAUFFAGE DE SOLUTION STERILE AVEC CHAMP OPERATOIRE STERILE A AUTO-LOCALISATION**  
[72] RACKERS, KEVIN JOSEPH, US  
[72] WANBAUGH, THOMAS J., US  
[72] GROZIER, PAUL, US  
[73] WEG SURGICAL SOLUTIONS, LLC, US  
[85] 2022-04-07  
[86] 2019-11-15 (PCT/US2019/061842)  
[87] (WO2020/102747)  
[30] US (62/768,721) 2018-11-16  
[30] US (16/240,387) 2019-01-04

[11] **3,157,546**

[13] C

- [51] **Int.Cl. A61M 25/02 (2006.01) A61F 2/95 (2013.01) A61M 25/04 (2006.01)**  
[25] EN  
[54] **DEVICE FOR STABILIZING CATHETERS AND METHOD OF USE THEREOF**  
[54] **DISPOSITIF POUR STABILISER DES CATHETERS ET METHODE D'UTILISATION**  
[72] SKARSGARD, PETER LLOYD, CA  
[72] GOMES, JOASH, CA  
[73] VESALIUS CARDIOVASCULAR INC., CA  
[85] 2022-04-27  
[86] 2021-12-13 (PCT/CA2021/051790)  
[87] (3157546)  
[30] US (63/127,471) 2020-12-18

[11] **3,158,886**

[13] C

- [51] **Int.Cl. H05B 3/00 (2006.01) F03D 80/40 (2016.01) B64D 15/12 (2006.01) B64D 15/20 (2006.01) F25C 5/08 (2006.01) F25D 21/02 (2006.01) F25D 21/08 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR DETECTING AND REMOVING ICE FROM A SURFACE**  
[54] **SYSTEME ET METHODE POUR DETECTER ET ELIMINER LA GLACE D'UNE SURFACE**  
[72] SAAD, SAMEH M. I., CA  
[72] CHAVES, LUCIANO F., CA  
[72] AHMED, KAZI KASED L., CA  
[73] BETTERFROST TECHNOLOGIES INC., CA  
[86] (3158886)  
[87] (3158886)  
[22] 2022-05-16  
[30] US (63/189,306) 2021-05-17

[11] **3,159,738**

[13] C

- [51] **Int.Cl. G06Q 10/0631 (2023.01)**  
[25] EN  
[54] **TECHNIQUES FOR ESTIMATING EXPECTED PERFORMANCE IN A TASK ASSIGNMENT SYSTEM**  
[54] **TECHNIQUES D'ESTIMATION DU RENDEMENT ATTENDU DANS UN SYSTEME D'ATTRIBUTION DE TACHES**  
[72] CHISHTI, ZIA, US  
[72] KAN, ITTAI, US  
[72] KHATRI, VIKASH, US  
[73] AFINITI, LTD., BM  
[86] (3159738)  
[87] (3159738)  
[22] 2018-04-05  
[62] 3,024,670  
[30] US (15/645,277) 2017-07-10  
[30] US (15/648,788) 2017-07-13

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[11] **3,162,035**  
[13] C

[51] **Int.Cl. H01L 31/048 (2014.01) H02S 30/20 (2014.01)**  
[25] FR  
[54] **PHOTOVOLTAIC MODULE AND FLEXIBLE SATELLITE SOLAR GENERATOR**  
[54] **MODULE PHOTOVOLTAIQUE ET GENERATEUR SOLAIRE FLEXIBLE DE SATELLITE**  
[72] MHIBIK, OUMAIMA, FR  
[72] VERGNET, DOMINIQUE, FR  
[73] AIRBUS DEFENCE AND SPACE SAS, FR  
[85] 2022-06-15  
[86] 2020-12-10 (PCT/FR2020/052373)  
[87] (WO2021/123575)  
[30] FR (FR1914823) 2019-12-19

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[11] **3,162,101**  
[13] C

[51] **Int.Cl. F16K 17/04 (2006.01) F16K 7/17 (2006.01) G05D 16/06 (2006.01)**  
[25] EN  
[54] **FLOW LIMITER FOR REGULATORS**  
[54] **LIMITEUR DE DEBIT POUR REGULATEURS**  
[72] HART, JUSTIN WADE, US  
[72] WEYER, THOMAS LEROY, US  
[73] EMERSON PROCESS MANAGEMENT REGULATOR TECHNOLOGIES, INC., US  
[85] 2022-05-18  
[86] 2020-11-24 (PCT/US2020/061986)  
[87] (WO2021/108391)  
[30] US (16/696,096) 2019-11-26

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[11] **3,163,080**  
[13] C

[51] **Int.Cl. F24F 1/0328 (2019.01) F24F 1/029 (2019.01) F24F 8/10 (2021.01) F24F 8/22 (2021.01) A61G 10/00 (2006.01) A61L 9/20 (2006.01) A61L 9/22 (2006.01) B01D 46/02 (2006.01)**  
[25] EN  
[54] **BREATHING TREATMENT EQUIPMENT**  
[54] **EQUIPEMENT DE TRAITEMENT RESPIRATOIRE**  
[72] LLANA GARCIA, PEDRO LUIS, ES  
[73] BIOWAIR TOTAL SYSTEMS, S.L., ES  
[85] 2022-05-26  
[86] 2020-11-27 (PCT/ES2020/070744)  
[87] (WO2021/105543)  
[30] EP (19383056.9) 2019-11-28

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[11] **3,163,795**  
[13] C

[51] **Int.Cl. A61K 36/07 (2006.01) A23L 31/00 (2016.01) A61K 31/4045 (2006.01) A61K 31/675 (2006.01) B01D 11/02 (2006.01) C07D 209/16 (2006.01) C07F 9/572 (2006.01) C12P 17/00 (2006.01)**  
[25] EN  
[54] **METHANOL-BASED EXTRACTION OF PSYCHOACTIVE ALKALOIDS FROM FUNGUS**  
[54] **EXTRACTION AU METHANOL D'ALCALOIDES PSYCHOACTIFS DANS LES CHAMPIGNONS**  
[72] LIGHTBURN, BENJAMIN, CA  
[72] MOSS, RYAN, CA  
[72] RANKEN, LISA, CA  
[73] PSILO SCIENTIFIC LTD., CA  
[85] 2022-06-03

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[86] 2021-06-16 (PCT/CA2021/050823)  
[87] (WO2021/253124)  
[30] US (63/040,317) 2020-06-17  
[30] US (63/046,089) 2020-06-30  
[30] CA (3088384) 2020-07-29  
[30] CA (3089455) 2020-08-07

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[11] **3,172,054**  
[13] C

[51] **Int.Cl. F41G 1/35 (2006.01) F21L 4/02 (2006.01) F21S 9/02 (2006.01) F21V 15/01 (2006.01)**  
[25] EN  
[54] **MOUNTABLE LIGHT HAVING INTERCHANGEABLE CLAMPING ELEMENTS**  
[54] **DISPOSITIF D'ECLAIRAGE MONTABLE AYANT DES ELEMENTS DE SERRAGE INTERCHANGEABLES**  
[72] SHARRAH, RAYMOND L., US  
[72] WORMAN, WILLIAM D., US  
[73] STREAMLIGHT, INC., US  
[85] 2022-09-16  
[86] 2021-08-05 (PCT/US2021/044700)  
[87] (WO2022/031944)  
[30] US (63/062,638) 2020-08-07  
[30] US (17/394,101) 2021-08-04

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[11] **3,176,678**  
[13] C

[51] **Int.Cl. G06V 40/10 (2022.01) G06T 7/73 (2017.01) G06V 40/20 (2022.01) G08B 21/02 (2006.01)**  
[25] EN  
[54] **ANOMALOUS POSE DETECTION METHOD AND SYSTEM**  
[54] **PROCEDE ET SYSTEME DE DETECTION DE POSES ANORMALES**  
[72] KEDARISETTI, DHARANISH, US  
[72] DANKEL, TERESA, US  
[72] HENSON, PATRICK, US  
[72] SARRAFI, ARAL, US  
[73] MOTOROLA SOLUTIONS, INC, US  
[85] 2022-10-24  
[86] 2021-04-26 (PCT/US2021/029092)  
[87] (WO2021/225814)  
[30] US (16/868,219) 2020-05-06

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[11] **3,178,598**  
[13] C

[51] **Int.Cl. B60K 6/445 (2007.10) B60K 6/36 (2007.10) B60K 6/365 (2007.10) B60K 6/387 (2007.10) B60K 6/547 (2007.10)**  
[25] EN  
[54] **ELECTROMECHANICAL POWER-SPLIT SYSTEM WITH A TWO-OUTPUT PLANETARY GEARSET**  
[54] **SYSTEME DE DIVISION DE PUISSANCE ELECTROMECHANIQUE ET PROCEDE DE FONCTIONNEMENT DE CE DERNIER**  
[72] LUKAS, JAN, CZ  
[72] POSPISIL, JAKUB, CZ  
[72] LUKES, MIROSLAV, CZ  
[72] NEMEC, PETR, CZ  
[72] KRATKY, MARTIN, CZ  
[73] WINNING STEEL S.R.O., CZ  
[85] 2022-11-10  
[86] 2021-03-10 (PCT/CZ2021/050028)  
[87] (WO2021/239167)  
[30] CZ (PV 2020-306) 2020-05-28

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[13] C

[51] **Int.Cl. E21B 34/08 (2006.01)**  
[25] EN  
[54] **DOWNHOLE ISOLATION VALVES  
WITH PRESSURE RELIEF**  
[54] **CLAPETS D'ISOLATION DE FOND  
DE TROU AVEC LIMITEUR DE  
PRESSION**  
[72] NOSKE, JOE, US  
[73] WEATHERFORD TECHNOLOGY  
HOLDINGS, LLC, US  
[85] 2022-11-11  
[86] 2021-05-11 (PCT/US2021/031678)  
[87] (WO2021/231352)  
[30] US (15/931,436) 2020-05-13

[11] **3,178,786**

[13] C

[51] **Int.Cl. G06F 3/023 (2006.01) G06F  
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[25] EN  
[54] **MODULAR KVM SWITCHING  
SYSTEM**  
[54] **SYSTEME KVM MODULAIRE**  
[72] SOFFER, AVIV, IL  
[73] HIGH SEC LABS LTD., IL  
[85] 2022-11-14  
[86] 2021-05-09 (PCT/IL2021/050525)  
[87] (WO2021/245644)  
[30] IL (275024) 2020-05-31

[11] **3,179,243**

[13] C

[51] **Int.Cl. F15C 1/18 (2006.01) F15D 1/00  
(2006.01) F15D 1/02 (2006.01)**  
[25] EN  
[54] **FLUID FLOW ENHANCING  
DEVICE AND CULVERT  
COMPRISING SAME**  
[54] **DISPOSITIF D'AMELIORATION  
DE L'ECOULEMENT DE FLUIDE  
ET PONCEAU EQUIPE DE CELUI-  
CI**  
[72] SCHMIDT, PAUL WAYNE, US  
[72] GHOSH, AVIJIT, US  
[73] VORTEX PIPE SYSTEMS LLC, US  
[85] 2022-11-17  
[86] 2021-05-07 (PCT/US2021/031249)  
[87] (WO2021/236357)  
[30] US (16/878,252) 2020-05-19  
[30] US (17/073,713) 2020-10-19

[11] **3,186,411**

[13] C

[51] **Int.Cl. E02D 29/02 (2006.01) E04C  
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[25] EN  
[54] **MASONRY BLOCK**  
[54] **BLOC DE MACONNERIE**  
[72] STELL, JASON, US  
[73] SHORELOC DESIGN GROUP, INC.,  
US  
[85] 2023-01-17  
[86] 2021-08-25 (PCT/US2021/047439)  
[87] (WO2022/076096)  
[30] US (17/066,656) 2020-10-09

[11] **3,188,889**

[13] C

[51] **Int.Cl. B03B 9/04 (2006.01) C08K  
3/013 (2018.01) B03C 1/32 (2006.01)  
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(2006.01) C04B 14/00 (2006.01) C04B  
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[25] EN  
[54] **PROCESS FOR PREPARING  
WHITENED FLY ASH**  
[54] **PROCEDE DE PREPARATION DE  
CENDRES VOLANTES BLANCHES**  
[72] SEVERIN, ERIK, HK  
[72] FERNANDEZ, ERWIN N., HK  
[72] MISA, JOHN VINCENT ADAP, HK  
[73] VECOR IP HOLDINGS LIMITED, HK  
[85] 2023-02-08  
[86] 2021-08-13 (PCT/EP2021/072598)  
[87] (WO2022/034214)  
[30] EP (20191116.1) 2020-08-14

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May 28, 2023 to June 3, 2023

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[51] **Int.Cl. H02G 1/00 (2006.01) H02S 20/20 (2014.01) B60L 53/14 (2019.01) H05B 47/115 (2020.01) E04H 12/00 (2006.01) F16L 3/00 (2006.01) F16M 13/00 (2006.01) H02G 7/00 (2006.01)**  
[25] EN  
[54] **NON-OBSTRUCTING OVER SIDEWALK EXTENSION CORD STAND**  
[54] **SUPPORT A CORDON PROLONGATEUR SUR TROTTOIR SANS OBSTRUCTION**  
[72] STEPP, GEOFFREY, CA  
[71] STEPP, GEOFFREY, CA  
[22] 2021-11-30  
[41] 2023-05-30

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[21] **3,140,661**  
[13] A1  
[51] **Int.Cl. B25B 23/00 (2006.01) B25B 29/00 (2006.01) B25G 1/00 (2006.01)**  
[25] EN  
[54] **A TOOL SYSTEM**  
[54] **SYSTEME D'OUTIL**  
[72] KRIVDA, DEXTER, CA  
[71] KRIVDA, DEXTER, CA  
[22] 2021-11-29  
[41] 2023-05-29

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[21] **3,140,678**  
[13] A1  
[51] **Int.Cl. A61F 9/008 (2006.01) A61B 3/12 (2006.01) A61B 3/14 (2006.01) G06N 3/02 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR DETECTION OF FLOATERS**  
[54] **SYSTEME ET METHODE POUR LA DETECTION DE FLOTTEURS**  
[72] KATCHINSKIY, NIR, CA  
[72] CEROICI, CHRISTOPHER, CA  
[72] AMINI, IMAN, CA  
[71] PULSEMEDICA CORP., CA  
[22] 2021-11-30  
[41] 2023-05-30

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[21] **3,140,688**  
[13] A1  
[51] **Int.Cl. C09D 5/14 (2006.01) C09D 7/61 (2018.01) A01N 25/10 (2006.01) A01N 59/16 (2006.01) A01N 59/20 (2006.01) A01P 1/00 (2006.01) C09D 133/02 (2006.01)**  
[25] EN  
[54] **FORMULATION, SYNTHESIS AND PREPARATION METHODS OF NANO-ANTIMICROBIAL COATING SPRAY FOR SUBSTRATE SURFACES**  
[54] **FORMULATION, SYNTHESE ET METHODES DE PREPARATION DE VAPORISATION DE REVETEMENT NANOANTIMICROBIEN POUR DES SURFACES DE SUBSTRAT**  
[72] REZAIE, ABDOLHAMID, CA  
[72] DEHNAVMI, VIDA KARGAR, CA  
[72] CHERMAHINI, MOHAMMAD TAQI JAFARI, CA  
[71] ENDUROPLUS CLEANLABS INC., CA  
[22] 2021-11-29  
[41] 2023-05-29

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[21] **3,140,732**  
[13] A1  
[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/90 (2013.01)**  
[25] EN  
[54] **STENT OF AORTIC VALVE**  
[54] **ENDOPROTHESE DE VALVE AORTIQUE**  
[72] CHODOR, PIOTR, PL  
[71] CHODOR, PIOTR, PL  
[22] 2021-11-30  
[41] 2023-05-30

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[21] **3,140,790**  
[13] A1  
[51] **Int.Cl. G06Q 10/04 (2023.01) G06N 3/084 (2023.01) C10G 1/04 (2006.01) G06N 3/04 (2023.01)**  
[25] EN  
[54] **SYSTEM, METHOD, AND MEDIUM FOR PREDICTING AND MITIGATING HYDROGEN SULPHIDE GENERATED IN BITUMEN PROCESSING**  
[54] **SYSTEME, METHODE ET SUPPORT POUR PREVOIR ET ATTENUER LE SULFURE D'HYDROGENE GENERE DANS LE TRAITEMENT DU BITUME**  
[72] VAN DER MERWE, SHAWN, CA  
[72] SPEIDEL, THOMAS, CA  
[72] YANG, XIAOLI, CA  
[71] FORT HILLS ENERGY L.P., CA  
[22] 2021-11-30  
[41] 2023-05-30

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[21] **3,140,804**  
[13] A1  
[51] **Int.Cl. A63B 26/00 (2006.01) A63B 6/00 (2006.01) A63B 22/00 (2006.01)**  
[25] EN  
[54] **EXERCISE APPARATUS**  
[54] **APPAREIL D'EXERCICE**  
[72] GULPE, VALENTINA, CA  
[71] GULPE, VALENTINA, CA  
[22] 2021-11-30  
[41] 2023-05-29  
[30] US (17/456,698) 2021-11-29



**Demandes canadiennes mises à la disponibilité du public**  
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[21] **3,140,847**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) G16H 40/67 (2018.01)**  
 [25] EN  
 [54] **AN OFF-SITE MEDICAL DEVICE FOR CONTINUOUS MONITORING OF HEALTH PARAMETER**  
 [54] **DISPOSITIF MEDICAL HORS SITE POUR LA SURVEILLANCE CONTINUE D'UN PARAMETRE DE SANTE**  
 [72] KHALAF, GEORGES, CA  
 [71] KHALAF, GEORGES, CA  
 [22] 2021-12-01  
 [41] 2023-06-01

[21] **3,140,862**  
[13] A1

[51] **Int.Cl. F03B 13/06 (2006.01) E21F 17/16 (2006.01)**  
 [25] EN  
 [54] **SYSTEM AND METHOD FOR ENERGY STORAGE USING GEOLOGICAL FORMATIONS AS RESERVOIRS**  
 [54] **SYSTEME ET METHODE POUR LE STOCKAGE D'ENERGIE EN UTILISANT DES FORMATIONS GEOLOGIQUES COMME RESERVOIRS**  
 [72] KULBA, BRENNAN PETER, CA  
 [72] AGHABARATI, HOSSEIN, CA  
 [72] LASTIWKA, MARTIN, CA  
 [71] SUNCOR ENERGY INC., CA  
 [22] 2021-11-30  
 [41] 2023-05-30

[21] **3,140,864**  
[13] A1

[51] **Int.Cl. B01J 4/00 (2006.01) B01D 1/00 (2006.01) B01D 61/04 (2006.01) B01D 61/12 (2006.01)**  
 [25] EN  
 [54] **SYSTEM AND METHOD FOR TREATING FEED FLUID TO BE FED TO AN APPARATUS**  
 [54] **SYSTEME ET METHODE POUR TRAITER UN FLUIDE D'ALIMENTATION A ACHEMINER A UN APPAREIL**  
 [72] PERDICAKIS, BASIL, CA  
 [72] LI, JING, CA  
 [72] NOURIMAND, KAVOUS, CA  
 [72] PREFONTAINE, JORDAN LUCAS, CA  
 [72] MCGREGOR, MICHAEL, CA  
 [71] SUNCOR ENERGY INC., CA  
 [22] 2021-11-30  
 [41] 2023-05-30

[21] **3,140,973**  
[13] A1

[51] **Int.Cl. H02G 3/14 (2006.01) H02G 3/08 (2006.01)**  
 [25] EN  
 [54] **OUTLET BOX**  
 [54] **BOITE DE SORTIE**  
 [72] YANG, TIANYUAN, CA  
 [71] IPEX TECHNOLOGIES INC., CA  
 [22] 2021-12-02  
 [41] 2023-06-02

[21] **3,141,019**  
[13] A1

[51] **Int.Cl. B62K 21/12 (2006.01) B62J 50/00 (2020.01) B62K 23/02 (2006.01)**  
 [25] EN  
 [54] **RECREATIONAL VEHICLE HANDGUARD SHIELD WITH MODULAR REPLACEABLE SEGMENTS**  
 [54] **PROTECTEUR DE GARDE-MAIN DE VEHICULE RECREATIF COMPRENANT DES SEGMENTS MODULAIRES REMPLACABLES**  
 [72] HARTWIG, TYLER, CA  
 [72] FORSYTH, KEVIN, CA  
 [71] HARTWIG, TYLER, CA  
 [71] FORSYTH, KEVIN, CA  
 [22] 2021-12-02  
 [41] 2023-06-02

[21] **3,141,021**  
[13] A1

[51] **Int.Cl. G16H 40/20 (2018.01) B60W 60/00 (2020.01)**  
 [25] EN  
 [54] **MULTI-SPECIALTY INTEGRATED CARE SCHEDULING SYSTEM**  
 [54] **SYSTEME DE PLANIFICATION DE SOINS INTEGRE A SPECIALITES MULTIPLES**  
 [72] KADRI, ALBERT, CA  
 [72] KADRI, MOHAMMED, CA  
 [71] KADRI MEDICAL LTD., CA  
 [22] 2021-12-02  
 [41] 2023-06-01  
 [30] US (17/539,899) 2021-12-01

[21] **3,141,040**  
[13] A1

[51] **Int.Cl. E21B 43/24 (2006.01) E21B 43/22 (2006.01) E21B 43/30 (2006.01)**  
 [25] EN  
 [54] **INTEGRATED HEATING SYSTEMS FOR HEATING STARTUP FLUID AND SOLVENT IN SOLVENT-ASSISTED HYDROCARBON RECOVERY PROCESSES**  
 [54] **SYSTEMES DE CHAUFFAGE INTEGRES POUR LE CHAUFFAGE DU FLUIDE DE DEMARRAGE ET DU SOLVANT DANS LES PROCEDES DE RECUPERATION D'HYDROCARBURES A L'AIDE DE SOLVANT**  
 [72] SOOD, ARUN, CA  
 [72] EDWARDS, CHRISTOPHER, CA  
 [72] XIA, CHONG, CA  
 [72] RUPERT, KRISTOPHER, CA  
 [71] SUNCOR ENERGY INC., CA  
 [22] 2021-12-03  
 [41] 2023-06-03

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[21] **3,141,048**  
[13] A1

[51] **Int.Cl. B62D 63/08 (2006.01) B62D 33/04 (2006.01)**  
[25] EN  
[54] **SHOCK DEFLECTING TRAILER WALL PANEL AND BEAM ASSEMBLY AND TRUCK TRAILER USING SAME**  
[54] **PANNEAU MURAL DE REMORQUE DE DEFLEXION DES CHOCS ET ASSEMBLAGE DE POUTRE ET REMORQUE L'UTILISANT**  
[72] BOILY, CHRISTIAN, CA  
[71] MANAC INC., CA  
[22] 2021-12-03  
[41] 2023-06-03

[21] **3,141,086**  
[13] A1

[51] **Int.Cl. C12N 5/00 (2006.01) C12N 5/07 (2010.01) C12N 5/071 (2010.01) C08K 3/011 (2018.01) C08J 3/075 (2006.01) C08J 3/24 (2006.01) C08K 3/16 (2006.01) C08K 11/00 (2006.01) C08L 5/04 (2006.01) C08L 89/00 (2006.01)**  
[25] EN  
[54] **NOVEL HYDROGEL FOR 3D TISSUE ENGINEERING**  
[54] **NOUVEL HYDROGEL POUR L'INGENIERIE TISSULAIRE TRIDIMENSIONNELLE**  
[72] TRAN, SIMON, CA  
[72] KINSELLA, JOSEPH MATTHEW, CA  
[72] MUNGUIA LOPEZ, JOSE GIL, CA  
[72] ZHANG, YULI, CA  
[72] PHAM, HIEU MICHAEL, CA  
[71] THE ROYAL INSTITUTION FOR THE ADVANCEMENT OF LEARNING/MCGILL UNIVERSIT, CA  
[22] 2021-12-03  
[41] 2023-06-03

[21] **3,141,241**  
[13] A1

[51] **Int.Cl. E01H 5/06 (2006.01) E01H 1/05 (2006.01)**  
[25] EN  
[54] **IMPLEMENT FOR SKID STEER VEHICLE**  
[54] **APPAREIL POUR UN VEHICULE A DIRECTION A GLISSEMENT**  
[72] NEFZGER, HARLEY, US  
[72] MISH, DEAN, US  
[72] NIER, MARK, US  
[71] ARIENS COMPANY, US  
[22] 2021-12-04  
[41] 2023-06-03  
[30] US (63/285,877) 2021-12-03

[21] **3,141,507**  
[13] A1

[51] **Int.Cl. F16K 11/02 (2006.01) E03C 1/044 (2006.01)**  
[25] EN  
[54] **PRESSURE BALANCE VALVE WITH REVERSIBLE CHECK STOPS**  
[54] **VANNE DE REGULATION DE PRESSION AVEC ARRETS DE VERIFICATION REVERSIBLE**  
[72] LYSY, KAREL, CA  
[72] WOLFORD, GERALD, CA  
[72] FORTIN, MARC, CA  
[71] OATEY CO., US  
[22] 2021-12-03  
[41] 2023-06-03

[21] **3,141,773**  
[13] A1

[51] **Int.Cl. E01H 5/06 (2006.01) B60D 3/00 (2006.01)**  
[25] EN  
[54] **ACCESSORY MOUNT ASSEMBLY FOR A VEHICLE**  
[54] **ASSEMBLAGE DE MONTAGE D'ACCESSOIRE POUR UN VEHICULE**  
[72] MATTSON, PAUL L., US  
[71] POLARIS INDUSTRIES INC., US  
[22] 2021-12-10  
[41] 2023-05-29  
[30] US (17/536569) 2021-11-29

[21] **3,144,369**  
[13] A1

[51] **Int.Cl. B67B 7/18 (2006.01) B25B 33/00 (2006.01)**  
[25] EN  
[54] **ROTATABLE CAP OPENER**  
[54] **DISPOSITIF D'OUVERTURE DE BOUCHON ROTATIF**  
[72] PRYS, ARON, IL  
[71] PRYS, ARON, IL  
[22] 2021-12-30  
[41] 2023-06-01  
[30] IL (288592) 2021-12-01

[21] **3,146,185**  
[13] A1

[51] **Int.Cl. E01H 5/06 (2006.01) B62D 11/00 (2006.01)**  
[25] EN  
[54] **BRINE ASSEMBLY FOR A STAND-ON SKID STEER VEHICLE**  
[54] **ASSEMBLAGE DE SAUMURE POUR UN VEHICULE A ORIENTATION A GLISSEMENT DEBOUT**  
[72] RASMUSSEN, BRIAN, US  
[72] NIER, MARK, US  
[72] LODES, JUSTIN, US  
[71] ARIENS COMPANY, US  
[22] 2022-01-19  
[41] 2023-06-03  
[30] US (63/285,854) 2021-12-03

[21] **3,147,948**  
[13] A1

[51] **Int.Cl. G06F 3/0488 (2022.01) G06F 3/16 (2006.01) G07F 7/10 (2006.01)**  
[25] EN  
[54] **TOUCH SCREEN DEVICE FOR ENTERING DATA USING AUDITORY SIGNALS**  
[54] **DISPOSITIF A ECRAN TACTILE POUR SAISIR DES DONNEES AU MOYEN DE SIGNAUX AUDITIFS**  
[72] BERKOWITZ, CHERYL, N, US  
[72] BLATMAN, JEFF, US  
[72] HARITOS, MARY, KATIE, US  
[72] YERUVA, SIVA, RAJA SEKHAR REDDY, US  
[72] TAKAYAMA, WAKO, US  
[72] ABRAMS, JACOB, WHITAKER, US  
[71] CLOVER NETWORK, LLC, US  
[22] 2022-02-04  
[41] 2023-05-30  
[30] US (17/538,569) 2021-11-30

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[21] **3,150,160**  
[13] A1

[51] **Int.Cl. E01H 5/06 (2006.01)**  
[25] EN  
[54] **SPREADER ASSEMBLY FOR A STAND-ON SKID STEER VEHICLE**  
[54] **ASSEMBLAGE D'EPANDEUSE POUR UN VEHICULE A ORIENTATION A GLISSEMENT DEBOUT**  
[72] NIER, MARK, US  
[72] DYKSTRA, ALEX, US  
[71] ARIENS COMPANY, US  
[22] 2022-01-19  
[41] 2023-06-03  
[30] US (63/285,863) 2021-12-03

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[21] **3,156,872**  
[13] A1

[51] **Int.Cl. C02F 1/72 (2006.01) A01K 61/13 (2017.01) A01K 63/04 (2006.01) C02F 1/20 (2006.01) C02F 1/74 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR PURGING OFF-FLAVOUR COMPOUNDS FROM FARM-RAISED FISH**  
[54] **METHODE ET SYSTEME POUR ELIMINER LES COMPOSES DE FLAVEUR INDESIRABLE DANS LES POISSONS D'AQUACULTURE**  
[72] KROPP, RAMSEY, US  
[72] BARRY, TERENCE P., US  
[72] KAPSOS, DAVID W., US  
[71] EXCITON CLEAN, LLC, US  
[22] 2022-04-28  
[41] 2023-05-29  
[30] US (17/536,448) 2021-11-29

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[21] **3,165,129**  
[13] A1

[25] EN  
[54] **MOTOR STATOR WITH SEMI-STAGGERED WINDING LAYOUT AND SINGLE-SIDED PHASE, NEUTRAL, AND COIL CONNECTION WELDS**  
[54] **STATOR DE MOTEUR A CONFIGURATION D'ENROULEMENT SEMI-DECALE ET SOUDURES DE CONNEXION MONOFACES A CABLE DE PHASE, A CABLE NEUTRE ET A BOBINES**  
[72] DANG, DANG DINH, US  
[72] BALLIETT, LOGAN NOEL, US  
[71] RIVIAN IP HOLDINGS, LLC, US  
[22] 2022-06-23  
[41] 2023-06-01  
[30] US (17/539376) 2021-12-01

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[21] **3,168,167**  
[13] A1

[51] **Int.Cl. A61F 13/535 (2006.01)**  
[25] EN  
[54] **EMBOSSSED ABSORBENT SYSTEMS AND ABSORBENT ARTICLES INCLUDING THE SAME**  
[54] **SYSTEMES ABSORBANTS BOSSELES ET ARTICLES ABSORBANTS LES COMPRENANT**  
[72] O'CONNELL, SUSAN, US  
[72] YALCIN, BERNA, US  
[72] DYER, BRIAN K., US  
[71] FIRST QUALITY BABY PRODUCTS, LLC, US  
[22] 2022-07-19  
[41] 2023-06-01  
[30] US (63/284,888) 2021-12-01

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[21] **3,170,850**  
[13] A1

[51] **Int.Cl. B64D 31/00 (2006.01) B64C 27/12 (2006.01) B64D 35/08 (2006.01) F02C 7/36 (2006.01) F02C 9/42 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD OF OPERATING MULTI-ENGINE SYSTEM**  
[54] **SYSTEME ET PROCEDE POUR FAIRE FONCTIONNER UN SYSTEME MULTIMOTEUR**  
[72] BEAUCHESNE-MARTEL, PHILIPPE, CA  
[72] DE LUSSY, GAETAN, CA  
[72] HEBERT, JEREMIE, CA  
[72] COUTU, DANIEL, CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2022-08-19  
[41] 2023-06-02  
[30] US (17/540,574) 2021-12-02

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[21] **3,171,283**  
[13] A1

[51] **Int.Cl. B64D 35/08 (2006.01) B64C 27/12 (2006.01) B64D 31/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD OF OPERATING MULTI-ENGINE SYSTEM**  
[54] **SYSTEME ET PROCEDE POUR FAIRE FONCTIONNER UN SYSTEME MULTIMOTEUR**  
[72] BEAUCHESNE-MARTEL, PHILIPPE, CA  
[72] DE LUSSY, GAETAN, CA  
[72] HEBERT, JEREMIE, CA  
[72] COUTU, DANIEL, CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2022-08-19  
[41] 2023-06-02  
[30] US (17/540,570) 2021-12-02

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**Canadian Applications Open to Public Inspection  
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[21] **3,172,346**  
[13] A1

[51] **Int.Cl. B64D 31/00 (2006.01) B64C 27/12 (2006.01) B64D 35/08 (2006.01) F02C 7/36 (2006.01) F02C 9/42 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD OF OPERATING MULTI-ENGINE SYSTEM**

[54] **SYSTEME ET PROCEDE POUR FAIRE FONCTIONNER UN SYSTEME MULTIMOTEUR**

[72] BEAUCHESNE-MARTEL, PHILLIPPE, CA

[72] DE LUSSY, GAETAN, CA

[72] HEBERT, JEREMIE, CA

[72] COUTU, DANIEL, CA

[71] PRATT & WHITNEY CANADA CORP., CA

[22] 2022-08-18

[41] 2023-06-02

[30] US (17/540,576) 2021-12-02

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[21] **3,173,744**  
[13] A1

[51] **Int.Cl. H01S 3/04 (2006.01) H01S 3/038 (2006.01) H01S 3/041 (2006.01) H01S 3/097 (2006.01)**

[25] EN

[54] **RADIO FREQUENCY SLAB LASER**

[54] **LASER A PLAQUE DE RADIOFREQUENCE**

[72] WEIHER, KEITH L., US

[72] KERN, GERALD L., US

[72] JACKSON, PAUL E., US

[72] COLBY, JACOB D., US

[71] KERN TECHNOLOGIES, LLC, US

[22] 2022-09-12

[41] 2023-05-30

[30] EP (21211527.3) 2021-11-30

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[21] **3,175,390**  
[13] A1

[51] **Int.Cl. C12N 5/04 (2006.01) A23L 19/00 (2016.01) A01H 6/82 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/08 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **TOMATO VARIETY NUN 01543 TOF**

[54] **TOMATE DE VARIETE NUN 01543 TOF**

[72] BUSTAMANTE PORRAS, JOSE WILFREDO, MX

[71] NUNHEMS B.V., NL

[22] 2022-09-23

[41] 2023-06-03

[30] US (63/285.777) 2021-12-03

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[21] **3,175,737**  
[13] A1

[51] **Int.Cl. C12N 5/04 (2006.01) A23K 10/30 (2016.01) A23L 19/00 (2016.01) A01H 6/14 (2018.01) A01H 1/00 (2006.01) A01H 4/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **LETTUCE VARIETY NUN 06529 LTL**

[54] **VARIETE DE LAITUE NUN 06529 LTL**

[72] MUNOZ MUNOZ, JUAN FRANCISCO, ES

[71] NUNHEMS B.V., NL

[22] 2022-09-15

[41] 2023-05-30

[30] US (63/284283) 2021-11-30

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[21] **3,176,968**  
[13] A1

[51] **Int.Cl. B23P 19/04 (2006.01) B23P 19/10 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR INSERTING WASHERS IN A MOLDED PART**

[54] **METHODE ET APPAREIL POUR INSERER DES RONDELLES DANS UNE PIECE MOULEE**

[72] ESCALERA, EDUARDO, US

[72] KESSLER, RONALD N., US

[71] R&L MARKETING & SALES, INC., US

[22] 2022-09-27

[41] 2023-06-02

[30] US (63/285,253) 2021-12-02

[30] US (17/842,155) 2022-06-16

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[21] **3,177,557**  
[13] A1

[25] EN

[54] **METHOD AND APPARATUS FOR TRAJECTORY SMOOTHING IN AUTONOMOUS VEHICLE CONTROL**

[54] **METHODE ET APPAREIL POUR LE LISSAGE DE TRAJECTOIRE DANS LA COMMANDE DE VEHICULE AUTONOME**

[72] JOHNSON, DAVID K, US

[71] USHR INC., US

[22] 2022-09-29

[41] 2023-06-03

[30] US (63/285,839) 2021-12-03

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[21] **3,177,601**  
 [13] A1

[51] **Int.Cl. F01D 25/28 (2006.01)**  
 [25] EN  
 [54] **AIRCRAFT ENGINE REPAIR TOOL AND METHOD FOR REMOVAL AND INSTALLATION OF A MID TURBINE FRAME IN AN AIRCRAFT ENGINE**  
 [54] **OUTIL DE REPARATION DE MOTEUR D'AERONEF ET METHODE DE RETRAIT ET D'INSTALLATION D'UN COUPLE DE TURBINE INTERMEDIAIRE DANS UN MOTEUR D'AERONEF**  
 [72] PORCO, CARLO, CA  
 [72] HENRIKSEN, GEOFFREY, CA  
 [72] WEDEMIRE, JASON, CA  
 [72] MATHIAS, ANTHONY, CA  
 [72] LAVOIE, LOUIS, CA  
 [72] PAYNTER, MARVEN, CA  
 [72] WILKINSON, DENNIS, CA  
 [71] PRATT & WHITNEY CANADA CORP., CA  
 [22] 2022-09-28  
 [41] 2023-06-01  
 [30] US (17/539,785) 2021-12-01

[21] **3,180,087**  
 [13] A1

[25] EN  
 [54] **STATOR FOR ELECTRICAL MACHINES**  
 [54] **STATOR POUR MACHINES ELECTRIQUES**  
 [72] POCOCK, EDWARD GRAHAM CHARLES, GB  
 [72] PAGE, ANDREW E., GB  
 [72] SAWATA, TADASHI, GB  
 [71] HAMILTON SUNDSTRAND CORPORATION, US  
 [22] 2022-10-26  
 [41] 2023-05-29  
 [30] EP (21275171.3) 2021-11-29

[21] **3,180,497**  
 [13] A1

[51] **Int.Cl. B23K 9/10 (2006.01)**  
 [25] EN  
 [54] **WELDING POWER SUPPLIES HAVING DYNAMIC CURRENT RESPONSES**  
 [54] **BLOCS D'ALIMENTATION DE SOUDAGE A REPNSES DE COURANT DYNAMIQUES**  
 [72] BOWMAN, CODY J., US  
 [72] JOYCE, RICHARD C., US  
 [71] ILLINOIS TOOL WORKS INC., US  
 [22] 2022-10-31  
 [41] 2023-05-30  
 [30] US (17/538,443) 2021-11-30

[21] **3,181,103**  
 [13] A1

[51] **Int.Cl. F03D 13/10 (2016.01)**  
 [25] EN  
 [54] **METHODS OF INSTALLING A MECHANICAL DAMPER APPARATUS**  
 [54] **METHODES D'INSTALLATION D'UN APPAREIL D'AMORTISSEUR MECANIQUE**  
 [72] PAURA, INGO, DE  
 [72] PALMER, EMILY JACOB, US  
 [71] GENERAL ELECTRIC RENOVABLES ESPANA S.L., ES  
 [22] 2022-11-03  
 [41] 2023-05-29  
 [30] EP (21211026.6) 2021-11-29

[21] **3,181,507**  
 [13] A1

[51] **Int.Cl. B23P 15/28 (2006.01) B23K 9/04 (2006.01) B23K 9/16 (2006.01) B26B 9/00 (2006.01)**  
 [25] EN  
 [54] **METHOD OF MANUFACTURING A KNIFE BLADE AND KNIFE BLADE**  
 [54] **METHODE DE FABRICATION D'UNE LAME DE COUTEAU, ET LAME DE COUTEAU**  
 [72] SOKKA, MIKA, FI  
 [72] HEINE, MIKKO, FI  
 [72] HUANG, TAO, FI  
 [71] FISKARS FINLAND OY AB, FI  
 [22] 2022-11-09  
 [41] 2023-06-01  
 [30] FI (20216231) 2021-12-01

[21] **3,181,528**  
 [13] A1

[51] **Int.Cl. F04C 2/107 (2006.01) F04C 14/00 (2006.01)**  
 [25] EN  
 [54] **ECCENTRIC SCREW PUMP WITH WORKING ENGAGEMENT AND IDLE ENGAGEMENT AND METHOD FOR CONTROLLING THE ECCENTRIC SCREW PUMP**  
 [54] **POMPE A VIS EXCENTRIQUE AVEC ENGAGEMENT EN FONCTIONNEMENT ET ENGAGEMENT AU RALENTI, ET METHODE D'EXPLOITATION**  
 [72] ROLFES, MICHAEL, DE  
 [72] KRAMPE, PAUL, DE  
 [71] VOGELSANG GMBH & CO. KG, DE  
 [22] 2022-11-08  
 [41] 2023-05-30  
 [30] DE (102021131427.5) 2021-11-30

[21] **3,181,581**  
 [13] A1

[51] **Int.Cl. G06F 30/13 (2020.01) G06N 3/0475 (2023.01) G06N 3/094 (2023.01)**  
 [25] EN  
 [54] **METHOD AND SYSTEMS FOR GENERATING ARCHITECTURAL VECTOR PLANS**  
 [54] **METHODE ET SYSTEMES POUR GENERER DES PLANS VECTORIELS ARCHITECTURAUX**  
 [72] BOLGER, NOAH, CA  
 [72] BORROOMAND, AMENEH, CA  
 [72] SWIDERSKY, JAMES NATHAN, CA  
 [71] MAPPEDIN INC., CA  
 [22] 2022-11-09  
 [41] 2023-06-02  
 [30] US (63/285,316) 2021-12-02

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[21] **3,181,642**  
[13] A1

[51] **Int.Cl. B27N 3/04 (2006.01) B29B 17/02 (2006.01) B32B 7/02 (2019.01) B32B 27/04 (2006.01) C08J 5/18 (2006.01) C08J 11/06 (2006.01) E04D 11/02 (2006.01) E04D 13/16 (2006.01)**

[25] EN

[54] **ROOF COVER BOARD WITH IMPROVED FRAGMENT SIZE AND PLASTIC-TO-PAPER RATIO**

[54] **PANNEAU DE COUVERTURE DE TOIT AVEC DIMENSION DE FRAGMENT ET RAPPORT PLASTIQUE-PAPIER AMELIORES**

[72] FISHER, KASEY, US  
[72] SUPUT, MARKO, US  
[72] SPENCER, MATTHEW, US  
[72] WINTEROWD, JACK G., US

[71] CONTINUUS MATERIALS INTELLECTUAL PROPERTY, LLC, US

[22] 2022-11-09  
[41] 2023-06-02  
[30] US (17/541,138) 2021-12-02

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[21] **3,181,948**  
[13] A1

[51] **Int.Cl. A63B 6/00 (2006.01)**

[25] EN

[54] **EXERCISE MAT AND METHODS FOR MAKING AN EXERCISE MAT**

[54] **TAPIS D'EXERCICE ET METHODES DE FABRICATION**

[72] YU, COLTON KAI, CA  
[72] KELLY, LAURA JULIE, CA  
[72] HERRERA MACIAS, MIGUEL ANGEL, CA

[72] DELFIN, JOSH NEHRU SAMONTE, CA

[72] MACMILLAN, KATE ALEXANDRIA, CA

[72] LAI, ADRIAN KA MING, CA  
[72] LIN, JEMON, CA

[71] LULULEMON ATHLETICA CANADA INC., CA

[22] 2022-11-15  
[41] 2023-06-03  
[30] US (63/285,949) 2021-12-03

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[21] **3,181,976**  
[13] A1

[51] **Int.Cl. B01F 33/83 (2022.01) B01F 23/53 (2022.01) C08J 3/05 (2006.01) E21B 43/26 (2006.01)**

[25] EN

[54] **DEVICE FOR DISPERSING WATER-SOLUBLE POLYMERS**

[54] **DISPOSITIF DE DISPERSION DE POLYMERES HYDROSOLUBLES**

[72] RIVAS, CHRISTOPHE, FR  
[72] BONNIER, JULIEN, FR  
[71] SPCM SA, FR

[22] 2022-11-15  
[41] 2023-05-29  
[30] FR (2112673) 2021-11-29

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[21] **3,181,990**  
[13] A1

[51] **Int.Cl. B60N 2/40 (2006.01)**

[25] EN

[54] **ALL-TERRAIN VEHICLE**

[54] **VEHICULE TOUT-TERRAIN**

[72] JOHNSTON, CODY D., US  
[72] HANSON, BRENT J., US  
[72] FLICK, BRIAN N., US  
[72] FISHER, CAMERON D., US  
[72] DAHL, NATHAN D., US  
[72] WATSON, PETER D., US

[71] POLARIS INDUSTRIES INC., US

[22] 2022-11-16  
[41] 2023-06-03  
[30] US (63/285,868) 2021-12-03

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[21] **3,182,249**  
[13] A1

[51] **Int.Cl. B65D 23/10 (2006.01) B65D 1/02 (2006.01)**

[25] EN

[54] **BOTTLE WITH HANDLE**

[54] **BOUEILLE AVEC POIGNEE**

[72] TANAKA, TOSHIMASA, JP  
[72] HARUNA, TAKAHIRO, JP  
[72] JONO, OSAMU, JP  
[72] IMAI, HIROAKI, JP

[71] YOSHINO KOGYOSHO CO., LTD., JP

[22] 2022-11-28  
[41] 2023-05-29  
[30] JP (2021-192924) 2021-11-29  
[30] JP (2021-192986) 2021-11-29  
[30] JP (2021-193027) 2021-11-29

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[21] **3,182,367**  
[13] A1

[51] **Int.Cl. B60W 40/09 (2012.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR DRIVING STYLE DRIVER IDENTITY DETERMINATION AND CONTROL OF VEHICLE FUNCTIONS**

[54] **SYSTEME ET METHODE POUR LA DETERMINATION D'UNE IDENTITE DE CONDUCTEUR FONDEE SUR LE STYLE DE CONDUITE ET COMMANDE DES FONCTIONS DU VEHICULE**

[72] KUEHNLE, ANDREAS U., US  
[72] LI, ZHENG, US  
[72] JONES, KARL H., US  
[72] BLOAM, ERIC E., US

[71] BENDIX COMMERCIAL VEHICLE SYSTEMS, LLC, US

[22] 2022-11-28  
[41] 2023-06-03  
[30] US (17/542,054) 2021-12-03

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[21] **3,182,446**  
[13] A1

[51] **Int.Cl. G06F 17/00 (2019.01) G06F 16/28 (2019.01) G06F 16/95 (2019.01) G06N 20/00 (2019.01) G06F 40/10 (2020.01) G06Q 30/0601 (2023.01) G06F 3/048 (2013.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR CLASSIFYING A WEBPAGE OR A WEBPAGE ELEMENT**

[54] **SYSTEMES ET METHODES POUR CATEGORISER UNE PAGE WEB OU UN ELEMENT DE PAGE WEB**

[72] MUELLER, ERIK, US  
[72] LIENDO, ZENOBIA, US  
[72] BLOCKSOM, JONATHAN, US  
[72] MEDIN, ERIC, US

[71] CAPITAL ONE SERVICES, LLC, US

[22] 2022-11-18  
[41] 2023-05-30  
[30] US (17/538344) 2021-11-30

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[21] **3,182,486**  
[13] A1

[51] **Int.Cl. F17C 13/00 (2006.01) B64G 1/40 (2006.01) F02K 9/60 (2006.01) F17C 13/08 (2006.01)**

[25] EN  
[54] **DEVICE**  
[54] **DISPOSITIF**  
[72] HOLLENBACH, BERT, DE  
[71] ARIANEGROUP GMBH, DE  
[22] 2022-11-21  
[41] 2023-06-03  
[30] DE (10 2021 131 892.0) 2021-12-03

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[21] **3,182,536**  
[13] A1

[51] **Int.Cl. B23K 26/70 (2014.01) B23K 37/00 (2006.01)**

[25] EN  
[54] **HOUSING FOR A LASER PROCESSING MACHINE AND LASER PROCESSING MACHINE HAVING A HOUSING**  
[54] **LOGEMENT POUR UNE MACHINE DE TRAITEMENT AU LASER, ET MACHINE DE TRAITEMENT AU LASER COMPRENANT UN LOGEMENT**  
[72] GEMIGNANI, ROBERTO, IT  
[72] CROSATO, ANDREA, IT  
[72] RAFFAELLI, DAVIDE, IT  
[72] CATTANEO, CORRADO, IT  
[72] RIVA, GIOVANNI, IT  
[72] COLOMBO, ANDREA, IT  
[71] BLM S.P.A., IT  
[22] 2022-11-22  
[41] 2023-06-03  
[30] IT (102021000030653) 2021-12-03

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[21] **3,182,542**  
[13] A1

[51] **Int.Cl. B23K 26/70 (2014.01) B23K 37/00 (2006.01)**

[25] EN  
[54] **HOUSING FOR A LASER PROCESSING MACHINE AND LASER PROCESSING MACHINE HAVING A HOUSING**  
[54] **LOGEMENT POUR UNE MACHINE DE TRAITEMENT AU LASER, ET MACHINE DE TRAITEMENT AU LASER COMPRENANT UN LOGEMENT**  
[72] GEMIGNANI, ROBERTO, IT  
[72] CROSATO, ANDREA, IT  
[72] RAFFAELLI, DAVIDE, IT  
[72] CATTANEO, CORRADO, IT  
[72] RIVA, GIOVANNI, IT  
[72] COLOMBO, ANDREA, IT  
[71] BLM S.P.A., IT  
[22] 2022-11-22  
[41] 2023-06-03  
[30] IT (102021000030638) 2021-12-03

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[21] **3,182,548**  
[13] A1

[51] **Int.Cl. F28F 3/12 (2006.01) F28D 21/00 (2006.01)**

[25] EN  
[54] **METHOD FOR ASSEMBLING A LIQUID COOLING ASSEMBLY OF A FAMILY OF LIQUID COOLING ASSEMBLIES**  
[54] **METHODE D'ASSEMBLAGE D'UN ENSEMBLE DE REFROIDISSEMENT LIQUIDE D'UNE FAMILLE D'ENSEMBLES DE REFROIDISSEMENT LIQUIDE**  
[72] BAUDUIN, HADRIEN, FR  
[72] CHEHADE, ALI, FR  
[72] MENEBOO, ALEXANDRE ALAIN  
[71] OVH, FR  
[22] 2022-11-22  
[41] 2023-05-29  
[30] EP (21306655.8) 2021-11-29  
[30] EP (22306283.7) 2022-08-30

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[21] **3,182,558**  
[13] A1

[51] **Int.Cl. F01N 3/20 (2006.01) F01N 3/28 (2006.01)**

[25] EN  
[54] **AFTERTREATMENT SYSTEM, DUAL FUEL SYSTEM, AND DUAL FUEL APPARATUS**  
[54] **SYSTEME DE POST-TRAITEMENT, SYSTEME A DEUX CARBURANTS ET APPAREIL A DEUX CARBURANTS**  
[72] SAKUJA, ANKIT, US  
[72] BATHULA, SRINIVAS CHAKRAVARTHY, US  
[71] CUMMINS POWER GENERATION INC., US  
[22] 2022-11-22  
[41] 2023-05-30  
[30] US (17/538,505) 2021-11-30

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[21] **3,182,564**  
[13] A1

[51] **Int.Cl. F28F 3/12 (2006.01) F28D 21/00 (2006.01)**

[25] EN  
[54] **COOLING BLOCK ASSEMBLY FOR COOLING A HEAT-GENERATING ELECTRONIC COMPONENT**  
[54] **ASSEMBLAGE DE BLOC DE REFROIDISSEMENT POUR REFROIDIR UN COMPOSANT ELECTRONIQUE GENERANT DE LA CHALEUR**  
[72] CHEHADE, ALI, FR  
[72] BAUDUIN, HADRIEN, FR  
[71] OVH, FR  
[22] 2022-11-22  
[41] 2023-05-29  
[30] EP (21306655.8) 2021-11-29  
[30] EP (22306283.7) 2022-08-30

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[21] **3,182,609**  
[13] A1

[51] **Int.Cl. F03D 80/40 (2016.01)**  
[25] EN  
[54] **METHOD FOR CONTROLLING HEATING OF ROTOR BLADES OF A WIND TURBINE**  
[54] **METHODE POUR CONTROLER LE CHAUFFAGE D'AUBES DE ROTOR D'UNE EOLIENNE**  
[72] DAQOUNE, TARIK, CA  
[72] AKKI, MOUHCINE, CA  
[72] KHATIB, AUBAI AL, DE  
[72] ARRATIA-SCHEIT, ELSY, DE  
[71] WOBLEN PROPERTIES GMBH, DE  
[22] 2022-11-21  
[41] 2023-06-01  
[30] EP (21211710.5) 2021-12-01

[21] **3,182,618**  
[13] A1

[51] **Int.Cl. F01N 3/18 (2006.01) F01N 3/10 (2006.01) F01N 3/28 (2006.01)**  
[25] EN  
[54] **AFTERTREATMENT SYSTEM, DUAL FUEL SYSTEM, AND METHODS THEREFOR**  
[54] **SYSTEME DE POST-TRAITEMENT, SYSTEME A DEUX CARBURANTS ET METHODES CONNEXES**  
[72] SAKUJA, ANKIT, US  
[72] BATHULA, SRINIVAS CHAKRAVARTHY, US  
[71] CUMMINS POWER GENERATION INC., US  
[22] 2022-11-22  
[41] 2023-05-30  
[30] US (17/538,470) 2021-11-30

[21] **3,182,651**  
[13] A1

[51] **Int.Cl. A47C 27/00 (2006.01) A47C 21/00 (2006.01) A47G 9/00 (2006.01)**  
[25] EN  
[54] **BEDDING COMPONENTS INCLUDING A DESICCANT**  
[54] **ELEMENTS DE LITERIE COMPRÉANT UN DESHYDRATANT**  
[72] ANDERSON, BRIAN MARK, US  
[72] ARIAS, FELIPE SALVADOR, US  
[72] MCGUIRE, SHERI L., US  
[71] DREAMWELL, LTD., US  
[22] 2022-11-23  
[41] 2023-05-30  
[30] US (63/284,224) 2021-11-30

[21] **3,182,653**  
[13] A1

[51] **Int.Cl. B65D 85/64 (2006.01) B65D 85/07 (2017.01) A47C 27/14 (2006.01) A47C 31/00 (2006.01) B65B 25/00 (2006.01) B65D 81/22 (2006.01)**  
[25] EN  
[54] **COMPRESSIBLE MATTRESS PACKAGE INCLUDING HUMIDIFYING AGENT**  
[54] **EMBALLAGE DE MATELAS COMPRIMABLE COMPRÉANT UN AGENT HUMIDIFIANT**  
[72] CHIRACKAL, KEVIN, US  
[72] ANDERSON, BRIAN MARK, US  
[72] MCGUIRE, SHERI L., US  
[71] DREAMWELL, LTD., US  
[22] 2022-11-23  
[41] 2023-05-30  
[30] US (63/284,223) 2021-11-30

[21] **3,182,727**  
[13] A1

[51] **Int.Cl. B62K 19/02 (2006.01) B62D 21/02 (2006.01)**  
[25] EN  
[54] **FRAME REINFORCEMENT ASSEMBLY FOR BICYCLE OR VEHICLE**  
[54] **ASSEMBLAGE DE RENFORCEMENT DE CHASSIS POUR UN VELO OU UN VEHICULE**  
[72] OHANIAN, ARA, US  
[71] OHANIAN, ARA, US  
[22] 2022-11-23  
[41] 2023-06-03  
[30] US (63/285,498) 2021-12-03

[21] **3,182,761**  
[13] A1

[51] **Int.Cl. A45C 13/30 (2006.01) A45F 3/06 (2006.01) A45F 5/02 (2006.01) F41C 33/00 (2006.01) A41F 9/00 (2006.01)**  
[25] EN  
[54] **COMPONENT OF A CARRIER SYSTEM**  
[54] **COMPOSANTE D'UN SYSTEME DE SUPPORT**  
[72] SCHWAGER, MARTIN, DE  
[72] SIXT, JOSEF, DE  
[71] LINDNERHOF-TAKTIK GMBH, DE  
[22] 2022-11-24  
[41] 2023-06-01  
[30] DE (10 2021 131 697.9) 2021-12-01

[21] **3,182,803**  
[13] A1

[51] **Int.Cl. A47G 33/10 (2006.01) A47G 33/08 (2006.01)**  
[25] EN  
[54] **APEX DECORATION STABILIZING MOUNT FOR A DECORATIVE TREE**  
[54] **SUPPORT DE STABILISATION DE DECORATION DE SOMMET POUR UN ARBRE DECORATIF**  
[72] HENDRICKS, JARED, US  
[71] SHINING SEA TRADING COMPANY, US  
[22] 2022-11-24  
[41] 2023-05-29  
[30] US (63/283991) 2021-11-29

[21] **3,182,805**  
[13] A1

[51] **Int.Cl. E21B 10/26 (2006.01) E21B 10/30 (2006.01)**  
[25] EN  
[54] **MODULAR REAMER**  
[54] **ALESOIR MODULAIRE**  
[72] COMEAU, LAURIE E., CA  
[72] RUSSELL, JAYSON, CA  
[71] T. J. TECHNOLOGY LTD., CA  
[22] 2022-11-24  
[41] 2023-06-01  
[30] US (17/457,245) 2021-12-01

[21] **3,182,822**  
[13] A1

[51] **Int.Cl. B60J 1/02 (2006.01)**  
[25] EN  
[54] **WINDSHIELD FOR VEHICLE**  
[54] **PARE-BRISE POUR VEHICULE**  
[72] KRUEGER, MICHAEL, US  
[72] RAJDERKAR, ADITYA, US  
[72] SCOTT, ROBERT PAUL, US  
[71] INTERNATIONAL TRUCK INTELLECTUAL PROPERTY COMPANY, LLC, US  
[22] 2022-11-25  
[41] 2023-06-03  
[30] US (17/541,892) 2021-12-03



**Demandes canadiennes mises à la disponibilité du public**  
**28 mai 2023 au 3 juin 2023**

[21] **3,182,829**  
 [13] A1

[51] **Int.Cl. A61L 27/26 (2006.01)**  
 [25] EN  
 [54] **BIODEGRADABLE COMPOSITE MATERIAL COMPOSITION FOR MANUFACTURING STENT AND MANUFACTURING METHOD THEREOF**  
 [54] **COMPOSITION DE MATERIAU COMPOSITE BIODEGRADABLE POUR LA FABRICATION D'UNE ENDOPROTHESE ET METHODE DE FABRICATION**  
 [72] SEONG, RYONG, KR  
 [72] CHO, YOUN KYUNG, KR  
 [72] KIM, HYUNG KI, KR  
 [71] FINTKOREA CO., LTD, KR  
 [22] 2022-11-25  
 [41] 2023-05-30  
 [30] KR (10-2021-0169090) 2021-11-30

[21] **3,182,841**  
 [13] A1

[25] EN  
 [54] **POWER-MEASURING DEVICES**  
 [54] **DISPOSITIFS DE MESURE DE LA PUISSANCE**  
 [72] LIN, CHING-YAO, TW  
 [72] HUANG, CHIN-LAI, TW  
 [72] CHANG, CHIH-KAI, TW  
 [72] LIN, CHUNG-WEI, TW  
 [71] GIANT MANUFACTURING CO., LTD., TW  
 [22] 2022-11-29  
 [41] 2023-06-02  
 [30] US (63/264,833) 2021-12-02  
 [30] US (18/058,744) 2022-11-24

[21] **3,182,843**  
 [13] A1

[51] **Int.Cl. E04G 11/08 (2006.01) E04G 19/00 (2006.01)**  
 [25] EN  
 [54] **METHOD FOR ASSEMBLING AND DISMANTLING AT LEAST ONE SLAB TABLE FOR AT LEAST PARTIAL FORMWORKING OF A CONCRETE SLAB**  
 [54] **METHODE D'ASSEMBLAGE ET DE DEMONTAGE D'AU MOINS UNE PLATEFORME A DALLE POUR LE COFFRAGE AU MOINS PARTIEL D'UNE DALLE DE BETON**  
 [72] RENZ, BERND, DE  
 [72] STOERK, MARTIN, DE  
 [72] SCHNEIDER, WERNER, DE  
 [71] PERI SE, DE  
 [22] 2022-11-24  
 [41] 2023-06-03  
 [30] DE (10 1021 131 957.9) 2021-12-03

[21] **3,182,851**  
 [13] A1

[25] EN  
 [54] **HYDROGEN ENERGY STORAGE FOR POWER TIME SHIFTING**  
 [54] **STOCKAGE D'ENERGIE D'HYDROGENE POUR LE DECALAGE DE PUISSANCE**  
 [72] MABE, BRANDON J., US  
 [72] ANDERSON, MARK D., US  
 [71] CATERPILLAR, INC., US  
 [22] 2022-11-25  
 [41] 2023-05-30  
 [30] US (17/538272) 2021-11-30

[21] **3,182,855**  
 [13] A1

[51] **Int.Cl. E21B 41/00 (2006.01) E21B 43/26 (2006.01)**  
 [25] EN  
 [54] **MODULAR FRACTURING SYSTEM WITH SINGLE SIDE INLETS**  
 [54] **SYSTEME DE FRACTURATION MODULAIRE AVEC ENTrees D'UN SEUL COTE**  
 [72] RIEDEL, ROBERT E. JR., US  
 [72] MANOS, PETER A., US  
 [71] SPM OIL & GAS INC., US  
 [22] 2022-11-25  
 [41] 2023-05-30  
 [30] US (17/538819) 2021-11-30

[21] **3,182,877**  
 [13] A1

[25] EN  
 [54] **FLOW ANGLE SENSOR WITH IMAGE SENSOR**  
 [54] **CAPTEUR D'ANGLE D'ECOULEMENT AVEC CAPTEUR D'IMAGE**  
 [72] VALLAMKONDU, ASWIN KUMAR, IN  
 [72] RAMTHUN, KENT ALLAN, US  
 [72] DEVARAKONDA, NAVEEN KUMAR, IN  
 [72] BURNS, JEREMY S., US  
 [72] REID, ALEXANDER N., US  
 [72] JEGATHEESWARAN, KARTHIK, IN  
 [72] VENNELAKANTI, VENKATA SAI SUDHEER KUMAR, IN  
 [71] ROSEMOUNT AEROSPACE INC., US  
 [22] 2022-11-25  
 [41] 2023-05-30  
 [30] IN (202141055481) 2021-11-30

[21] **3,182,904**  
 [13] A1

[51] **Int.Cl. E21B 41/00 (2006.01) E21B 33/03 (2006.01) E21B 43/26 (2006.01)**  
 [25] EN  
 [54] **HYDRAULIC FRACTURING SYSTEM WITH MULTIPLE TRAILER-MOUNTED FRACTURING MANIFOLDS**  
 [54] **SYSTEME DE FRACTURATION HYDRAULIQUE COMPRENANT DE MULTIPLES COLLECTEURS DE FRACTURATION MONTES SUR REMORQUE**  
 [72] RIEDEL, JR., ROBERT E., US  
 [72] MANOS, PETER A., US  
 [71] SPM OIL & GAS INC., US  
 [22] 2022-11-25  
 [41] 2023-05-30  
 [30] US (17/538,779) 2021-11-30

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[21] **3,182,919**  
[13] A1

[51] **Int.Cl. B65H 75/28 (2006.01) B65H 75/14 (2006.01)**  
[25] EN  
[54] **WELDING WIRE SPOOL WITH BREAKAWAY TAB**  
[54] **ENROULEUR DE FIL DE SOUDAGE AVEC LANGUETTE DE RUPTURE**  
[72] RUNKLE, CALEB, US  
[72] MAI, BRENNAN, US  
[71] HOBART BROTHERS LLC, US  
[22] 2022-11-28  
[41] 2023-05-29  
[30] US (63/283,852) 2021-11-29  
[30] US (17/989,288) 2022-11-17

[21] **3,182,922**  
[13] A1

[51] **Int.Cl. E05C 3/14 (2006.01)**  
[25] EN  
[54] **GATE LATCH ASSEMBLY**  
[54] **ENSEMBLE DE LOQUETS DE BARRIERE**  
[72] BAKER, SCOTT CALVIN, US  
[71] SPECTRUM BRANDS, INC., US  
[22] 2022-11-28  
[41] 2023-05-29  
[30] US (63/283,769) 2021-11-29

[21] **3,182,929**  
[13] A1

[25] EN  
[54] **PRINTER CASSETTE WITH MOVABLE TENSIONING ROLLER AND ASSOCIATED PRINTER**  
[54] **CASSETTE D'IMPRIMANTE AVEC ROULEAU DE TENSIONNEMENT MOBILE ET IMPRIMANTE CONNEXE**  
[72] WHITBY, MICHAEL A., US  
[72] REDMAN, RANDALL L., US  
[72] KNOBLAUCH, AUSTIN M., US  
[71] ILLINOIS TOOL WORKS INC., US  
[22] 2022-11-28  
[41] 2023-05-29  
[30] US (17/536,590) 2021-11-29

[21] **3,182,982**  
[13] A1

[51] **Int.Cl. A47F 1/10 (2006.01)**  
[25] EN  
[54] **DISPENSER WITH DRAWERS AND SILOS FOR SMALL PACKETS**  
[54] **DISTRIBUTEUR AVEC TIROIRS ET SILOS POUR LES PETITS PAQUETS**  
[72] VARDARO, ANTONIO, CA  
[72] VARDARO, ENZO, CA  
[71] ARTITALIA GROUP, CA  
[22] 2022-11-30  
[41] 2023-05-30  
[30] US (63/284,162) 2021-11-30

[21] **3,182,985**  
[13] A1

[51] **Int.Cl. B65F 1/00 (2006.01) B65D 88/10 (2006.01) B65F 1/04 (2006.01) B65F 1/14 (2006.01)**  
[25] EN  
[54] **COMMERCIAL CONTAINER CARTRIDGE SYSTEM**  
[54] **SYSTEME DE CARTOUCHE DE CONTENEUR COMMERCIAL**  
[72] FOSTER, DERICK, US  
[71] REHRIG PACIFIC COMPANY, US  
[22] 2022-11-28  
[41] 2023-05-28  
[30] US (63/283,516) 2021-11-28

[21] **3,183,036**  
[13] A1

[51] **Int.Cl. E05F 15/668 (2015.01)**  
[25] EN  
[54] **FORCE PROFILE SETTING WHILE IN LIMIT SET MODE SYSTEMS AND METHODS**  
[54] **SYSTEMES ET METHODES DE REGLAGE DE PROFIL DE FORCE EN MODE DE REGLAGE DE LIMITE**  
[72] MATIAS, GREGORY D., US  
[72] RAUSCHER, BRENT A., US  
[71] GMI HOLDINGS, INC., US  
[22] 2022-11-30  
[41] 2023-06-03  
[30] US (63/285,654) 2021-12-03

[21] **3,183,043**  
[13] A1

[51] **Int.Cl. F24H 1/28 (2006.01) F24H 9/1836 (2022.01) F23C 3/00 (2006.01)**  
[25] EN  
[54] **COMBUSTION CHAMBER FOR WATER HEATER, WATER HEATER INCLUDING THE SAME, AND METHOD FOR MANUFACTURING COMBUSTION CHAMBER**  
[54] **CHAMBRE DE COMBUSTION POUR CHAUFFE-EAU, CHAUFFE-EAU COMPRENANT LADITE CHAMBRE ET METHODE POUR LA FABRICATION DE LA CHAMBRE DE COMBUSTION**  
[72] PARK, JUN KYU, KR  
[72] KWON, TAE SEONG, KR  
[71] KYUNG DONG NAVIEN CO., LTD., KR  
[22] 2022-11-28  
[41] 2023-06-03  
[30] KR (10-2021-0172166) 2021-12-03

[21] **3,183,044**  
[13] A1

[51] **Int.Cl. E06B 7/16 (2006.01) E06B 3/48 (2006.01) E06B 3/52 (2006.01)**  
[25] EN  
[54] **SEAL FOR AN OVERHEAD DOOR**  
[54] **JOINT D'ETANCHEITE POUR UNE PORTE BASCULANTE**  
[72] PATOCK, JOHN D., US  
[72] PETERSON, CARL J., US  
[71] THERMO TRAKS INC, US  
[22] 2022-12-01  
[41] 2023-06-02  
[30] US (17/540,821) 2021-12-02

[21] **3,183,047**  
[13] A1

[51] **Int.Cl. G01N 37/00 (2006.01) B05B 1/18 (2006.01) G01M 17/00 (2006.01)**  
[25] EN  
[54] **RAIN SIMULATION SYSTEM**  
[54] **SYSTEME DE SIMULATION DE PLUIE**  
[72] PAO, WING YI, CA  
[72] LI, LONG, CA  
[72] AGELIN-CHAAB, MARTIN, CA  
[72] KNUTZEN, JULIAN, CA  
[72] BALTAZAR-Y-JIMENEZ, ALEXIS, US  
[71] MAGNA EXTERIORS INC., CA  
[22] 2022-11-29  
[41] 2023-05-29  
[30] US (63/283,793) 2021-11-29

**Demandes canadiennes mises à la disponibilité du public**  
**28 mai 2023 au 3 juin 2023**

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[21] **3,183,067**  
[13] A1

[51] **Int.Cl. E03C 1/22 (2006.01)**  
[25] EN  
[54] **DRAIN ASSEMBLY AND METHOD OF INSTALLATION**  
[54] **ENSEMBLE DE DRAINAGE ET METHODE D'INSTALLATION**  
[72] LORKOWSKI, AARON, US  
[72] JIAN, ZHANG, CN  
[72] MEYER, ALEXANDER, US  
[72] SIENA, MATTHEW, US  
[71] OATEY CO., US  
[22] 2022-11-29  
[41] 2023-05-29  
[30] US (63/283,668) 2021-11-29

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[21] **3,183,088**  
[13] A1

[51] **Int.Cl. G06N 3/088 (2023.01) G06F 16/48 (2019.01)**  
[25] EN  
[54] **UNSUPERVISED DATA AUGMENTATION FOR MULTIMEDIA DETECTORS**  
[54] **AUGMENTATION DE DONNEES SANS SUPERVISION POUR DES DETECTEURS MULTIMEDIAS**  
[72] YOUNESSIAN, EHSAN, US  
[71] COMCAST CABLE COMMUNICATIONS, LLC, US  
[22] 2022-12-02  
[41] 2023-06-02  
[30] US (17/457,319) 2021-12-02

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[21] **3,183,101**  
[13] A1

[51] **Int.Cl. C02F 1/52 (2006.01) C02F 1/24 (2006.01) C02F 1/54 (2006.01) C02F 1/56 (2006.01)**  
[25] EN  
[54] **WATER REMEDIATION**  
[54] **REMEDIATION D'EAU**  
[72] JEFFERS, DAVID SEAN, CA  
[72] MCRAE, ARLEE FREDERICK, CA  
[71] CHAMPIONX CANADA ULC, CA  
[71] REFRESH RESOURCES LTD., CA  
[22] 2022-12-02  
[41] 2023-06-03  
[30] US (63/285,955) 2021-12-03

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[21] **3,183,259**  
[13] A1

[25] EN  
[54] **CAM-ACTUATED SELF-LOCKING CLAMP ASSEMBLY FOR SOLAR PANELS**  
[54] **ASSEMBLAGE DE PINCE AUTOBLOQUANTE ENTRAINEE PAR CAME POUR DES PANNEAUX SOLAIRES**  
[72] RIZZO, NATHAN T., US  
[71] DYNORAXX, INC., US  
[22] 2022-12-01  
[41] 2023-06-01  
[30] US (63/284,792) 2021-12-01

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[21] **3,183,277**  
[13] A1

[51] **Int.Cl. B60P 7/06 (2006.01)**  
[25] EN  
[54] **VERTICAL CARGO SUPPORT SYSTEM FOR A CARGO SPACE**  
[54] **SYSTEME DE SUPPORT DE MARCHANDISE VERTICAL POUR UN COMPARTIMENT A MARCHANDISES**  
[72] MUZYKA, YAROSLOW I., CA  
[71] INTERNATIONAL TRUCK BODY, CA  
[22] 2022-12-01  
[41] 2023-06-02  
[30] US (18/072,500) 2022-11-30  
[30] US (63/285,324) 2021-12-02

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[21] **3,183,292**  
[13] A1

[51] **Int.Cl. A01D 41/12 (2006.01) A01D 57/20 (2006.01)**  
[25] EN  
[54] **DRAPER HEAD WITH A CENTER DRAPER BELT FRAME**  
[54] **TETE DE CONVOYEUR A TOILE AVEC COUPLE DE CONVOYEUR A TOILE CENTRAL**  
[72] SUDHUES, STEFFEN, DE  
[72] HARTMANN, CHRISTOPH, DE  
[72] HEITKAMP, ALEXANDER, DE  
[72] WEBERMANN, DIRK, DE  
[71] CARL GERINGHOFF GMBH & CO. KG, DE  
[22] 2022-11-29  
[41] 2023-06-03  
[30] DE (10 2021 131 962.5) 2021-12-03

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[21] **3,183,293**  
[13] A1

[51] **Int.Cl. B60L 50/10 (2019.01) F01B 23/10 (2006.01)**  
[25] EN  
[54] **MINIATURIZED TURBOGENERATOR FOR THE DIRECT ELECTRICAL PROPULSION OF AUTOMOTIVE, URBAN AIR MOBILITY, AND SMALL MARINE VEHICLES**  
[54] **TURBOGENERATRICE MINIATURISEE POUR UNE PROPULSION ELECTRIQUE DIRECTE DE VEHICULES AUTOMOBILES, DE VEHICULES DE MOBILITE AERIENNE URBAINS ET DE PETITS VEHICULES MARINS**  
[72] TINGLEY, WILLIAM Q., US  
[72] TINGLEY, WILLIAM Q., III, US  
[72] BRADLEY, DANIEL R., US  
[71] TRIPLE TANGO POWER & PROPULSION, LLC, US  
[22] 2022-11-29  
[41] 2023-05-29  
[30] US (63/283,593) 2021-11-29

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[21] **3,183,302**  
[13] A1

[51] **Int.Cl. B65F 3/00 (2006.01)**  
[25] EN  
[54] **CONTROLLING A REFUSE COLLECTION VEHICLE BASED ON RADIOACTIVE WASTE DETECTION**  
[54] **COMMANDE D'UN VEHICULE DE COLLECTE D'ORDURES EN FONCTION D'UNE DETECTION DE DECHET RADIOACTIF**  
[72] HAM, BRIAN HUSTON, US  
[72] GEARY, MICHAEL DEAN, CA  
[72] ROMANO, ANTHONY, US  
[71] THE HEIL CO., US  
[22] 2022-11-30  
[41] 2023-05-30  
[30] US (63/284,373) 2021-11-30

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[21] **3,183,305**  
[13] A1

[25] EN  
[54] **POWER DISTRIBUTION CONNECTOR WITH INTERFACE LOAD RECEPTACLE**  
[54] **CONNECTEUR DE DISTRIBUTION DE PUISSANCE AVEC RECEPTACLE DE CHARGE D'INTERFACE**  
[72] FONG, ROBERT, US  
[72] GIEGER, JEFFREY S., US  
[71] ABB SCHWEIZ AG, CH  
[22] 2022-12-02  
[41] 2023-06-03  
[30] US (17/541,420) 2021-12-03

[21] **3,183,312**  
[13] A1

[25] EN  
[54] **CLAMPING LINEAR ACTUATOR**  
[54] **ACTIONNEUR LINEAIRE DE SERRAGE**  
[72] GIVENS, RAY, CA  
[72] ROADHOUSE, CAMERON WADE, CA  
[71] GIVENS, RAY, CA  
[22] 2022-12-02  
[41] 2023-06-03  
[30] US (63,285,559) 2021-12-03

[21] **3,183,352**  
[13] A1

[51] **Int.Cl. B01J 20/30 (2006.01) B01D 27/02 (2006.01) B01J 20/22 (2006.01) B01J 20/26 (2006.01)**  
[25] EN  
[54] **GRAPHENE-BASED FILTER MATERIALS AND CARBON BLOCK FILTERS COMPRISING SAME**  
[54] **MATERIAUX FILTRANTS A BASE DE GRAPHENE ET FILTRES A BLOC DE CHARBON COMPRENANT LES MATERIAUX**  
[72] OSAZUWA, OSAYUKI, CA  
[72] ZHOU, YANG, CA  
[72] HO, QUANG BINH, CA  
[72] RUNTE, CAMERON S., CA  
[71] GRAFOID INC., CA  
[22] 2022-11-30  
[41] 2023-06-03  
[30] US (63/285,727) 2021-12-03

[21] **3,183,420**  
[13] A1

[51] **Int.Cl. F41C 27/06 (2006.01)**  
[25] EN  
[54] **GRENAD LAUNCHER**  
[54] **LANCE-GRENADES**  
[72] STAHL, IVAN HENRIK, SE  
[71] BERSERK SWEDEN AB, SE  
[22] 2022-12-01  
[41] 2023-06-02  
[30] SE (2151474-0) 2021-12-02

[21] **3,183,435**  
[13] A1

[51] **Int.Cl. G06F 40/00 (2020.01) G06N 20/00 (2019.01) G06F 40/30 (2020.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR TRAINING LANGUAGE MODELS USING ALREADY TRAINED LANGUAGE MODELS**  
[54] **SYSTEME ET METHODE POUR ENTRAINER DES MODELES DE LANGAGE AU MOYEN DE MODELES DE LANGAGE DEJA ENTRAINES**  
[72] FROSST, NICHOLAS MYLES WISENER, CA  
[72] GHANAVI, ROZHINA, CA  
[72] CREMER, CHRISTOPHER ALEXANDER, CA  
[71] COHERE INC., CA  
[22] 2022-11-30  
[41] 2023-06-03  
[30] US (63/285,516) 2021-12-03

[21] **3,183,455**  
[13] A1

[25] EN  
[54] **LABEL WITH WIRELESS COMMUNICATION CAPABILITY FOR VIAL OR TUBE**  
[54] **ETIQUETTE AVEC CAPACITE DE COMMUNICATION SANS FIL POUR UNE FIOLE OU UNE EPROUVETTE**  
[72] AMBARTSOUMIAN, GOURGEN, CA  
[71] AMBARTSOUMIAN, GOURGEN, CA  
[22] 2022-12-01  
[41] 2023-06-03  
[30] US (63/285,778) 2021-12-03

[21] **3,183,469**  
[13] A1

[51] **Int.Cl. G06F 12/08 (2016.01) G06F 8/654 (2018.01)**  
[25] EN  
[54] **LZO DECOMPRESSION IN EXTERNAL STORAGE**  
[54] **DECOMPRESSION LEMPEL-ZIV-OBERHUMER DANS UNE MEMOIRE EXTERNE**  
[72] SCHNEIDER, MAXIMILIAN WALDO, US  
[72] VINCENT, FRANCOIS, US  
[72] THOR, RAPF PETER, US  
[71] HONEYWELL INTERNATIONAL INC., US  
[22] 2022-11-30  
[41] 2023-05-30  
[30] US (17/456969) 2021-11-30

[21] **3,183,509**  
[13] A1

[51] **Int.Cl. G06F 8/654 (2018.01) G06F 1/30 (2006.01) G06F 11/07 (2006.01)**  
[25] EN  
[54] **INTERRUPTABLE LZO DECOMPRESSION**  
[54] **DECOMPRESSION LEMPEL-ZIV-OBERHUMER POUVANT ETRE INTERROMPUE**  
[72] SCHNEIDER, MAXIMILIAN WALDO, US  
[72] VINCENT, FRANCOIS, US  
[72] THOR, RALF PETER, US  
[71] HONEYWELL INTERNATIONAL INC., US  
[22] 2022-11-30  
[41] 2023-05-30  
[30] US (17/456937) 2021-11-30

[21] **3,183,540**  
[13] A1

[51] **Int.Cl. B27B 3/10 (2006.01) B27B 3/04 (2006.01) B27B 3/28 (2006.01)**  
[25] EN  
[54] **SAW GUIDE SUPPORT PAD**  
[54] **COUSSIN DE SUPPORT POUR GUIDE-LAME**  
[72] VOGT, NALYND, CA  
[72] BERGEN, CARRICK, CA  
[72] PACHOLKO, NATHAN, CA  
[71] PRECISION GUIDE MACHINERY AND REPAIR LIMITED, CA  
[22] 2022-12-05  
[41] 2023-06-03  
[30] US (63/285,622) 2021-12-03

**Demandes canadiennes mises à la disponibilité du public**  
**28 mai 2023 au 3 juin 2023**

[21] **3,183,548**  
[13] A1

[51] **Int.Cl. B27B 3/10 (2006.01) B27B 3/04 (2006.01) B27B 3/28 (2006.01)**

[25] EN

[54] **SAW GUIDES FOR GANG SAWS**

[54] **GUIDE-LAME POUR SCIES ALTERNATIVES**

[72] VOGT, NALYND, CA

[72] BERGEN, CARRICK, CA

[72] PACHOLKO, NATHAN, CA

[71] PRECISION GUIDE MACHINERY AND REPAIR LIMITED, CA

[22] 2022-12-05

[41] 2023-06-03

[30] US (63/285,615) 2021-12-03

[21] **3,183,615**  
[13] A1

[51] **Int.Cl. G06Q 30/0601 (2023.01) G06Q 30/0201 (2023.01)**

[25] EN

[54] **INVENTORY VALUE CALCULATION METHOD, STOCK VALUE CALCULATION DEVICE, COMPUTER EQUIPMENT AND STORAGE MEDIUM**

[54] **METHODE DE CALCUL DE VALEUR DE STOCK, DISPOSITIF DE CALCUL DE VALEUR DE STOCK, MATERIEL INFORMATIQUE ET SUPPORT DE STOCKAGE**

[72] ZHU, MENG, CN

[72] DONG, JIAJIA, CN

[72] FAN, DAZHANG, CN

[72] GAO, LEI, CN

[72] SHEN, WUBIN, CN

[71] 10353744 CANADA LTD., CA

[22] 2022-11-30

[41] 2023-05-30

[30] CN (202111443960.1) 2021-11-30

[21] **3,183,789**  
[13] A1

[51] **Int.Cl. E05D 15/06 (2006.01) E05D 13/00 (2006.01) E06B 3/46 (2006.01) E06B 9/17 (2006.01)**

[25] EN

[54] **SLIDING DOOR ROLLERS**

[54] **ROULETTES DE PORTE COULISSANTE**

[72] SCORCIA, VALENTINO, US

[72] DALLMANN, MARY BETH, US

[72] CRIDDLE, DOUGLAS JOHN, US

[71] AMESBURY GROUP, INC., US

[22] 2022-12-01

[41] 2023-06-02

[30] US (63/285262) 2021-12-02

[21] **3,183,908**  
[13] A1

[51] **Int.Cl. B64D 43/00 (2006.01)**

[25] EN

[54] **AUTOMATIC SELECTION OF BEST AIR DATA SOURCE FOR AIRCRAFT**

[54] **SELECTION AUTOMATIQUE DE LA MEILLEURE SOURCE DE DONNEES AERODYNAMIQUES POUR UN AERONEF**

[72] ASSELIN, MARIO, CA

[72] DOYON, RICHARD, US

[71] BOMBARDIER INC., CA

[22] 2022-12-02

[41] 2023-06-03

[30] US (63/285,793) 2021-12-03

[21] **3,183,945**  
[13] A1

[25] FR

[54] **METHOD FOR CONTROLLING THE CHARGING AND DISCHARGING OF A PLURALITY OF ELECTRICAL ENERGY STORAGE DEVICES**

[54] **PROCEDE DE PILOTAGE DE CHARGE ET DE DECHARGE D'UNE PLURALITE DE DISPOSITIFS DE STOCKAGE D'ENERGIE ELECTRIQUE**

[72] FREYTES, JULIAN, FR

[72] BOGDAN, DZONLAGA, FR

[71] ELECTRICITE DE FRANCE, FR

[22] 2022-12-02

[41] 2023-06-03

[30] FR (FR2112962) 2021-12-03

[21] **3,187,976**  
[13] A1

[51] **Int.Cl. G01M 13/04 (2019.01) G01N 21/95 (2006.01)**

[25] EN

[54] **BEARING ELEMENT INSPECTION SYSTEM AND METHOD**

[54] **SYSTEME ET METHODE D'INSPECTION D'ELEMENT DE ROULEMENT**

[72] COMPAGNAT, JESSEN, CA

[72] ETHIER, MARC ANDRE, CA

[72] BEAUDOIN POULIOT, MAXIME, CA

[72] KARIGIANNIS, JOHN, CA

[72] HAREL, STEPHANE, CA

[71] GENERAL ELECTRIC COMPANY, US

[22] 2023-01-27

[41] 2023-05-29

[30] US (17/590,029) 2022-02-01

[21] **3,194,542**  
[13] A1

[51] **Int.Cl. B64C 1/00 (2006.01) B64U 20/30 (2023.01) B64U 20/70 (2023.01) B64D 37/32 (2006.01)**

[25] EN

[54] **A ROTORCRAFT WITH AN ENERGY SOURCE STORAGE UNIT**

[54] **GIRAVION COMPORTANT UNE UNITE DE STOCKAGE D'UNE SOURCE D'ENERGIE**

[72] BLACHA, MARTIN, DE

[72] SCHNEIDER, SASCHA, DE

[71] AIRBUS HELICOPTERS DEUTSCHLAND GMBH, DE

[22] 2023-03-29

[41] 2023-05-30

[30] EP (22400006.7) 2022-07-19

[21] **3,194,840**  
[13] A1

[51] **Int.Cl. A01M 31/00 (2006.01) A63H 5/00 (2006.01)**

[25] EN

[54] **COLLAPSIBLE CALL HORN FOR HUNTERS WHICH GENERATES SAMPLED ANIMAL CALLS**

[54] **CORNE D'APPEL TELESCOPIQUE POUR CHASSEURS GENERANT DES CRIS D'ANIMAUX ECHANTILLONNES**

[72] GAGNE, MARCEL, CA

[71] GAGNE, MARCEL, CA

[22] 2022-11-28

[41] 2023-05-29

[30] GB (2117233.3) 2021-11-29

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[21] **3,157,037**  
[13] A1  
[51] **Int.Cl. A47C 1/0355 (2013.01)**  
[25] EN  
[54] **SEAT FRAME**  
[54] **CADRE DE SIEGE**  
[72] YANG, LIMING, CN  
[72] ZHOU, WEIYAO, CN  
[72] LI, LONG, CN  
[71] DEWERTOKIN TECHNOLOGY GROUP CO., LTD., CN  
[85] 2022-05-17  
[86] 2022-01-25 (PCT/CN2022/073636)  
[87] (3157037)  
[30] CN (202122972115.5) 2021-11-30

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[21] **3,173,787**  
[13] A1  
[51] **Int.Cl. A61K 31/517 (2006.01) A61K 9/00 (2006.01) A61P 19/04 (2006.01)**  
[25] EN  
[54] **EXPANDED DOSAGE REGIMENS FOR INTEGRIN INHIBITORS**  
[54] **POSOLOGIES ETENDUES POUR DES INHIBITEURS DE L'INTEGRINE**  
[72] TURNER, SCOTT, US  
[72] DECARIS, MARTIN, US  
[72] LEFEBVRE, ERIC, US  
[71] PLIANT THERAPEUTICS, INC., US  
[85] 2022-09-28  
[86] 2022-04-29 (PCT/US2022/072013)  
[87] (WO2022/232838)  
[30] US (63/182,757) 2021-04-30

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[21] **3,175,767**  
[13] A1  
[51] **Int.Cl. H01M 10/48 (2006.01) H01M 10/05 (2010.01)**  
[25] FR  
[54] **SYSTEM FOR CYCLING BATTERY CELLS WITH PRESSURE REGULATION**  
[54] **SYSTEME DE CYCLAGE DE CELLULES DE BATTERIE AVEC REGULATION DE PRESSION**  
[72] MONTAMBAULT, SERGE, CA  
[72] MORIN, FRANCOIS, CA  
[72] RIVARD, ETIENNE, CA  
[72] PERREAULT, CHRISTIAN, CA  
[72] ZAGHIB, KARIM, CA  
[71] HYDRO-QUEBEC, CA  
[85] 2022-10-17  
[86] 2021-05-07 (PCT/CA2021/050642)  
[87] (3175767)  
[30] CA (3080727) 2020-05-13

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[21] **3,178,926**  
[13] A1  
[51] **Int.Cl. A61K 47/36 (2006.01) A61K 47/69 (2017.01) A61K 9/14 (2006.01) A61K 9/51 (2006.01) A61K 31/12 (2006.01) A61K 31/675 (2006.01) A61K 47/12 (2006.01) A61P 31/12 (2006.01) A61P 31/14 (2006.01)**  
[25] EN  
[54] **SYNERGISTIC ANTI-VIRAL PHARMACEUTICAL COMPOSITION CONTAINING TARGETING NANOPARTICLES**  
[54] **COMPOSITION PHARMACEUTIQUE ANTIVIRALE SYNERGIQUE CONTENANT DES NANOPARTICULES DE CIBLAGE**  
[72] SUN, CHUNG-CHIN, CA  
[72] LIU, DEAN MO, CA  
[71] NUCOLOGY BIOMEDICAL INC., CA  
[85] 2022-11-15  
[86] 2021-09-28 (PCT/CA2021/050699)  
[87] (WO2021/232169)  
[30] US (63/028,958) 2020-05-22

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[21] **3,178,980**  
[13] A1  
[25] EN  
[54] **METHOD FOR GENERATING KEYWORD FOR SOUND SOURCE**  
[54] **METHODE DE GENERATION D'UN MOT-CLE POUR UNE SOURCE SONORE**  
[72] JIN, SE HAN, KR  
[71] CASTU CO., LTD., KR  
[85] 2022-11-15  
[86] 2021-12-01 (PCT/KR2021/018002)  
[87] (3178980)  
[30] KR (KR 10-2021-0140754) 2021-10-21

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[21] **3,188,076**  
[13] A1  
[51] **Int.Cl. C12N 15/10 (2006.01) C12N 15/11 (2006.01)**  
[25] EN  
[54] **EUKARYOTIC DNA REPLICATION ORIGINS, AND VECTOR CONTAINING THE SAME**  
[54] **ORIGINE DE REPLICATION D'ADN EUCARYOTE, ET VECTEUR LA CONTENANT**  
[72] MECHALI, MARCEL, FR  
[72] AKERMAN, ILDEM, GB  
[72] GABORIT, NADEGE, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[71] UNIVERSITE DE MONTPELLIER, FR  
[85] 2023-02-01  
[86] 2021-09-06 (PCT/EP2021/074523)  
[87] (WO2022/049295)  
[30] EP (20305987.8) 2020-09-07

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[21] **3,189,604**  
[13] A1

[51] **Int.Cl. G06F 16/68 (2019.01)**  
[25] EN  
[54] **DANCE SEGMENT RECOGNITION METHOD, DANCE SEGMENT RECOGNITION APPARATUS, AND STORAGE MEDIUM**  
[54] **PROCEDE DE RECONNAISSANCE DE SEGMENT DE DANSE, APPAREIL DE RECONNAISSANCE DE SEGMENT DE DANSE, ET SUPPORT DE STOCKAGE**  
[72] ZHOU, MO, CN  
[72] YANG, XIWEN, CN  
[72] QU, WEI, CN  
[72] WANG, QIMING, CN  
[72] ZHANG, PENGSHEN, CN  
[72] TONG, YALONG, CN  
[71] NEW ORIENTAL EDUCATION & TECHNOLOGY GROUP INC., CN  
[85] 2023-02-15  
[86] 2021-09-28 (PCT/CN2021/121346)  
[87] (WO2022/068823)  
[30] CN (202011052113.8) 2020-09-29

[21] **3,194,245**  
[13] A1

[51] **Int.Cl. A47J 42/38 (2006.01) A47J 31/42 (2006.01)**  
[25] EN  
[54] **COFFEE MACHINE**  
[54] **MACHINE A CAFE**  
[72] SAITO, TOSHIO, JP  
[71] DAITO GIKEN, INC., JP  
[85] 2023-03-07  
[86] 2022-12-01 (PCT/JP2022/044347)  
[87] (3194245)  
[30] JP (2021-197320) 2021-12-03

[21] **3,196,824**  
[13] A1

[51] **Int.Cl. G06Q 10/00 (2023.01)**  
[25] EN  
[54] **VEHICLE RESERVATION PLATFORM**  
[54] **PLATEFORME DE RESERVATION DE VEHICULES**  
[72] NORMAN, NILA J., US  
[72] PAINTER, RYAN R., US  
[72] RENTZ, GRAY I., US  
[72] RAISANEN, NORA C., US  
[72] COLESTOCK, SCOTT E., US  
[71] POLARIS INDUSTRIES INC., US  
[85] 2023-04-27  
[86] 2021-10-27 (PCT/US2021/056860)  
[87] (WO2022/093965)  
[30] US (63/106,627) 2020-10-28

[21] **3,196,832**  
[13] A1

[51] **Int.Cl. G01F 15/18 (2006.01)**  
[25] EN  
[54] **USER CLICK MODELLING IN SEARCH QUERIES**  
[54] **MODELISATION DE CLIC D'UTILISATEUR LORS D'INTERROGATIONS DE RECHERCHE**  
[72] ZHOU, JIANGHONG, US  
[72] ZAHIRI, SAYYED, US  
[72] HUGHES, SIMON, US  
[72] KALLUMADI, SURYA, US  
[72] AL JADDA, KHALIFEH, US  
[72] AGICHTEIN, EUGENE, US  
[71] HOME DEPOT INTERNATIONAL, INC., US  
[85] 2023-04-27  
[86] 2021-11-01 (PCT/US2021/057518)  
[87] (WO2022/094377)  
[30] US (63/108,031) 2020-10-30  
[30] US (63/155,890) 2021-03-03  
[30] US (17/514,522) 2021-10-29

[21] **3,196,833**  
[13] A1

[51] **Int.Cl. A23L 3/3409 (2006.01) A61L 2/20 (2006.01) B01J 7/00 (2006.01) B01J 7/02 (2006.01) B01J 19/02 (2006.01) B01J 19/14 (2006.01) B01J 19/24 (2006.01) C01B 11/02 (2006.01) C01B 17/50 (2006.01) C01B 21/36 (2006.01)**  
[25] EN  
[54] **GAS GENERATION APPARATUS AND METHOD UTILIZING HYDROPHOBIC MEMBRANE POUCH REACTOR**  
[54] **APPAREIL DE GENERATION DE GAZ ET PROCEDE UTILISANT UN REACTEUR A POCHE A MEMBRANE HYDROPHOBE**  
[72] THOMAS, JEFF, US  
[72] MILLER, TANJA, US  
[71] SELECTIVE MICRO TECHNOLOGIES, LLC, US  
[85] 2023-04-27  
[86] 2021-10-27 (PCT/US2021/056868)  
[87] (WO2022/093970)  
[30] US (63/106,115) 2020-10-27

[21] **3,196,837**  
[13] A1

[51] **Int.Cl. G10K 1/07 (2006.01)**  
[25] EN  
[54] **OUTDOOR MUSHROOM INSTRUMENTS**  
[54] **INSTRUMENTS CHAMPIGNONS EXTERIEURS**  
[72] RANNELLS, JOSHUA, US  
[72] COOKE, RICHARD, US  
[72] HILL, LINDSAY, US  
[72] MORRISON, KATE, US  
[71] PLAYCORE WISCONSIN, INC., US  
[85] 2023-04-27  
[86] 2021-10-27 (PCT/US2021/056889)  
[87] (WO2022/093986)  
[30] US (63/105,957) 2020-10-27

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[21] **3,196,937**  
[13] A1

[51] **Int.Cl. A61K 9/06 (2006.01) A61K 31/445 (2006.01) A61K 31/635 (2006.01) A61K 45/00 (2006.01) A61K 47/10 (2017.01) A61K 47/12 (2006.01) A61K 47/14 (2017.01) A61K 47/26 (2006.01) A61K 47/28 (2006.01) A61K 47/44 (2017.01) A61P 29/00 (2006.01)**

[25] EN  
[54] **SUSTAINED-RELEASE PREPARATION COMPOSITION**  
[54] **COMPOSITION DE PREPARATION A LIBERATION CONTROLEE**

[72] LI, LING, CN  
[72] WU, QU, CN  
[72] JI, YUANXIN, CN  
[72] WANG, QINGSONG, CN  
[71] NANJING DELOVA BIOTECH CO. LTD., CN  
[85] 2023-04-28  
[86] 2022-01-14 (PCT/CN2022/071928)  
[87] (WO2022/152232)  
[30] CN (202110051096.4) 2021-01-14

[21] **3,196,938**  
[13] A1

[51] **Int.Cl. H04R 1/02 (2006.01) H04R 1/08 (2006.01) H04R 1/28 (2006.01) H04R 5/02 (2006.01) H04R 9/06 (2006.01)**

[25] EN  
[54] **MEDICAL DEVICE WITH AUDIO OUTPUT FOR USE IN A STERILE FIELD**  
[54] **DISPOSITIF MEDICAL A SORTIE AUDIO DESTINE A ETRE UTILISE DANS UN CHAMP STERILE**

[72] PICOT, JOHN, US  
[72] ELLERBUSCH, GARY, US  
[72] KOLB, MATTHEW LEE, US  
[72] ZHU, HONG, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-04-28  
[86] 2021-11-02 (PCT/US2021/057673)  
[87] (WO2022/098626)  
[30] US (63/108,925) 2020-11-03

[21] **3,196,939**  
[13] A1

[51] **Int.Cl. A47G 19/22 (2006.01) A47G 19/23 (2006.01) B21D 22/28 (2006.01) B21D 51/10 (2006.01) B21D 51/18 (2006.01) B65D 1/26 (2006.01)**

[25] EN  
[54] **TAPERED CUP AND METHOD OF FORMING THE SAME**  
[54] **GOBELET METALLIQUE EVASE ET SON PROCEDE DE FORMATION**

[72] WHITMORE, JONATHAN A., US  
[72] FITZSIMONS, SEAN K., US  
[72] HINES, LINDA A., US  
[71] BALL CORPORATION, US  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/US2021/057296)  
[87] (WO2022/094241)  
[30] US (63/108,102) 2020-10-30

[21] **3,196,941**  
[13] A1

[51] **Int.Cl. H04B 10/071 (2013.01) H04J 14/02 (2006.01) H04Q 11/00 (2006.01)**

[25] EN  
[54] **PORT IDENTIFICATION METHOD AND APPARATUS**  
[54] **PROCEDE ET APPAREIL D'IDENTIFICATION DE PORT**

[72] DONG, ZHENHUA, CN  
[72] DONG, XIAOLONG, CN  
[72] JIN, CHAO, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2023-04-28  
[86] 2021-08-10 (PCT/CN2021/111865)  
[87] (WO2022/088839)  
[30] CN (202011183533.X) 2020-10-29

[21] **3,196,943**  
[13] A1

[51] **Int.Cl. C08J 11/06 (2006.01) C08L 29/14 (2006.01)**

[25] EN  
[54] **UPGRADING RECYCLED POLYVINYL BUTYRAL**  
[54] **REVALORISATION DE POLYVINYL BUTYRAL RECYCLE**

[72] VAN DELDEN, ROELAND HANS FERDINAND, NL  
[72] BATENBURG, LAWRENCE FABIAN, NL  
[71] DAKIP B.V., NL  
[85] 2023-04-28  
[86] 2021-11-04 (PCT/NL2021/050679)  
[87] (WO2022/098237)  
[30] NL (2026819) 2020-11-04

[21] **3,196,944**  
[13] A1

[51] **Int.Cl. G06Q 40/04 (2012.01) G06Q 50/06 (2012.01)**

[25] EN  
[54] **SYNTHESIZING ENERGY DATA**  
[54] **SYNTHESE DE DONNEES D'ENERGIE**

[72] GUTERMUTH, GEORG, DE  
[72] PRIMAS, BERNHARD, DE  
[72] LENDERS, FELIX, DE  
[71] ABB SCHWEIZ AG, CH  
[85] 2023-04-28  
[86] 2021-10-25 (PCT/EP2021/079501)  
[87] (WO2022/096303)  
[30] EP (20206168.5) 2020-11-06

[21] **3,196,945**  
[13] A1

[51] **Int.Cl. C08H 8/00 (2010.01)**

[25] EN  
[54] **IMMUNOMODULATORY AGENT**  
[54] **AGENT IMMUNOMODULATEUR**

[72] GREEN, BRIAN DESMOND, GB  
[71] THE QUEEN'S UNIVERSITY OF BELFAST, GB  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/GB2021/052818)  
[87] (WO2022/090735)  
[30] GB (2017255.7) 2020-10-30

[21] **3,196,947**  
[13] A1

[51] **Int.Cl. A63B 24/00 (2006.01) A63B 69/36 (2006.01) A63B 71/06 (2006.01) G06T 7/20 (2017.01)**

[25] EN  
[54] **METHOD, SYSTEM, AND NON-TRANSITORY COMPUTER READABLE STORAGE MEDIUM FOR SUPPORTING VIRTUAL GOLF SIMULATION**

[54] **PROCEDE, SYSTEME ET SUPPORT DE STOCKAGE LISIBLE PAR ORDINATEUR NON TRANSITOIRE POUR PRENDRE EN CHARGE UNE SIMULATION DE GOLF VIRTUELLE**

[72] SUK, YONG HO, KR  
[72] SUK, JEY HO, KR  
[71] CREATZ INC., KR  
[85] 2023-04-28  
[86] 2021-11-01 (PCT/KR2021/015625)  
[87] (WO2022/092983)  
[30] KR (10-2020-0143836) 2020-10-30



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[21] **3,196,948**  
[13] A1

[51] **Int.Cl. H04B 7/06 (2006.01)**  
[25] EN  
[54] **INNOVATIVE THREE-DIMENSIONAL U-SHAPED ARCHITECTURE FOR TRANSMIT/RECEIVE MODULES OF AESA SYSTEMS**  
[54] **ARCHITECTURE INNOVANTE EN FORME D'U A TROIS DIMENSIONS POUR DES MODULES D'EMISSION/RECEPTION DE SYSTEMES AESA**  
[72] APRILE, ANGELO, IT  
[72] ISELLA, GIORGIO, IT  
[72] TROYSI, ELEONORA, IT  
[72] VERTEMATI, GIOVANNI, IT  
[72] MELEDANDRI, DARIO, IT  
[72] BREGLIA, ALFONSO, IT  
[72] VANNICOLA, ERSILIO, IT  
[71] LEONARDO S.P.A., IT  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/IB2021/060038)  
[87] (WO2022/091026)  
[30] IT (102020000025723) 2020-10-29

[21] **3,196,950**  
[13] A1

[51] **Int.Cl. G06N 3/04 (2023.01) G06N 10/00 (2022.01) G06N 3/08 (2023.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR MACHINE LEARNING USING A QUANTUM SYSTEM**  
[54] **PROCEDE ET APPAREIL D'APPRENTISSAGE AUTOMATIQUE UTILISANT UN SYSTEME QUANTIQUE**  
[72] LECHNER, WOLFGANG, AT  
[71] PARITY QUANTUM COMPUTING GMBH, AT  
[85] 2023-04-28  
[86] 2020-11-19 (PCT/EP2020/082705)  
[87] (WO2022/106003)

[21] **3,196,951**  
[13] A1

[51] **Int.Cl. B01D 19/00 (2006.01) B01D 21/24 (2006.01) B01D 21/26 (2006.01)**  
[25] EN  
[54] **COALESCING MEDIA FOR HYDRONIC AIR AND SEDIMENT SEPARATION DEVICE**  
[54] **MILIEU COALESCENT POUR AIR HYDRONIQUE ET DISPOSITIF DE SEPARATION DE SEDIMENTS**  
[72] TURTON, THOMAS, US  
[72] EVANS, STANLEY PAUL, US  
[72] MOSHER, SCOTT D., US  
[72] KERBACK, CHRISTOPHER C., US  
[72] LITORIYA, MRINALINI, IN  
[71] FLUID HANDLING LLC, US  
[85] 2023-04-28  
[86] 2021-11-04 (PCT/US2021/057976)  
[87] (WO2022/098814)  
[30] US (63/109,472) 2020-11-04

[21] **3,196,954**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/4184 (2006.01) A61P 31/12 (2006.01)**  
[25] EN  
[54] **CRYSTALLINE FORMS OF PIPERAZINE-1,4-DIYLBIS((6-(1H-BENZOI[D]IMIDAZO-2-YL)PYRIDIN-2YL)METHANONE) AS LANCL2 MODULATORS**  
[54] **FORMES CRISTALLINES DE PIPERAZINE-1,4-DIYLBIS((6-(1H-BENZOI[D]IMIDAZO-2-YL)PYRIDIN-2YL)METHANONE UTILISEES EN TANT QUE MODULATEURS DE LANCL2**  
[72] BASSAGANYA-RIERA, JOSEP, US  
[72] LEBER, ANDREW, US  
[72] HONTECILLAS, RAQUEL, US  
[71] NIMMUNE BIOPHARMA, INC., US  
[85] 2023-04-28  
[86] 2021-11-02 (PCT/US2021/057706)  
[87] (WO2022/098644)  
[30] US (63/108,958) 2020-11-03

[21] **3,196,956**  
[13] A1

[51] **Int.Cl. B26F 3/02 (2006.01) B31D 5/00 (2017.01)**  
[25] EN  
[54] **DUNNAGE CONVERSION MACHINE AND METHOD WITH ASSISTED TEAR APPARATUS**  
[54] **MACHINE DE CONVERSION DE FARDAGE ET PROCEDE A APPAREIL DE DECHIREMENT ASSISTE**  
[72] WAGNER, DENNIS J., US  
[72] CHEICH, ROBERT C., US  
[72] STINARD, BRIAN J., US  
[71] RANPAK CORP., US  
[85] 2023-04-28  
[86] 2021-11-11 (PCT/US2021/072356)  
[87] (WO2022/104355)  
[30] US (63/113,227) 2020-11-13

[21] **3,196,959**  
[13] A1

[51] **Int.Cl. B65G 47/57 (2006.01)**  
[25] EN  
[54] **CONVEYANCE EQUIPMENT**  
[54] **EQUIPEMENT DE TRANSPORT**  
[72] FUJIO, YOSHIHIKO, JP  
[71] DAIFUKU CO., LTD., JP  
[85] 2023-04-28  
[86] 2020-11-16 (PCT/JP2020/042590)  
[87] (WO2022/102121)

[21] **3,196,960**  
[13] A1

[51] **Int.Cl. A61G 5/12 (2006.01) A61G 5/08 (2006.01)**  
[25] EN  
[54] **A MOUNTING SYSTEM**  
[54] **SYSTEME DE MONTAGE**  
[72] EAGLE, BENJAMIN, NZ  
[72] EASTWOOD, PAUL, NZ  
[72] PATEL, ANIL RAMAN, GB  
[71] MASCULL, ROGER THOMAS, NZ  
[71] MASCULL, ELIZABETH JOCELYN, NZ  
[85] 2023-04-28  
[86] 2021-10-28 (PCT/IB2021/059949)  
[87] (WO2022/090973)  
[30] AU (2020903922) 2020-10-29

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[21] **3,196,961**  
[13] A1

[51] **Int.Cl. H01M 10/12 (2006.01) H01M 50/20 (2021.01) H01M 50/30 (2021.01) H01M 50/35 (2021.01) H01M 50/383 (2021.01) H01M 50/60 (2021.01)**

[25] EN

[54] **VENT ADAPTOR AND BATTERY INCLUDING A VENT ADAPTOR**

[54] **ADAPTATEUR D'EVENT ET BATTERIE COMPRENANT UN ADAPTATEUR D'EVENT**

[72] VARATHARAJAH, ARUNRAJ, US

[72] FUHR, JASON, US

[71] CPS TECHNOLOGY HOLDINGS LLC, US

[85] 2023-04-28

[86] 2021-10-29 (PCT/US2021/057254)

[87] (WO2022/094213)

[30] US (63/108,103) 2020-10-30

[21] **3,196,962**  
[13] A1

[51] **Int.Cl. A23L 33/175 (2016.01) A61K 31/522 (2006.01) A61K 31/198 (2006.01) A61K 31/405 (2006.01)**

[25] EN

[54] **COMPOSITIONS FOR NASAL APPLICATION**

[54] **COMPOSITIONS POUR APPLICATION NASALE**

[72] FABER, PATRICK, AT

[71] FABER, PATRICK, AT

[85] 2023-04-28

[86] 2021-11-03 (PCT/EP2021/080455)

[87] (WO2022/096481)

[30] EP (20205430.0) 2020-11-03

[21] **3,196,963**  
[13] A1

[51] **Int.Cl. H02J 3/00 (2006.01) H02J 3/32 (2006.01) H02J 3/38 (2006.01)**

[25] EN

[54] **MITIGATION OF PEAK POWER EXCHANGE BETWEEN SUPPLIERS AND FACILITIES**

[54] **ATTENUATION D'ECHANGE DE PUISSANCE DE CRETE ENTRE DES FOURNISSEURS ET DES INSTALLATIONS**

[72] GUTERMUTH, GEORG, DE

[72] LENDERS, FELIX, DE

[71] ABB SCHWEIZ AG, CH

[85] 2023-04-28

[86] 2021-09-20 (PCT/EP2021/075805)

[87] (WO2022/100910)

[30] EP (20207563.6) 2020-11-13

[21] **3,196,964**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) A61K 39/395 (2006.01) C07K 14/715 (2006.01) C07K 19/00 (2006.01) C12N 15/62 (2006.01) C12N 15/861 (2006.01)**

[25] EN

[54] **VECTORIZED TNF-ALPHA ANTAGONISTS FOR OCULAR INDICATIONS**

[54] **ANTAGONISTES DE TNF-ALPHA VECTORISES POUR DES INDICATIONS OCULAIRES**

[72] WANG, XU, US

[72] MCDOUGALD, DEVIN, US

[72] BRUDER, JOSEPH, US

[72] LIU, YE, US

[72] DANOS, OLIVIER, US

[72] QIAO, CHUNPING, US

[72] LEE, WEI-HUA, US

[71] REGENXBIO INC., US

[85] 2023-04-28

[86] 2021-10-29 (PCT/US2021/057380)

[87] (WO2022/094295)

[30] US (63/107,415) 2020-10-29

[21] **3,196,965**  
[13] A1

[51] **Int.Cl. C07D 487/04 (2006.01)**

[25] EN

[54] **COMPOUNDS AND USES THEREOF**

[54] **COMPOSES ET LEURS UTILISATIONS**

[72] NETHERTON, MATTHEW, US

[72] BRUCELLE, FRANCOIS, US

[72] DENG, JING, US

[72] VOIGT, JOHANNES H., US

[71] FOGHORN THERAPEUTICS INC., US

[85] 2023-04-28

[86] 2021-11-22 (PCT/US2021/060352)

[87] (WO2022/109396)

[30] US (63/116,268) 2020-11-20

[21] **3,196,966**  
[13] A1

[51] **Int.Cl. G06Q 20/38 (2012.01) G06Q 20/34 (2012.01) G06Q 20/36 (2012.01) G06Q 20/40 (2012.01)**

[25] EN

[54] **COMPUTER-BASED SYSTEMS INVOLVING TEMPORARY CARDS AND ASSOCIATED SERVER AND/OR MOBILE DEVICE FEATURES AND METHODS OF USE THEREOF**

[54] **SYSTEMES INFORMATIQUES IMPLIQUANT DES CARTES TEMPORAIRES ET DES CARACTERISTIQUES DE SERVEUR ET/OU DE DISPOSITIF MOBILE ASSOCIES ET LEURS PROCEDES D'UTILISATION**

[72] SNEIDER, AMANDA, US

[72] SUN, KAICHAO, US

[72] PRAT, BERNARD, US

[71] CAPITAL ONE SERVICES, LLC, US

[85] 2023-04-28

[86] 2021-10-29 (PCT/US2021/057462)

[87] (WO2022/094351)

[30] US (17/086,250) 2020-10-30

[21] **3,196,967**  
[13] A1

[51] **Int.Cl. D21H 11/04 (2006.01) D21H 11/08 (2006.01) D21H 17/20 (2006.01) D21H 17/33 (2006.01) D21H 17/45 (2006.01) D21H 17/55 (2006.01) D21H 17/56 (2006.01)**

[25] EN

[54] **METHOD OF INCREASING EFFICIENCY OF CHEMICAL ADDITIVES IN PAPERMAKING SYSTEMS**

[54] **PROCEDE D'AUGMENTATION DE L'EFFICACITE D'ADDITIFS CHIMIQUES DANS DES SYSTEMES DE FABRICATION DE PAPIER**

[72] SHAROYAN, DAVIT EDWARD, US

[72] HARRINGTON, JOHN CHARLES IV, US

[72] DE FREITAS, VALMIR FRAUCHES, US

[72] DE OLIVEIRA, FLAVIO HENRIQUE GAZZOTTI BUENO, US

[71] SOLENIS TECHNOLOGIES CAYMAN, L.P., CH

[85] 2023-04-28

[86] 2021-10-29 (PCT/US2021/072114)

[87] (WO2022/094597)

[30] US (17/084,895) 2020-10-30

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[21] **3,196,968**  
[13] A1

[51] **Int.Cl. F16K 31/04 (2006.01) F16K 31/53 (2006.01) F16K 37/00 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR AUTOMATIC OPERATION AND FUNCTIONAL VERIFICATION OF LINE VALVES INSTALLED IN FLUID DISTRIBUTION NETWORKS**

[54] **PROCEDE ET SYSTEME POUR LE FONCTIONNEMENT AUTOMATIQUE ET LA VERIFICATION FONCTIONNELLE DE ROBINETS DE CONDUITE INSTALLES DANS DES RESEAUX DE DISTRIBUTION DE FLUIDE**

[72] ODORI, MAURO, IT  
[71] I.S.I.F. S.R.L., IT  
[85] 2023-04-28  
[86] 2021-11-09 (PCT/IB2021/060357)  
[87] (WO2022/097118)  
[30] IT (10202000026648) 2020-11-09

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[21] **3,196,969**  
[13] A1

[51] **Int.Cl. A61K 51/04 (2006.01) A61P 35/00 (2006.01) C07B 59/00 (2006.01) C07H 21/00 (2006.01)**

[25] EN

[54] **OLIGONUCLEOTIDE-BASED THERAPEUTICS AND USES THEREOF**

[54] **AGENTS THERAPEUTIQUES A BASE D'OLIGONUCLEOTIDES ET UTILISATIONS ASSOCIEES**

[72] SPEER, TOD, US  
[71] SPEER, TOD, US  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/US2021/072133)  
[87] (WO2022/094609)  
[30] US (63/108,029) 2020-10-30

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[21] **3,196,970**  
[13] A1

[51] **Int.Cl. A63F 13/285 (2014.01) G06F 3/01 (2006.01)**

[25] EN

[54] **METHOD AND ARRANGEMENT FOR PRODUCING HAPTIC EFFECTS IN A USER DEVICE**

[54] **PROCEDE ET AGENCEMENT POUR PRODUIRE DES EFFETS HAPTIQUES DANS UN DISPOSITIF UTILISATEUR**

[72] TIMLIN, TOMI, FI  
[72] YLIMAKI, MISKA, FI  
[71] PS AUDIO DESIGN OY, FI  
[85] 2023-04-28  
[86] 2022-01-20 (PCT/FI2022/050033)  
[87] (WO2022/157416)  
[30] FI (20215082) 2021-01-25  
[30] FI (20215101) 2021-01-29

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[21] **3,196,971**  
[13] A1

[51] **Int.Cl. H05H 1/46 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR POWDER SPHEROIDISATION BY MICROWAVE-INDUCED PLASMA**

[54] **APPAREIL ET PROCEDE DE SPHEROIDISATION DE POUDDRE PAR UN PLASMA INDUIT PAR MICRO-ONDES**

[72] RUIZ RODRIGUEZ, ALBERTO, ES  
[72] PLANTA TORRALBA, FRANCISCO JAVIER, ES  
[72] CAMINATI, RAFFAELE, ES  
[71] FUNDACIO EURECAT, ES  
[85] 2023-04-28  
[86] 2021-11-05 (PCT/EP2021/080779)  
[87] (WO2022/096647)  
[30] EP (20382965.0) 2020-11-06

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[21] **3,196,972**  
[13] A1

[51] **Int.Cl. A61B 3/13 (2006.01) A61B 3/14 (2006.01) G02B 21/00 (2006.01) G02B 21/24 (2006.01)**

[25] EN

[54] **NON-CONTACT WIDE ANGLE RETINA VIEWING SYSTEM**

[54] **SYSTEME DE VISUALISATION DE LA RETINE A GRAND ANGLE SANS CONTACT**

[72] TRIPATHI, ASHOK BURTON, US  
[71] ALCON INC., CH  
[85] 2023-04-28  
[86] 2021-11-02 (PCT/IB2021/060143)  
[87] (WO2022/123346)  
[30] US (17/116,912) 2020-12-09

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[21] **3,196,973**  
[13] A1

[51] **Int.Cl. A61K 35/766 (2015.01) A61K 35/768 (2015.01) C07K 14/705 (2006.01)**

[25] EN

[54] **AN IMMUNE CHECKPOINT-MODULATING VSV-NDV HYBRID VIRUS FOR ONCOLYTIC VIRUS IMMUNOTHERAPY OF CANCER**

[54] **VIRUS HYBRIDE VSV-NDV DE MODULATION DE POINT DE CONTROLE IMMUNITAIRE POUR L'IMMUNOTHERAPIE DU CANCER PAR VIRUS ONCOLYTIQUE**

[72] ALTOMONTE, JENNIFER, DE  
[72] KRABBE, TERESA, DE  
[71] KLINIKUM RECHTS DER ISAR DER TECHNISCHEN UNIVERSITAT MUNCHEN, DE  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/EP2021/080188)  
[87] (WO2022/090500)  
[30] EP (20205209.8) 2020-11-02

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[21] **3,196,974**  
[13] A1

[51] **Int.Cl. B02C 13/20 (2006.01) B02C 13/28 (2006.01)**

[25] EN

[54] **AN IMPACT CRUSHER, AN UPPER ROTOR AND A HAMMER**

[54] **CONCASSEUR A PERCUSSION, ROTOR SUPERIEUR ET MARTEAU**

[72] KORPIJAAKKO, TAPIO, FI  
[72] REINIKAINEN, MARKO, FI  
[72] LAASONEN, TEEMU, FI  
[71] MAICON ENGINEERING OY, FI  
[85] 2023-04-28  
[86] 2021-10-26 (PCT/FI2021/050717)  
[87] (WO2022/090620)  
[30] FI (20206084) 2020-10-30

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[21] **3,196,975**  
[13] A1

[51] **Int.Cl. B01J 31/22 (2006.01) B01J 31/24 (2006.01) C07C 67/38 (2006.01)**  
[25] EN  
[54] **SELECTIVE TRANSITION METAL CATALYZED DEUTERIUM INCORPORATION INTO ALKYNE AND ALKENE FUNCTIONALITIES**  
[54] **INCORPORATION SELECTIVE DE DEUTERIUM CATALYSE PAR METAL DE TRANSITION DANS DES FONCTIONNALITES ALCYNE ET ALCENE**  
[72] CLARK, JOSEPH R., US  
[72] VANG, ZOUA PA, US  
[72] MILLS, MITCHELL, US  
[72] REYES, ALBERT, US  
[72] SLOANE, SAMANTHA E., US  
[72] TORRES, EMANUEL RIVERA, US  
[71] MARQUETTE UNIVERSITY, US  
[85] 2023-04-28  
[86] 2021-11-01 (PCT/US2021/057608)  
[87] (WO2022/094420)  
[30] US (63/108,145) 2020-10-30  
[30] US (63/167,439) 2021-03-29

[21] **3,196,976**  
[13] A1

[51] **Int.Cl. C10B 53/02 (2006.01) C10B 47/24 (2006.01) C10G 1/02 (2006.01)**  
[25] EN  
[54] **PYROLYSIS PLANT AND METHOD FOR THERMAL MINERALIZATION OF BIOMASS AND PRODUCTION OF COMBUSTIBLE GASES, LIQUIDS AND BIOCHAR**  
[54] **INSTALLATION DE PYROLYSE ET PROCEDE DE MINERALISATION THERMIQUE DE BIOMASSE ET DE PRODUCTION DE GAZ COMBUSTIBLES, DE LIQUIDES ET DE BIOCHARBON**  
[72] KUDAHL MUNCH, OVE, DK  
[71] FRICHS HOLDING 2 APS, DK  
[85] 2023-04-28  
[86] 2021-10-27 (PCT/DK2021/050317)  
[87] (WO2022/089704)  
[30] DK (PA 2020 01242) 2020-11-02

[21] **3,196,977**  
[13] A1

[51] **Int.Cl. A61B 3/00 (2006.01)**  
[25] EN  
[54] **PREDICTION OF POST-OPERATIVE VIGNETTING IN A PSEUDOPHAKIC EYE**  
[54] **PREDICTION DE VIGNETTAGE POST-OPERATOIRE DANS UN ?IL PSEUDOPHAKIQUE**  
[72] PETTIT, GEORGE HUNTER, US  
[72] ZIELKE, MARK ANDREW, US  
[72] HERNANDEZ, VICTOR MANUEL, US  
[72] MCCULLOCH, PHILIP MATTHEW, US  
[71] ALCON INC., CH  
[85] 2023-04-28  
[86] 2021-10-14 (PCT/IB2021/059474)  
[87] (WO2022/123339)  
[30] US (63/124,281) 2020-12-11

[21] **3,196,978**  
[13] A1

[51] **Int.Cl. G01N 33/24 (2006.01) G01V 9/00 (2006.01)**  
[25] EN  
[54] **DEVICE AND METHOD FOR DETERMINING THE HYDROCARBON-WATER CONTACT POSITION IN HYDROCARBON RESERVOIR**  
[54] **DISPOSITIF ET PROCEDE DESTINES A DETERMINER LA POSITION DE CONTACT HYDROCARBURE-EAU DANS UN RESERVOIR D?HYDROCARBURES**  
[72] PUJOL, MAGALI, FR  
[72] SCOTT, JAMES-ALEXANDER, FR  
[71] TOTALENERGIES ONE TECH, FR  
[85] 2023-04-28  
[86] 2021-12-21 (PCT/EP2021/087124)  
[87] (WO2022/136453)  
[30] EP (20306664.2) 2020-12-22

[21] **3,196,979**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61K 39/44 (2006.01) A61P 19/08 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **CXCR1/CXCR2 INHIBITORS FOR USE IN TREATING MYELOFIBROSIS**  
[54] **INHIBITEURS DE CXCR1/CXCR2 A UTILISER DANS LE TRAITEMENT DE LA MYELOFIBROSE**  
[72] HOFFMAN, RONALD, US  
[72] LU, MIN, US  
[71] ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI, US  
[85] 2023-04-28  
[86] 2021-11-04 (PCT/US2021/057986)  
[87] (WO2022/098822)  
[30] US (63/109,981) 2020-11-05

[21] **3,196,980**  
[13] A1

[51] **Int.Cl. A41D 19/00 (2006.01) A61B 42/00 (2016.01) B29C 41/00 (2006.01) C08J 5/02 (2006.01) C08K 3/22 (2006.01) C08L 9/04 (2006.01) C08L 11/02 (2006.01) C09D 109/02 (2006.01)**  
[25] EN  
[54] **SOFTER BLENDED NITRILE ELASTOMERIC ARTICLE**  
[54] **ARTICLE ELASTOMERE DE NITRILE MELANGE PLUS MOU**  
[72] MODHA, SHANTILAL H., US  
[72] ISSARA, SOPHA, US  
[72] TAN, SIEW HOE, US  
[71] O&M HALYARD INC., US  
[85] 2023-04-28  
[86] 2021-10-27 (PCT/US2021/056750)  
[87] (WO2022/093893)  
[30] US (63/107,177) 2020-10-29

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[21] **3,196,982**  
[13] A1

[51] **Int.Cl. F04D 25/08 (2006.01) F04D 29/70 (2006.01)**  
[25] EN  
[54] **BLADE FOR A FAN, AND A FAN USING SUCH A BLADE**  
[54] **PALE POUR VENTILATEUR ET VENTILATEUR UTILISANT UNE TELLE PALE**  
[72] THOMSEN, DENNIS, DK  
[72] HERMANSEN, JESPER, DK  
[71] NORDICCO A/S, DK  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/DK2021/050319)  
[87] (WO2022/089705)  
[30] DK (PA 2020 70721) 2020-10-30  
[30] DK (PA 2021 70311) 2021-06-18

[21] **3,196,983**  
[13] A1

[51] **Int.Cl. A61K 6/887 (2020.01) A61K 6/15 (2020.01) A61K 6/16 (2020.01) A61K 6/17 (2020.01) A61K 6/30 (2020.01) A61K 6/60 (2020.01) A61K 6/65 (2020.01) A61K 6/76 (2020.01) A61K 6/84 (2020.01)**  
[25] EN  
[54] **DENTAL CURABLE COMPOSITION HAVING GOOD COLOR COMPATIBILITY**  
[54] **COMPOSITION DENTAIRE DURCISSABLE AYANT UNE BONNE COMPATIBILITE DE COULEUR**  
[72] KAJIKAWA, TATSUYA, JP  
[72] HORIGUCHI, HIROTAKA, JP  
[72] KAMEYA, TAKEHIRO, JP  
[71] KURARAY NORITAKE DENTAL INC., JP  
[85] 2023-04-28  
[86] 2021-10-28 (PCT/JP2021/039803)  
[87] (WO2022/092193)  
[30] JP (2020-180960) 2020-10-28

[21] **3,196,984**  
[13] A1

[51] **Int.Cl. A61M 16/04 (2006.01) A61M 16/06 (2006.01)**  
[25] EN  
[54] **ADJUSTABLE AIRWAY STABILIZATION SYSTEM**  
[54] **SYSTEME REGLABLE DE STABILISATION DE LA VOIE RESPIRATOIRE**  
[72] KANOWITZ, ARTHUR, US  
[72] TRINH, NAM, US  
[72] MCINTYRE, KATIE, US  
[72] BRUNING, MARK, US  
[72] PARKINSON, PATRICK, US  
[72] MAROM, LIAD, US  
[72] THOMSON, RYAN, US  
[72] THOMPSON, TAYLOR, US  
[72] RYDBERG, NICK, US  
[72] SKUJINS, JANIS PAULIS, US  
[72] BOLDENOW, PATRICK, US  
[71] SECUISYN MEDICAL, LLC, US  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/US2021/057464)  
[87] (WO2022/094353)  
[30] US (63/108,274) 2020-10-30

[21] **3,196,985**  
[13] A1

[51] **Int.Cl. C08L 23/06 (2006.01) C08K 9/06 (2006.01) C08L 23/08 (2006.01)**  
[25] EN  
[54] **POLYAMINOSILOXANE WATER TREE REPELLANT FOR ELECTRICAL INSULATION**  
[54] **REPULSIF ANTI-ARBORESCENCE D'EAU A BASE DE POLYAMINOSILOXANE POUR ISOLATION ELECTRIQUE**  
[72] HE, CHAO, CN  
[72] SUN, YABIN, CN  
[72] GOU, QIAN, US  
[72] ZONG, XIAOHONG, CN  
[72] COGEN, JEFFREY M., US  
[72] PERSON, TIMOTHY J., US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[71] DOW SILICONES CORPORATION, US  
[85] 2023-04-28  
[86] 2020-10-29 (PCT/CN2020/124808)  
[87] (WO2022/087959)

[21] **3,196,986**  
[13] A1

[51] **Int.Cl. C01B 3/24 (2006.01) C01B 32/205 (2017.01) C01B 3/02 (2006.01)**  
[25] EN  
[54] **HYDROGEN PRODUCTION FROM HYDROCARBONS BY PLASMA PYROLYSIS**  
[54] **PRODUCTION D'HYDROGENE A PARTIR D'HYDROCARBURES PAR PYROLYSE AU PLASMA**  
[72] PICARD, FRANCOIS, CA  
[72] SHAHVERDI, ALI, CA  
[72] CARABIN, PIERRE, CA  
[71] PYROGENESIS CANADA INC., CA  
[85] 2023-04-28  
[86] 2021-11-01 (PCT/CA2021/000099)  
[87] (WO2022/087708)  
[30] US (63/107,555) 2020-10-30

[21] **3,196,987**  
[13] A1

[51] **Int.Cl. B01L 3/00 (2006.01)**  
[25] FR  
[54] **CARTRIDGE COMPRISING A PLURALITY OF ANALYSIS CHAMBERS FOR RECEIVING A BIOLOGICAL LIQUID**  
[54] **CARTOUCHE COMPORTANT UNE PLURALITE DE CHAMBRES D'ANALYSE POUR RECEVOIR UN LIQUIDE BIOLOGIQUE**  
[72] FRATZL, MARIO, FR  
[72] DELSHADI, SARAH, FR  
[72] KAUFFMANN, PAUL, FR  
[71] MAGIA DIAGNOSTICS, FR  
[85] 2023-04-28  
[86] 2021-11-09 (PCT/FR2021/051978)  
[87] (WO2022/106770)  
[30] FR (FR2011788) 2020-11-17

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[21] **3,196,988**  
[13] A1

[51] **Int.Cl. G01N 33/68 (2006.01)**  
[25] EN  
[54] **METHODS, SYSTEMS, AND KITS FOR PREDICTION, DETECTION, MONITORING, AND TREATMENT OF ALZHEIMER'S DISEASE**  
[54] **METHODES, SYSTEMES ET KIT DE PREDICTION, DE DETECTION, DE SURVEILLANCE ET DE TRAITEMENT DE LA MALADIE D'ALZHEIMER**  
[72] RAI, BALWANT, DK  
[72] KAUR, JASDEEP, DK  
[71] BASELINE BIOSCIENCE, INC., US  
[85] 2023-04-28  
[86] 2020-10-30 (PCT/US2020/058336)  
[87] (WO2022/093274)

[21] **3,196,989**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 38/00 (2006.01) A61K 47/02 (2006.01) A61K 47/10 (2017.01) A61K 47/12 (2006.01) A61K 47/18 (2017.01) A61K 47/26 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITION OF GLP-1/GLP-2 DUAL AGONISTS**  
[54] **COMPOSITION PHARMACEUTIQUE D'AGONISTES DOUBLES DE GLP-1/GLP-2**  
[72] VILLADSEN, JESPER SKOVBORG, DK  
[72] GIEHM, LISE, DK  
[71] ZEALAND PHARMA A/S, DK  
[85] 2023-04-28  
[86] 2021-12-16 (PCT/EP2021/086148)  
[87] (WO2022/129312)  
[30] EP (20214558.7) 2020-12-16

[21] **3,196,990**  
[13] A1

[51] **Int.Cl. A61B 17/04 (2006.01) A61F 2/08 (2006.01)**  
[25] EN  
[54] **DYNAMIC LIGAMENT REPAIR DEVICE**  
[54] **DISPOSITIF DE REPARATION DE LIGAMENT DYNAMIQUE**  
[72] ANDERSON, CHRISTIAN, US  
[71] ANDERSON, CHRISTIAN, US  
[85] 2023-04-28  
[86] 2021-11-01 (PCT/US2021/057627)  
[87] (WO2022/094434)  
[30] US (63/108,169) 2020-10-30

[21] **3,196,991**  
[13] A1

[51] **Int.Cl. A61K 31/4045 (2006.01) A61K 31/4412 (2006.01) A61K 39/395 (2006.01) A61P 1/00 (2006.01) A61P 19/02 (2006.01) G01N 33/68 (2006.01)**  
[25] EN  
[54] **METHODS FOR SYSTEMATICALLY ASSESSING LOCAL INFLAMMATION AND ACTIVE REPAIR**  
[54] **PROCEDES POUR EVALUER SYSTEMATIQUEMENT UNE INFLAMMATION LOCALE ET UNE REPARATION ACTIVE**  
[72] TSUI, FLORENCE WING LING, CA  
[72] LIN, AIFENG, CA  
[72] PRITZKER, KENNETH PHILLIP HENRY, CA  
[72] INMAN, ROBERT DAVIES, CA  
[71] KEYINTEL MEDICAL INC., CA  
[85] 2023-04-28  
[86] 2021-11-05 (PCT/CA2021/051582)  
[87] (WO2022/094722)  
[30] US (63/109,893) 2020-11-05

[21] **3,196,992**  
[13] A1

[51] **Int.Cl. D01D 5/253 (2006.01) D01D 5/18 (2006.01) D01D 5/24 (2006.01)**  
[25] EN  
[54] **MELT-SPUN FILAMENTS, YARNS, AND METHODS OF MAKING THE SAME**  
[54] **FILAMENTS FILES PAR FUSION, FILS ET PROCEDES DE FABRICATION DE TELS FILAMENTS ET FILS**  
[72] CASCIO, ANTHONY, US  
[71] ALADDIN MANUFACTURING CORPORATION, US  
[85] 2023-04-28  
[86] 2021-11-18 (PCT/US2021/059812)  
[87] (WO2022/109083)  
[30] US (63/116,339) 2020-11-20

[21] **3,196,993**  
[13] A1

[51] **Int.Cl. C03C 3/16 (2006.01) G21G 1/10 (2006.01)**  
[25] EN  
[54] **PHOSPHATE BASED TARGETS**  
[54] **CIBLES A BASE DE PHOSPHATE**  
[72] SCHOULTZ, BENT WILHELM, NO  
[72] HENRIKSEN, GJERMUND, NO  
[71] UNIVERSITETET I OSLO, NO  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/EP2021/080166)  
[87] (WO2022/090488)  
[30] GB (2017229.2) 2020-10-30

[21] **3,196,994**  
[13] A1

[51] **Int.Cl. G06F 21/31 (2013.01) G06Q 20/22 (2012.01) G06Q 20/38 (2012.01) G06Q 20/40 (2012.01)**  
[25] EN  
[54] **COMPUTER-BASED SYSTEMS CONFIGURED TO PROVIDE MULTIMODAL ATM ACCESS VIA MOBILE DEVICES AND METHODS OF USE THEREOF**  
[54] **SYSTEMES INFORMATIQUES CONFIGURES POUR FOURNIR UN ACCES GAB MULTIMODAL PAR L'INTERMEDIAIRE DE DISPOSITIFS MOBILES ET LEURS PROCEDES D'UTILISATION**  
[72] RODRIGUEZ, ELISA-MICHELLE, US  
[72] OSBORN, KEVIN, US  
[72] GULATI, LATIKA, US  
[71] CAPITAL ONE SERVICES, LLC, US  
[85] 2023-04-28  
[86] 2021-11-03 (PCT/US2021/057913)  
[87] (WO2022/098769)  
[30] US (17/088,230) 2020-11-03

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[21] **3,196,995**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) A61P 35/00 (2006.01) C12N 15/63 (2006.01) C12N 15/90 (2006.01)**

[25] EN  
[54] **A SYNTHETIC CIRCUIT FOR CELLULAR MULTISTABILITY**  
[54] **CIRCUIT SYNTHETIQUE POUR MULTISTABILITE CELLULAIRE**

[72] ZHU, RONGHUI, US  
[72] ELOWITZ, MICHAEL B., US  
[71] CALIFORNIA INSTITUTE OF TECHNOLOGY, US

[85] 2023-04-28  
[86] 2021-12-07 (PCT/US2021/062278)  
[87] (WO2022/125590)  
[30] US (63/122,850) 2020-12-08

[21] **3,196,996**  
[13] A1

[51] **Int.Cl. C07K 14/155 (2006.01) C12N 15/113 (2010.01) C12N 15/115 (2010.01) C12N 9/22 (2006.01) C12N 9/78 (2006.01) C12N 15/86 (2006.01)**

[25] EN  
[54] **VECTORS, SYSTEMS AND METHODS FOR EUKARYOTIC GENE EDITING**  
[54] **VECTEURS, SYSTEMES ET PROCEDES D'EDITION DE GENES EUCARYOTES**

[72] LU, BAISONG, US  
[72] ATALA, ANTHONY, US  
[71] WAKE FOREST UNIVERSITY HEALTH SCIENCES, US

[85] 2023-04-28  
[86] 2021-11-19 (PCT/US2021/060099)  
[87] (WO2022/109275)  
[30] US (63/115,932) 2020-11-19

[21] **3,196,997**  
[13] A1

[51] **Int.Cl. B64B 1/50 (2006.01) B64B 1/56 (2006.01) B64B 1/66 (2006.01)**

[25] FR  
[54] **DEVICE AND SYSTEM FOR RELEASING, MAINTAINING IN FLIGHT AND RECOVERING A TETHERED AEROSTAT**  
[54] **DISPOSITIF ET SYSTEME DE LARGAGE, DE MAINTIEN EN VOL ET DE RECUPERATION D'UN AEROSTAT CAPTIF**

[72] DABEZIES, BERNARD, FR  
[72] GRUCHET, LAURENT, FR  
[71] CNIM SYSTEMES INDUSTRIELS, FR

[85] 2023-04-28  
[86] 2021-11-02 (PCT/FR2021/051919)  
[87] (WO2022/096816)  
[30] FR (FR2011246) 2020-11-03

[21] **3,196,998**  
[13] A1

[51] **Int.Cl. B29C 65/00 (2006.01) B65B 51/00 (2006.01) B65D 3/00 (2006.01) B65D 75/20 (2006.01)**

[25] EN  
[54] **MULTI-STAGE PRESSURE SEALING OF METALLIZED SUBSTRATES**  
[54] **SCELLEMENT SOUS PRESSION A PLUSIEURS ETAGES DE SUBSTRATS METALLISES**

[72] YEO, KIAT HWEE, SG  
[72] SOH, HOCK SENG GORDON, SG  
[72] ALLAPICHAH, SHEIK ABDULLAH, CH

[71] SOCIETE DES PRODUITS NESTLE S.A., CH

[85] 2023-04-28  
[86] 2021-11-17 (PCT/EP2021/081975)  
[87] (WO2022/117343)  
[30] SG (10202012013W) 2020-12-02  
[30] EP (21157738.2) 2021-02-18

[21] **3,196,999**  
[13] A1

[51] **Int.Cl. A61K 38/47 (2006.01) C07K 16/28 (2006.01)**

[25] EN  
[54] **SUBCUTANEOUS ADMINISTRATION OF PD1/PD-L1 ANTIBODIES**  
[54] **ADMINISTRATION SOUS-CUTANEE D'ANTICORPS PD1/PD-L1**

[72] HUANG, MASANO, US  
[72] KHOSSRAVI, MEHRNAZ, US  
[72] HABY, THOMAS ARTHUR, US  
[72] HART, SCOTT AARON, US  
[72] MANTRI, RAO VENKATRAMANA, US  
[72] VEZINA, HEATHER ELIZABETH, US

[72] ROY, AMIT, US  
[72] MURTHY, BINDU PURNIMA, US  
[72] ARAS, URVI ASHISH, US  
[72] SANGHAVI, KINJAL, US  
[72] ZHAO, XIAOCHEN, US  
[72] BELLO, AKINTUNDE, US  
[71] BRISTOL-MYERS SQUIBB COMPANY, US  
[71] HALOZYME THERAPEUTICS, INC., US

[85] 2023-04-28  
[86] 2021-12-27 (PCT/US2021/065255)  
[87] (WO2022/146948)  
[30] US (63/131,240) 2020-12-28  
[30] US (63/150,420) 2021-02-17  
[30] US (63/184,082) 2021-05-04

[21] **3,197,000**  
[13] A1

[51] **Int.Cl. B60L 53/00 (2019.01) G06Q 10/04 (2023.01) G06Q 50/06 (2012.01) G06Q 50/30 (2012.01) B60L 53/60 (2019.01) G06N 20/00 (2019.01)**

[25] EN  
[54] **ARTIFICIAL INTELLIGENCE PLATFORM FOR VEHICLE ELECTRIFICATION**  
[54] **PLATEFORME D'INTELLIGENCE ARTIFICIELLE POUR ELECTRIFICATION DE VEHICULE**

[72] ARSENAULT, DAVID, CA  
[72] RAINVILLE, FRANCOIS, CA  
[71] DEVELOPPEMENT EFFENCO INC., CA

[85] 2023-04-28  
[86] 2021-10-14 (PCT/CA2021/051441)  
[87] (WO2022/087716)  
[30] US (63/107,095) 2020-10-29

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[21] **3,197,001**  
[13] A1

[51] **Int.Cl. B01J 23/644 (2006.01) H01M 8/0202 (2016.01) H01M 8/083 (2016.01) C25B 11/073 (2021.01) H01M 12/06 (2006.01) H01M 12/08 (2006.01)**

[25] EN

[54] **ELECTRODE, METHOD FOR PREPARING SAID ELECTRODE, AND ELECTROCHEMICAL DEVICE USING SAID ELECTRODE**

[54] **ELECTRODE, PROCEDE DE PREPARATION DE LADITE ELECTRODE ET DISPOSITIF ELECTROCHIMIQUE UTILISANT LADITE ELECTRODE**

[72] MORIMITSU, MASATSUGU, JP  
[71] THE DOSHISHA, JP  
[85] 2023-04-28  
[86] 2021-11-09 (PCT/JP2021/041203)  
[87] (WO2022/102618)  
[30] JP (2020-188929) 2020-11-12  
[30] JP (2021-011494) 2021-01-27

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[21] **3,197,002**  
[13] A1

[51] **Int.Cl. F16K 3/02 (2006.01) F16K 27/04 (2006.01)**

[25] EN

[54] **A PNEUMATIC VALVE WITH FLEXI-SEALS**

[54] **SOUPAPE PNEUMATIQUE A JOINTS FLEXIBLES**

[72] SHAH, RAJESH, IN  
[71] ROTEX AUTOMATION LIMITED, IN  
[85] 2023-04-28  
[86] 2021-10-30 (PCT/IB2021/060072)  
[87] (WO2022/091046)  
[30] IN (202021047485) 2020-10-30

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[21] **3,197,003**  
[13] A1

[51] **Int.Cl. G06F 16/9535 (2019.01)**

[25] EN

[54] **SUBSCRIPTION-BASED DATA DELIVERY SYSTEM**

[54] **SYSTEME DE DISTRIBUTION DE DONNEES A BASE D'ABONNEMENT**

[72] MANSOOR, RASHID MOHAMED, GB  
[72] KAY, JAMES, GB  
[72] SINCLAIR, CHRISTOPHER, GB  
[72] WILSON, DOUGLAS, GB  
[71] HADEAN SUPERCOMPUTING LTD, GB  
[85] 2023-04-28  
[86] 2021-10-27 (PCT/EP2021/079902)  
[87] (WO2022/090354)  
[30] EP (20204927.6) 2020-10-30

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[21] **3,197,004**  
[13] A1

[51] **Int.Cl. B29C 65/32 (2006.01) B32B 27/10 (2006.01) B65D 43/14 (2006.01) B65D 43/16 (2006.01) D21J 3/00 (2006.01)**

[25] EN

[54] **A COMPOSITE PAPERBOARD CONTAINER WITH A RIM COMPRISING FIBERS, AND A METHOD FOR PRODUCING SUCH A CONTAINER**

[54] **CONTENANT EN CARTON COMPOSITE DOTE D'UN BORD COMPRENANT DES FIBRES ET PROCEDE DE PRODUCTION D'UN TEL CONTENANT**

[72] LUNDGREN-GOODMAN, MAXIMILLIAN, SE  
[72] GEZELIUS, GEORG, SE  
[71] GPI SYSTEMS AB, SE  
[85] 2023-04-28  
[86] 2021-10-14 (PCT/SE2021/051010)  
[87] (WO2022/093090)  
[30] SE (2051255-4) 2020-10-28

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[21] **3,197,005**  
[13] A1

[51] **Int.Cl. A61F 5/30 (2006.01)**

[25] FR

[54] **FLEXIBLE HAND ORTHOSIS FOR PREVENTING OR TREATING CARPAL TUNNEL AND/OR GUYON'S CANAL SYNDROME**

[54] **ORTHESE DE MAIN FLEXIBLE POUR PREVENIR OU TRAITER LE SYNDROME DU CANAL CARPIEN ET/OU DU CANAL DE GUYON**

[72] CLOUARD, JACQUES, FR  
[71] CLOUARD, JACQUES, FR  
[85] 2023-04-28  
[86] 2021-10-28 (PCT/EP2021/080035)  
[87] (WO2022/106177)  
[30] FR (FR2011920) 2020-11-20

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[21] **3,197,006**  
[13] A1

[51] **Int.Cl. H04L 9/00 (2022.01)**

[25] EN

[54] **KEY OBTAINING METHOD AND COMMUNICATION APPARATUS**

[54] **PROCEDE D'ACQUISITION DE CLE ET APPAREIL DE COMMUNICATION**

[72] WU, YIZHUANG, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2023-04-28  
[86] 2020-10-30 (PCT/CN2020/125224)  
[87] (WO2022/088029)



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[21] **3,197,007**  
[13] A1

[51] **Int.Cl. H04L 9/40 (2022.01) H04W 12/106 (2021.01) H04W 36/08 (2009.01) H04W 92/20 (2009.01)**

[25] EN

[54] **METHODS, APPARATUS, COMPUTER PROGRAMS AND COMPUTER PROGRAM PRODUCTS FOR USER PLANE INTEGRITY PROTECTION DURING X2 HANDOVER**

[54] **PROCEDES, APPAREILS, PROGRAMMES D'ORDINATEUR ET PRODUITS PROGRAMMES D'ORDINATEUR POUR LA PROTECTION DE L'INTEGRITE DU PLAN UTILISATEUR PENDANT UN TRANSFERT INTERCELLULAIRE X2**

[72] WIFVESSON, MONICA, SE

[72] STATTIN, MAGNUS, SE

[72] ARAUJO, LIAN, SE

[71] TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE

[85] 2023-04-28

[86] 2021-10-27 (PCT/EP2021/079850)

[87] (WO2022/090326)

[30] US (63/107,862) 2020-10-30

[21] **3,197,008**  
[13] A1

[51] **Int.Cl. B01J 21/04 (2006.01) B01J 21/08 (2006.01) B01J 29/04 (2006.01) B01J 37/04 (2006.01)**

[25] EN

[54] **ESSENTIALLY CLAY FREE FCC CATALYST WITH INCREASED CONTAMINANT RESISTIVITY, ITS PREPARATION AND USE**

[54] **CATALYSEUR FCC SENSIBLEMENT EXEMPT D'ARGILE AYANT UNE RESISTIVITE ACCRUE AUX CONTAMINANT, SA PREPARATION ET SON UTILISATION**

[72] IYYAMPURMAL, ESWARAMOORTHY, US

[72] YALURIS, GEORGE, US

[72] RAINER, DARRELL, US

[71] ALBEMARLE CORPORATION, US

[85] 2023-04-28

[86] 2021-10-29 (PCT/US2021/057395)

[87] (WO2022/094306)

[30] US (63/107,961) 2020-10-30

[21] **3,197,009**  
[13] A1

[51] **Int.Cl. B01J 19/08 (2006.01)**

[25] EN

[54] **ELECTRICALLY HEATED REFORMING REACTOR FOR REFORMING OF METHANE AND OTHER HYDROCARBONS**

[54] **REACTEUR DE REFORMAGE CHAUFFE ELECTRIQUEMENT POUR LE REFORMAGE DE METHANE ET D'AUTRES HYDROCARBURES**

[72] MARKER, TERRY, US

[72] WANGEROW, JIM, US

[72] LINCK, MARTIN, US

[71] GAS TECHNOLOGY INSTITUTE, US

[85] 2023-04-28

[86] 2021-08-16 (PCT/US2021/046115)

[87] (WO2022/093363)

[30] US (63/107,537) 2020-10-30

[21] **3,197,010**  
[13] A1

[51] **Int.Cl. C07D 417/14 (2006.01) A61K 31/4433 (2006.01) A61K 31/444 (2006.01) A61K 31/4545 (2006.01) A61K 31/497 (2006.01) A61P 35/02 (2006.01) C07D 401/14 (2006.01) C07D 405/14 (2006.01) C07D 417/04 (2006.01)**

[25] EN

[54] **DEUTERATED HPK1 KINASE INHIBITOR, AND PREPARATION METHOD AND USE THEREOF**

[54] **INHIBITEUR DE KINASE HPK1 DEUTERE, SON PROCEDE DE PREPARATION ET SON UTILISATION**

[72] LIN, XINGYU, CN

[72] LU, TINGTING, CN

[71] ZHUHAI YUFAN BIOTECHNOLOGIES CO., LTD, CN

[85] 2023-04-28

[86] 2021-10-15 (PCT/CN2021/124144)

[87] (WO2022/089225)

[30] CN (202011199799.3) 2020-10-30

[21] **3,197,011**  
[13] A1

[51] **Int.Cl. A47C 27/06 (2006.01) A47C 7/35 (2006.01) A47C 27/07 (2006.01) A47C 27/20 (2006.01)**

[25] EN

[54] **POCKETED SPRING ASSEMBLY INCLUDING CUSHION PADS**

[54] **ENSEMBLE DE RESSORTS ENSACHES COMPRENANT DES COUSSINETS**

[72] JEWETT, JASON V., US

[71] L&P PROPERTY MANAGEMENT COMPANY, US

[85] 2023-04-28

[86] 2021-08-12 (PCT/US2021/045695)

[87] (WO2022/093361)

[30] US (17/082,245) 2020-10-28

[21] **3,197,013**  
[13] A1

[51] **Int.Cl. B03D 1/14 (2006.01) B63B 35/32 (2006.01) C02F 1/24 (2006.01) C02F 1/52 (2006.01) E02B 15/08 (2006.01)**

[25] EN

[54] **MICROFLOTATION SYSTEM FOR TREATING A BODY OF WATER**

[54] **SYSTEME DE MICROFLOTTATION POUR LE TRAITEMENT D'UN CORPS D'EAU**

[72] DAMANN, ROLAND, DE

[71] DAMANN, VOLKER, DE

[71] DAMANN, ROLAND, DE

[85] 2023-04-28

[86] 2021-10-27 (PCT/EP2021/079870)

[87] (WO2022/090336)

[30] EP (20205159.5) 2020-11-02

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[21] **3,197,014**  
[13] A1

[51] **Int.Cl. B25B 23/10 (2006.01)**  
[25] EN  
[54] **FASTENER IDENTIFYING MECHANISM FOR ATTACHMENT TOOL**  
[54] **MECANISME D'IDENTIFICATION DE FIXATION POUR OUTIL DE FIXATION**  
[72] SHADWELL, PETER J., US  
[72] DELMY, CEDRIC, US  
[72] MAW, KURT MICHAEL, US  
[72] HILDERSLEY, CATHERINE, US  
[72] KELLY, JOSHUA S., US  
[71] OMG, INC., US  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/US2021/057312)  
[87] (WO2022/094250)  
[30] US (63/107,667) 2020-10-30  
[30] US (63/109,053) 2020-11-03

[21] **3,197,015**  
[13] A1

[51] **Int.Cl. B67D 1/00 (2006.01)**  
[25] EN  
[54] **HYDRAULIC UNIT FOR DISPENSERS OF CARBONATED WATER**  
[54] **UNITE HYDRAULIQUE POUR DISTRIBUTEURS D'EAU GAZEIFIEE**  
[72] BONANNI, MASSIMO, IT  
[72] SEGALINI, FABIO, IT  
[72] SIBILIA, GINO, IT  
[71] ELTEK S.P.A., IT  
[85] 2023-04-28  
[86] 2021-09-15 (PCT/IB2021/058416)  
[87] (WO2022/090820)  
[30] IT (102020000025849) 2020-10-30

[21] **3,197,016**  
[13] A1

[51] **Int.Cl. B29C 65/32 (2006.01) B32B 27/10 (2006.01) B65D 43/14 (2006.01) B65D 43/16 (2006.01) B65D 53/02 (2006.01) D21J 3/00 (2006.01)**  
[25] EN  
[54] **A COMPOSITE PAPERBOARD CONTAINER WITH A RIM COMPRISING FIBERS, AND A METHOD FOR PRODUCING SUCH A CONTAINER**  
[54] **RECIPIENT EN CARTON COMPOSITE AVEC UN REBORD COMPRENANT DES FIBRES, ET PROCEDE DE FABRICATION D'UN TEL RECIPIENT**  
[72] LUNDGREN-GOODMAN, MAXIMILLIAN, SE  
[72] GEZELIUS, GEORG, SE  
[71] GPI SYSTEMS AB, SE  
[85] 2023-04-28  
[86] 2021-10-14 (PCT/SE2021/051009)  
[87] (WO2022/093089)  
[30] SE (2051256-2) 2020-10-28

[21] **3,197,017**  
[13] A1

[51] **Int.Cl. B66C 13/48 (2006.01) G06Q 50/08 (2012.01)**  
[25] EN  
[54] **CONSTRUCTION INFORMATION INTEGRATION SYSTEM, CONSTRUCTION INFORMATION INTEGRATION METHOD, AND CONSTRUCTION INFORMATION INTEGRATION PROGRAM**  
[54] **SYSTEME D'INTEGRATION D'INFORMATIONS DE CONSTRUCTION, PROCEDE D'INTEGRATION D'INFORMATIONS DE CONSTRUCTION ET PROGRAMME D'INTEGRATION D'INFORMATIONS DE CONSTRUCTION**  
[72] TAGO, SHO, JP  
[72] SUGAYA, KAZUHITO, JP  
[72] SUGIMOTO, TAKASHI, JP  
[72] SOMEYA, MASATOSHI, JP  
[72] TOKURA, KENTARO, JP  
[71] SUMITOMO MITSUI CONSTRUCTION CO., LTD., JP  
[85] 2023-04-28  
[86] 2021-03-08 (PCT/JP2021/008965)  
[87] (WO2022/113385)  
[30] JP (2020-197371) 2020-11-27

[21] **3,197,018**  
[13] A1

[51] **Int.Cl. H04W 8/26 (2009.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR ASSIGNING NETWORK ADDRESS PREFIX**  
[54] **PROCEDE ET APPAREIL D'ATTRIBUTION DE PREFIXE D'ADRESSE RESEAU**  
[72] ZHANG, WEN, CN  
[72] YANG, YONG, SE  
[72] HE, YINGJIAO, CN  
[71] TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE  
[85] 2023-04-28  
[86] 2021-09-27 (PCT/CN2021/121059)  
[87] (WO2022/095630)  
[30] CN (PCT/CN2020/126610) 2020-11-04

[21] **3,197,019**  
[13] A1

[51] **Int.Cl. C12Q 1/6804 (2018.01) C12Q 1/6806 (2018.01) C12Q 1/6874 (2018.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR HIGH-THROUGHPUT CELL LINE DEVELOPMENT**  
[54] **SYSTEMES ET PROCEDES DE DEVELOPPEMENT A HAUT DEBIT DE LIGNEES CELLULAIRES**  
[72] TSIORIS, KONSTANTINOS, US  
[72] YALCIN OZKUMUR, AYCA, US  
[71] ONECYTE BIOTECHNOLOGIES, INC., US  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/US2021/057453)  
[87] (WO2022/094344)  
[30] US (63/107,967) 2020-10-30  
[30] US (63/192,305) 2021-05-24

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[21] **3,197,020**  
[13] A1

[51] **Int.Cl. G09B 15/00 (2006.01)**  
[25] EN  
[54] **DEVICES, SYSTEMS, AND METHODS FOR SPEECH THERAPY**  
[54] **DISPOSITIFS, SYSTEMES ET PROCEDES DE THERAPIE VOCALE**  
[72] FRANK, MATTHEW KEITH, US  
[71] INNOVATIVE VOICE SCIENCES AND STRATEGIES, LLC, US  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/US2021/057283)  
[87] (WO2022/094231)  
[30] US (17/086,214) 2020-10-30

[21] **3,197,021**  
[13] A1

[51] **Int.Cl. G06F 11/36 (2006.01)**  
[25] EN  
[54] **INFORMATION TRANSMISSION METHOD, CONTROL APPARATUS, ELECTROMAGNETIC SIGNAL TRANSCIEVER APPARATUS, AND SIGNAL PROCESSING DEVICE**  
[54] **PROCEDE DE TRANSMISSION D'INFORMATIONS, APPAREIL DE COMMANDE, APPAREIL EMETTEUR-RECEPTEUR DE SIGNAL ELECTROMAGNETIQUE ET DISPOSITIF DE TRAITEMENT DE SIGNAL**  
[72] RUAN, HONGCHAO, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2023-04-28  
[86] 2020-10-30 (PCT/CN2020/125435)  
[87] (WO2022/088080)

[21] **3,197,022**  
[13] A1

[51] **Int.Cl. A61K 9/08 (2006.01) A61K 47/02 (2006.01) A61P 25/00 (2006.01) A61P 37/02 (2006.01) C07K 16/18 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **USE OF AN ANTI-CD19 ANTIBODY TO TREAT AUTOIMMUNE DISEASE**  
[54] **UTILISATION D'UN ANTICORPS ANTI-CD19 POUR TRAITER UNE MALADIE AUTO-IMMUNE**  
[72] SHE, DEWEI, US  
[72] RATCHFORD, JOHN, US  
[72] KATZ, ELIEZER, US  
[72] REES, WILLIAM, US  
[71] VIELA BIO, INC., US  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/US2021/057443)  
[87] (WO2022/094334)  
[30] US (63/107,182) 2020-10-29  
[30] US (63/143,541) 2021-01-29  
[30] US (63/178,286) 2021-04-22

[21] **3,197,023**  
[13] A1

[51] **Int.Cl. A61K 31/7088 (2006.01) C12N 15/115 (2010.01) A61K 47/60 (2017.01) A61K 31/712 (2006.01) A61P 27/02 (2006.01)**  
[25] EN  
[54] **METHODS FOR TREATING OPHTHALMOLOGICAL CONDITIONS**  
[54] **METHODES DE TRAITEMENT D'AFFECTIONS OPHTALMOLOGIQUES**  
[72] DUGEL, PRAVIN, US  
[72] DESAI, DHAVAL B., US  
[71] IVERIC BIO, INC., US  
[85] 2023-04-28  
[86] 2021-10-31 (PCT/US2021/057484)  
[87] (WO2022/094364)  
[30] US (63/108,428) 2020-11-01  
[30] US (63/108,427) 2020-11-01  
[30] US (63/212,098) 2021-06-17  
[30] US (63/212,102) 2021-06-17  
[30] US (63/257,565) 2021-10-19

[21] **3,197,024**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61P 31/14 (2006.01) C07K 14/005 (2006.01)**  
[25] EN  
[54] **CHIMERIC PROTEIN COMPRISING THE RECEPTOR BINDING DOMAIN OF THE CORONAVIRUS SPIKE PROTEIN AND COMPOSITIONS THEREOF**  
[54] **PROTEINE CHIMERIQUE COMPRENANT LE DOMAINE DE LIAISON AU RECEPTEUR DE LA PROTEINE DE SPICULE DE CORONAVIRUS ET COMPOSITIONS LA COMPRENANT**  
[72] CHINEA SANTIAGO, GLAY, CU  
[72] MARTIN DUNN, ALEJANDRO MIGUEL, CU  
[72] GONZALEZ ROCHE, DIAMILE, CU  
[72] LIMONTA FERNANDEZ, MILADYS, CU  
[72] IGLESIAS PEREZ, ENRIQUE, CU  
[72] BEQUET ROMERO, MONICA, CU  
[72] SANTANA MILIAN, HECTOR, CU  
[72] MARQUEZ PERERA, GABRIEL J., CU  
[72] MUSACCHIO LASA, ALEXIS, CU  
[72] CABRALES RICO, ANIA, CU  
[72] GUILLEN NIETO, GERARDO ENRIQUE, CU  
[72] AYALA AVILA, MARTA, CU  
[72] PIMENTEL VAZQUEZ, EULOGIO, CU  
[72] ROJAS DORANTES, GERTRUDIS, CU  
[72] HUERTA GALINDO, VIVIAN, CU  
[71] CENTRO DE INGENIERIA GENETICA Y BIOTECNOLOGIA, CU  
[85] 2023-04-28  
[86] 2021-11-03 (PCT/CU2021/050010)  
[87] (WO2022/096039)  
[30] CU (2020-0081) 2020-11-04

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[21] **3,197,025**  
[13] A1

[51] **Int.Cl. G01N 33/68 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS RELATING TO BIOMARKERS FOR NEURODEGENERATIVE DISEASES**  
[54] **METHODES ET COMPOSITIONS SE RAPPORTANT A DES BIOMARQUEURS POUR DES MALADIES NEURODEGENERATIVES**  
[72] RIDEOUT, HARDY, GR  
[71] ANACALYPSIS THERAPEUTICS, IKE, GR  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/IB2021/000754)  
[87] (WO2022/090804)  
[30] GR (20200100660) 2020-10-30

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[21] **3,197,027**  
[13] A1

[51] **Int.Cl. B01J 49/57 (2017.01) B01J 49/40 (2017.01)**  
[25] EN  
[54] **PROCESS FOR THE SELECTIVE REMOVAL OF ANIONIC RADIONUCLIDES**  
[54] **PROCEDE D'ELIMINATION SELECTIVE DE RADIONUCLEIDES ANIONIQUES**  
[72] PROKOPOWICZ, RICHARD A., CA  
[71] KINECTRICS INC., CA  
[85] 2023-04-28  
[86] 2021-10-28 (PCT/CA2021/051522)  
[87] (WO2022/087738)  
[30] US (63/107,977) 2020-10-30

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[21] **3,197,028**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2023.01) G06Q 50/28 (2012.01)**  
[25] EN  
[54] **COMPUTER APPLICATIONS THAT DETERMINE A PARCEL POSITION ERROR**  
[54] **APPLICATIONS INFORMATIQUES DETERMINANT UNE ERREUR DE POSITION DE COLIS**  
[72] FREEMAN, MALLORY, US  
[72] MAJOR, TIMOTHY, US  
[72] WU, DAVID, US  
[72] SKORB, LAUREN, US  
[72] BRITTON, MATTHEW, US  
[71] UNITED PARCEL SERVICE OF AMERICA, INC., US  
[85] 2023-04-28  
[86] 2021-10-13 (PCT/US2021/054747)  
[87] (WO2022/093532)  
[30] US (17/085,817) 2020-10-30

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[21] **3,197,029**  
[13] A1

[51] **Int.Cl. C12Q 1/6886 (2018.01)**  
[25] EN  
[54] **PROGNOSTIC METHOD FOR AGGRESSIVE LUNG ADENOCARCINOMAS**  
[54] **PROCEDE DE PRONOSTIC POUR DES ADENOCARCINOMES PULMONAIRES AGRESSIFS**  
[72] BIANCHI, FABRIZIO, IT  
[72] DAMA, ELISA, IT  
[72] MELOCCHI, VALENTINA, IT  
[71] FONDAZIONE DI RELIGIONE E DI CULTO "CASA SOLLIEVO DELLA SOFFERENZA" - OPERA DI SAN PIO DA PIETRELCINA, IT  
[85] 2023-04-28  
[86] 2021-12-10 (PCT/EP2021/085141)  
[87] (WO2022/122994)  
[30] EP (20213323.7) 2020-12-11

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[21] **3,197,030**  
[13] A1

[51] **Int.Cl. C22C 38/40 (2006.01) C22C 38/42 (2006.01) C22C 38/46 (2006.01) C22C 38/48 (2006.01) C22C 38/50 (2006.01)**  
[25] EN  
[54] **MARAGING STEEL**  
[54] **ACIER MARAGING**  
[72] EJNERMARK, SEBASTIAN, SE  
[71] UDDEHOLMS AB, SE  
[85] 2023-04-28  
[86] 2021-11-04 (PCT/SE2021/051102)  
[87] (WO2022/098285)  
[30] SE (2051286-9) 2020-11-05

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[21] **3,197,031**  
[13] A1

[51] **Int.Cl. B01J 2/16 (2006.01) C12N 1/20 (2006.01) F26B 3/06 (2006.01) F26B 17/02 (2006.01) F26B 25/04 (2006.01)**  
[25] EN  
[54] **METHOD FOR PREPARING AMINO ACID MIXED SOLID AND APPARATUS FOR PREPARING AMINO ACID MIXED SOLID**  
[54] **PROCEDE ET APPAREIL DE PRODUCTION DE SOLIDES D'ACIDES AMINES MELANGES**  
[72] JEONG, DAEYOUNG, KR  
[72] LEE, IN SUNG, KR  
[72] GWAK, WON SIK, KR  
[72] YU, JAE HUN, KR  
[72] KWON, MIN KYUNG, KR  
[72] HONG, JIN TAE, KR  
[72] KANG, JI-HUN, KR  
[71] CJ CHEILJEDANG CORPORATION, KR  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/KR2021/015388)  
[87] (WO2022/092879)  
[30] KR (10-2020-0142144) 2020-10-29

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[21] **3,197,032**  
[13] A1

[51] **Int.Cl. C07D 413/12 (2006.01) A61K 31/443 (2006.01) A61K 31/4436 (2006.01) A61K 31/4439 (2006.01) C07D 413/14 (2006.01) C07D 417/12 (2006.01) C07D 417/14 (2006.01)**

[25] EN

[54] **PYRAZOLE DERIVATIVES AS RET KINASE INHIBITORS**

[54] **DERIVES DE PYRAZOLE EN TANT QU'INHIBITEURS DE KINASE RET**

[72] ANDERSON, ERIN D., US

[72] ANDREWS, STEVEN W., US

[72] BOLDRON, CHRISTOPHER PIERRE ALBERT JEAN, US

[72] CONDROSKI, KEVIN R., US

[72] IRVIN, THOMAS C., US

[72] KOLAKOWSKI, GABRIELLE R. A/K/A JODY GABRIELLE RUSTMANN KOLAKOWSKI, US

[72] KUMAR, MANOJ, US

[72] MCFADDIN, ELIZABETH A., US

[72] MCKENNEY, MEGAN L., US

[72] MCLEAN, JOHNATHAN ALEXANDER, US

[72] MOURET, TIPHAIN, US

[72] MUNCHHOF, MICHAEL J., US

[72] PANCALDI, THOMAS PIERRE DINO, US

[72] PILKINGTON-MIKSA, MICHAEL ALEXANDER, US

[72] PINTO, MARTA, US

[71] ELI LILLY AND COMPANY, US

[85] 2023-04-28

[86] 2021-11-05 (PCT/US2021/058206)

[87] (WO2022/098970)

[30] US (63/110,643) 2020-11-06

[21] **3,197,033**  
[13] A1

[51] **Int.Cl. G06Q 20/38 (2012.01)**

[25] EN

[54] **AUTONOMOUS CRYPTOGRAPHIC AND BLOCKCHAIN ACTOR IN A BROWSER EXECUTION CONTEXT**

[54] **ACTEUR DE CHAINE DE BLOCS ET CRYPTOGRAPHIQUE AUTONOME DANS UN CONTEXTE D'EXECUTION DE NAVIGATEUR**

[72] LUNDGREN, LON C., US

[72] KEARNS, ERIC A., US

[72] DUBINETS, LEV, US

[71] OCELOT TECHNOLOGIES, INC., US

[85] 2023-04-28

[86] 2021-10-29 (PCT/US2021/057415)

[87] (WO2022/094318)

[30] US (63/107,407) 2020-10-29

[21] **3,197,034**  
[13] A1

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/5377 (2006.01) A61P 25/28 (2006.01)**

[25] EN

[54] **SUBSTITUTED DIARYLAMINE COMPOUND, PHARMACEUTICAL COMPOSITION THEREOF, PREPARATION METHOD THEREFOR, AND USE THEREOF**

[54] **COMPOSE DE DIARYLAMINE SUBSTITUE, COMPOSITION PHARMACEUTIQUE DE CELUI-CI, PROCEDE DE PREPARATION CORRESPONDANT ET UTILISATION ASSOCIEE**

[72] XIA, YAN, CN

[72] GUO, ZENGSHAN, CN

[72] JIANG, ZIQING, CN

[72] WANG, XIZHI, CN

[72] ZHU, TAOTAO, CN

[72] WANG, CHUAN, CN

[72] ZHUO, LANG, CN

[71] SUZHOU YABAO PHARMACEUTICAL R&D CO., LTD., CN

[85] 2023-04-28

[86] 2021-10-27 (PCT/CN2021/126790)

[87] (WO2022/089497)

[30] CN (202011187029.7) 2020-10-29

[21] **3,197,035**  
[13] A1

[51] **Int.Cl. B63B 59/04 (2006.01)**

[25] EN

[54] **AN ANTI-FOULING PROTECTIVE COVER**

[54] **HOUSSE DE PROTECTION ANTI-SALISSURES**

[72] STENSLET, TROND, NO

[72] ERIKSEN, ERLING, NO

[71] MARINE PRO AS, NO

[85] 2023-04-28

[86] 2021-11-01 (PCT/EP2021/080266)

[87] (WO2022/096417)

[30] NO (20201210) 2020-11-06

[21] **3,197,036**  
[13] A1

[51] **Int.Cl. H04L 9/32 (2006.01)**

[25] EN

[54] **BLOCKCHAIN-BASED SECURE, ANONYMIZING MESSAGE BUS**

[54] **BUS DE MESSAGES D'ANONYMISATION SECURISE SUR CHAINE DE BLOCS**

[72] LUNDGREN, LON C., US

[72] KEARNS, ERIC A., US

[71] OCELOT TECHNOLOGIES, INC., US

[85] 2023-04-28

[86] 2021-10-29 (PCT/US2021/057445)

[87] (WO2022/094336)

[30] US (63/107,407) 2020-10-29

[21] **3,197,037**  
[13] A1

[51] **Int.Cl. B81C 3/00 (2006.01) G06N 10/00 (2022.01)**

[25] EN

[54] **CHIP ASSEMBLY AND METHOD OF MAKING A CHIP ASSEMBLY**

[54] **ENSEMBLE PUCE ET PROCEDE DE FABRICATION D'ENSEMBLE PUCE**

[72] SINCLAIR, ALASTAIR, GB

[72] WILPERS, GUIDO, GB

[72] CHOONEE, KAUSHAL, GB

[72] LARSSON, MICHAEL PETER, GB

[71] NPL MANAGEMENT LIMITED, GB

[85] 2023-04-28

[86] 2021-10-29 (PCT/GB2021/052809)

[87] (WO2022/090729)

[30] GB (2017243.3) 2020-10-30

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[21] **3,197,038**  
[13] A1

[51] **Int.Cl. C12N 9/12 (2006.01) C12Q 1/6844 (2018.01) C12N 9/22 (2006.01) C12N 15/09 (2006.01)**

[25] EN

[54] **NEW POLYMERASE AND USE THEREOF**

[54] **NOUVELLE POLYMERASE ET SON UTILISATION**

[72] SODERBERG, OLA, SE

[72] WENSON, LEONIE, DE

[72] HELLMAN, BJORN, SE

[72] BIVEHED, ERIK, SE

[72] HELDIN, JOHAN, SE

[71] SODERBERG, OLA, SE

[71] WENSON, LEONIE, DE

[71] HELLMAN, BJORN, SE

[71] BIVEHED, ERIK, SE

[71] HELDIN, JOHAN, SE

[85] 2023-04-28

[86] 2021-10-19 (PCT/SE2021/051028)

[87] (WO2022/093091)

[30] SE (2051265-3) 2020-10-30

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[21] **3,197,039**  
[13] A1

[51] **Int.Cl. H01L 23/13 (2006.01) G06N 10/00 (2022.01) H01L 23/15 (2006.01)**

[25] EN

[54] **ION MICROTRAP ASSEMBLY AND METHOD OF MAKING OF MAKING SUCH AN ASSEMBLY**

[54] **ENSEMBLE MICROPIEGE IONIQUE ET PROCEDE DE FABRICATION ASSOCIE**

[72] SINCLAIR, ALASTAIR, GB

[72] WILPERS, GUIDO, GB

[72] CHOONEE, KAUSHAL, GB

[72] VICKERS, GARRIE, GB

[72] ASHBY, BILL, GB

[71] NPL MANAGEMENT LIMITED, GB

[71] OPTOCAP, LTD, GB

[85] 2023-04-28

[86] 2021-10-29 (PCT/GB2021/052811)

[87] (WO2022/090731)

[30] GB (2017249.0) 2020-10-30

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[21] **3,197,040**  
[13] A1

[51] **Int.Cl. H01M 50/244 (2021.01)**

[25] EN

[54] **BATTERY PACK AND VEHICLE HAVING SAME**

[54] **BLOC-BATTERIE ET VEHICULE POURVU DE CELUI-CI**

[72] TAN, LIANGWEN, CN

[72] SONG, NA, CN

[72] TAN, JING, CN

[72] CHEN, WENHUI, CN

[71] BYD COMPANY LIMITED, CN

[85] 2023-04-28

[86] 2021-07-12 (PCT/CN2021/105761)

[87] (WO2022/088753)

[30] CN (202011194507.7) 2020-10-30

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[21] **3,197,041**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01) C12N 15/861 (2006.01)**

[25] EN

[54] **ARTIFICIAL EXPRESSION CONSTRUCTS FOR MODULATING GENE EXPRESSION IN CHANDELIER CELLS**

[54] **CONSTRUCTIONS D'EXPRESSION ARTIFICIELLES POUR MODULER L'EXPRESSION GENIQUE DANS LES CELLULES EN CHANDELIER**

[72] DAIGLE, TANYA, US

[72] GRAYBUCK, LUCAS T., US

[72] KALMBACH, BRIAN EDWARD, US

[72] LEIN, EDWARD SEBASTIAN, US

[72] LEVI, BOAZ P., US

[72] MICH, JOHN K., US

[72] SEDENO CORTES, ADRIANA ESTELA, US

[72] TASIC, BOSILJKA, US

[72] TING, JONATHAN, US

[72] ZENG, HONGKUI, US

[71] ALLEN INSTITUTE, US

[85] 2023-04-28

[86] 2021-11-10 (PCT/US2021/058812)

[87] (WO2022/103859)

[30] US (63/112,102) 2020-11-10

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[21] **3,197,049**  
[13] A1

[51] **Int.Cl. C25C 7/06 (2006.01) C25C 3/18 (2006.01)**

[25] EN

[54] **REMOVING IMPURITIES FROM AN ELECTROLYTE**

[54] **ELIMINATION D'IMPURETES D'UN ELECTROLYTE**

[72] D'ASTOLFO, LEROY, US

[72] LIU, XINGHUA, US

[72] MICKELSON, LARRY, US

[72] MACKEY, ALLEN GEORGE, US

[72] FORS, JOHN, NO

[71] ELYSIS LIMITED PARTNERSHIP, CA

[85] 2023-05-01

[86] 2021-11-23 (PCT/CA2021/051665)

[87] (WO2022/109725)

[30] US (63/117,483) 2020-11-24

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[21] **3,197,052**  
[13] A1

[51] **Int.Cl. C25C 3/12 (2006.01) C25C 3/08 (2006.01) C25C 7/02 (2006.01)**

[25] EN

[54] **CONTROLLING ELECTRODE CURRENT DENSITY OF AN ELECTROLYTIC CELL**

[54] **REGULATION DE LA DENSITE DE COURANT D'ELECTRODE D'UNE CELLULE ELECTROLYTIQUE**

[72] D'ASTOLFO, LEROY, US

[72] MICKELSON, LARRY, US

[72] RUAN, YIMIN, US

[71] ELYSIS LIMITED PARTNERSHIP, CA

[85] 2023-05-01

[86] 2021-11-25 (PCT/CA2021/051689)

[87] (WO2022/109742)

[30] US (63/118,774) 2020-11-27

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[21] **3,197,057**  
[13] A1

[51] **Int.Cl. G01V 1/20 (2006.01) H04B 11/00 (2006.01)**

[25] EN

[54] **RECEIVING DEVICE FOR ACOUSTIC WAVES**

[54]

[72] BRUNET, JEAN-PHILIPPE, FR

[72] DERRIENNIC, HERVE, FR

[72] TORLAY, JEAN-ERIC, FR

[71] THALES, FR

[85] 2023-05-01

[86] 2021-08-30 (PCT/EP2021/073829)

[87] (WO2022/096173)

[30] FR (FR2011345) 2020-11-05

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[21] **3,197,073**  
[13] A1

[51] **Int.Cl. C22B 3/42 (2006.01) C22B 26/12 (2006.01)**  
[25] EN  
[54] **METHODS OF OBTAINING WATER FOR DOWNSTREAM PROCESSES**  
[54] **METHODES D'OBTENTION D'EAU POUR PROCEDES EN AVAL**  
[72] BENDER, JACK, US  
[72] DINN, TIPOUSH, US  
[72] MAYS, WILLIAM C., US  
[72] PANCHULA, MARTIN LAWRENCE, US  
[72] VON DEAK, DIETER G., US  
[71] BASF CORPORATION, US  
[85] 2023-05-01  
[86] 2021-11-04 (PCT/US2021/072233)  
[87] (WO2022/126053)  
[30] US (63/109,421) 2020-11-04

[21] **3,197,077**  
[13] A1

[51] **Int.Cl. G01N 35/00 (2006.01)**  
[25] EN  
[54] **DIAGNOSTIC ASSAY SYSTEM WITH REPLACEABLE PROCESSING MODULES AND REMOTE MONITORING**  
[54] **SYSTEME DE DOSAGE DIAGNOSTIQUE A MODULES DE TRAITEMENT REMPLACABLES ET SURVEILLANCE A DISTANCE**  
[72] CHANG, RONALD, US  
[72] MONTGOMERY, STEVEN, US  
[72] MOTE, GREGORY, US  
[72] BLIVEN, BRIAN, US  
[71] CEPHEID, US  
[85] 2023-05-01  
[86] 2021-11-01 (PCT/US2021/057598)  
[87] (WO2022/094414)  
[30] US (63/107,934) 2020-10-30

[21] **3,197,079**  
[13] A1

[51] **Int.Cl. G01M 7/02 (2006.01) G01M 13/028 (2019.01) G01M 13/045 (2019.01) B62D 55/32 (2006.01) G01M 15/12 (2006.01)**  
[25] EN  
[54] **UNDERCARRIAGE WEAR PREDICTION BASED ON MACHINE VIBRATION DATA**  
[54] **PREDICTION D'USURE DE TRAIN DE ROULEMENT BASEE SUR DES DONNEES DE VIBRATION DE MACHINE**  
[72] ZHANG, LI, US  
[72] XU, YINGBIAO, US  
[71] CATERPILLAR INC., US  
[85] 2023-05-01  
[86] 2021-10-06 (PCT/US2021/053678)  
[87] (WO2022/093503)  
[30] US (16/949,450) 2020-10-29

[21] **3,197,076**  
[13] A1

[51] **Int.Cl. G06N 20/00 (2019.01)**  
[25] EN  
[54] **AUTONOMOUS AND CONTINUOUSLY SELF-IMPROVING LEARNING SYSTEM**  
[54] **SYSTEME D'APPRENTISSAGE AUTONOME ET S'AUTO-AMELIORANT EN CONTINU**  
[72] CROSBY, PETER, US  
[72] REQUA, JAMES, US  
[71] SATISFAI HEALTH INC., CA  
[85] 2023-05-01  
[86] 2021-10-27 (PCT/US2021/056875)  
[87] (WO2022/093975)  
[30] US (17/087,558) 2020-11-02  
[30] US (17/408,283) 2021-08-20

[21] **3,197,078**  
[13] A1

[51] **Int.Cl. G01M 13/00 (2019.01) G01M 17/00 (2006.01) G05B 23/02 (2006.01) G06N 3/08 (2023.01) G07C 5/08 (2006.01)**  
[25] EN  
[54] **UNDERCARRIAGE WEAR PREDICTION USING MACHINE LEARNING MODEL**  
[54] **PREDICTION D'USURE DE TRAIN DE ROULEMENT A L'AIDE D'UN MODELE D'APPRENTISSAGE AUTOMATIQUE**  
[72] ZHANG, LI, US  
[72] JOHANNSEN, ERIC J., US  
[72] ZHANG, YANCHAI, US  
[72] HU, XUEFEI, US  
[72] HOYT, DANIEL W., US  
[71] CATERPILLAR INC., US  
[85] 2023-05-01  
[86] 2021-10-04 (PCT/US2021/053321)  
[87] (WO2022/093484)  
[30] US (16/949,448) 2020-10-29

[21] **3,197,080**  
[13] A1

[51] **Int.Cl. C10G 31/08 (2006.01) C10G 19/02 (2006.01) C10G 45/04 (2006.01) C10G 45/34 (2006.01) C10G 65/06 (2006.01) C10G 67/02 (2006.01)**  
[25] EN  
[54] **PROCESS FOR TREATING A FEEDSTOCK COMPRISING HALIDES**  
[54] **PROCEDE DE TRAITEMENT D'UNE CHARGE D'ALIMENTATION COMPRENANT DES HALOGENURES**  
[72] JORGENSEN, LARS, DK  
[71] TOPSOE A/S, DK  
[85] 2023-05-01  
[86] 2021-11-11 (PCT/EP2021/081366)  
[87] (WO2022/101333)  
[30] EP (20207450.6) 2020-11-13

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[21] **3,197,081**  
[13] A1

[51] **Int.Cl. G02B 6/38 (2006.01) H01R 13/627 (2006.01)**  
[25] EN  
[54] **FIBER OPTIC CONNECTORS HAVING A WEATHERPROOFING COLLAR**  
[54] **CONNECTEURS DE FIBRES OPTIQUES A COLLIER D'ETANCHEITE**  
[72] CAPPANNARI, STEPHEN PAUL, US  
[72] DE JONG, MICHAEL, US  
[72] JONES, ASHLEY WESLEY, US  
[72] KUKIAN, PRZEMYSLAW ANDRZEJ, PL  
[72] MA, JUN, US  
[72] MUELLER-SCHLOMKA, GORDON, DE  
[72] WOODY, SHANE CHAD, US  
[71] CORNING RESEARCH & DEVELOPMENT CORPORATION, US  
[85] 2023-05-01  
[86] 2021-10-28 (PCT/US2021/056980)  
[87] (WO2022/094030)  
[30] US (63/107,962) 2020-10-30

[21] **3,197,082**  
[13] A1

[51] **Int.Cl. C08K 5/07 (2006.01)**  
[25] EN  
[54] **POLYOLEFIN FORMULATION FORMULATION DE POLYOLEFINE**  
[72] YU, XINDI, US  
[72] MWASAME, PAUL M., US  
[72] YU, DECAI, US  
[72] MUKHOPADHYAY, SUKRIT, US  
[72] RAO, YUANQIAO, US  
[72] PERSON, TIMOTHY J., US  
[72] LI, DACHAO, US  
[72] GU, JUNSI, US  
[72] COGEN, JEFFREY M., US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2023-05-01  
[86] 2021-10-25 (PCT/US2021/056438)  
[87] (WO2022/093682)  
[30] US (63/107,894) 2020-10-30

[21] **3,197,083**  
[13] A1

[51] **Int.Cl. A63B 63/00 (2006.01) A63B 71/02 (2006.01)**  
[25] EN  
[54] **IMPROVEMENTS IN AND RELATING TO MOVEABLE GOAL ASSEMBLIES AND PARTS AND FITTINGS THEREFOR**  
[54] **AMELIORATIONS APPORTEES ET AYANT TRAIT A DES ENSEMBLES BUTS MOBILES ET PIECES ET ACCESSOIRES ASSOCIES**  
[72] MACKENZIE, THOMAS WILLIAM, NZ  
[71] TETRANTARES LIMITED, NZ  
[85] 2023-05-01  
[86] 2021-10-29 (PCT/NZ2021/050192)  
[87] (WO2022/093046)  
[30] AU (2020903919) 2020-10-29

[21] **3,197,084**  
[13] A1

[51] **Int.Cl. C12M 1/00 (2006.01) C12M 1/22 (2006.01) C12M 1/26 (2006.01) C12M 1/36 (2006.01)**  
[25] EN  
[54] **MOVEABLE EFFECTOR ASSEMBLY, SYSTEM, AND METHODS**  
[54] **ENSEMBLE EFFECTEUR MOBILE, SYSTEME ET PROCEDES**  
[72] SITTON, GREGORY W., US  
[72] CRICHTON, DANIEL, GB  
[72] WOODWARD, ADRIAN M., GB  
[72] SHAKESPEARE, SIMON A., GB  
[71] 3M INNOVATIVE PROPERTIES COMPANY, US  
[85] 2023-05-01  
[86] 2021-11-01 (PCT/IB2021/060099)  
[87] (WO2022/091059)  
[30] US (63/108,587) 2020-11-02

[21] **3,197,085**  
[13] A1

[51] **Int.Cl. A61K 8/90 (2006.01) A61K 8/22 (2006.01) A61K 8/81 (2006.01) A61Q 11/00 (2006.01)**  
[25] EN  
[54] **ORAL CARE WHITENING COMPOSITIONS**  
[54] **COMPOSITIONS DE BLANCHIMENT POUR SOINS BUCCAUX**  
[72] CHEN, XIANG, US  
[72] CHOPRA, SUMAN, US  
[72] FEI, LIN, US  
[71] COLGATE-PALMOLIVE COMPANY, US  
[85] 2023-05-01  
[86] 2021-11-05 (PCT/US2021/058202)  
[87] (WO2022/098967)  
[30] US (63/110,586) 2020-11-06

[21] **3,197,086**  
[13] A1

[51] **Int.Cl. A23K 10/30 (2016.01) A23K 50/40 (2016.01)**  
[25] EN  
[54] **PET FOOD COMPOSITIONS COMPOSITIONS ALIMENTAIRES POUR ANIMAUX DE COMPAGNIE**  
[72] EPHRAIM, EDEN, US  
[72] FOLLY, EDEM-ELIKPLIM, US  
[72] JEWELL, DENNIS, US  
[71] HILL'S PET NUTRITION, INC., US  
[85] 2023-05-01  
[86] 2021-11-10 (PCT/US2021/058777)  
[87] (WO2022/103836)  
[30] US (63/112,361) 2020-11-11



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[21] **3,197,088**  
[13] A1

[51] **Int.Cl. C07C 41/01 (2006.01) C07C 43/04 (2006.01)**  
[25] EN  
[54] **PROCESSES FOR PRODUCING AN ETHER**  
[54] **PROCEDES DE PRODUCTION D'UN ETHER**  
[72] FLAHERTY, DAVID WILLIAM, US  
[72] BARTON, DAVID G., US  
[72] CHEN, XUE, US  
[72] BERDUGO DIAZ, CLAUDIA EUGENIA, US  
[72] LUO, JING, US  
[72] YUN, YANGSIK, US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[71] THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS, US  
[85] 2023-05-01  
[86] 2021-10-04 (PCT/US2021/053350)  
[87] (WO2022/093489)  
[30] US (63/107,739) 2020-10-30

[21] **3,197,090**  
[13] A1

[51] **Int.Cl. E02F 3/32 (2006.01) E02F 3/42 (2006.01) E02F 3/43 (2006.01) E02F 9/20 (2006.01) E02F 9/22 (2006.01) E02F 9/26 (2006.01) G05G 9/04 (2006.01)**  
[25] EN  
[54] **COORDINATED ACTUATOR CONTROL BY AN OPERATOR CONTROL**  
[54] **COMMANDE COORDONNEE D'ACTIONNEUR PAR UNE COMMANDE D'OPERATEUR**  
[72] KUSHNER, JEREMY, US  
[71] CATERPILLAR INC., US  
[85] 2023-05-01  
[86] 2021-10-04 (PCT/US2021/053324)  
[87] (WO2022/093485)  
[30] US (17/086,126) 2020-10-30

[21] **3,197,091**  
[13] A1

[51] **Int.Cl. H01S 3/02 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR HOMOGENIZING THE TEMPERATURE OF A LASER BASE PLATE**  
[54] **PROCEDE ET DISPOSITIF D'HOMOGENEISATION DE TEMPERATURE DE PLAQUE DE BASE LASER**  
[72] RUSTEIKA, NERIJUS, LT  
[72] GALIN, ILDAR, LT  
[72] REGELSKIS, KESTUTIS, LT  
[72] GAVRILINAS, NIKOLAJUS, LT  
[71] LITILIT, UAB, LT  
[85] 2023-05-01  
[86] 2021-12-10 (PCT/IB2021/061557)  
[87] (WO2022/130146)  
[30] LT (LT2020 563) 2020-12-14

[21] **3,197,092**  
[13] A1

[51] **Int.Cl. C07D 403/06 (2006.01) A61P 7/06 (2006.01) A61P 9/10 (2006.01) C07D 417/14 (2006.01)**  
[25] EN  
[54] **1-(2-(4-CYCLOPROPYL-1H-1,2,3-TRIAZOL-1-YL)ACETYL)-4-HYDROXY-N-(BENZYL)PYRROLIDIN E-2-CARBOXAMIDE DERIVATIVES AS VHL INHIBITORS FOR THE TREATMENT OF ANEMIA AND CANCER**  
[54] **DERIVES DE 1-(2-(4-CYCLOPROPYL-1H-1,2,3-TRIAZOL-1-YL)ACETYL)-4-HYDROXY-N-(BENZYL)PYRROLIDIN E-2-CARBOXAMIDE UTILISES EN TANT QU'INHIBITEURS DE VHL POUR LE TRAITEMENT DE L'ANEMIE ET DU CANCER**  
[72] FUHRMANN, JAKOB, US  
[72] WU, HAO, US  
[72] FAIRBROTHER, WAYNE J., US  
[71] GENENTECH, INC., US  
[85] 2023-05-01  
[86] 2020-11-30 (PCT/US2020/062627)  
[87] (WO2022/103411)  
[30] US (63/112,609) 2020-11-11

[21] **3,197,093**  
[13] A1

[51] **Int.Cl. E02F 9/24 (2006.01) E02F 9/26 (2006.01) E02F 9/28 (2006.01)**  
[25] EN  
[54] **GROUND ENGAGING TOOL WEAR AND LOSS DETECTION SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE DE DETECTION D'USURE ET DE PERTE D'OUTIL D'ATTAQUE DU SOL**  
[72] PETRANY, PETER JOSEPH, US  
[72] RAM, SHASTRI, US  
[71] CATERPILLAR INC., US  
[85] 2023-05-01  
[86] 2021-10-12 (PCT/US2021/054472)  
[87] (WO2022/093525)  
[30] US (17/086,081) 2020-10-30

[21] **3,197,095**  
[13] A1

[51] **Int.Cl. C07D 405/04 (2006.01) A61K 31/4192 (2006.01)**  
[25] EN  
[54] **GALECTIN-3 INHIBITING 2-HYDROXYCYCLOALKANE-1-CARBAMOYL DERIVATIVES**  
[54] **DERIVES DE 2-HYDROXYCYCLOALCANE-1-CARBAMOYLE INHIBANT LA GALECTINE-3**  
[72] BOLLI, MARTIN, CH  
[72] GATFIELD, JOHN, CH  
[72] GRISOSTOMI, CORINNA, CH  
[72] REMEN, LUBOS, CH  
[72] SAGER, CHRISTOPH, CH  
[72] ZUMBRUNN, CORNELIA, CH  
[71] IDORSIA PHARMACEUTICALS LTD, CH  
[85] 2023-05-01  
[86] 2021-11-01 (PCT/EP2021/080276)  
[87] (WO2022/090544)  
[30] EP (PCT/EP2020/080681) 2020-11-02  
[30] EP (PCT/EP2021/053133) 2021-02-10

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[21] **3,197,096**  
[13] A1

[51] **Int.Cl. E02F 3/32 (2006.01) E02F 3/42 (2006.01) E02F 3/43 (2006.01) E02F 9/20 (2006.01) E02F 9/22 (2006.01) E02F 9/26 (2006.01) G05G 9/047 (2006.01)**

[25] EN

[54] **MODE SELECTION FOR AN OPERATOR CONTROL**

[54] **SELECTION DE MODE POUR UNE COMMANDE D'OPERATEUR**

[72] KUSHNER, JEREMY, US

[72] ELLIOTT, CHRISTOPHER M., US

[72] SMITH, SAGE F., US

[71] CATERPILLAR INC., US

[85] 2023-05-01

[86] 2021-10-05 (PCT/US2021/053456)

[87] (WO2022/093494)

[30] US (17/086,128) 2020-10-30

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[21] **3,197,097**  
[13] A1

[51] **Int.Cl. E02F 9/26 (2006.01) G06T 7/00 (2017.01)**

[25] EN

[54] **WEAR AND LOSS DETECTION SYSTEM AND METHOD USING BUCKET-TOOL TEMPLATES**

[54] **SYSTEME ET PROCEDE DE DETECTION D'USURE ET DE PERTE UTILISANT DES MODELES DE GODET-OUTIL**

[72] RAM, SHASTRI, US

[72] PETRANY, PETER JOSEPH, US

[71] CATERPILLAR INC., US

[85] 2023-05-01

[86] 2021-10-12 (PCT/US2021/054468)

[87] (WO2022/093524)

[30] US (17/086,117) 2020-10-30

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[21] **3,197,100**  
[13] A1

[51] **Int.Cl. B01D 61/18 (2006.01) B01J 19/00 (2006.01) B01L 3/00 (2006.01) B01L 9/00 (2006.01) G01N 33/53 (2006.01)**

[25] EN

[54] **METHOD FOR MANUFACTURING ANALYSIS CHIPS AND ANALYSIS CHIP THUS OBTAINED**

[54] **PROCEDE DE FABRICATION D'UNE PUCE D'ANALYSE ET PUCE D'ANALYSE**

[72] PFLIMLIN, PASCAL, FR

[72] LUDWIG, BERNARD, CH

[71] PRECIPHOS, FR

[85] 2023-05-01

[86] 2021-11-04 (PCT/EP2021/080623)

[87] (WO2022/096564)

[30] FR (FR2011446) 2020-11-06

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[21] **3,197,101**  
[13] A1

[51] **Int.Cl. C11D 1/62 (2006.01) C11D 1/64 (2006.01) C11D 3/00 (2006.01)**

[25] EN

[54] **LIQUID CONDITIONING COMPOSITIONS COMPRISING AN ESTER QUAT DERIVED IN PART FROM TRANS FATTY ACIDS**

[54] **COMPOSITIONS DE CONDITIONNEMENT LIQUIDES COMPRENANT UN ESTERQUAT DERIVE EN PARTIE A PARTIR D'ACIDES GRAS TRANS**

[72] DECLERCQ, MARC JOHAN, BE

[71] THE PROCTER & GAMBLE COMPANY, US

[85] 2023-05-01

[86] 2021-11-10 (PCT/US2021/072312)

[87] (WO2022/104331)

[30] EP (20207807.7) 2020-11-16

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[21] **3,197,102**  
[13] A1

[51] **Int.Cl. G02B 6/28 (2006.01) G02B 6/38 (2006.01) G02B 6/44 (2006.01)**

[25] EN

[54] **CONFIGURABLE OPTICAL DEVICES HAVING AN OPTICAL SPLITTER AND DUPLEX CONNECTOR**

[54] **DISPOSITIFS OPTIQUES CONFIGURABLES AYANT UN DIVISEUR OPTIQUE ET UN CONNEXTEUR DUPLEX**

[72] DE JONG, MICHAEL, US

[72] SHAPIRA, CARMIL, IL

[72] TEN HAVE, ERIC STEPHAN, DE

[71] CORNING RESEARCH & DEVELOPMENT CORPORATION, US

[85] 2023-05-01

[86] 2021-10-25 (PCT/US2021/056393)

[87] (WO2022/093659)

[30] US (63/107,928) 2020-10-30

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[21] **3,197,103**  
[13] A1

[51] **Int.Cl. G06F 9/44 (2018.01)**

[25] EN

[54] **COMPUTER-BASED SYSTEMS CONFIGURED FOR AUTOMATED COMPUTER SCRIPT ANALYSIS AND MALWARE DETECTION AND METHODS THEREOF**

[54] **SYSTEMES INFORMATIQUES CONFIGURES A DES FINS D'ANALYSE AUTOMATISEE DE SCRIPT INFORMATIQUE ET DE DETECTION DE LOGICIEL MALVEILLANT ET PROCEDES ASSOCIES**

[72] SABERIDOKHT, BAHARAK, US

[72] MARBOUTI, FARSHID, US

[72] FLETCHER, STEPHEN, US

[71] CAPITAL ONE SERVICES, LLC, US

[85] 2023-05-01

[86] 2021-11-03 (PCT/US2021/057897)

[87] (WO2022/098759)

[30] US (17/088,368) 2020-11-03

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[21] **3,197,104**  
[13] A1

[51] **Int.Cl. A61P 19/08 (2006.01) A61P 19/10 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **BIFUNCTIONAL ANTAGONISTS OF ACTIVIN/TGF-BETA AND RANKL AND USES THEREOF**

[54] **ANTAGONISTES BIFONCTIONNELS DE L'ACTIVINE/TGF-BETA ET RANKL ET LEURS UTILISATIONS**

[72] HAN, HQ, US

[72] ZHOU, XIAOLAN, US

[71] HAN, HQ, US

[71] ZHOU, XIAOLAN, US

[85] 2023-05-01

[86] 2021-11-05 (PCT/US2021/058181)

[87] (WO2022/103660)

[30] US (63/112,380) 2020-11-11

[30] US (63/113,922) 2020-11-15

[21] **3,197,105**  
[13] A1

[51] **Int.Cl. B01J 19/00 (2006.01) B01J 19/28 (2006.01) F27B 7/16 (2006.01)**

[25] EN

[54] **INTERNAL BACKMIX SYSTEM OF THE REAGENT MASS IN A ROTATING CYLINDRICAL REACTOR**

[54] **SYSTEME DE RETROMELANGE INTERNE DE LA MASSE REACTIVE DANS UN REACTEUR CYLINDRIQUE ROTATIF**

[72] BRASIL, LUDMILA LOPES NASCIMENTO, BR

[72] DE OLIVEIRA, RONALD LOPES, BR

[72] GONCALVES, GUILHERME FRANCISCO, BR

[72] SOARES, ALVARO GUEDES, BR

[72] FROIS, FABRICIO TINOCO, BR

[72] DA SILVA, EZEQUIEL, BR

[72] POTTER, STEPHEN MICHAEL, BR

[71] TECNORED DESENVOLVIMENTO TECNOLOGICO S.A., BR

[85] 2023-05-01

[86] 2021-11-08 (PCT/BR2021/050486)

[87] (WO2022/094684)

[30] BR (BR102020022740-8) 2020-11-09

[21] **3,197,106**  
[13] A1

[51] **Int.Cl. E04F 15/02 (2006.01) E04F 15/10 (2006.01)**

[25] EN

[54] **DECORATIVE PANEL, AND COVERING OF SUCH DECORATIVE PANELS**

[54] **PANNEAU DECORATIF ET REVETEMENT FAIT DE TELS PANNEAUX DECORATIFS**

[72] BOUCKE, EDDY ALBERIC, BE

[71] I4F LICENSING NV, BE

[85] 2023-05-01

[86] 2021-11-08 (PCT/EP2021/080947)

[87] (WO2022/096712)

[30] NL (2026858) 2020-11-09

[21] **3,197,108**  
[13] A1

[51] **Int.Cl. A61K 47/60 (2017.01) A61P 13/04 (2006.01) A61P 19/06 (2006.01)**

[25] EN

[54] **MODIFIED URICASE AND USES THEREOF**

[54] **URICASE MODIFIEE ET SES UTILISATIONS**

[72] RUDERFER, ILYA, IL

[72] NATAF, YAKIR, IL

[72] ARVATZ, GIL, IL

[72] HANANIA, URI, IL

[72] ARIEL, TAMAR, IL

[72] ROZEN, SHELLY, IL

[72] HAYON, YAEL, IL

[71] PROTALIX LTD., IL

[85] 2023-05-01

[86] 2021-11-03 (PCT/IL2021/051305)

[87] (WO2022/097141)

[30] US (63/108,890) 2020-11-03

[21] **3,197,109**  
[13] A1

[51] **Int.Cl. G06Q 20/34 (2012.01)**

[25] EN

[54] **WEB-BASED ACTIVATION OF CONTACTLESS CARDS**

[54] **ACTIVATION DE CARTES SANS CONTACT SUR LE WEB**

[72] RULE, JEFFREY, US

[72] LUTZ, WAYNE, US

[71] CAPITAL ONE SERVICES, LLC, US

[85] 2023-05-01

[86] 2021-10-18 (PCT/US2021/055359)

[87] (WO2022/098494)

[30] US (17/088,399) 2020-11-03

[21] **3,197,110**  
[13] A1

[51] **Int.Cl. C11D 1/66 (2006.01) C11D 3/33 (2006.01) C11D 3/386 (2006.01) C11D 11/00 (2006.01)**

[25] EN

[54] **AUTOMATIC DISHWASHING METHOD WITH ALKALINE RINSE**

[54] **PROCEDE DE LAVAGE AUTOMATIQUE DE LA VAISSELLE PRESENTANT UN RINCAGE ALCALIN**

[72] DELPLANCKE, PATRICK FIRMIN AUGUST, BE

[72] VAN ELSSEN, KATRIEN ANDREA LIEVEN, BE

[72] BEWICK, LINDSAY SUZANNE, GB

[71] THE PROCTER & GAMBLE COMPANY, US

[85] 2023-05-01

[86] 2020-11-17 (PCT/US2020/070796)

[87] (WO2022/108611)

[21] **3,197,112**  
[13] A1

[51] **Int.Cl. B42F 7/10 (2006.01)**

[25] EN

[54] **TRAY STORAGE FOR EASILY STORING AND VIEWING DOCUMENTS**

[54] **STOCKAGE A PLATEAU POUR STOCKER ET VISUALISER FACILEMENT DES DOCUMENTS**

[72] JEONG, DO CHEON, KR

[71] JEONG, DO CHEON, KR

[85] 2023-05-01

[86] 2021-11-02 (PCT/KR2021/015711)

[87] (WO2022/169069)

[30] KR (10-2021-0014976) 2021-02-02

[30] KR (10-2021-0053752) 2021-04-26

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[21] **3,197,114**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/14 (2006.01) A61K 31/337 (2006.01) A61P 35/00 (2006.01) A61P 35/04 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR THE TREATMENT OF SOLID TUMORS**

[54] **COMPOSITIONS ET METHODES DESTINEES AU TRAITEMENT DE TUMEURS SOLIDES**

[72] EMANUEL, NOAM, IL

[71] POLYPID LTD., IL

[85] 2023-05-01

[86] 2021-12-21 (PCT/IB2021/062116)

[87] (WO2022/137126)

[30] US (63/128,218) 2020-12-21

[30] US (63/231,662) 2021-08-10

[30] US (63/243,147) 2021-09-12

[21] **3,197,115**  
[13] A1

[51] **Int.Cl. B62D 55/21 (2006.01)**

[25] EN

[54] **REDUCED MATERIAL HYDRAULIC MINING SHOVEL TRACK PAD**

[54] **PLAQUETTE DE CHENILLE DE PELLE EXCAVATRICE DE MINE HYDRAULIQUE A MATERIAU REDUIT**

[72] JONES, BENJAMIN I., US

[71] CATERPILLAR INC., US

[85] 2023-05-01

[86] 2021-10-05 (PCT/US2021/053457)

[87] (WO2022/093495)

[30] US (17/085,294) 2020-10-30

[21] **3,197,116**  
[13] A1

[51] **Int.Cl. G02B 6/38 (2006.01)**

[25] EN

[54] **FEMALE FIBER OPTIC CONNECTORS HAVING A ROCKER LATCH ARM AND METHODS OF MAKING THE SAME**

[54] **CONNECTEURS DE FIBRES OPTIQUES FEMELLES A CULBUTEUR DE VERROUILLAGE ET LEURS PROCEDES DE FABRICATION**

[72] CAPPANNARI, STEPHEN PAUL, US

[72] DE JONG, MICHAEL, US

[72] JONES, ASHLEY WESLEY, US

[72] KUKIAN, PRZEMYSLAW ANDRZEJ, PL

[72] MCDONALD, ALVIN JOHN, US

[72] MUELLER-SCHLOMKA, GORDON, DE

[72] TRAN, HIEU VINH, US

[72] WOODY, SHANE CHAD, US

[71] CORNING RESEARCH & DEVELOPMENT CORPORATION, US

[85] 2023-05-01

[86] 2021-10-28 (PCT/US2021/056976)

[87] (WO2022/094027)

[30] US (63/107,962) 2020-10-30

[21] **3,197,118**  
[13] A1

[51] **Int.Cl. G16H 20/10 (2018.01) G16H 10/60 (2018.01) A61K 31/4045 (2006.01)**

[25] EN

[54] **TREATMENT SUPPORT**

[54] **PRISE EN CHARGE DE TRAITEMENT**

[72] GOLDSMITH, PAUL, GB

[72] WILLIAMS, ADRIAN, GB

[72] O'REGAN, DAVID, GB

[72] COX, DAVID, GB

[71] CLOSED LOOP MEDICINE LTD, GB

[85] 2023-05-01

[86] 2021-11-04 (PCT/GB2021/052858)

[87] (WO2022/096883)

[30] US (63/109,668) 2020-11-04

[21] **3,197,119**  
[13] A1

[51] **Int.Cl. C11D 1/00 (2006.01) C11D 1/825 (2006.01) C11D 11/00 (2006.01)**

[25] EN

[54] **AUTOMATIC DISHWASHING COMPOSITION**

[54] **COMPOSITION POUR LAVE-VAISSELLE AUTOMATIQUE**

[72] DELPLANCKE, PATRICK FIRMIN AUGUST, BE

[72] GOVAERTS, JOKE, BE

[71] THE PROCTER & GAMBLE COMPANY, US

[85] 2023-05-01

[86] 2021-11-05 (PCT/US2021/058144)

[87] (WO2022/108764)

[30] EP (20208156.8) 2020-11-17

[21] **3,197,120**  
[13] A1

[51] **Int.Cl. A45D 40/26 (2006.01) B65D 51/32 (2006.01)**

[25] EN

[54] **ROTATING COSMETIC APPLICATOR SYSTEM**

[54] **SYSTEME D'APPLICATEUR D'UN PRODUIT COSMETIQUE ROTATIF**

[72] GARRISON, CHAD, US

[71] ELC MANAGEMENT LLC, US

[85] 2023-05-01

[86] 2021-10-31 (PCT/US2021/057480)

[87] (WO2022/094361)

[30] US (63/108,634) 2020-11-02

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[21] **3,197,121**  
[13] A1

[51] **Int.Cl. A23C 11/00 (2006.01) A23L 9/20 (2016.01) A23C 20/00 (2006.01) A23J 3/10 (2006.01) A23J 3/20 (2006.01) C12N 15/70 (2006.01)**

[25] EN

[54] **MICELLE AND MICELLE-LIKE COMPOSITIONS AND RELATED METHODS**

[54] **COMPOSITIONS DE MICELLES ET D'ANALOGUES DE MICELLES ET PROCEDES ASSOCIES**

[72] RADMAN, INJA, US  
[72] REITH, REBECCA, US  
[72] ADAMES, NEIL, US  
[72] STODDARD, PATRICK, US  
[72] PANFAIR, DILRAJKUR, US  
[71] NEW CULTURE INC., US  
[85] 2023-05-01  
[86] 2021-11-04 (PCT/US2021/058029)  
[87] (WO2022/098853)  
[30] US (63/109,837) 2020-11-04  
[30] US (63/109,851) 2020-11-04

[21] **3,197,123**  
[13] A1

[51] **Int.Cl. H04L 67/53 (2022.01) H04L 67/306 (2022.01) H04L 67/50 (2022.01) H04L 67/562 (2022.01) H04M 3/51 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR PROVIDING PERSONALIZED CONTEXT**

[54] **SYSTEME ET PROCEDE POUR FOURNIR UN CONTENU PERSONNALISE**

[72] JIANG, JOHN BOHAN, CA  
[72] JOHN-CHUAN, CLIVE, CA  
[72] ZHAO, WILLIAM, CA  
[72] CULBERT, ROBERT J., CA  
[72] HUNG, COLIN KUM-TENG, CA  
[71] GENESYS CLOUD SERVICES, INC., US  
[85] 2023-05-01  
[86] 2021-11-04 (PCT/US2021/058128)  
[87] (WO2022/098918)  
[30] US (63/109,413) 2020-11-04

[21] **3,197,126**  
[13] A1

[51] **Int.Cl. A61M 11/00 (2006.01) A61M 15/08 (2006.01) B05B 1/00 (2006.01) B05B 11/00 (2023.01) B65D 83/28 (2006.01)**

[25] EN

[54] **SINGLE-USE ADAPTER ATTACHED TO DRUG/VACCINE VIALS COMPATIBLE WITH HYPODERMIC NEEDLES TO ENABLE INJECTION**

[54] **ADAPTATEUR A USAGE UNIQUE FIXE A DES FLACONS DE MEDICAMENT/VACCIN COMPATIBLE AVEC DES AIGUILLES HYPODERMIQUES POUR PERMETTRE L'INJECTION**

[72] LEE, GUAN BIN, SG  
[71] BECTON DICKINSON HOLDINGS PTE. LTD., SG  
[85] 2023-05-01  
[86] 2021-11-02 (PCT/SG2021/050664)  
[87] (WO2022/098298)  
[30] SG (10202010968P) 2020-11-04

[21] **3,197,122**  
[13] A1

[51] **Int.Cl. A61K 31/255 (2006.01) A61K 35/15 (2015.01) A61K 35/17 (2015.01) A61K 31/436 (2006.01) A61K 31/7076 (2006.01) A61P 35/02 (2006.01)**

[25] EN

[54] **METHODS FOR ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION**

[54] **PROCEDES POUR TRANSPLANTATION DE CELLULES SOUCHES HEMATOPOIETIQUES ALLOGENIQUES**

[72] MEYER, EVERETT HURTEAU, US  
[72] NEGRIN, ROBERT S., US  
[72] FERNHOFF, NATHANIEL, US  
[72] MCCLELLAN, SCOTT, US  
[72] KILLIAN, SCOTT, US  
[71] ORCA BIOSYSTEMS INC., US  
[85] 2023-05-01  
[86] 2021-11-04 (PCT/US2021/058141)  
[87] (WO2022/098926)  
[30] US (63/109,811) 2020-11-04  
[30] US (63/121,453) 2020-12-04  
[30] US (63/121,742) 2020-12-04  
[30] US (63/121,534) 2020-12-04

[21] **3,197,125**  
[13] A1

[51] **Int.Cl. A61K 9/127 (2006.01) A61K 47/58 (2017.01) A61K 47/68 (2017.01) A61K 9/50 (2006.01) A61K 9/51 (2006.01) C08F 293/00 (2006.01)**

[25] EN

[54] **THERAPEUTIC PH RESPONSIVE COMPOSITIONS**

[54] **COMPOSITIONS THERAPEUTIQUES SENSIBLES AU PH**

[72] ZHAO, TIAN, US  
[72] BHARADWAJ, GAURAV, US  
[72] DING, XINLIANG, US  
[72] GUTOWSKI, STEPHEN, US  
[72] MILLER, JASON, US  
[72] ROBINSON, DREW, US  
[72] CAMPBELL, ASHLEY, US  
[72] SU, QINGTAI, US  
[71] ONCONANO MEDICINE, INC., US  
[85] 2023-05-01  
[86] 2021-11-03 (PCT/US2021/072215)  
[87] (WO2022/099268)  
[30] US (63/109,220) 2020-11-03

[21] **3,197,127**  
[13] A1

[51] **Int.Cl. A61K 31/724 (2006.01) A61K 47/69 (2017.01) A61P 1/16 (2006.01) A61P 3/06 (2006.01)**

[25] FR

[54] **COMPOSITIONS COMPRISING METHYL CYCLODEXTRINS FOR THE TREATMENT AND/OR PREVENTION OF HEPATIC STEATOSIS**

[54] **COMPOSITIONS A BASE DE METHYL-CYCLODEXTRINES POUR LE TRAITEMENT ET/OU LA PREVENTION DE LA STEATOSE HEPATIQUE**

[72] WILS, DANIEL, FR  
[72] PERREAU, CAROLINE, FR  
[71] ROQUETTE FRERES, FR  
[85] 2023-05-01  
[86] 2021-11-04 (PCT/EP2021/025430)  
[87] (WO2022/096151)  
[30] FR (FR2011361) 2020-11-05

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[21] **3,197,128**  
[13] A1

[51] **Int.Cl. C03B 5/12 (2006.01) C03B 5/235 (2006.01)**

[25] EN

[54] **METHOD OF PREPARING A MELT FOR THE PRODUCTION OF MAN-MADE MINERAL FIBRES**

[54] **PROCEDE DE PREPARATION D'UNE MASSE FONDUE POUR LA PRODUCTION DE FIBRES MINERALES ARTIFICIELLES**

[72] HANSEN, LARS ELMEKILDE, DK  
[72] ZHOU, HAOSHENG, DK  
[71] ROCKWOOL A/S, DK  
[85] 2023-05-01  
[86] 2021-11-19 (PCT/EP2021/082247)  
[87] (WO2022/106592)  
[30] EP (20208659.1) 2020-11-19

[21] **3,197,129**  
[13] A1

[51] **Int.Cl. B62D 55/20 (2006.01) B62D 55/21 (2006.01)**

[25] EN

[54] **TRACK PAD WITH UNIFORM HARDENED REGION**

[54] **PATIN DE CHENILLE A REGION DURCIE UNIFORME**

[72] JONES, BENJAMIN, US  
[72] MAGNER, SCOTT H., US  
[71] CATERPILLAR INC., US  
[85] 2023-05-01  
[86] 2021-10-27 (PCT/US2021/056731)  
[87] (WO2022/098541)  
[30] US (16/949,593) 2020-11-05

[21] **3,197,131**  
[13] A1

[51] **Int.Cl. A01B 45/02 (2006.01) A01G 20/30 (2018.01) F04B 35/06 (2006.01)**

[25] EN

[54] **A VENTILATION SYSTEM PROVIDING HOMOGENOUS AIR DISTRIBUTION ONTO GRASS FIELD**

[54] **SYSTEME DE VENTILATION FOURNISSANT UNE DISTRIBUTION D'AIR HOMOGENE SUR UN TERRAIN HERBEUX**

[72] KOPRULU, ISMET BULENT, TR  
[71] KOPRULU, ISMET BULENT, TR  
[85] 2023-05-01  
[86] 2020-11-11 (PCT/TR2020/051082)  
[87] (WO2022/103344)

[21] **3,197,133**  
[13] A1

[51] **Int.Cl. A24B 15/00 (2006.01) A24F 7/00 (2006.01) C07D 401/00 (2006.01)**

[25] EN

[54] **AQUEOUS FORMULATION FOR AEROSOLIZING AND INHALING USING ELECTRONIC DEVICES**

[54] **FORMULATION AQUEUSE D'AEROSOLISATION ET D'INHALATION A L'AIDE DE DISPOSITIFS ELECTRONIQUES**

[72] DANEK, MARIO, US  
[72] CHENG, CHRISTOPHER KAREHENG, US  
[72] WALSH, JOSEPH GENE, US  
[72] QUIGLEY, BRIAN, US  
[71] QNOVIA, INC., US  
[85] 2023-05-01  
[86] 2021-10-30 (PCT/US2021/057477)  
[87] (WO2022/094358)  
[30] US (63/108,405) 2020-11-01

[21] **3,197,134**  
[13] A1

[51] **Int.Cl. A61B 5/1486 (2006.01)**

[25] EN

[54] **WORKING ELECTRODE FOR AN ANALYTE SENSOR**

[54] **ELECTRODE DE TRAVAIL POUR UN CAPTEUR D'ANALYTE**

[72] BABIC, BRANISLAV, DE  
[72] STECK, ALEXANDER, DE  
[71] F. HOFFMANN-LA ROCHE AG, CH  
[85] 2023-05-01  
[86] 2021-11-19 (PCT/EP2021/082273)  
[87] (WO2022/106604)  
[30] EP (20209219.3) 2020-11-23

[21] **3,197,135**  
[13] A1

[51] **Int.Cl. G06F 11/20 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR HIERARCHICAL FAILOVER GROUPS**

[54] **SYSTEMES ET PROCEDES POUR GROUPES DE BASCULEMENT HIERARCHIQUES**

[72] NGO, THANH Q., US  
[72] REVITCH, SAMUEL, US  
[71] DH2I COMPANY, US  
[85] 2023-05-01  
[86] 2021-11-04 (PCT/US2021/072232)  
[87] (WO2022/099283)  
[30] US (63/110,481) 2020-11-06  
[30] US (17/453,407) 2021-11-03

[21] **3,197,137**  
[13] A1

[51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/42 (2020.01) A24F 40/60 (2020.01) A24F 40/65 (2020.01) A24F 40/90 (2020.01) A24F 42/60 (2020.01)**

[25] EN

[54] **AEROSOL GENERATION DEVICE**

[54] **DISPOSITIF DE GENERATION D'AEROSOL**

[72] ADAIR, KYLE, GB  
[72] POPOOLA, OLAYIWOLA OLAMIPOSI, GB  
[72] LOVEDAY, PETER, GB  
[71] JT INTERNATIONAL S.A., CH  
[85] 2023-05-01  
[86] 2021-11-04 (PCT/EP2021/080655)  
[87] (WO2022/096580)  
[30] EP (20206185.9) 2020-11-06  
[30] EP (20206204.8) 2020-11-06

[21] **3,197,138**  
[13] A1

[51] **Int.Cl. B01D 21/00 (2006.01) B01D 21/02 (2006.01) B01D 21/24 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR SEPARATING MATERIAL**

[54] **SYSTEME ET PROCEDE DE SEPARATION DE MATERIAU**

[72] QUEENER, JACK PERRY, US  
[72] STOLLINGS, JAMES DANIEL (DECEASED), XX  
[71] RARE ELEMENTS OF THE WORLD, LLC, US  
[85] 2023-05-01  
[86] 2021-10-30 (PCT/US2021/057475)  
[87] (WO2022/094356)  
[30] US (63/108,242) 2020-10-30

[21] **3,197,139**  
[13] A1

[51] **Int.Cl. B60L 53/30 (2019.01) B60L 53/60 (2019.01)**

[25] EN

[54] **SELECTIVE RAPID DISCONNECTION OF A CHARGING DEVICE**

[54] **ARRET D'URGENCE SELECTIF D'UN DISPOSITIF DE RECHARGE**

[72] SCHALLING, RUDI, DE  
[72] WYAND, SYDNEY JUSTIN, DE  
[71] SIEMENS AKTIENGESELLSCHAFT, DE  
[85] 2023-05-01  
[86] 2021-10-29 (PCT/EP2021/080122)  
[87] (WO2022/096393)  
[30] DE (10 2020 213 802.8) 2020-11-03

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[21] **3,197,140**  
[13] A1

[51] **Int.Cl. B60B 33/00 (2006.01) B60B 33/06 (2006.01)**  
[25] EN  
[54] **MOVEABLE LAUNDRY TREATMENT APPARATUS**  
[54] **APPAREIL DE TRAITEMENT DE LINGE MOBILE**  
[72] PAPS DORF, CLIFFORD THEODORE, US  
[72] MIZER, SCOTT EUGENE, US  
[72] HOWDY SHELL, MARK NEIL, US  
[71] THE PROCTER & GAMBLE COMPANY, US  
[85] 2023-05-01  
[86] 2021-11-16 (PCT/US2021/072417)  
[87] (WO2022/109536)  
[30] EP (20208817.5) 2020-11-20

[21] **3,197,141**  
[13] A1

[51] **Int.Cl. A61K 31/13 (2006.01) A61K 31/135 (2006.01) A61K 31/138 (2006.01) A61K 31/14 (2006.01) A61K 31/46 (2006.01)**  
[25] EN  
[54] **METHODS OF TREATING CORONAVIRUS DISEASE AND COMPOUNDS FOR SAME**  
[54] **METHODES DE TRAITEMENT D'UNE MALADIE A CORONAVIRUS ET COMPOSES ASSOCIES**  
[72] WASAN, KISHOR M., CA  
[72] GALLIANO, CHRIS, US  
[72] MUKHOPADHYAY, SUPRATIK, US  
[72] BESS, ADAM, US  
[72] BERGLIND, FREJ KNUT GOSTA, US  
[72] CORMIER, STEPHANIA, US  
[72] ADER, ALLAN, US  
[72] GRIGGS, NICHOLAS, US  
[72] GOULD, JANET, US  
[72] CHO, TIFFANY, US  
[72] ABRAMOV, JULIA, US  
[72] HNIK, PETER, US  
[72] BRYLINSKI, MICHAL, US  
[71] SKYMOUNT MEDICAL US INC., US  
[71] THE BOARD OF SUPERVISORS OF LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COLLEGE, US  
[71] WASAN, KISHOR M., CA  
[71] GALLIANO, CHRIS, US  
[71] MUKHOPADHYAY, SUPRATIK, US  
[71] BESS, ADAM, US  
[71] BERGLIND, FREJ KNUT GOSTA, US  
[71] CORMIER, STEPHANIA, US  
[71] ADER, ALLAN, US  
[71] GRIGGS, NICHOLAS, US  
[71] GOULD, JANET, US  
[71] CHO, TIFFANY, US  
[71] ABRAMOV, JULIA, US  
[71] HNIK, PETER, US  
[71] BRYLINSKI, MICHAL, US  
[85] 2023-05-01  
[86] 2021-11-02 (PCT/US2021/057754)  
[87] (WO2022/094480)  
[30] CA (3,097,717) 2020-11-02  
[30] US (63/165,510) 2021-03-24  
[30] US (63/168,766) 2021-03-31

[21] **3,197,142**  
[13] A1

[51] **Int.Cl. H04W 52/02 (2009.01) H04W 84/12 (2009.01)**  
[25] EN  
[54] **COMMUNICATION METHOD AND APPARATUS**  
[54] **PROCEDE ET APPAREIL DE COMMUNICATION**  
[72] GAN, MING, CN  
[72] GONG, BO, CN  
[72] LU, YUXIN, CN  
[72] YU, JIAN, CN  
[72] LI, YUNBO, CN  
[72] HU, MENGSHI, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2023-05-01  
[86] 2022-05-26 (PCT/CN2022/095195)  
[87] (WO2022/247901)  
[30] CN (202110581012.8) 2021-05-26  
[30] CN (202110821657.4) 2021-07-20

[21] **3,197,143**  
[13] A1

[51] **Int.Cl. C12P 19/02 (2006.01) C12P 7/10 (2006.01) C12P 7/58 (2006.01) C12P 19/14 (2006.01)**  
[25] EN  
[54] **PROCESS FOR THE PREPARATION OF A SUGAR PRODUCT AND A FERMENTATION PRODUCT**  
[54] **PROCEDE DE PREPARATION D'UN PRODUIT A BASE DE SUCRE ET D'UN PRODUIT DE FERMENTATION**  
[72] APPELDOORN, MAAIKE, NL  
[72] NOORDAM, BERTUS, NL  
[71] VERSALIS S.P.A., IT  
[85] 2023-05-01  
[86] 2022-04-05 (PCT/EP2022/058941)  
[87] (WO2022/214460)  
[30] EP (21167451.0) 2021-04-08

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[21] **3,197,144**  
[13] A1

[51] **Int.Cl. H01M 4/1395 (2010.01) H01M 4/134 (2010.01) H01M 10/0525 (2010.01)**

[25] EN

[54] **PROCESS FOR TRANSFORMING SILICON SLAG INTO HIGH CAPACITY ANODE MATERIAL FOR LITHIUM-ION BATTERIES**

[54] **PROCEDE DE TRANSFORMATION DE LAITIER DE SILICIUM EN MATERIAU D'ANODE A HAUTE CAPACITE POUR BATTERIES AU LITHIUM-ION**

[72] ROUE, LIONEL, CA  
[72] VANPEENE, VICTOR, FR  
[72] HEITZ, ALEXANDRE, FR  
[72] SHAHVERDI, ALI, CA  
[72] MARDAN, MILAD, CA  
[72] CARABIN, PIERRE, CA  
[71] HPQ SILICON INC., CA  
[85] 2023-05-01  
[86] 2021-11-01 (PCT/CA2021/000100)  
[87] (WO2022/087709)  
[30] US (63/108,257) 2020-10-30

[21] **3,197,145**  
[13] A1

[51] **Int.Cl. A61K 38/20 (2006.01) C07K 14/54 (2006.01)**

[25] EN

[54] **INTERLEUKIN-18 VARIANTS AND METHODS OF USE**

[54] **VARIANTS DE L'INTERLEUKINE-18 ET LEURS PROCEDES D'UTILISATION**

[72] RING, AARON, US  
[72] BOONE, TOM, US  
[71] SIMCHA IL-18, INC., US  
[71] YALE UNIVERSITY, US  
[85] 2023-05-01  
[86] 2021-11-02 (PCT/US2021/057741)  
[87] (WO2022/094473)  
[30] US (63/108,794) 2020-11-02

[21] **3,197,146**  
[13] A1

[51] **Int.Cl. C08J 3/22 (2006.01) C08L 23/06 (2006.01) C08K 3/26 (2006.01)**

[25] EN

[54] **HIGH CONCENTRATION POLYMER MASTERBATCHES OF LIQUID PHOSPHITE ANTIOXIDANTS WITH IMPROVED RESISTANCE TO HYDROLYSIS**

[54] **LOTS MAITRES A HAUTE CONCENTRATION DE POLYMERES D'ANTIOXYDANTS PHOSPHITES LIQUIDES PRESENTANT UNE RESISTANCE AMELIOREE A L'HYDROLYSE**

[72] CHARLTON, JOHN ZACHARIAH, CA  
[72] GIAMMARIA, PAUL MARCO, CA  
[72] D'UVA, SALVATORE, CA  
[72] LIU, ZHEHUI, US  
[72] KHALED AH SAAD, AHMED, CA  
[72] MEEREBOER, KJELD WIEBE, CA  
[71] INGENIA POLYMERS INTERNATIONAL S.A., NL  
[85] 2023-05-01  
[86] 2021-12-21 (PCT/EP2021/087141)  
[87] (WO2022/136465)  
[30] EP (20217063.5) 2020-12-23

[21] **3,197,147**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01)**

[25] EN

[54] **PROTEIN PAYLOAD RELEASE**

[54] **LIBERATION DE CHARGE UTILE DE PROTEINE**

[72] HUNG, MICHELLE ELIZABETH, US  
[72] GORDLEY, RUSSELL MORRISON, US  
[72] LEE, GARY, US  
[71] SENTI BIOSCIENCES, INC., US  
[85] 2023-05-01  
[86] 2021-11-04 (PCT/US2021/058134)  
[87] (WO2022/098922)  
[30] US (63/109,812) 2020-11-04  
[30] US (63/193,004) 2021-05-25

[21] **3,197,164**  
[13] A1

[51] **Int.Cl. A23J 3/22 (2006.01) A23L 33/105 (2016.01) A23L 33/185 (2016.01) A23P 30/10 (2016.01)**

[25] EN

[54] **BINDER SYSTEM FOR A PLANT BASED PRODUCT**

[54] **SYSTEME LIANT POUR PRODUIT A BASE DE PLANTES**

[72] FERNANDEZ FARRAS, ISABEL, ES  
[72] LOUTAN, JONATHAN, CH  
[72] SCHEERMEIJER, ROOSMARIJN ANTOINETTE, CH  
[71] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2023-05-02  
[86] 2021-11-24 (PCT/EP2021/082799)  
[87] (WO2022/112314)  
[30] EP (20209641.8) 2020-11-24

[21] **3,197,167**  
[13] A1

[51] **Int.Cl. A61K 47/54 (2017.01) A61K 47/68 (2017.01) A61K 47/69 (2017.01) A61P 35/00 (2006.01) C07H 21/00 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **ANTIBODY DRUG CONJUGATES**

[54] **CONJUGUES ANTICORPS-MEDICAMENT**

[72] XU, HE, US  
[72] LEE, HONG MYUNG, US  
[72] ARENDT, CHRISTOPHER, US  
[71] TAKEDA PHARMACEUTICAL COMPANY LIMITED, JP  
[85] 2023-05-02  
[86] 2021-11-09 (PCT/IB2021/060356)  
[87] (WO2022/097117)  
[30] US (63/111,478) 2020-11-09  
[30] US (63/232,935) 2021-08-13  
[30] US (63/250,358) 2021-09-30



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[21] **3,197,175**  
[13] A1

[51] **Int.Cl. B32B 1/08 (2006.01) B32B 25/14 (2006.01) B32B 25/16 (2006.01)**  
[25] EN  
[54] **MULTILAYER MEDICAL TUBING WITH LOW SORBABILITY**  
[54] **TUBULURE MEDICALE MULTICOUCHE A FAIBLE CAPACITE D'ABSORPTION**  
[72] SEVINC, ZEHRA, US  
[72] DOANE, MARK, US  
[72] TRAINER, LAWRENCE, US  
[72] SUWITO, WANTJINARJO, US  
[72] GUEVARA, ANTHONY, US  
[71] CAREFUSION 303, INC., US  
[85] 2023-05-02  
[86] 2021-11-02 (PCT/US2021/057785)  
[87] (WO2022/098679)  
[30] US (63/111,538) 2020-11-09

[21] **3,197,184**  
[13] A1

[51] **Int.Cl. B05B 1/34 (2006.01) B05B 7/02 (2006.01) B05B 7/04 (2006.01) B05B 7/10 (2006.01) B05B 7/24 (2006.01) B05B 11/00 (2023.01) B65D 83/14 (2006.01)**  
[25] EN  
[54] **MECHANICAL BREAKUP ACTUATOR WITH DISRUPTIVE VORTEX CHAMBER**  
[54] **ACTIONNEUR DE DESAGREGATION MECANIQUE POURVU D'UNE CHAMBRE A TOURBILLONS PERTURBATEURS**  
[72] FORE, JOHN B., US  
[71] PRECISION VALVE CORPORATION, US  
[85] 2023-05-02  
[86] 2021-11-02 (PCT/US2021/057660)  
[87] (WO2022/094447)  
[30] US (63/108,669) 2020-11-02

[21] **3,197,185**  
[13] A1

[51] **Int.Cl. E21B 23/04 (2006.01)**  
[25] EN  
[54] **HYDRAULIC LOCK APPARATUS**  
[54] **APPAREIL DE VERROUILLAGE HYDRAULIQUE**  
[72] MOYES, PETER BARNES, GB  
[72] STEWART, STEFAN NEIL LEWIS, GB  
[71] WELLENG SCIENCE AND TECHNOLOGY LTD, GB  
[85] 2023-05-02  
[86] 2021-10-26 (PCT/EP2021/079740)  
[87] (WO2022/096327)  
[30] GB (2017435.5) 2020-11-04

[21] **3,197,187**  
[13] A1

[51] **Int.Cl. A61B 8/08 (2006.01) A61K 9/00 (2006.01) A61K 41/00 (2020.01) A61K 51/02 (2006.01) A61M 37/00 (2006.01) A61N 7/00 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR TARGETED DELIVERY OF THERAPEUTICS USING CARRIERS**  
[54] **COMPOSITIONS ET PROCEDES POUR L'ADMINISTRATION CIBLEE D'AGENTS THERAPEUTIQUES UTILISANT DES SUPPORTS**  
[72] LI, RHODEMANN, US  
[72] LARSEN, CLAYTON, US  
[72] SCHUTT, ERNEST G., US  
[72] KELTNER, LLEW, US  
[71] VESSELON, INC., US  
[85] 2023-05-02  
[86] 2021-11-03 (PCT/US2021/057961)  
[87] (WO2022/098801)  
[30] US (63/109,193) 2020-11-03

[21] **3,197,188**  
[13] A1

[51] **Int.Cl. A61K 31/20 (2006.01) A61K 33/243 (2019.01) A61K 31/7068 (2006.01)**  
[25] EN  
[54] **THERAPEUTIC METHODS AND COMPOSITIONS FOR TREATING BILIARY TRACT CANCER USING DEVIMISTAT**  
[54] **METHODES ET COMPOSITIONS THERAPEUTIQUES POUR TRAITER LE CANCER DU TRACTUS BILIAIRE EN UTILISANT DU DEVIMISTAT**  
[72] LUTHER, SANJEEV, US  
[72] PARDEE, TIMOTHY S., US  
[72] SAHAI, VAIBHAV, US  
[71] CORNERSTONE PHARMACEUTICALS, INC., US  
[71] REGENTS OF THE UNIVERSITY OF MICHIGAN, US  
[85] 2023-05-02  
[86] 2021-11-03 (PCT/US2021/057829)  
[87] (WO2022/098704)  
[30] US (63/108,934) 2020-11-03

[21] **3,197,190**  
[13] A1

[51] **Int.Cl. B67D 1/08 (2006.01)**  
[25] EN  
[54] **A BEVERAGE DISPENSING APPARATUS**  
[54] **APPAREIL DE DISTRIBUTION DE BOISSONS**  
[72] WHATELEY, TIM, GB  
[72] JONES, CRAIG, GB  
[71] HODGES & DRAKE DESIGN LTD, GB  
[85] 2023-05-02  
[86] 2021-11-01 (PCT/EP2021/080240)  
[87] (WO2022/090528)  
[30] GB (2017357.1) 2020-11-02  
[30] GB (2019898.2) 2020-12-16

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[21] **3,197,191**  
[13] A1

[51] **Int.Cl. A01N 63/40 (2020.01)**  
[25] EN  
[54] **PHAGE COMPOSITIONS FOR PSEUDOMONAS COMPRISING CRISPR-CAS SYSTEMS AND METHODS OF USE THEREOF**  
[54] **COMPOSITIONS DE PHAGE POUR PSEUDOMONAS COMPRENANT DES SYSTEMES CRISPR-CAS ET PROCEDES D'UTILISATION ASSOCIES**  
[72] GAROFOLO, PAUL, US  
[72] OUSTEROUT, DAVID G., US  
[72] SELLE, KURT, US  
[72] TUSON, HANNAH HEWITT, US  
[72] MCMILLAN, LANA, US  
[72] MCKEE, ROBERT, US  
[72] PENKE, TAYLOR, US  
[72] STEELE, SHAUN, US  
[72] LADNER, CHRISTOPHER, US  
[72] AL-GHALITH, GABRIEL, US  
[71] LOCUS BIOSCIENCES, INC., US  
[85] 2023-05-02  
[86] 2021-11-04 (PCT/US2021/058123)  
[87] (WO2022/098916)  
[30] US (63/110,288) 2020-11-05  
[30] US (63/184,728) 2021-05-05

[21] **3,197,193**  
[13] A1

[51] **Int.Cl. C12Q 1/6806 (2018.01) G01N 21/552 (2014.01) C12Q 1/6844 (2018.01) C12Q 1/6869 (2018.01)**  
[25] EN  
[54] **FUNCTIONALIZED PLASMONIC NANOSTRUCTURES**  
[54] **NANOSTRUCTURES PLASMONIQUES FONCTIONNALISEES**  
[72] ARTIOLI, GIANLUCA ANDREA, GB  
[72] LESSARD-VIGER, MATHIEU, US  
[72] MATHER, BRIAN D., US  
[72] VON HATTEN, XAVIER, GB  
[71] ILLUMINA CAMBRIDGE LIMITED, GB  
[71] ILLUMINA, INC., US  
[85] 2023-05-02  
[86] 2021-11-12 (PCT/EP2021/081504)  
[87] (WO2022/101402)  
[30] US (63/114,309) 2020-11-16

[21] **3,197,195**  
[13] A1

[51] **Int.Cl. B21J 13/02 (2006.01) B21K 1/44 (2006.01) B21K 1/56 (2006.01) B21K 5/00 (2006.01) B23P 11/02 (2006.01) B23P 19/02 (2006.01)**  
[25] EN  
[54] **MODULAR FORMING TOOL, MODULAR FORMING TOOL SET, PRESS TOOL SYSTEM AND METHOD OF MAKING MODULAR FORMING TOOL**  
[54] **OUTIL DE FORMAGE MODULAIRE, ENSEMBLE D'OUTIL DE FORMAGE MODULAIRE, SYSTEME D'OUTIL DE PRESSAGE ET PROCEDE DE PRODUCTION D'UN OUTIL DE FORMAGE MODULAIRE**  
[72] FINSTERBUSCH, ROY, DE  
[72] LUDWIG, CHRISTIAN, DE  
[72] GENSERT, HILMAR, DE  
[72] STURM, ROBERT, DE  
[71] KAMAX HOLDING GMBH & CO. KG, DE  
[85] 2023-05-02  
[86] 2021-11-03 (PCT/EP2021/080541)  
[87] (WO2022/101074)  
[30] DE (10 2020 129 954.0) 2020-11-13

[21] **3,197,196**  
[13] A1

[51] **Int.Cl. E04D 13/072 (2006.01)**  
[25] EN  
[54] **IMPROVED GUTTER HANGER**  
[54] **DISPOSITIF DE SUSPENSION DE GOUTTIERE AMELIORE**  
[72] BAILEY, LANCE, US  
[71] GPI HOME SOLUTIONS, US  
[85] 2023-05-02  
[86] 2021-11-02 (PCT/US2021/057796)  
[87] (WO2022/094489)  
[30] US (63/108,814) 2020-11-02  
[30] US (17/517,649) 2021-11-02

[21] **3,197,200**  
[13] A1

[51] **Int.Cl. A61K 31/00 (2006.01) A61K 35/744 (2015.01) A61P 17/00 (2006.01) C12N 1/20 (2006.01)**  
[25] EN  
[54] **NEW COMPOSITION FOR TREATMENT OF SKIN CONDITIONS**  
[54] **NOUVELLE COMPOSITION POUR LE TRAITEMENT D'AFFECTIONS CUTANEEES**  
[72] VEDEL, CHARLOTTE, DK  
[72] OLSEN, KATJA BILLEKOP, DK  
[72] KJAERULFF, SOREN, DK  
[72] CHRISTENSEN, SIGURD, DK  
[71] LACTOBIO A/S, DK  
[85] 2023-05-02  
[86] 2021-11-04 (PCT/EP2021/080640)  
[87] (WO2022/096573)  
[30] DK (PA 2020 01248) 2020-11-05  
[30] DK (PA 2021 00281) 2021-03-19

[21] **3,197,206**  
[13] A1

[51] **Int.Cl. C12Q 1/6883 (2018.01) C12Q 1/6809 (2018.01)**  
[25] EN  
[54] **CIRCULATING MIRNA AND PROTEIN BIOMARKERS FOR FACIOSCAPULOHUMERAL DYSTROPHY**  
[54] **BIOMARQUEURS CIRCULANTS DE MIARN ET DE PROTEINES POUR LA DYSTROPHIE FACIOSCAPULOHUMERALE**  
[72] CHEN, YI-WEN, US  
[72] HEIER, CHRISTOPHER, US  
[71] CHILDREN'S NATIONAL MEDICAL CENTER, US  
[85] 2023-05-02  
[86] 2021-11-03 (PCT/US2021/057881)  
[87] (WO2022/098746)  
[30] US (63/109,561) 2020-11-04

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[21] **3,197,207**  
[13] A1

[51] **Int.Cl. A61M 25/06 (2006.01)**  
[25] EN  
[54] **CATHETER ASSEMBLY PLUG DEVICES, SYSTEMS, AND METHODS**  
[54] **DISPOSITIF DE BOUCHON D'ENSEMBLE CATHETER, SYSTEMES ET PROCEDES**  
[72] THIRUMOORTHY, SANKARANARAYANAN, IN  
[72] BALAMURUGAN, MUKILAN, IN  
[72] DAS PRADEEP, RAJDEEP, US  
[72] VINCENT, DARIN, US  
[72] BALASUBRAMANIAN, SIVARAMAKRISHNAN, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-05-02  
[86] 2021-10-27 (PCT/US2021/056778)  
[87] (WO2022/103580)  
[30] IN (202011049485) 2020-11-12

[21] **3,197,209**  
[13] A1

[51] **Int.Cl. A61K 31/155 (2006.01) A61K 31/79 (2006.01) A61K 47/02 (2006.01)**  
[25] EN  
[54] **ORAL RINSE, NASAL SPRAY AND METHODS FOR PREVENTION OF COVID-19 BY LOWERING VIRAL LOAD OF COVID-19**  
[54] **RINCAGE BUCCAL, PULVERISATION NASALE ET METHODES POUR LA PREVENTION DE LA COVID-19 PAR REDUCTION DE LA CHARGE VIRALE DE COVID-19**  
[72] CRAWFORD, KEITH, US  
[71] RUCKER CAPITAL ADVISORS, US  
[85] 2023-05-02  
[86] 2021-11-09 (PCT/US2021/058578)  
[87] (WO2022/099182)  
[30] US (63/111,355) 2020-11-09  
[30] US (63/213,922) 2021-06-23  
[30] US (63/246,023) 2021-09-20

[21] **3,197,210**  
[13] A1

[51] **Int.Cl. C08J 5/22 (2006.01) H01M 8/1023 (2016.01) H01M 8/1025 (2016.01) H01M 8/1027 (2016.01)**  
[25] EN  
[54] **BORON-CONTAINING POROUS MEMBRANES AND METHODS OF USE THEREOF**  
[54] **MEMBRANES POREUSES CONTENANT DU BORE ET PROCEDES D'UTILISATION ASSOCIES**  
[72] BHATTACHARYYA, SUKANTA, US  
[72] SOBEK, DANIEL, US  
[71] IS1 ENERGY, INC., US  
[85] 2023-05-02  
[86] 2021-04-28 (PCT/US2021/029705)  
[87] (WO2022/098391)  
[30] US (63/109,943) 2020-11-05

[21] **3,197,211**  
[13] A1

[51] **Int.Cl. G01S 19/23 (2010.01) G01S 19/14 (2010.01) G01S 19/51 (2010.01) G01S 19/53 (2010.01)**  
[25] EN  
[54] **METHODS OF AND SYSTEMS FOR REMOTELY MONITORING STATIONARY SYSTEMS USING GNSS-BASED TECHNOLOGIES**  
[54] **PROCEDES ET SYSTEMES DE SURVEILLANCE A DISTANCE DE SYSTEMES STATIONNAIRES A L'AIDE DE TECHNOLOGIES BASEES SUR UN GNSS**  
[72] DUNDORF, CHRISTOPHER, US  
[72] MELVIN, PATRICK, US  
[71] 2KR SYSTEMS, LLC, US  
[85] 2023-05-02  
[86] 2021-11-03 (PCT/US2021/057964)  
[87] (WO2022/098803)  
[30] US (17/087,629) 2020-11-03

[21] **3,197,214**  
[13] A1

[51] **Int.Cl. C01B 21/26 (2006.01) C01B 21/28 (2006.01) C01B 21/38 (2006.01) C01B 21/46 (2006.01)**  
[25] EN  
[54] **MONO-PRESSURE PLANT FOR THE PRODUCTION OF NITRIC ACID AND METHOD FOR OPERATING SAME**  
[54] **INSTALLATION A PRESSION UNIQUE DESTINEE A LA PRODUCTION D'ACIDE NITRIQUE ET SON PROCEDE DE MISE EN FONCTIONNEMENT**  
[72] VIGELAND, BENT, NO  
[72] OIEN, HALVOR, NO  
[72] ROSLER, RONALD, NO  
[72] DE SMET, ANDRE, NL  
[72] FAUCONNIER, PETER, BE  
[71] YARA INTERNATIONAL ASA, NO  
[85] 2023-05-02  
[86] 2021-12-17 (PCT/EP2021/086446)  
[87] (WO2022/129494)  
[30] EP (20215134.6) 2020-12-17

[21] **3,197,215**  
[13] A1

[51] **Int.Cl. C07F 5/02 (2006.01) H01M 8/1016 (2016.01) H01M 8/1027 (2016.01) B01J 39/09 (2017.01) B01J 39/08 (2017.01) B01J 39/16 (2017.01) C07F 5/04 (2006.01) H01M 8/10 (2016.01)**  
[25] EN  
[54] **TETRAVALENT BORON-CONTAINING PROTON-EXCHANGE SOLID SUPPORTS AND METHODS OF MAKING AND USING TETRAVALENT BORON-CONTAINING PROTON-EXCHANGE SOLID SUPPORTS**  
[54] **SUPPORTS SOLIDES D'ECHANGE DE PROTONS CONTENANT DU BORE TETRAVALENT ET PROCEDES DE FABRICATION ET D'UTILISATION DE SUPPORTS SOLIDES D'ECHANGE DE PROTONS CONTENANT DU BORE TETRAVALENT**  
[72] BHATTACHARYYA, SUKANTA, US  
[72] SOBEK, DANIEL, US  
[71] IS1 ENERGY, INC., US  
[85] 2023-05-02  
[86] 2021-06-24 (PCT/US2021/038956)  
[87] (WO2022/098397)  
[30] US (63/109,943) 2020-11-05  
[30] US (PCT/US2021/029705) 2021-04-28

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[51] <b>Int.Cl. H04B 10/27 (2013.01) H04B 10/25 (2013.01)</b>	[51] <b>Int.Cl. C10L 3/06 (2006.01) C07C 7/12 (2006.01) C07C 9/04 (2006.01)</b>	[51] <b>Int.Cl. C07D 209/96 (2006.01) C07D 403/12 (2006.01) C07D 413/12 (2006.01) C07D 471/04 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>DEVICES FOR INTERCONNECTING NODES IN A DIRECT INTERCONNECT NETWORK</b>	[54] <b>SYSTEM FOR RECOVERING METHANE FROM A BIOGAS</b>	[54] <b>OXINDOLES AND METHODS OF USE THEREOF</b>
[54] <b>DISPOSITIFS D'INTERCONNEXION DE N?UDS DANS UN RESEAU D'INTERCONNEXION DIRECTE</b>	[54] <b>SYSTEME DE RECUPERATION DE METHANE A PARTIR D'UN BIOGAZ</b>	[54] <b>OXINDOLES ET LEURS PROCEDES D'UTILISATION</b>
[72] LEONG, KIN-WAI, CA	[72] IUHAS, CRISTIAN STEFAN, CA	[72] MCGOWAN, DAVID CRAIG, US
[72] WILLIAMS, MATTHEW ROBERT, CA	[72] JEWELL, RICHARD PETER GLYNN, CA	[72] RABOISSON, PIERRE JEAN-MARIE BERNARD, US
[72] KUSYK, RICHARD GLENN, CA	[72] TORRES, ALBERTO, CA	[72] VANDYCK, KOEN, US
[72] BOBYN, JOHN, CA	[71] XEBEC ADSORPTION INC., CA	[72] DEVAL, JEROME, US
[71] ROCKPORT NETWORKS INC., CA	[71] IUHAS, CRISTIAN STEFAN, CA	[72] BEIGELMAN, LEONID, US
[85] 2023-05-02	[71] JEWELL, RICHARD PETER GLYNN, CA	[71] ALIGOS THERAPEUTICS, INC., US
[86] 2021-11-03 (PCT/IB2021/000753)	[71] TORRES, ALBERTO, CA	[85] 2023-05-02
[87] (WO2022/096927)	[85] 2023-05-02	[86] 2021-11-05 (PCT/US2021/058326)
[30] US (63/109,096) 2020-11-03	[86] 2021-11-02 (PCT/CA2021/051554)	[87] (WO2022/099066)
	[87] (WO2022/087755)	[30] US (63/110,814) 2020-11-06
	[30] US (63/108,769) 2020-11-02	[30] US (63/195,969) 2021-06-02
[21] <b>3,197,218</b> [13] A1	[21] <b>3,197,224</b> [13] A1	[21] <b>3,197,230</b> [13] A1
[51] <b>Int.Cl. A61B 10/00 (2006.01) A61B 10/02 (2006.01) A61B 17/12 (2006.01) A61B 17/24 (2006.01) A61F 13/20 (2006.01) A61F 13/26 (2006.01) A61F 13/84 (2006.01)</b>	[51] <b>Int.Cl. H01B 12/16 (2006.01) H01F 6/04 (2006.01)</b>	[51] <b>Int.Cl. C12N 5/078 (2010.01) C12N 5/0789 (2010.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>APPLICATION DEVICE FOR POSITIONING AN ABSORPTIVE MATRIX ELEMENT WITHIN A CAVITY AND COLLECTION KIT FOR COLLECTING BIOLOGICAL SECRETION</b>	[54] <b>SYSTEMS AND METHODS FOR COOLING OF SUPERCONDUCTING POWER TRANSMISSION LINES</b>	[54] <b>CELL PREPARATION, USE OF PROTEIN IN CHARACTERIZING HEMATOPOIETIC STEM CELLS, AND METHOD FOR DETERMINING HEMATOPOIETIC STEM CELLS</b>
[54] <b>DISPOSITIF D'APPLICATION PERMETTANT DE POSITIONNER UN ELEMENT DE MATRICE ABSORBANTE A L'INTERIEUR D'UNE CAVITE ET KIT DE COLLECTE PERMETTANT DE COLLECTER UNE SECRETION BIOLOGIQUE</b>	[54] <b>SYSTEMES ET PROCEDES DE REFROIDISSEMENT DE LIGNES DE TRANSMISSION D'ENERGIE SUPRACONDUCTRICES</b>	[54] <b>PREPARATION CELLULAIRE, UTILISATION DE PROTEINE POUR LA CARACTERISATION DE CELLULES SOUCHES HEMATOPOIETIQUES, ET PROCEDE DE DETERMINATION DE CELLULES SOUCHES HEMATOPOIETIQUES</b>
[72] HAACK, MAREIKE, DE	[72] ASHWORTH, STEPHEN PAUL, US	[72] FANG, RIGUO, CN
[71] NOSELAB GMBH, DE	[72] MORICONI, FRANCO, US	[72] MA, KUIYING, CN
[85] 2023-05-02	[72] HEIDEL, TIMOTHY DAVID, US	[72] LI, CHAO, CN
[86] 2021-11-11 (PCT/EP2021/081322)	[71] VEIR, INC., US	[72] YUAN, PENGFEI, CN
[87] (WO2022/101311)	[85] 2023-05-02	[71] EDIGENE (GUANGZHOU) INC., CN
[30] EP (20206895.3) 2020-11-11	[86] 2021-11-11 (PCT/US2021/058927)	[85] 2023-05-02
	[87] (WO2022/108819)	[86] 2021-09-29 (PCT/CN2021/121702)
	[30] US (63/115,226) 2020-11-18	[87] (WO2022/095642)
		[30] CN (202011208703.5) 2020-11-03

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[21] **3,197,232**  
[13] A1

[51] **Int.Cl. A61M 11/00 (2006.01) A61M 16/10 (2006.01)**

[25] EN

[54] **SURFACE ACOUSTIC WAVE ATOMIZER WITH FLUID DIRECTION AND MIGRATION PREVENTION**

[54] **ATOMISEUR A ONDES ACOUSTIQUES DE SURFACE AYANT UNE DIRECTION DE FLUIDE ET UNE PREVENTION DE MIGRATION**

[72] DITTMER, ANDREW, CA  
[72] YOUNG, HEATHER, CA  
[72] BAXTER, NICHOLAS, CA  
[71] TRUDELL MEDICAL INTERNATIONAL, CA

[85] 2023-05-02  
[86] 2021-11-05 (PCT/IB2021/060278)  
[87] (WO2022/097092)  
[30] US (63/110,777) 2020-11-06

[21] **3,197,233**  
[13] A1

[51] **Int.Cl. A01N 63/30 (2020.01) A01N 63/22 (2020.01) A01N 63/32 (2020.01) C05G 5/12 (2020.01) C05F 11/08 (2006.01)**

[25] EN

[54] **METHODS FOR SEQUESTERING ATMOSPHERIC CARBON AND FOR QUANTIFYING THE SAME**

[54] **PROCEDES DE SEQUESTRATION DE CARBONE ATMOSPHERIQUE ET DE QUANTIFICATION DE CELUI-CI**

[72] KARATHUR, KARTHIK N., US  
[72] FARMER, SEAN, US  
[72] CALLOW, NICHOLAS, US  
[72] FOTSCH, ALEX, US  
[71] LOCUS SOLUTIONS IPCO, LLC., US

[85] 2023-05-02  
[86] 2021-10-29 (PCT/US2021/057227)  
[87] (WO2022/098573)  
[30] US (63/110,070) 2020-11-05

[21] **3,197,234**  
[13] A1

[51] **Int.Cl. A61K 31/53 (2006.01) A61P 5/00 (2006.01) A61P 9/00 (2006.01) A61P 35/00 (2006.01) C07D 403/12 (2006.01)**

[25] EN

[54] **PYRIDAZINONE DERIVATIVES AS THYROID RECEPTOR AGONISTS AND USES THEREOF**

[54] **DERIVES DE PYRIDAZINONE EN TANT QU'AGONISTES DU RECEPTEUR THYROIDIEN ET LEURS UTILISATIONS**

[72] MCGOWAN, DAVID CRAIG, US  
[72] RABOISSON, PIERRE JEAN-MARIE BERNARD, US  
[72] VANDYCK, KOEN, US  
[72] DEVAL, JEROME, US  
[71] ALIGOS THERAPEUTICS, INC., US

[85] 2023-05-02  
[86] 2021-11-05 (PCT/US2021/058307)  
[87] (WO2022/099049)  
[30] US (63/110,820) 2020-11-06

[21] **3,197,237**  
[13] A1

[51] **Int.Cl. B64F 1/04 (2006.01) B64F 1/14 (2006.01) B64F 1/22 (2006.01) B64F 1/24 (2006.01) B64F 1/32 (2006.01)**

[25] EN

[54] **A DRONE DELIVERY SYSTEM HUB FOR FACILITATING PARCEL DELIVERY BY UNMANNED AERIAL VEHICLES**

[54] **CONCENTRATEUR DE SYSTEME DE LIVRAISON DE DRONE PERMETTANT DE FACILITER LA LIVRAISON DE COLIS PAR DES VEHICULES AERIENS SANS PILOTE**

[72] GIL, JULIO, US  
[72] RAMSAGER, THOMAS, US  
[72] WALP, JEFF, US  
[71] UNITED PARCEL SERVICE OF AMERICA, INC., US

[85] 2023-05-02  
[86] 2021-11-22 (PCT/US2021/060364)  
[87] (WO2022/109402)  
[30] US (63/116,461) 2020-11-20  
[30] US (17/532,247) 2021-11-22

[21] **3,197,238**  
[13] A1

[51] **Int.Cl. G06V 20/40 (2022.01) G06V 10/46 (2022.01)**

[25] EN

[54] **SOFTWARE METHOD FOR OPTO-SENSORY DETECTION, MEASUREMENT AND VALUATION OF TOOL CONDITIONS**

[54] **PROCEDE LOGICIEL POUR LA DETECTION, LA MESURE ET L'EVALUATION OPTO-SENSORIELLES DE CONDITIONS D'OUTIL**

[72] HERLITZIUS, THOMAS, DE  
[72] PANTKE, SAMUEL, DE  
[72] ZIRKER, PATRICK, DE  
[72] HENGST, MARTIN, DE  
[72] GEISSLER, SOREN, DE  
[71] TECHNISCHE UNIVERSITAT DRESDEN, DE

[85] 2023-05-02  
[86] 2021-11-01 (PCT/EP2021/080268)  
[87] (WO2022/090539)  
[30] DE (10 2020 128 759.3) 2020-11-02

[21] **3,197,241**  
[13] A1

[51] **Int.Cl. B27C 5/06 (2006.01) B27M 1/08 (2006.01)**

[25] FR

[54] **MACHINE TOOL FOR MACHINING A WOODEN WORKPIECE**

[54] **MACHINE-OUTIL D'USINAGE D'UNE PIECE EN BOIS**

[72] GIUSTI, PIERRE, FR  
[72] VINET, DENIS, FR  
[72] CLAIR, OLIVIER, FR  
[71] EPUR, FR

[85] 2023-05-02  
[86] 2021-12-03 (PCT/EP2021/084211)  
[87] (WO2022/117838)  
[30] FR (FR2012662) 2020-12-04

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[21] **3,197,242**  
[13] A1

[51] **Int.Cl. F16B 7/18 (2006.01) F16L 17/04 (2006.01) F16L 19/02 (2006.01) F16L 19/065 (2006.01) F16L 21/06 (2006.01) F16L 23/10 (2006.01)**

[25] EN

[54] **COUPLING HAVING ROTATION LIMITED SEGMENTS**

[54] **RACCORD AYANT DES SEGMENTS A ROTATION LIMITEE**

[72] BOWMAN, MATTHEW A., US  
[72] NUNNALLY, THOMAS, US  
[71] VICTAULIC COMPANY, US  
[85] 2023-05-02  
[86] 2021-10-26 (PCT/US2021/056560)  
[87] (WO2022/098534)  
[30] US (63/110,433) 2020-11-06

[21] **3,197,246**  
[13] A1

[51] **Int.Cl. G06Q 50/26 (2012.01) G08B 21/04 (2006.01)**

[25] EN

[54] **SYSTEM FOR MANAGING A NETWORK OF PERSONAL SAFETY ACCESSORIES**

[54] **SYSTEME DE GESTION D'UN RESEAU D'ACCESSOIRES DE SECURITE INDIVIDUELLE**

[72] KISH, NITZAN, IL  
[71] WONDER JEWEL LTD., IL  
[85] 2023-05-02  
[86] 2021-11-04 (PCT/IL2021/051314)  
[87] (WO2022/097148)  
[30] US (63/110,071) 2020-11-05

[21] **3,197,247**  
[13] A1

[51] **Int.Cl. A47B 96/06 (2006.01)**

[25] EN

[54] **SHELF SYSTEM COMPRISING A MARBLE SHELF**

[54] **SYSTEME D'ETAGERE COMPRENANT UNE ETAGERE EN MARBRE**

[72] BAUCE, ALESSANDRO, IT  
[72] BAUCE, DAVIDE, IT  
[71] BAUCE BRUNO & C. S.R.L., IT  
[85] 2023-05-02  
[86] 2021-11-02 (PCT/IB2021/060123)  
[87] (WO2022/091066)  
[30] IT (10202000026095) 2020-11-02

[21] **3,197,248**  
[13] A1

[51] **Int.Cl. E04B 9/24 (2006.01)**

[25] EN

[54] **GASKETED CEILING SYSTEM**

[54] **SYSTEME DE PLAFOND A JOINT D'ETANCHEITE**

[72] FRANTZ, WILLIAM H., US  
[72] OLESKE, PETER J., US  
[71] ARMSTRONG WORLD INDUSTRIES, INC., US  
[85] 2023-05-02  
[86] 2021-11-12 (PCT/US2021/059188)  
[87] (WO2022/104094)  
[30] US (63/113,539) 2020-11-13

[21] **3,197,249**  
[13] A1

[51] **Int.Cl. C07D 403/12 (2006.01) A61K 31/53 (2006.01) A61P 1/16 (2006.01) A61P 3/04 (2006.01) A61P 3/06 (2006.01) A61P 3/10 (2006.01) A61P 5/14 (2006.01) A61P 9/00 (2006.01) A61P 9/10 (2006.01) A61P 35/00 (2006.01) C07D 401/14 (2006.01)**

[25] EN

[54] **BICYCLIC PYRIDAZINONES AS THYROID HORMONE RECEPTOR BETA (TR-BETA) AGONISTS**

[54] **PYRIDAZINONES BICYCLIQUES ET LEURS PROCEDES D'UTILISATION**

[72] MCGOWAN, DAVID CRAIG, US  
[72] RABOISSON, PIERRE JEAN-MARIE BERNARD, US  
[72] VANDYCK, KOEN, US  
[72] DEVAL, JEROME, US  
[72] BEIGELMAN, LEONID, US  
[71] ALIGOS THERAPEUTICS, INC., US  
[85] 2023-05-02  
[86] 2021-11-05 (PCT/US2021/058320)  
[87] (WO2022/099060)  
[30] US (63/110,816) 2020-11-06

[21] **3,197,254**  
[13] A1

[51] **Int.Cl. A61K 31/573 (2006.01) A61K 45/06 (2006.01) A61P 31/14 (2006.01)**

[25] EN

[54] **NEW THERAPY CONCEPT FOR THE TREATMENT OF CORONA INFECTIONS, MORE PARTICULARLY COVID-19 INFECTIONS**

[54] **NOUVEAU CONCEPT THERAPEUTIQUE POUR LE TRAITEMENT D'INFECTIONS A CORONAVIRUS, PLUS PARTICULIEREMENT D'INFECTIONS COVID-19**

[72] PLOCH, MICHAEL, DE  
[71] MARIA CLEMENTINE MARTIN KLOSTERFRAU VERTRIEBSGESELLSCHAFT MBH, DE  
[85] 2023-05-02  
[86] 2021-10-06 (PCT/EP2021/077544)  
[87] (WO2022/106112)  
[30] DE (10 2020 007 038.8) 2020-11-18  
[30] DE (10 2020 131 716.6) 2020-11-30

[21] **3,197,255**  
[13] A1

[51] **Int.Cl. A61P 35/00 (2006.01) C07K 14/705 (2006.01) C07K 14/71 (2006.01) C07K 14/725 (2006.01)**

[25] EN

[54] **BINDING PROTEINS RECOGNIZING HA-1 ANTIGEN AND USES THEREOF**

[54] **PROTEINES DE LIAISON RECONNAISSANT L'ANTIGENE HA-1 ET LEURS UTILISATIONS**

[72] NAYAR, RIBHU, US  
[72] MACBEATH, GAVIN, US  
[72] JANGALWE, SONAL, US  
[72] JUREWICZ, MOLLIE M., US  
[72] BASINSKI, ANDREW S., US  
[72] XU, QIKAI, US  
[72] BOUDOT, ANTOINE J., US  
[72] KULA, TOMASZ, US  
[71] TSCAN THERAPEUTICS, INC., US  
[85] 2023-05-02  
[86] 2021-11-08 (PCT/US2021/058382)  
[87] (WO2022/099100)  
[30] US (63/110,851) 2020-11-06  
[30] US (63/111,462) 2020-11-09  
[30] US (63/175,350) 2021-04-15  
[30] US (63/129,804) 2020-12-23

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[21] **3,197,256**  
[13] A1

[51] **Int.Cl. A61N 5/10 (2006.01) G16H 20/40 (2018.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR AUTOMATED VOLUMETRIC MODULATED ARC THERAPY (VMAT) FOR EXTERNAL RADIATION THERAPY**  
[54] **METHODES ET SYSTEMES D'ARC-THERAPIE MODULEE VOLUMETRIQUE (VMAT) POUR RADIOTHERAPIE EXTERNE**  
[72] DEASY, JOSEPH O., US  
[72] GUNDUZ, PINAR DURSUN, US  
[72] ZAREPISHEH, MASOUD, US  
[71] MEMORIAL SLOAN KETTERING CANCER CENTER, US  
[85] 2023-05-02  
[86] 2021-11-04 (PCT/US2021/058066)  
[87] (WO2022/098875)  
[30] US (63/110,164) 2020-11-05

[21] **3,197,258**  
[13] A1

[51] **Int.Cl. B29B 17/00 (2006.01) B29B 17/02 (2006.01) B29B 17/04 (2006.01)**  
[25] EN  
[54] **COMPOSITE MATERIAL AND METHODS OF OBTAINING THE SAME**  
[54] **MATERIAU COMPOSITE ET SES PROCEDES D'OBTENTION**  
[72] FELUS, GIL, IL  
[72] STAHL, GAD, IL  
[72] BIGIO, JACK (TATO), IL  
[71] U.B.Q MATERIALS LTD., IL  
[85] 2023-05-02  
[86] 2021-11-24 (PCT/IL2021/051394)  
[87] (WO2022/113068)  
[30] IL (278953) 2020-11-24

[21] **3,197,261**  
[13] A1

[51] **Int.Cl. C09K 8/32 (2006.01)**  
[25] EN  
[54] **DRILLING FLUID**  
[54] **FLUIDE DE FORAGE**  
[72] AFRA, SALAR, US  
[72] SAMOUEI, HAMIDREZA, US  
[72] CHAI, ZHENG, US  
[72] EBERT, JEFFERSON THOMAS, US  
[72] HASELTINE, BENJAMIN, US  
[72] NASR-EL-DIN, HISHAM (DECEASED), US  
[71] ASCEND PERFORMANCE MATERIALS OPERATIONS LLC, US  
[85] 2023-05-02  
[86] 2021-11-09 (PCT/US2021/058590)  
[87] (WO2022/103735)  
[30] US (63/113,417) 2020-11-13

[21] **3,197,262**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01) C07K 16/22 (2006.01)**  
[25] EN  
[54] **OCULAR ANTIBODY-DRUG CONJUGATES**  
[54] **CONJUGUES ANTICORPS-MEDICAMENT OCULAIRE**  
[72] NI, JINSONG, US  
[72] YANG, RONG, US  
[72] FANG, WENKUI KEN, US  
[71] ADS THERAPEUTICS LLC, US  
[85] 2023-05-02  
[86] 2021-11-03 (PCT/US2021/057844)  
[87] (WO2022/098717)  
[30] US (63/108,990) 2020-11-03

[21] **3,197,265**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) A61P 7/04 (2006.01)**  
[25] EN  
[54] **A STABLE CRYSTALLINE HYDRATE OF CLAZOSENTAN DISODIUM SALT**  
[54] **HYDRATE CRISTALLIN STABLE DE SEL DISODIQUE DE CLAZOSENTAN**  
[72] RAGER, TIMO, CH  
[72] VON RAUMER, MARKUS, CH  
[71] IDORSIA PHARMACEUTICALS LTD, CH  
[85] 2023-05-02  
[86] 2021-11-04 (PCT/EP2021/080589)  
[87] (WO2022/096549)  
[30] EP (PCT/EP2020/081085) 2020-11-05

[21] **3,197,266**  
[13] A1

[51] **Int.Cl. A24F 40/10 (2020.01) A24F 40/46 (2020.01)**  
[25] EN  
[54] **ELECTRONIC DEVICES FOR AEROSOLIZING AND INHALING LIQUID**  
[54] **DISPOSITIFS ELECTRONIQUES POUR L'AEROSOLISATION ET L'INHALATION DE LIQUIDE**  
[72] DANEK, MARIO, US  
[72] KOVACEVICH, IAN, US  
[72] BETTS, KASSIE, US  
[71] QNOVIA, INC., US  
[85] 2023-05-02  
[86] 2021-11-03 (PCT/US2021/057963)  
[87] (WO2022/098802)  
[30] US (63/108,880) 2020-11-03

[21] **3,197,267**  
[13] A1

[51] **Int.Cl. F24S 10/50 (2018.01) F24S 20/60 (2018.01) F24S 20/69 (2018.01) F24S 70/16 (2018.01)**  
[25] EN  
[54] **THERMAL ENERGY COLLECTOR AND/OR EMITTER CLADDING PANEL**  
[54] **PANNEAU DE REVETEMENT COLLECTEUR ET/OU EMETTEUR D'ENERGIE THERMIQUE**  
[72] SARRABLO MORENO, VICENTE, ES  
[72] ROVIRAS MINANA, JORDI, ES  
[71] UNIVERSITAT INTERNACIONAL DE CATALUNYA, FUNDACIO PRIVADA, ES  
[71] NEOLITH DISTRIBUTION, SL, ES  
[85] 2023-05-02  
[86] 2021-09-28 (PCT/ES2021/070701)  
[87] (WO2022/096761)  
[30] ES (P202031114) 2020-11-05

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[21] **3,197,268**  
[13] A1

[51] **Int.Cl. C10G 9/24 (2006.01) C07C 4/04 (2006.01) C07C 11/02 (2006.01) C10G 9/14 (2006.01)**

[25] EN

[54] **ELECTRIC FURNACE TO PRODUCE OLEFINS**

[54] **FOUR ELECTRIQUE POUR LA PRODUCTION D'OLEFINES**

[72] SUNDARAM, KANDASAMY MEENAKSHI, US

[72] STANLEY, STEPHEN J., US

[71] LUMMUS TECHNOLOGY LLC, US

[85] 2023-05-02

[86] 2021-11-02 (PCT/US2021/057700)

[87] (WO2022/094455)

[30] US (63/108,699) 2020-11-02

[21] **3,197,269**  
[13] A1

[51] **Int.Cl. C22C 38/02 (2006.01) C22C 38/04 (2006.01) C22C 38/22 (2006.01) C22C 38/24 (2006.01)**

[25] EN

[54] **A NEW WEAR RESISTANT STEEL WITH HIGH HARDNESS AND GOOD TOUGHNESS WHICH KEEPS HARDENED AFTER HARD FACING AND TUNGSTEN CARBIDE TILE BRAZING**

[54] **NOUVEL ACIER RESISTANT A L'USURE AYANT UNE DURETE ELEVEE ET UNE BONNE TENACITE QUI CONSERVE UN DURCISSEMENT APRES UN PAREMENT DUR ET UN BRASAGE DE TUILE DE CARBURE DE TUNGSTENE**

[72] LI, SHANE XINYANG, AU

[71] TANG, YUANKUI, CN

[71] LI, SHANE XINYANG, AU

[85] 2023-05-02

[86] 2021-11-22 (PCT/AU2021/051387)

[87] (WO2022/109658)

[30] AU (2020904402) 2020-11-27

[21] **3,197,272**  
[13] A1

[51] **Int.Cl. A61M 25/06 (2006.01)**

[25] EN

[54] **INTRODUCER NEEDLE HAVING A BUMP AND RELATED SYSTEMS AND METHODS**

[54] **AIGUILLE D'INTRODUCTION AYANT UNE PROTUBERANCE ET SYSTEMES ET PROCEDES CONNEXES**

[72] NAIDU, JITHENDRA KUMAR SATHYANARAYANA, SG

[71] BECTON, DICKINSON AND COMPANY, US

[85] 2023-05-02

[86] 2021-10-27 (PCT/US2021/056769)

[87] (WO2022/103579)

[30] US (63/114,276) 2020-11-16

[30] US (17/508,105) 2021-10-22

[21] **3,197,277**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61P 31/04 (2006.01) C12N 7/00 (2006.01) C12N 9/22 (2006.01)**

[25] EN

[54] **PHAGE COMPOSITIONS FOR ESCHERICHIA COMPRISING CRISPR-CAS SYSTEMS AND METHODS OF USE THEREOF**

[54] **COMPOSITIONS BACTERIOPHAGES POUR ESCHERICHIA COMPRENANT DES SYSTEMES CRISPR-CAS ET METHODES D'UTILISATION ASSOCIEES**

[72] GAROFOLO, PAUL, US

[72] OUSTEROUT, DAVID G., US

[72] SELLE, KURT, US

[72] TUSON, HANNAH HEWITT, US

[72] MCMILLAN, LANA, US

[72] DELORENZO, DREW, US

[72] MCKEE, ROBERT, US

[72] PRYBOL, CAMERON, US

[71] LOCUS BIOSCIENCES, INC., US

[85] 2023-05-02

[86] 2021-11-04 (PCT/US2021/058095)

[87] (WO2022/098899)

[30] US (63/110,107) 2020-11-05

[30] US (63/184,647) 2021-05-05

[21] **3,197,279**  
[13] A1

[51] **Int.Cl. C08K 3/105 (2018.01) C08K 3/26 (2006.01) C08K 5/3435 (2006.01) C08L 23/06 (2006.01)**

[25] EN

[54] **METHOD FOR STABILIZING AN ORGANIC MATERIAL USING A STABILIZER MIXTURE**

[54] **PROCEDE DE STABILISATION D'UN MATERIAU ORGANIQUE A L'AIDE D'UN MELANGE STABILISANT**

[72] WEYLAND, TANIA, CH

[72] HERBST, HEINZ, CH

[72] VITALI, MANUELE, IT

[72] MUELLER, DANIEL, CH

[71] BASF SE, DE

[85] 2023-05-02

[86] 2021-10-28 (PCT/EP2021/079940)

[87] (WO2022/096356)

[30] EP (20205384.9) 2020-11-03

[21] **3,197,281**  
[13] A1

[51] **Int.Cl. C09J 7/38 (2018.01) C09J 11/06 (2006.01) C09J 183/04 (2006.01) C09J 201/02 (2006.01)**

[25] EN

[54] **IMPROVED ADHESIVE FORMULATIONS INCLUDING AT LEAST ONE SILYL MODIFIED POLYMER**

[54] **FORMULATIONS ADHESIVES AMELIOREES CONTENANT AU MOINS UN POLYMERE A MODIFICATION SILYLE**

[72] YU, LINGTAO, US

[72] XING, LINLIN, US

[71] BMIC, LLC, US

[85] 2023-05-02

[86] 2021-11-04 (PCT/US2021/058015)

[87] (WO2022/098844)

[30] US (63/109,716) 2020-11-04



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[13] A1

[51] **Int.Cl. C12P 19/34 (2006.01) C12Q 1/686 (2018.01) C40B 40/08 (2006.01)**  
[25] EN  
[54] **HAIRPIN OLIGONUCLEOTIDES AND USES THEREOF**  
[54] **OLIGONUCLEOTIDES EN EPINGLE A CHEVEUX ET LEURS UTILISATIONS**  
[72] PAN, TAO, US  
[72] KATANSKI, CHRISTOPHER D., US  
[72] WATKINS, CHRISTOPHER P., US  
[71] THE UNIVERSITY OF CHICAGO, US  
[85] 2023-05-02  
[86] 2021-11-05 (PCT/US2021/058258)  
[87] (WO2022/099010)  
[30] US (63/110,605) 2020-11-06

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[21] **3,197,285**  
[13] A1

[51] **Int.Cl. B60L 53/10 (2019.01) B60L 53/50 (2019.01) B60L 53/60 (2019.01) B60L 53/62 (2019.01)**  
[25] EN  
[54] **MULTIPOINT ENERGY ROUTING SYSTEMS**  
[54] **SYSTEMES D'ACHEMINEMENT D'ENERGIE MULTIPOINTS**  
[72] MAUGER, MICKAEL J., US  
[72] KANDULA, RAJENDRA PRASAD, US  
[72] DIVAN, DEEPAK M., US  
[71] GEORGIA TECH RESEARCH CORPORATION, US  
[85] 2023-05-02  
[86] 2021-11-10 (PCT/US2021/058810)  
[87] (WO2022/103858)  
[30] US (63/112,043) 2020-11-10

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[21] **3,197,287**  
[13] A1

[51] **Int.Cl. B29C 64/165 (2017.01)**  
[25] EN  
[54] **PHOTON PROPAGATION MODIFIED ADDITIVE MANUFACTURING COMPOSITIONS AND METHODS OF ADDITIVE MANUFACTURING USING SAME**  
[54] **COMPOSITIONS DE FABRICATION ADDITIVE MODIFIEES PAR PROPAGATION DE PHOTONS ET PROCEDES DE FABRICATION ADDITIVE UTILISANT CELLES-CI**  
[72] SALASIN, JOHN R., US  
[72] FISHER, BENJAMIN D., US  
[71] BWXT ADVANCED TECHNOLOGIES LLC, US  
[85] 2023-05-02  
[86] 2021-11-02 (PCT/US2021/057644)  
[87] (WO2022/098613)  
[30] US (63/109,882) 2020-11-05  
[30] US (17/515,625) 2021-11-01

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[21] **3,197,289**  
[13] A1

[51] **Int.Cl. A61K 8/04 (2006.01) A61K 8/34 (2006.01) A61Q 5/02 (2006.01) A61Q 5/12 (2006.01)**  
[25] EN  
[54] **ANHYDROUS CONCENTRATED HAIR CARE COMPOSITIONS IN THE FORM OF A PASTE**  
[54] **COMPOSITIONS DE SOINS CAPILLAIRES CONCENTREES ANHYDRES SOUS LA FORME D'UNE PATE**  
[72] AREFMANESH, MANDANA, CA  
[72] HOOD, LA CHAE, CA  
[72] ROBERTSON, SHARON, CA  
[72] JENKINS, JAYME, CA  
[72] STEVENSON, JESSICA, CA  
[71] EVERIST INC., CA  
[85] 2023-05-02  
[86] 2021-11-09 (PCT/CA2021/051596)  
[87] (WO2022/094731)  
[30] US (63/111,497) 2020-11-09

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[21] **3,197,292**  
[13] A1

[51] **Int.Cl. E21B 7/04 (2006.01) E21B 7/06 (2006.01) E21B 47/12 (2012.01) G01R 22/06 (2006.01) G01R 27/20 (2006.01) G01V 3/20 (2006.01) H01R 4/66 (2006.01)**  
[25] EN  
[54] **METHOD FOR INSTALLING AN EARTHING SYSTEM**  
[54] **PROCEDE D'INSTALLATION D'UNE MISE A LA TERRE**  
[72] MCCLURE, TIMOTHY ROBERT, AU  
[71] MCCLURE, TIMOTHY ROBERT, AU  
[85] 2023-05-02  
[86] 2021-11-02 (PCT/AU2021/051290)  
[87] (WO2022/087690)  
[30] AU (2020903990) 2020-11-02  
[30] AU (2021902748) 2021-08-25

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[21] **3,197,297**  
[13] A1

[51] **Int.Cl. A45C 11/00 (2006.01) H04B 1/3877 (2015.01) H04M 1/72409 (2021.01) F16M 13/00 (2006.01) G06F 1/16 (2006.01) H04M 1/04 (2006.01)**  
[25] EN  
[54] **CLOSED-LOOP AND OPEN-LOOP CONTROL DEVICE WITHOUT INTEGRATED ARRANGEMENT FOR CONTROL AND/OR MONITORING**  
[54] **APPAREIL DE REGULATION ET DE COMMANDE SANS DISPOSITIF INTEGRE POUR LA COMMANDE ET/OU L'OBSERVATION**  
[72] JANSEN, JENS, CH  
[71] SIEMENS SCHWEIZ AG, CH  
[85] 2023-05-02  
[86] 2021-10-29 (PCT/EP2021/080086)  
[87] (WO2022/096382)  
[30] DE (10 2020 213 933.4) 2020-11-05

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[21] **3,197,299**  
[13] A1

[51] **Int.Cl. E21B 43/10 (2006.01)**  
[25] EN  
[54] **DIAMOND COATING ON THE CONE FOR EXPANDABLE TUBULARS**  
[54] **REVETEMENT DE DIAMANT SUR LE CONE POUR ELEMENTS TUBULAIRES EXPANSIBLES**  
[72] XU, JIANHUI, SA  
[72] ZHAN, GUODONG (DAVID), SA  
[71] SAUDI ARABIAN OIL COMPANY, SA  
[85] 2023-05-02  
[86] 2021-11-03 (PCT/US2021/057907)  
[87] (WO2022/098764)  
[30] US (17/088,179) 2020-11-03

[21] **3,197,311**  
[13] A1

[51] **Int.Cl. C07H 21/02 (2006.01) C12N 9/22 (2006.01) C12N 15/11 (2006.01)**  
[25] EN  
[54] **OLIGONUCLEOTIDE COMPOSITIONS AND METHODS THEREOF**  
[54] **COMPOSITIONS D'OLIGONUCLEOTIDES ET PROCEDES ASSOCIES**  
[72] MONIAN, PRASHANT, US  
[72] SHIVALILA, CHIKDU SHAKTI, US  
[72] MARAPPAN, SUBRAMANIAN, US  
[72] VARGESE, CHANDRA, US  
[72] KANDASAMY, PACHAMUTHU, US  
[72] LU, GENLIANG, US  
[72] YU, HUI, US  
[72] BUTLER, DAVID CHARLES DONNELL, US  
[72] APPONI, LUCIANO HENRIQUE, US  
[72] SHIMIZU, MAMORU, US  
[72] STANDLEY, STEPHANY MICHELLE, US  
[72] BOULAY, DAVID JOHN, US  
[72] HOSS, ANDREW GUZIOR, US  
[72] DESAI, JIGAR, US  
[72] GODFREY, JACK DAVID, US  
[72] YANG, HAILIN, US  
[72] IWAMOTO, NAOKI, US  
[72] KUMARASAMY, JAYAKANTHAN, US  
[72] LAMATTINA, ANTHONY, US  
[72] PU, TOM LIANTANG, US  
[71] WAVE LIFE SCIENCES LTD., SG  
[85] 2023-05-03  
[86] 2021-11-08 (PCT/US2021/058495)  
[87] (WO2022/099159)

[21] **3,197,319**  
[13] A1

[51] **Int.Cl. G09B 23/28 (2006.01)**  
[25] EN  
[54] **SIMULATOR SYSTEM FOR THE SAFE TRAINING OF MEDICAL PERSONNEL**  
[54] **COMPLEXE DE SIMULATION POUR LA FORMATION SANS RISQUE DE PERSONNEL MEDICAL**  
[72] KOSTYUSHOV, EVGENIJ ALEKSANDROVICH, RU  
[72] BUSHUEV, VLADIMIR ALEKSANDROVICH, RU  
[72] DUDAREV, DMITRIJ ALEKSEEVICH, RU  
[72] ISAEV, ALEKSANDR NIKOLAEVICH, RU  
[71] OBSHCHESTVO S OGRANICHENNOJ OTVETSTVENNOST'YU "VIARSIM", RU  
[85] 2023-05-03  
[86] 2021-07-26 (PCT/RU2021/050239)  
[87] (WO2022/098261)  
[30] RU (2020135486) 2020-11-03

[21] **3,197,323**  
[13] A1

[51] **Int.Cl. B60G 17/052 (2006.01) B60G 11/27 (2006.01) B62D 61/12 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR CONTROLLING A LIFT AXLE**  
[54] **SYSTEMES ET PROCEDES DE COMMANDE D'UN ESSIEU RELEVABLE**  
[72] BAILEY, RICHARD, US  
[71] NORGREN GT DEVELOPMENT LLC, US  
[85] 2023-05-03  
[86] 2021-12-08 (PCT/EP2021/084762)  
[87] (WO2022/135933)  
[30] US (17/130,129) 2020-12-22

[21] **3,197,328**  
[13] A1

[51] **Int.Cl. F03B 17/06 (2006.01)**  
[25] EN  
[54] **IMPROVED POWER GENERATING APPARATUS**  
[54] **APPAREIL DE PRODUCTION D'ENERGIE AMELIORE**  
[72] ANNAL, WILLIAM, GB  
[72] MEASON, JONATHAN, GB  
[71] ORBITAL MARINE POWER LIMITED, GB  
[85] 2023-05-03  
[86] 2021-11-18 (PCT/GB2021/052997)  
[87] (WO2022/106832)  
[30] GB (2018290.3) 2020-11-20

[21] **3,197,329**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/28 (2021.01) A61B 5/024 (2006.01) A61B 5/1455 (2006.01) A61B 5/1477 (2006.01)**  
[25] EN  
[54] **WEARABLE DATA COLLECTION DEVICE WITH NON-INVASIVE SENSING**  
[54] **DISPOSITIF DE COLLECTE DE DONNEES POUVANT ETRE PORTE ET A DETECTION NON INVASIVE**  
[72] BENSON, KATIA, US  
[72] MOORE, KEVIN, US  
[72] BENNETT, SCOTT, US  
[71] SOBR SAFE, INC., US  
[85] 2023-05-03  
[86] 2021-11-03 (PCT/US2021/072203)  
[87] (WO2022/099262)  
[30] US (63/109,134) 2020-11-03

[21] **3,197,330**  
[13] A1

[51] **Int.Cl. C01B 3/04 (2006.01) C25B 1/04 (2021.01)**  
[25] EN  
[54] **METHOD FOR CRACKING AMMONIA**  
[54] **PROCEDE DE CRAQUAGE D'AMMONIAC**  
[72] HOJLUND NIELSEN, POUL ERIK, DK  
[72] HAN, PAT A., DK  
[72] BOGILD HANSEN, JOHN, DK  
[71] TOPSOE A/S, DK  
[85] 2023-05-03  
[86] 2021-11-03 (PCT/EP2021/080551)  
[87] (WO2022/096529)  
[30] EP (20205667.7) 2020-11-04

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[21] **3,197,332**  
[13] A1

[51] **Int.Cl. C12N 5/071 (2010.01) C12N 5/073 (2010.01) C12N 5/077 (2010.01) A21D 8/00 (2006.01) C12N 5/00 (2006.01)**

[25] EN

[54] **POROUS SCAFFOLD, METHOD OF MAKING AND USES THEREOF**

[54] **ECHAFAUDAGE POREUX, PROCEDE DE FABRICATION ET UTILISATIONS DE CELUI-CI**

[72] HOLMES, JESSICA T., CA  
[72] JABERANSARI, ZIBA, CA  
[72] COLLINS, WILLIAM, CA  
[72] LEBLANC LATOUR, MAXINE, CA  
[72] MODULEVSKY, DANIEL J., CA  
[72] PELLING, ANDREW E., CA  
[71] UNIVERSITY OF OTTAWA, CA  
[85] 2023-05-03  
[86] 2021-11-09 (PCT/CA2021/051595)  
[87] (WO2022/099410)  
[30] US (63/112,712) 2020-11-12

[21] **3,197,334**  
[13] A1

[51] **Int.Cl. H04W 36/04 (2009.01) H04W 36/30 (2009.01)**

[25] EN

[54] **TIMING ACQUISITION METHOD FOR FASTER BEAM, GATEWAY, SATELLITE AN INTER-NETWORK HANDOVERS**

[54] **PROCEDE D'ACQUISITION DE TEMPORISATION POUR UN FAISCEAU PLUS RAPIDE, PASSERELLE, SATELLITE ET TRANSFERTS INTERCELLULAIRES INTER-RESEAUX**

[72] OZA, RAJEEV GAUTAM, US  
[71] HUGHES NETWORK SYSTEMS, LLC, US  
[85] 2023-05-03  
[86] 2021-12-29 (PCT/US2021/065503)  
[87] (WO2022/147117)  
[30] US (17/138,888) 2020-12-30

[21] **3,197,335**  
[13] A1

[51] **Int.Cl. C23C 22/34 (2006.01)**

[25] EN

[54] **TREATMENT OF METALLIC SURFACES BY OH-FUNCTIONAL COPOLYMER CONTAINING ACIDIC AQUEOUS COMPOSITIONS**

[54] **TRAITEMENT DE SURFACES METALLIQUES PAR UN COPOLYMERE A FONCTION OH CONTENANT DES COMPOSITIONS AQUEUSES ACIDES**

[72] KHELFAH, NAWEL SOUAD, DE  
[72] BURKHARDT, THOMAS, DE  
[72] OSTROVSKY, ILYA, DE  
[72] WALTER, MANFRED, DE  
[72] GASPARIC, SVEN DANIEL, DE  
[72] ROTHER-NOEDING, HELEN, DE  
[71] CHEMETALL GMBH, DE  
[85] 2023-05-03  
[86] 2021-11-09 (PCT/EP2021/081097)  
[87] (WO2022/101192)  
[30] EP (20206683.3) 2020-11-10

[21] **3,197,336**  
[13] A1

[51] **Int.Cl. A47J 31/36 (2006.01) B65D 85/804 (2006.01)**

[25] EN

[54] **CAPSULE, METHOD AND SYSTEM FOR PREPARING A BEVERAGE**

[54] **CAPSULE, PROCEDE ET SYSTEME POUR PREPARER UNE BOISSON**

[72] AFFOLTER, ROLAND, CH  
[72] BRONNIMANN, MARKUS, CH  
[72] KURTZ, OLIVIA, CH  
[72] SIEFARTH, CAROLINE, CH  
[72] STEINBRUCKNER, KATHRIN, CH  
[72] THILLA, TIM, DE  
[72] TSCHOPP, PATRICK, CH  
[72] WUTHRICH, MARTIN, CH  
[72] ZWEIFEL, MICHA, CH  
[71] DELICA AG, CH  
[85] 2023-05-03  
[86] 2021-12-20 (PCT/EP2021/086816)  
[87] (WO2022/136284)  
[30] EP (20216258.2) 2020-12-22

[21] **3,197,338**  
[13] A1

[51] **Int.Cl. G01S 5/02 (2010.01) H04W 4/02 (2018.01) H04W 16/14 (2009.01) H04W 28/08 (2023.01)**

[25] EN

[54] **PROVISIONING AN ACCESS POINT DEVICE USING AN EIRP MASK**

[54] **FOURNITURE D'UN DISPOSITIF DE POINT D'ACCES A L'AIDE D'UN MASQUE EIRP**

[72] FLESCH, JAMES R., US  
[71] ARRIS ENTERPRISES LLC, US  
[85] 2023-05-03  
[86] 2021-10-05 (PCT/US2021/053534)  
[87] (WO2022/098463)  
[30] US (63/109,609) 2020-11-04

[21] **3,197,343**  
[13] A1

[51] **Int.Cl. B05D 1/16 (2006.01) B05D 1/24 (2006.01) E04B 1/86 (2006.01) B05D 1/42 (2006.01)**

[25] EN

[54] **ACOUSTIC PANEL EDGE**

[54] **BORD DE PANNEAU ACOUSTIQUE**

[72] NORKJAER, STEN, DK  
[71] ROCKWOOL A/S, DK  
[85] 2023-05-03  
[86] 2021-11-09 (PCT/EP2021/081115)  
[87] (WO2022/096746)  
[30] EP (20206562.9) 2020-11-09

[21] **3,197,344**  
[13] A1

[51] **Int.Cl. A61K 38/10 (2006.01) A61P 37/04 (2006.01) C07K 7/08 (2006.01)**

[25] EN

[54] **IL-2R.BETA.YC BINDING COMPOUNDS AND USES THEREOF**

[54] **COMPOSES DE LIAISON A IL-2R.BETA.YC C ET UTILISATIONS ASSOCIEES**

[72] DOWER, WILLIAM J., US  
[72] NEEDELS, MICHAEL C., US  
[72] BARRETT, RONALD W., US  
[72] BAKKER, ALICE V., US  
[72] CWIRLA, STEVEN E., US  
[71] MEDIKINE, INC., US  
[85] 2023-05-03  
[86] 2021-11-04 (PCT/US2021/058085)  
[87] (WO2022/098890)  
[30] US (17/089,515) 2020-11-04

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[21] **3,197,346**  
[13] A1

[51] **Int.Cl. B21D 43/14 (2006.01) B65G 47/252 (2006.01)**  
[25] EN  
[54] **DEVICE FOR TURNING PANELS**  
[54] **DISPOSITIF DE RETOURNEMENT DE PANNEAUX**  
[72] DEISS, CLAUS, DE  
[72] ERNST, OLEK, DE  
[72] FUCHS, BERND, DE  
[71] GRENZEBACH BSH GMBH, DE  
[85] 2023-05-03  
[86] 2021-11-04 (PCT/EP2021/025429)  
[87] (WO2022/096150)  
[30] DE (10 2020 006 799.9) 2020-11-05

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[21] **3,197,347**  
[13] A1

[51] **Int.Cl. A61K 8/37 (2006.01) A61K 8/35 (2006.01) A61K 8/41 (2006.01) A61K 8/49 (2006.01)**  
[25] FR  
[54] **NOVEL SYSTEM FOR SOLUBILISING FAT-SOLUBLE ORGANIC SUN FILTERS**  
[54] **NOUVEAU SYSTEME SOLUBILISANT DE FILTRES SOLAIRES ORGANIQUES LIPOSOLUBLES**  
[72] DROMIGNY, HELENE, FR  
[72] TOUITOU, KARINE, FR  
[72] PROVOST, ROXANE, FR  
[72] PLANTIE, MARIE, FR  
[71] PIERRE FABRE DERMO-COSMETIQUE, FR  
[85] 2023-05-03  
[86] 2021-11-10 (PCT/FR2021/051998)  
[87] (WO2022/101584)  
[30] FR (FR2011622) 2020-11-12

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[21] **3,197,348**  
[13] A1

[51] **Int.Cl. B01J 8/02 (2006.01) B01J 8/04 (2006.01)**  
[25] EN  
[54] **FIXED BED REACTOR SYSTEM FOR OXIDATIVE DEHYDROGENATION OF ETHANE**  
[54] **SYSTEME DE REACTEUR A LIT FIXE POUR LA DESHYDROGENATION OXYDANTE D'ETHANE**  
[72] GOODARZANIA, SHAHIN, CA  
[72] SIMANZHENKOV, VASILY, CA  
[72] OLAYIWOLA, BOLAJI, CA  
[72] GENT, DAVID, CA  
[71] NOVA CHEMICALS (INTERNATIONAL) S.A., CH  
[85] 2023-05-03  
[86] 2021-11-05 (PCT/IB2021/060286)  
[87] (WO2022/097099)  
[30] US (63/110,385) 2020-11-06

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[21] **3,197,349**  
[13] A1

[51] **Int.Cl. G01S 5/02 (2010.01) H04W 4/02 (2018.01) H04W 16/14 (2009.01) H04W 28/08 (2023.01)**  
[25] EN  
[54] **PROVISIONING AN ACCESS POINT DEVICE USING AN EIRP MASK**  
[54] **APPROVISIONNEMENT D'UN DISPOSITIF DE POINT D'ACCES A L'AIDE D'UN MASQUE EIRP**  
[72] FLESCHE, JAMES R., US  
[71] ARRIS ENTERPRISES LLC, US  
[85] 2023-05-03  
[86] 2021-10-05 (PCT/US2021/053529)  
[87] (WO2022/098462)  
[30] US (63/109,610) 2020-11-04

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[21] **3,197,350**  
[13] A1

[51] **Int.Cl. B60C 11/03 (2006.01) B60C 11/12 (2006.01) B60C 11/13 (2006.01)**  
[25] EN  
[54] **PNEUMATIC VEHICLE TYRE WITH CENTRAL CIRCUMFERENTIAL RIB**  
[54] **PNEUMATIQUE DE VEHICULE A NERVURE CIRCONFERENCE CENTRALE**  
[72] BRANDAU, CHRISTIAN, DE  
[72] BROCKMANN, JURGEN, DE  
[72] SENG, MATTHIAS, DE  
[72] SUBRAMANIAN, MANICKARAJ, DE  
[71] CONTINENTAL REIFEN DEUTSCHLAND GMBH, DE  
[85] 2023-05-03  
[86] 2021-12-09 (PCT/DE2021/200254)  
[87] (WO2022/128021)  
[30] DE (10 2020 215 799.5) 2020-12-14

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[21] **3,197,351**  
[13] A1

[51] **Int.Cl. F16B 45/02 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR A KEY OPTIMIZED DOUBLE GATED CARABINER**  
[54] **SYSTEMES ET PROCEDES POUR MOUSQUETON A DOUBLE DOIGT OPTIMISE PAR CLAVETTE**  
[72] ADELMAN, GREGORY M., US  
[71] NITE IZE, INC., US  
[85] 2023-05-03  
[86] 2021-10-20 (PCT/US2021/055812)  
[87] (WO2022/103560)  
[30] US (17/097,335) 2020-11-13

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[21] **3,197,352**  
[13] A1

[51] **Int.Cl. C01F 7/743 (2022.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING COAGULANT ALUMINIUM SALTS**  
[54] **METHODE DE PRODUCTION DE SELS D'ALUMINIUM COAGULANTS**  
[72] HONKANEN, TAPIO, FI  
[72] STRICKLAND, FORREST, US  
[72] PENTTINEN, MATIAS, FI  
[72] AZARNOUSH, FAZLOLLAH, SE  
[71] KEMIRA OYJ, FI  
[85] 2023-05-03  
[86] 2021-11-25 (PCT/FI2021/050806)  
[87] (WO2022/112656)  
[30] FI (20206206) 2020-11-26

[21] **3,197,353**  
[13] A1

[51] **Int.Cl. C23C 22/34 (2006.01) C23C 22/44 (2006.01)**  
[25] EN  
[54] **TREATMENT OF METALLIC SURFACES BY COPOLYMER CONTAINING ACIDIC AQUEOUS COMPOSITIONS**  
[54] **TRAITEMENT DE SURFACES METALLIQUES PAR UN COPOLYMERE CONTENANT DES COMPOSITIONS AQUEUSES ACIDES**  
[72] KHELIFALLAH, NAWEL SOUAD, DE  
[72] BURKHARDT, THOMAS, DE  
[72] OSTROVSKY, ILYA, DE  
[72] WALTER, MANFRED, DE  
[72] GASPARIC, SVEN DANIEL, DE  
[72] ROTHER-NOEDING, HELEN, DE  
[71] CHEMETALL GMBH, DE  
[85] 2023-05-03  
[86] 2021-11-09 (PCT/EP2021/081096)  
[87] (WO2022/101191)  
[30] EP (20206678.3) 2020-11-10

[21] **3,197,354**  
[13] A1

[51] **Int.Cl. H01M 4/131 (2010.01) H01M 4/505 (2010.01) H01M 4/525 (2010.01) C01D 15/02 (2006.01)**  
[25] EN  
[54] **CATHODE ACTIVE MATERIAL, METHOD FOR ITS MANUFACTURE, AND USE**  
[54] **MATERIAU ACTIF DE CATHODE, SON PROCEDE DE FABRICATION ET UTILISATION**  
[72] TEUFL, TOBIAS MAXIMILIAN, DE  
[72] LAMPERT, JORDAN K, US  
[72] SOMMER, HEINO, DE  
[72] CHUEH, WILLIAM C., US  
[72] GENT, WILLIAM E., US  
[71] BASF SE, DE  
[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US  
[85] 2023-05-03  
[86] 2021-11-05 (PCT/EP2021/080785)  
[87] (WO2022/101103)  
[30] EP (20207655.0) 2020-11-13

[21] **3,197,355**  
[13] A1

[51] **Int.Cl. A01G 25/09 (2006.01) A01G 25/16 (2006.01) D21F 3/02 (2006.01)**  
[25] EN  
[54] **SUPPORT BODY AND PAPER MACHINE COMPRISING SUCH A SUPPORT BODY**  
[54] **CORPS DE SUPPORT ET MACHINE A PAPIER COMPRENANT UN TEL CORPS DE SUPPORT**  
[72] LEANDERSSON, ANDERS, SE  
[72] BERG, JONAS, SE  
[72] BRATTSTROM, ANDERS, SE  
[72] JARKEBORN, PETER, SE  
[72] NORDIN, ADAM, SE  
[71] VALMET AB, SE  
[85] 2023-05-03  
[86] 2021-11-17 (PCT/EP2021/081974)  
[87] (WO2022/122327)  
[30] SE (2051421-2) 2020-12-07

[21] **3,197,358**  
[13] A1

[51] **Int.Cl. A01G 25/09 (2006.01) B64C 39/02 (2023.01)**  
[25] EN  
[54] **IRRIGATION SYSTEM WITH UNMANNED AERIAL VEHICLES**  
[54] **SYSTEME D'IRRIGATION DESTINE A ETRE UTILISE AVEC DES VEHICULES AERIENS SANS PILOTE**  
[72] MILLER, MARK WILLIAM, US  
[71] LINDSAY CORPORATION, US  
[85] 2023-05-03  
[86] 2021-11-10 (PCT/US2021/058716)  
[87] (WO2022/103791)  
[30] US (63/111,712) 2020-11-10  
[30] US (17/522,992) 2021-11-10

[21] **3,197,359**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61K 39/395 (2006.01) A61K 45/00 (2006.01) A61K 45/06 (2006.01) A61P 9/10 (2006.01) A61P 11/00 (2006.01)**  
[25] EN  
[54] **VISTA AGONIST FOR TREATMENT/PREVENTION OF ISCHEMIC AND/OR REPERFUSION INJURY**  
[54] **AGONISTE DE VISTA DESTINE AU TRAITEMENT/A LA PREVENTION D'UNE LESION ISCHEMIQUE ET/OU DE REPERFUSION**  
[72] NOELLE, RANDOLPH J., US  
[72] SMITS, NICOLE, US  
[71] THE TRUSTEES OF DARTMOUTH COLLEGE, US  
[85] 2023-05-03  
[86] 2021-11-04 (PCT/US2021/058020)  
[87] (WO2022/098846)  
[30] US (63/109,584) 2020-11-04

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[21] **3,197,360**  
[13] A1

[51] **Int.Cl. E05B 15/00 (2006.01) E05B 47/02 (2006.01)**

[25] EN

[54] **LOCKING DEVICE FOR MECHANICAL AND NON-MECHANICAL ACTIVATION OF A LOCKING BOLT**

[54] **DISPOSITIF DE VERROUILLAGE DESTINE A L'ACTIVATION MECANIQUE ET NON MECANIQUE D'UN BOULON DE VERROUILLAGE**

[72] JENSEN, LARS, SE

[72] STENDAL, OLOV, SE

[71] STENDALS EL AB, SE

[85] 2023-05-03

[86] 2021-11-09 (PCT/SE2021/051119)

[87] (WO2022/103315)

[30] SE (2051322-2) 2020-11-12

[21] **3,197,361**  
[13] A1

[51] **Int.Cl. A61K 31/352 (2006.01) A61K 47/54 (2017.01) C07H 15/203 (2006.01)**

[25] EN

[54] **PRODUCTION OF GLYCOSYLATED CANNABINOIDS**

[54] **PRODUCTION DE CANNABINOIDES GLYCOSYLES**

[72] SCHUETZ, MATHIAS, CA

[72] PASSAIA PRIETSCH, GISELE, CA

[71] WILLOW BIOSCIENCES, INC., CA

[71] EPIMERON USA, INC., US

[85] 2023-05-03

[86] 2021-11-05 (PCT/US2021/058342)

[87] (WO2022/099078)

[30] US (63/111,005) 2020-11-07

[21] **3,197,362**  
[13] A1

[51] **Int.Cl. B29C 64/124 (2017.01) B33Y 70/00 (2020.01) B33Y 80/00 (2015.01) C08K 3/013 (2018.01) C08F 2/48 (2006.01) C08F 222/10 (2006.01) C08K 3/04 (2006.01) G03F 7/027 (2006.01) G03F 7/035 (2006.01)**

[25] EN

[54] **RADIATION CURABLE RESIN**

[54] **RESINE DURCISSABLE PAR RAYONNEMENT**

[72] BASKER, DINESH KUMAR, SG

[72] SARKAR, SOUMYA, SG

[72] WU, YILI, SG

[72] PENG, ERWIN, SG

[71] EVONIK OPERATIONS GMBH, DE

[85] 2023-05-03

[86] 2021-11-19 (PCT/EP2021/082241)

[87] (WO2022/112109)

[30] EP (20210550.8) 2020-11-30

[30] EP (21157664.0) 2021-02-17

[21] **3,197,363**  
[13] A1

[51] **Int.Cl. C10L 1/185 (2006.01) C10L 1/198 (2006.01)**

[25] EN

[54] **EMULSIFIER PACKAGE WITH A BRANCHED AND OPTIONALLY WITH A PROPOXYLATED SURFACTANT FOR FUEL EMULSION**

[54] **ENSEMBLE D'EMULSIFIANTS AYANT UN TENSIOACTIF RAMIFIE ET EVENTUELLEMENT AYANT UN TENSIOACTIF PROPOXYLE POUR EMULSION COMBUSTIBLE**

[72] WAGNER, JOCHEN, DE

[72] HARHAUSEN, MARCEL, DE

[72] SCHOEPPE, THORSTEN, DE

[72] STEPPAN, SIMON, DE

[72] MEISSNER, JENS, DE

[71] BASF SE, DE

[85] 2023-05-03

[86] 2021-10-26 (PCT/EP2021/079627)

[87] (WO2022/096314)

[30] EP (20205720.4) 2020-11-04

[30] EP (20207016.5) 2020-11-11

[21] **3,197,364**  
[13] A1

[51] **Int.Cl. F16K 47/04 (2006.01) B01F 25/441 (2022.01) B01F 25/442 (2022.01) B01F 25/46 (2022.01) F16K 3/32 (2006.01) F16K 47/08 (2006.01) F16K 47/16 (2006.01)**

[25] EN

[54] **VALVE**

[54] **SOUPAPE**

[72] JARCHAU, MICHAEL, DE

[71] GEA MECHANICAL EQUIPMENT ITALIA S.P.A., IT

[85] 2023-05-03

[86] 2022-07-28 (PCT/IB2022/056990)

[87] (WO2023/021349)

[30] DE (10 2021 004 243.3) 2021-08-20

[21] **3,197,365**  
[13] A1

[51] **Int.Cl. C10L 1/2383 (2006.01)**

[25] EN

[54] **SYNTHETIC LUBRICITY ADDITIVES FOR HYDROCARBON FUELS**

[54] **ADDITIFS LUBRIFIANTS SYNTHETIQUES DESTINES AUX CARBURANTS HYDROCARBONES**

[72] SRIRAM, SURESH R., US

[72] SORIANO, NESTOR U. JR., US

[72] EURESTE, KARINA, US

[71] ECOLAB USA INC., US

[85] 2023-05-03

[86] 2021-11-12 (PCT/US2021/059087)

[87] (WO2022/104021)

[30] US (63/113,444) 2020-11-13

[21] **3,197,366**  
[13] A1

[51] **Int.Cl. D21H 11/18 (2006.01) D21H 17/14 (2006.01) D21H 19/12 (2006.01) D21H 19/18 (2006.01) D21H 19/36 (2006.01) D21H 19/46 (2006.01) D21H 19/52 (2006.01) D21H 21/16 (2006.01)**

[25] EN

[54] **ENHANCED CELLULOSE NANOFIBRILS (CNF)**

[54] **CELLULOSE NANOCRISTALLINE AMELIOREE**

[72] BILODEAU, MICHAEL ALBERT, SG

[72] SPENDER, JONATHAN, SG

[71] GREENTECH GLOBAL PTE. LTD., SG

[85] 2023-05-03

[86] 2021-11-05 (PCT/IB2021/060282)

[87] (WO2022/097095)

[30] US (63/110,106) 2020-11-05

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[21] **3,197,367**  
[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6827 (2018.01) C12Q 1/6851 (2018.01) C12Q 1/6881 (2018.01)**

[25] EN

[54] **APPARATUSES, SYSTEMS, AND METHODS FOR EXTRACTING MEANING FROM DNA SEQUENCE DATA USING NATURAL LANGUAGE PROCESSING (NLP)**

[54] **APPAREILS, SYSTEMES ET PROCEDES PERMETTANT D'EXTRAIRE LA SIGNIFICATION DE DONNEES DE SEQUENCES D'ADN A L'AIDE DU TRAITEMENT DU LANGAGE NATUREL (NLP)**

[72] DAVIS, ERIN MARIE, US

[72] MARTSCHAT, SEBASTIAN HERMANN, DE

[72] VOGEL, JONATHAN T., US

[71] BASF CORPORATION, US

[85] 2023-05-03

[86] 2021-11-01 (PCT/US2021/057491)

[87] (WO2022/098588)

[30] US (17/088,734) 2020-11-04

[21] **3,197,368**  
[13] A1

[51] **Int.Cl. C09K 23/00 (2022.01) C10L 1/10 (2006.01) C10L 1/24 (2006.01) C10L 1/32 (2006.01) F02M 25/022 (2006.01) C10L 1/198 (2006.01)**

[25] EN

[54] **AQUEOUS EMULSIFIER PACKAGE WITH ANIONIC SURFACTANT FOR FUEL EMULSION**

[54] **ENSEMBLE EMULSIFIANT AQUEUX A TENSIOACTIF ANIONIQUE POUR EMULSION DE CARBURANT**

[72] WAGNER, JOCHEN, DE

[72] HARHAUSEN, MARCEL, DE

[72] SCHOEPPPE, THORSTEN, DE

[72] STEPPAN, SIMON, DE

[72] MEISSNER, JENS, DE

[71] BASF SE, DE

[85] 2023-05-03

[86] 2021-10-26 (PCT/EP2021/079610)

[87] (WO2022/096310)

[30] EP (20205718.8) 2020-11-04

[30] EP (20207007.4) 2020-11-11

[21] **3,197,369**  
[13] A1

[51] **Int.Cl. G01V 3/30 (2006.01)**

[25] EN

[54] **A DEVICE AND METHOD FOR IMAGING UNDERGROUND FEATURES FROM A BOREHOLE**

[54] **D'POSITIF ET PROCEDURE D'IMAGERIE DE CARACTERISTIQUES SOUTERRAINES D'UN TROU DE FORAGE**

[72] JORDAN, STEVE, GB

[72] FLANAGAN, FERGUS, GB

[72] TURNER, ELIOTT, GB

[71] HYPERTUNNEL IP LIMITED, GB

[85] 2023-05-03

[86] 2021-11-08 (PCT/IB2021/060326)

[87] (WO2022/101762)

[30] GB (2017921.4) 2020-11-13

[21] **3,197,370**  
[13] A1

[51] **Int.Cl. D21H 11/14 (2006.01) D21C 9/08 (2006.01) D21H 21/30 (2006.01) D21H 21/32 (2006.01) D21H 21/36 (2006.01)**

[25] EN

[54] **METHOD FOR REDUCING AMOUNT OF BACTERIAL ENDOSPORES IN AN AQUEOUS FIBRE SUSPENSION**

[54] **PROCEDE DE REDUCTION DE QUANTITE D'ENDOSPORES BACTERIENNES DANS UNE SUSPENSION AQUEUSE DE FIBRES**

[72] KOLARI, MARKO, FI

[72] AHOLA, JUHANA, FI

[71] KEMIRA OYJ, FI

[85] 2023-05-03

[86] 2021-11-29 (PCT/FI2021/050824)

[87] (WO2022/112663)

[30] FI (20206220) 2020-11-30

[21] **3,197,371**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) A61K 38/20 (2006.01) A61K 38/22 (2006.01) C12N 15/86 (2006.01)**

[25] EN

[54] **ONCOLYTIC IMMUNOTHERAPY BY TUMOR MICRO-ENVIRONMENT REMODELING**

[54] **IMMUNOTHERAPIE ONCOLYTIQUE PAR REMODELAGE D'UN MICRO-ENVIRONNEMENT TUMORAL**

[72] THORNE, STEPHEN HOWARD, US

[72] ZHANG, MINGRUI, US

[72] BYRD, DANIEL J., US

[71] KALIVIR IMMUNOTHERAPEUTICS, INC., US

[85] 2023-05-03

[86] 2021-11-18 (PCT/US2021/059887)

[87] (WO2022/109133)

[30] US (63/116,004) 2020-11-19

[21] **3,197,373**  
[13] A1

[51] **Int.Cl. E21B 43/22 (2006.01) C09K 8/592 (2006.01) C09K 8/64 (2006.01) C09K 8/80 (2006.01) C09K 8/86 (2006.01) E21B 43/24 (2006.01) E21B 43/26 (2006.01) E21B 43/40 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR ENHANCED OIL RECOVERY**

[54] **PROCEDE ET SYSTEME POUR UNE RECUPERATION ASSISTEE DU PETROLE**

[72] GOULD, THOMAS, US

[72] SOLOW, JON, US

[72] SZABO, DAVID J., US

[71] OIL TECHNOLOGY GROUP, LLC, US

[71] GOULD, THOMAS, US

[71] SOLOW, JON, US

[71] SZABO, DAVID J., US

[85] 2023-05-03

[86] 2021-10-31 (PCT/US2021/057483)

[87] (WO2022/098587)

[30] US (17/087,814) 2020-11-03

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[21] **3,197,374**  
[13] A1  
[51] **Int.Cl. A61K 36/53 (2006.01) A61K 31/05 (2006.01) A61K 31/355 (2006.01) A61P 27/02 (2006.01)**  
[25] EN  
[54] **OPHTHALMIC COMPOSITION**  
[54] **COMPOSITION OPHTHALMIQUE**  
[72] CARUSO, CIRO, IT  
[71] IROMED GROUP S.R.L., IT  
[85] 2023-05-03  
[86] 2021-10-05 (PCT/IB2021/059110)  
[87] (WO2022/096965)  
[30] IT (10202000026236) 2020-11-04

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[21] **3,197,375**  
[13] A1  
[51] **Int.Cl. G01M 15/14 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR ANALYZING SENSED DATA IN 3D SPACE**  
[54] **SYSTEME ET PROCEDE D'ANALYSE DES DONNEES DETECTEES DANS UN ESPACE 3D**  
[72] MIKHAILOV, OLEG, US  
[72] CLARKE, RICHARD, US  
[72] KOSSAKOVSKI, DMITRI, US  
[71] EXPLORATION ROBOTICS TECHNOLOGIES INC., US  
[85] 2023-05-03  
[86] 2021-08-05 (PCT/US2021/044685)  
[87] (WO2022/098407)  
[30] US (63/109,013) 2020-11-03

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[21] **3,197,376**  
[13] A1  
[51] **Int.Cl. B25C 1/06 (2006.01) G05B 19/04 (2006.01)**  
[25] EN  
[54] **POWER TOOL CONTROL SYSTEM**  
[54] **SYSTEME DE COMMANDE D'OUTIL ELECTRIQUE**  
[72] LI, YONG MIN, CN  
[72] XIE, LI HUA, CN  
[72] FANG, ZHONG KANG, CN  
[72] SUN, JI GUANG, CN  
[71] TECHTRONIC CORDLESS GP, US  
[85] 2023-05-03  
[86] 2020-11-05 (PCT/CN2020/126727)  
[87] (WO2022/094851)

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[21] **3,197,377**  
[13] A1  
[51] **Int.Cl. C02F 1/24 (2006.01) C02F 1/28 (2006.01) C02F 1/44 (2006.01) G01N 21/64 (2006.01) G01N 33/18 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR DETERMINING SURFACTANT CONCENTRATION IN INDUSTRIAL PROCESSES**  
[54] **PROCEDE ET SYSTEME DE DETERMINATION DE LA CONCENTRATION EN AGENTS TENSIOACTIFS DANS DES PROCESSUS INDUSTRIELS**  
[72] POLASHOCK, VICKY, US  
[72] DHAGUMUDI, VETRIVEL, US  
[72] FRASER, BRIAN S., US  
[71] KIMBERLY-CLARK WORLDWIDE, INC., US  
[85] 2023-05-03  
[86] 2020-11-06 (PCT/US2020/059352)  
[87] (WO2022/098362)

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[21] **3,197,379**  
[13] A1  
[51] **Int.Cl. B60L 3/04 (2006.01) B60W 60/00 (2020.01) B60W 50/04 (2006.01) G01C 21/26 (2006.01) G05D 1/00 (2006.01) G05D 1/02 (2020.01) G07C 5/08 (2006.01)**  
[25] EN  
[54] **UNMANNED VEHICLE CONTROL, COMMUNICATION AND SAFETY SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE DE COMMANDE, DE COMMUNICATION ET DE SECURITE DE VEHICULE SANS PILOTE**  
[72] CRONIN, JOE, AU  
[72] PRELLER, ANDRE, AU  
[71] AUSTRALIAN DROID & ROBOT PTY LTD, AU  
[85] 2023-05-03  
[86] 2021-11-11 (PCT/AU2021/051341)  
[87] (WO2022/099371)  
[30] AU (2020904136) 2020-11-11

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[21] **3,197,380**  
[13] A1  
[51] **Int.Cl. D21H 11/12 (2006.01) D21C 1/06 (2006.01) D21C 1/10 (2006.01) D21C 3/02 (2006.01) D21H 11/20 (2006.01)**  
[25] EN  
[54] **HIGH POROSITY NON-WOOD PULP**  
[54] **PATE NON LIGNEUSE A POROSITE ELEVEE**  
[72] SHANNON, THOMAS G., US  
[72] YU, ZHIYING, US  
[71] KIMBERLY-CLARK WORLDWIDE, INC., US  
[85] 2023-05-03  
[86] 2021-11-05 (PCT/US2021/058189)  
[87] (WO2022/098956)  
[30] US (63/110,593) 2020-11-06

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[21] **3,197,381**  
[13] A1  
[51] **Int.Cl. A61K 39/00 (2006.01) A61K 39/395 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **USE OF ISATUXIMAB FOR THE TREATMENT OF MULTIPLE MYELOMA**  
[54] **UTILISATION D'ISATUXIMAB DANS LE TRAITEMENT DU MYELOME MULTIPLE**  
[72] SEMIOND, DOROTHEE, FR  
[72] THAI, HOAI-THU, FR  
[72] VAN DE VELDE, HELGI, FR  
[72] VEYRAT-FOLLET, CHRISTINE, FR  
[71] SANOFI-AVENTIS U.S. LLC, US  
[71] SEMIOND, DOROTHEE, FR  
[71] THAI, HOAI-THU, FR  
[71] VAN DE VELDE, HELGI, FR  
[71] VEYRAT-FOLLET, CHRISTINE, FR  
[85] 2023-05-03  
[86] 2021-11-02 (PCT/US2021/072193)  
[87] (WO2022/099257)  
[30] US (63/109,305) 2020-11-03  
[30] US (63/239,108) 2021-08-31

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[21] **3,197,382**  
[13] A1

[51] **Int.Cl. C10L 1/198 (2006.01) C10L 1/32 (2006.01)**

[25] EN

[54] **EMULSIFIER PACKAGE WITH A SHORT-CHAINED AND OPTIONALLY WITH A LONG-CHAINED SURFACTANT FOR FUEL EMULSION**

[54] **EMBALLAGE D'EMULSIFIANT A TENSIOACTIF A CHAINE COURTE ET FACULTATIVEMENT A TENSIOACTIF A CHAINE LONGUE POUR EMULSION DE COMBUSTIBLE**

[72] WAGNER, JOCHEN, DE  
[72] HARHAUSEN, MARCEL, DE  
[72] SCHOEPPE, THORSTEN, DE  
[72] STEPPAN, SIMON, DE  
[72] MEISSNER, JENS, DE  
[71] BASF SE, DE  
[85] 2023-05-03  
[86] 2021-10-26 (PCT/EP2021/079634)  
[87] (WO2022/096316)  
[30] EP (20205715.4) 2020-11-04  
[30] EP (20207010.8) 2020-11-11

[21] **3,197,383**  
[13] A1

[51] **Int.Cl. E05B 67/00 (2006.01) E05B 71/00 (2006.01) E05B 73/00 (2006.01)**

[25] EN

[54] **CHAIN LOCK AND CHAIN FOR A CHAIN LOCK**

[54] **SERRURE A CHAINE ET CHAINE POUR SERRURE A CHAINE**

[72] PANKRATIUS, ERNST, DE  
[71] ABUS AUGUST BREMICKER SOHNE KG, DE  
[85] 2023-05-03  
[86] 2021-11-12 (PCT/EP2021/081481)  
[87] (WO2022/112019)  
[30] DE (10 2020 131 332.2) 2020-11-26

[21] **3,197,385**  
[13] A1

[51] **Int.Cl. B60N 2/22 (2006.01) B60N 2/90 (2018.01) B60N 2/30 (2006.01)**

[25] EN

[54] **SEAT ASSEMBLY WITH ZERO-GRAVITY POSITION**

[54] **ENSEMBLE SIEGE A POSITION DE GRAVITE NULLE**

[72] RUNDE, DAVID M., US  
[71] MAGNA SEATING INC., CA  
[85] 2023-05-03  
[86] 2021-11-18 (PCT/US2021/059958)  
[87] (WO2022/109180)  
[30] US (63/115,122) 2020-11-18

[21] **3,197,386**  
[13] A1

[51] **Int.Cl. E21B 33/134 (2006.01)**

[25] EN

[54] **DOWNHOLE APPARATUS AND METHOD**

[54] **APPAREIL DE FOND DE TROU ET PROCEDE ASSOCIE**

[72] LOUDEN, ANDREW, GB  
[72] LOWRY, WILLIAM EDWARD, US  
[71] ISOL8 (HOLDINGS) LIMITED, GB  
[85] 2023-05-03  
[86] 2021-11-04 (PCT/EP2021/025428)  
[87] (WO2022/096149)  
[30] GB (2017444.7) 2020-11-04

[21] **3,197,389**  
[13] A1

[51] **Int.Cl. H04B 7/185 (2006.01)**

[25] EN

[54] **DYNAMIC INROUTE RECONFIGURATION OF SATELLITE NETWORK COMMUNICATION SYSTEMS**

[54] **RECONFIGURATION D'ITINERAIRE DYNAMIQUE DE SYSTEMES DE COMMUNICATION DE RESEAU DE SATELLITES**

[72] BORDER, JOHN LEONARD, US  
[72] REGUNATHAN, MURALI, US  
[72] SONREXA, JAYANT, US  
[72] TORRES, ROBERT JAMES, US  
[71] HUGHES NETWORK SYSTEMS, LLC, US  
[85] 2023-05-03  
[86] 2021-12-31 (PCT/US2021/065826)  
[87] (WO2022/147353)  
[30] US (63/133,051) 2020-12-31  
[30] US (17/566,214) 2021-12-30

[21] **3,197,391**  
[13] A1

[51] **Int.Cl. A61K 39/215 (2006.01) A61P 31/12 (2006.01) A61P 31/14 (2006.01) C07K 16/08 (2006.01) C07K 16/10 (2006.01)**

[25] EN

[54] **DNA ENCODED NANOPARTICLES AND METHOD OF USE THEREOF AS A CORONAVIRUS DISEASE 2019 (COVID-19) VACCINE**

[54] **NANOPARTICULES A CODAGE ADN ET PROCEDE D'UTILISATION DE CELLES-CI EN TANT QUE VACCIN CONTRE LA MALADIE A CORONAVIRUS 2019 (COVID-19)**

[72] KULP, DAN, US  
[72] XU, ZIYANG, US  
[72] WEINER, DAVID, US  
[71] THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY, US  
[85] 2023-05-03  
[86] 2021-11-03 (PCT/US2021/057859)  
[87] (WO2022/098728)  
[30] US (63/109,123) 2020-11-03

[21] **3,197,392**  
[13] A1

[51] **Int.Cl. B62H 5/00 (2006.01) E05B 67/00 (2006.01) E05B 71/00 (2006.01)**

[25] EN

[54] **TWO-WHEELER LOCK**

[54] **SERRURE DE VEHICULE A DEUX ROUES**

[72] HEINEMANN, STEFAN, DE  
[71] ABUS AUGUST BREMICKER SOHNE KG, DE  
[85] 2023-05-03  
[86] 2021-12-03 (PCT/EP2021/084205)  
[87] (WO2022/128537)  
[30] DE (10 2020 134 110.5) 2020-12-18

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[21] **3,197,393**  
[13] A1

[51] **Int.Cl. H02J 7/02 (2016.01) H02J 7/32 (2006.01)**  
[25] EN  
[54] **PORTABLE POWER SYSTEM**  
[54] **SYSTEME D'ALIMENTATION PORTATIF**

[72] LOUDON, JONATHAN, CA  
[72] RICHARDSON, JULIAN, CA  
[72] MACDONALD, JASON, CA  
[72] ROSSI, STEVEN, CA  
[71] WORKSPORT LTD., CA  
[85] 2023-05-03  
[86] 2022-04-15 (PCT/US2022/025117)  
[87] (WO2022/221728)  
[30] US (63/175,860) 2021-04-16

[21] **3,197,394**  
[13] A1

[51] **Int.Cl. B65D 83/04 (2006.01) G07F 11/24 (2006.01) G07F 11/42 (2006.01) G07F 11/44 (2006.01) G07F 17/32 (2006.01)**  
[25] EN  
[54] **TOUCHLESS SYSTEM FOR DISPENSING PRODUCT SAMPLES**  
[54] **SYSTEME SANS CONTACT POUR DISTRIBUER DES ECHANTILLONS DE PRODUIT**

[72] HAROUSH, ARIEL, US  
[71] OUTFORM LTD., IL  
[85] 2023-05-03  
[86] 2021-11-29 (PCT/IB2021/000820)  
[87] (WO2022/118073)  
[30] US (63/120,239) 2020-12-02  
[30] US (63/242,299) 2021-09-09

[21] **3,197,395**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) G06F 30/20 (2020.01)**  
[25] EN  
[54] **METHOD FOR MANUFACTURING A MOLD FOR A CARDIAC VALVE PROSTHESIS**  
[54] **PROCEDE DE FABRICATION D'UN MOULE POUR UNE PROTHESE DE VALVULE CARDIAQUE**

[72] SCHMITT, BORIS, DE  
[71] GROWNVALVE GMBH, DE  
[85] 2023-05-03  
[86] 2021-12-09 (PCT/EP2021/085101)  
[87] (WO2022/122980)  
[30] EP (20213219.7) 2020-12-10

[21] **3,197,397**  
[13] A1

[51] **Int.Cl. B05D 1/00 (2006.01) C23G 1/12 (2006.01) C25D 11/02 (2006.01) C25D 11/30 (2006.01)**  
[25] EN  
[54] **CORROSION-RESISTANT MAGNESIUM ALLOY WITH A MULTI-LEVEL PROTECTIVE COATING AND PREPARATION PROCESS THEREOF**  
[54] **ALLIAGE DE MAGNESIUM RESISTANT A LA CORROSION AYANT UN REVETEMENT PROTECTEUR MULTI-NIVEAUX ET SON PROCEDE DE PREPARATION**

[72] ZHANG, DINGFEI, CN  
[72] LIU, YUPING, CN  
[72] MIAO, CHAO, CN  
[72] ZHAO, HANXI, CN  
[72] ZHAO, LIBIN, CN  
[71] THE BOEING COMPANY, US  
[85] 2023-05-03  
[86] 2022-01-03 (PCT/US2022/011020)  
[87] (WO2022/147493)  
[30] CN (202110002962.0) 2021-01-04

[21] **3,197,398**  
[13] A1

[51] **Int.Cl. F16L 1/26 (2006.01) E21B 43/01 (2006.01) E21B 43/013 (2006.01) F16L 1/16 (2006.01)**  
[25] EN  
[54] **DIRECT TIE-IN OF A PIPELINE**  
[54] **LIAISON DIRECTE DE PIPELINE**

[72] LEVOLD, ERIK, NO  
[72] ILSTAD, HAVAR, NO  
[72] OPGARD, MARIE FINSTAD, NO  
[71] EQUINOR ENERGY AS, NO  
[85] 2023-05-03  
[86] 2021-10-07 (PCT/NO2021/050206)  
[87] (WO2022/098243)  
[30] GB (2017495.9) 2020-11-05

[21] **3,197,401**  
[13] A1

[51] **Int.Cl. B65D 65/42 (2006.01) D21H 17/36 (2006.01) D21H 19/56 (2006.01) D21H 23/22 (2006.01)**  
[25] EN  
[54] **POLYLACTIDE FORMULATION FOR IMPROVED EXTRUSION PROCESSING**  
[54] **FORMULATION DE POLYLACTIDE POUR TRAITEMENT AMELIORE PAR EXTRUSION**

[72] BHARDWAJ, RAHUL, US  
[72] YANG, CHITAI C., US  
[72] BENNETT, JUSTIN L., US  
[72] JOHNSON, COURTNEY R., US  
[71] WESTROCK MWV, LLC, US  
[85] 2023-05-03  
[86] 2021-12-08 (PCT/US2021/062462)  
[87] (WO2022/125696)  
[30] US (63/124,162) 2020-12-11

[21] **3,197,402**  
[13] A1

[51] **Int.Cl. B60K 7/00 (2006.01) B60T 17/08 (2006.01) B62D 31/02 (2006.01) B62D 47/02 (2006.01)**  
[25] EN  
[54] **FRAME WITH A BRAKE ASSEMBLY FOR AN ELECTRIC VEHICLE**  
[54] **CADRE DOTE D'UN ENSEMBLE DE FREIN POUR UN VEHICULE ELECTRIQUE**

[72] ENGELS, WILHELMUS PETRUS, NL  
[71] E-TRACTION EUROPE B.V., NL  
[85] 2023-05-03  
[86] 2021-11-04 (PCT/NL2021/050677)  
[87] (WO2022/098235)  
[30] NL (2026841) 2020-11-06

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[21] **3,197,403**  
[13] A1

[51] **Int.Cl. A23L 29/25 (2016.01) A23L 29/231 (2016.01) A23L 29/269 (2016.01) A23L 29/294 (2016.01)**

[25] EN

[54] **XANTHAN-BASED LIQUID CONCENTRATE**

[54] **CONCENTRE LIQUIDE A BASE DE XANTHANE**

[72] JEDWAB, MICHAEL REUBEN, CH

[72] STEVENSON, NANCY, US

[72] CHISHOLM, HELEN, CH

[72] GUNES, ZEYNEL DENIZ, CH

[72] BURBIDGE, ADAM, CH

[71] SOCIETE DES PRODUITS NESTLE S.A., CH

[85] 2023-05-03

[86] 2021-12-20 (PCT/EP2021/086688)

[87] (WO2022/136208)

[30] EP (20217207.8) 2020-12-24

[21] **3,197,405**  
[13] A1

[51] **Int.Cl. A61K 9/20 (2006.01) A61K 31/4155 (2006.01) A61P 19/06 (2006.01)**

[25] EN

[54] **STABLE ORAL FORMULATION CONTAINING 1-(3-CYANO-1-ISOPROPYL-INDOL-5-YL) PYRAZOLE-4-CARBOXYLIC ACID**

[54] **FORMULATION ORALE STABLE CONTENANT DE L'ACIDE 1-(3-CYANO-1-ISOPROPYL-INDOL-5-YL) PYRAZOLE-4-CARBOXYLIQUE**

[72] YOO, SEOK CHEOL, KR

[72] LEE, SUN, KR

[72] YUN, DUCK IL, KR

[72] PARK, JUNGHONG, KR

[72] SUN, HYUN JI, KR

[71] LG CHEM, LTD., KR

[85] 2023-05-03

[86] 2021-11-30 (PCT/KR2021/017842)

[87] (WO2022/119269)

[30] KR (10-2020-0166051) 2020-12-01

[21] **3,197,406**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) C12N 15/115 (2010.01) C12N 15/62 (2006.01)**

[25] EN

[54] **ENHANCEMENT OF PREDICTABLE AND TEMPLATE-FREE GENE EDITING BY THE ASSOCIATION OF CAS WITH DNA POLYMERASE**

[54] **AMELIORATION DE L'EDITION GENIQUE PREVISIBLE ET EXEMPTÉ DE MATRICE PAR L'ASSOCIATION DE CAS ET D'UNE ADN POLYMERASE**

[72] LONG, CHENGZU, US

[72] YANG, QIAOYAN, US

[71] NEW YORK UNIVERSITY, US

[85] 2023-05-03

[86] 2021-11-04 (PCT/US2021/058135)

[87] (WO2022/098923)

[30] US (63/109,909) 2020-11-05

[21] **3,197,407**  
[13] A1

[51] **Int.Cl. A61B 8/08 (2006.01) G06T 7/11 (2017.01) G16H 30/40 (2018.01) G16H 50/20 (2018.01) G06T 7/00 (2017.01)**

[25] EN

[54] **ROBUST SEGMENTATION THROUGH HIGH-LEVEL IMAGE UNDERSTANDING**

[54] **SEGMENTATION ROBUSTE PAR COMPREHENSION D'IMAGE A HAUT NIVEAU**

[72] AYINDE, BABAJIDE, US

[72] ZHANG, FAN, US

[71] ECHONOUS, INC., US

[85] 2023-05-03

[86] 2021-11-04 (PCT/US2021/058037)

[87] (WO2022/098859)

[30] US (17/091,263) 2020-11-06

[21] **3,197,408**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 90/00 (2016.01) A61B 8/00 (2006.01) A61B 8/12 (2006.01) A61B 18/14 (2006.01) A61M 25/10 (2013.01)**

[25] EN

[54] **SYSTEMS, METHODS, AND CATHETERS FOR ENDOVASCULAR TREATMENT OF A BLOOD VESSEL**

[54] **SYSTEMES, PROCEDES ET CATHETERS POUR LE TRAITEMENT ENDOVASCULAIRE D'UN VAISSEAU SANGUIN**

[72] SIMPSON, BREANNA, US

[72] PALMER, OLIVIA R., US

[72] MOLL, ANDREW, US

[72] AKERELE-ALE, OLADIPO PETER, US

[72] PALMER, ALEX, US

[72] PEDE, STEPHEN, US

[71] TVA MEDICAL, INC., US

[85] 2023-05-03

[86] 2021-11-30 (PCT/US2021/061118)

[87] (WO2022/115752)

[30] US (63/119,239) 2020-11-30

[21] **3,197,411**  
[13] A1

[51] **Int.Cl. B01D 1/30 (2006.01) B01D 1/12 (2006.01) B01D 9/02 (2006.01) B08B 9/027 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR CLEANING OF A FORCED-CIRCULATION EVAPORATIVE CRYSTALLIZER**

[54] **SYSTEME ET PROCEDE DE NETTOYAGE D'UN CRISTALLISEUR PAR EVAPORATION A CIRCULATION FORCEE**

[72] LEE, JUSTIN DONGHOON, CA

[72] SPARROW, BENJAMIN, CA

[71] SALTWORKS TECHNOLOGIES INC., CA

[85] 2023-05-03

[86] 2021-11-18 (PCT/CA2021/051630)

[87] (WO2022/104463)

[30] US (63/115,209) 2020-11-18

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[21] **3,197,412**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/145 (2006.01)**  
[25] EN  
[54] **SYSTEMS, DEVICES, AND METHODS FOR ANALYTE SENSOR INSERTION**  
[54] **SYSTEMES, DISPOSITIFS ET PROCEDES D'INSERTION DE CAPTEUR D'ANALYTE**  
[72] WANG, YI, US  
[72] CHO, HYUN, US  
[72] FELDMAN, BENJAMIN J., US  
[72] TRAN, LAM N., US  
[72] SADIK, ZAHID, US  
[71] ABBOTT DIABETES CARE INC., US  
[85] 2023-05-03  
[86] 2021-12-09 (PCT/US2021/062612)  
[87] (WO2022/125779)  
[30] US (63/123,938) 2020-12-10

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[21] **3,197,413**  
[13] A1

[51] **Int.Cl. A61B 17/11 (2006.01)**  
[25] EN  
[54] **CATHETER SYSTEMS WITH BIASING RAILS AND METHODS FOR FORMING FISTULAS**  
[54] **SYSTEMES DE CATHETERS AVEC RAILS DE SOLLICITATION ET PROCEDES DE FORMATION DE FISTULES**  
[72] AKERELE-ALE, OLADIPO PETER, US  
[72] MOLL, ANDREW, US  
[72] PALMER, ALEX, US  
[72] SIMPSON, BREANNA, US  
[72] PALMER, OLIVIA RUTH, US  
[71] TVA MEDICAL, INC., US  
[85] 2023-05-03  
[86] 2020-11-30 (PCT/US2020/062556)  
[87] (WO2022/115109)

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[21] **3,197,414**  
[13] A1

[51] **Int.Cl. C12N 9/22 (2006.01) C12N 15/113 (2010.01) A61K 48/00 (2006.01) C12N 15/09 (2006.01) C12N 15/10 (2006.01) C12N 15/55 (2006.01) C12N 15/85 (2006.01)**  
[25] EN  
[54] **GENE EDITING WITH A MODIFIED ENDONUCLEASE**  
[54] **EDITION DE GENES AVEC UNE ENDONUCLEASE MODIFIEE**  
[72] STEAD, BRENT E., CA  
[72] MCMURROUGH, THOMAS A., CA  
[72] ISRAEL, ODISHO K., CA  
[71] SPECIFIC BIOLOGICS INC., CA  
[85] 2023-05-03  
[86] 2021-11-04 (PCT/IB2021/060236)  
[87] (WO2022/097070)  
[30] US (63/109,396) 2020-11-04

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[21] **3,197,415**  
[13] A1

[51] **Int.Cl. G01M 13/045 (2019.01) G01M 13/028 (2019.01) G01M 13/04 (2019.01)**  
[25] EN  
[54] **GLOBALLY-BASED AUTOMATIC LUBRICATION SYSTEM**  
[54] **SYSTEME DE LUBRIFICATION AUTOMATIQUE A BASE GLOBALE**  
[72] BISHOP, WILLIAM, US  
[72] MOHR, GARY, US  
[72] FRASER, BLAIR, CA  
[71] U.E. SYSTEMS, INC., US  
[85] 2023-05-03  
[86] 2021-12-22 (PCT/US2021/064781)  
[87] (WO2022/140503)  
[30] US (17/131,523) 2020-12-22

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[21] **3,197,417**  
[13] A1

[51] **Int.Cl. H02S 20/23 (2014.01)**  
[25] FR  
[54] **IMPROVED SUPPORT PLATE FOR PHOTOVOLTAIC PANELS**  
[54] **PLAQUE DE SUPPORT PERFECTIONNEE POUR PANNEAU PHOTOVOLTAIQUE**  
[72] DOUIEB, YANIV, IL  
[71] GYS HOLDING, FR  
[85] 2023-05-03  
[86] 2021-11-08 (PCT/IB2021/060316)  
[87] (WO2022/101758)  
[30] FR (FR2011573) 2020-11-11

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[21] **3,197,418**  
[13] A1

[51] **Int.Cl. A41D 19/00 (2006.01) A41D 19/015 (2006.01) A61F 5/00 (2006.01) A61F 13/00 (2006.01) A61F 13/10 (2006.01) A61H 1/00 (2006.01)**  
[25] EN  
[54] **HAND-AND-WRIST ACCESSORY DEVICE FOR PEOPLE THAT FACILITATES EXTENSION MOVEMENTS**  
[54] **DISPOSITIF ACCESSOIRE POUR MAIN ET POIGNET FACILITATEUR DE MOUVEMENTS D'EXTENSION POUR PERSONNES**  
[72] GORUP VALENZUELA, CRISTIAN EDUARDO, CL  
[72] GODOY SANTANDER, DIEGO ANTONIO, CL  
[71] GOGO LABS SPA, CL  
[85] 2023-05-03  
[86] 2021-10-18 (PCT/CL2021/050103)  
[87] (WO2022/094736)  
[30] CL (2852-2020) 2020-11-04

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[21] **3,197,420**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/06 (2006.01) A61K 9/107 (2006.01) A61P 17/00 (2006.01)**  
[25] EN  
[54] **TOPICAL FORMULATION COMPRISING OMEGA-3 FATTY ACIDS, MELATONIN AND VITAMIN D**  
[54] **FORMULATION TOPIQUE COMPRENANT DES ACIDES GRAS OMEGA-3, DE LA MELATONINE ET DE LA VITAMINE D**  
[72] MARTINSEN, BO, US  
[71] AMBO INNOVATIONS LLC, US  
[85] 2023-05-03  
[86] 2021-11-04 (PCT/US2021/058072)  
[87] (WO2022/098880)  
[30] US (63/110,311) 2020-11-05

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[13] A1

[51] **Int.Cl. A61K 38/44 (2006.01) A61P 3/06 (2006.01) A61P 3/10 (2006.01) A61P 9/10 (2006.01) A61P 9/12 (2006.01) A61P 13/12 (2006.01) A61P 19/02 (2006.01) A61P 19/06 (2006.01)**

[25] EN

[54] **METHOD FOR PREPARING POLYETHYLENE GLYCOL-MODIFIED URATE OXIDASE**

[54] **PROCEDE DE PREPARATION D'URATE D'OXYDASE MODIFIEE PAR DU POLYETHYLENE GLYCOL**

[72] LIU, RIYONG, CN  
[72] WANG, ZHIMING, CN  
[72] HE, YUNFENG, CN  
[72] WANG, YU, CN  
[72] FU, ZHICHENG, CN  
[72] YAN, TIANWEN, CN  
[72] HU, CHUNLAN, CN  
[72] SU, GUOWEI, CN  
[72] TAN, CHANGCHENG, CN  
[72] DING, XUPENG, CN  
[72] YANG, HUI, CN  
[72] WANG, HONGYING, CN  
[72] DING, QIONG, CN  
[72] WANG, QIAN, CN  
[72] WEN, HAIYAN, CN  
[72] FAN, KAI, CN  
[71] HANGZHOU GRAND BIOLOGIC PHARMACEUTICAL INC., CN  
[85] 2023-05-03  
[86] 2021-11-05 (PCT/CN2021/129072)  
[87] (WO2022/095974)  
[30] CN (202011224610.1) 2020-11-05

[21] **3,197,423**  
[13] A1

[51] **Int.Cl. A61K 31/7088 (2006.01) A61K 35/15 (2015.01) A61K 38/17 (2006.01) A61K 38/19 (2006.01) A61K 39/00 (2006.01) A61K 39/395 (2006.01)**

[25] EN

[54] **ENGINEERED CHIMERIC FUSION PROTEIN COMPOSITIONS AND METHODS OF USE THEREOF**

[54] **COMPOSITIONS DE PROTEINES DE FUSION CHIMERIQUES MODIFIEES ET LEURS PROCEDES D'UTILISATION**

[72] GETTS, DANIEL, US  
[72] WANG, YUXIAO, US  
[72] MCCREEDY, BRUCE JR., US  
[71] MYELOID THERAPEUTICS, INC., US  
[71] MYELOID THERAPEUTICS, INC., US  
[85] 2023-05-03  
[86] 2021-11-04 (PCT/US2021/058104)  
[87] (WO2022/098905)  
[30] US (63/109,445) 2020-11-04  
[30] US (63/162,205) 2021-03-17  
[30] US (63/196,994) 2021-06-04  
[30] US (63/251,400) 2021-10-01

[21] **3,197,424**  
[13] A1

[51] **Int.Cl. A61K 38/44 (2006.01) A61K 47/60 (2017.01) A61P 19/06 (2006.01)**

[25] EN

[54] **URATE OXIDASE PREPARATION AND USE THEREOF**

[54] **PREPARATION D'URATE OXYDASE ET UTILISATION ASSOCIEE**

[72] HE, YUNFENG, CN  
[72] WANG, ZHIMING, CN  
[72] FU, ZHICHENG, CN  
[72] WANG, YU, CN  
[72] WEN, HAIYAN, CN  
[72] YAN, TIANWEN, CN  
[72] HU, CHUNLAN, CN  
[72] SU, GUOWEI, CN  
[72] LIU, RIYONG, CN  
[72] DING, XUPENG, CN  
[72] FAN, KAI, CN  
[72] WANG, HONGYING, CN  
[72] WANG, QIAN, CN  
[71] HANGZHOU GRAND BIOLOGIC PHARMACEUTICAL INC., CN  
[85] 2023-05-03  
[86] 2021-11-05 (PCT/CN2021/129071)  
[87] (WO2022/095973)  
[30] CN (202011224613.5) 2020-11-05

[21] **3,197,425**  
[13] A1

[51] **Int.Cl. B66F 9/18 (2006.01) B66F 9/24 (2006.01) B66F 17/00 (2006.01)**

[25] EN

[54] **LOAD STABILIZER FOR STABILIZING LOADS TRANSPORTED BY A GROUND VEHICLE**

[54] **STABILISATEUR DE CHARGE POUR STABILISER DES CHARGES TRANSPORTEES PAR UN VEHICULE TERRESTRE**

[72] WEIS, STEVEN A., US  
[72] CASSETTARI, MICHAEL J., US  
[72] KISSEL, NATHANIEL, US  
[71] THE HERSHEY COMPANY, US  
[85] 2023-05-03  
[86] 2021-11-08 (PCT/US2021/072290)  
[87] (WO2022/159250)  
[30] US (17/154,747) 2021-01-21

[21] **3,197,426**  
[13] A1

[51] **Int.Cl. C07K 16/00 (2006.01) C07K 16/18 (2006.01) C07K 16/28 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **METHODS FOR OBTAINING ANTIBODIES THAT BIND TRANSMEMBRANE PROTEINS AND CELLS THAT PRODUCE THE SAME**

[54] **PROCEDES D'OBTENTION D'ANTICORPS QUI SE LIENT A DES PROTEINES TRANSMEMBRANAIRES ET CELLULES QUI LES PRODUISENT**

[72] CHEN, GANG, US  
[72] SHI, ERGANG, US  
[72] LEE, WEN-YI, US  
[72] SUH, DAVID, US  
[72] FARR, GLEN, US  
[72] BABB, ROBERT, US  
[71] REGENERON PHARMACEUTICALS, INC., US  
[85] 2023-05-03  
[86] 2021-12-22 (PCT/US2021/064769)  
[87] (WO2022/140494)  
[30] US (63/130,044) 2020-12-23

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[21] **3,197,427**  
[13] A1

[51] **Int.Cl. H01L 31/048 (2014.01) H02S 20/25 (2014.01)**  
[25] EN  
[54] **COLORED PHOTOVOLTAIC ROOF TILES**  
[54] **TUILES DE TOIT PHOTOVOLTAIQUES COLOREES**  
[72] PADILLA, MILAN, US  
[72] VERBON, BRADLEY, US  
[72] ZHANG, LI, US  
[72] HONEKER, CHRISTIAN, US  
[71] TESLA, INC., US  
[85] 2023-05-03  
[86] 2021-11-10 (PCT/US2021/058844)  
[87] (WO2022/108809)  
[30] US (63/115,481) 2020-11-18

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[21] **3,197,428**  
[13] A1

[51] **Int.Cl. A24F 40/20 (2020.01)**  
[25] EN  
[54] **AEROSOL-GENERATING MATERIAL**  
[54] **MATERIAU DE GENERATION D'AEROSOL**  
[72] JENKINS, BENJAMIN, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-05-03  
[86] 2021-10-29 (PCT/GB2021/052808)  
[87] (WO2022/096860)  
[30] GB (2017532.9) 2020-11-05  
[30] GB (2114586.7) 2021-10-12

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[21] **3,197,429**  
[13] A1

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 40/10 (2020.01) A24F 40/20 (2020.01) A24F 40/30 (2020.01)**  
[25] EN  
[54] **AEROSOL PROVISION SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES DE FOURNITURE D'AEROSOL**  
[72] NELSON, DAVID ALAN, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-05-03  
[86] 2021-10-26 (PCT/GB2021/052785)  
[87] (WO2022/096858)  
[30] GB (2017562.6) 2020-11-06

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[21] **3,197,432**  
[13] A1

[51] **Int.Cl. A24F 40/51 (2020.01) A24F 40/53 (2020.01)**  
[25] EN  
[54] **ELECTRONIC AEROSOL PROVISION SYSTEM**  
[54] **SYSTEME ELECTRONIQUE DE FOURNITURE D'AEROSOL**  
[72] NELSON, DAVID ALAN, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-05-03  
[86] 2021-11-02 (PCT/GB2021/052830)  
[87] (WO2022/096862)  
[30] GB (2017558.4) 2020-11-06

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[13] A1

[51] **Int.Cl. H01M 10/056 (2010.01) H01M 4/131 (2010.01) H01M 4/133 (2010.01) H01M 10/0525 (2010.01)**  
[25] EN  
[54] **ADDITIVE MIXTURES FOR NON-AQUEOUS BATTERY ELECTROLYTES**  
[54] **MELANGES ADDITIFS POUR ELECTROLYTES DE BATTERIE NON AQUEUX**  
[72] GLAZIER, STEPHEN LAURENCE, CA  
[72] HUANG, YADONG, CA  
[72] BURNS, JOHN CHRISTOPHER, CA  
[72] MCARTHUR, MARK ALBERT, CA  
[72] BROOM, KENNETH GEORGE, CA  
[71] NOVONIX BATTERY TECHNOLOGY SOLUTIONS INC., CA  
[85] 2023-05-03  
[86] 2021-10-19 (PCT/US2021/055569)  
[87] (WO2022/098503)  
[30] US (63/109,575) 2020-11-04

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[21] **3,197,435**  
[13] A1

[51] **Int.Cl. G06N 3/08 (2023.01)**  
[25] EN  
[54] **MULTI-DIMENSIONAL LOGARITHMIC NUMBER SYSTEM PROCESSOR FOR INNER PRODUCT COMPUTATIONS**  
[54] **PROCESSEUR A SYSTEME DE NUMERATION LOGARITHMIQUE MULTIDIMENSIONNEL POUR CALCULS DE PRODUIT INTERNE**  
[72] DAWANI, SANJAY, CA  
[72] DIMITROV, VASSIL, CA  
[72] MADANAYAKE, HABARAKADA L., US  
[71] LEMURIAN LABS INC., CA  
[85] 2023-05-03  
[86] 2021-11-03 (PCT/CA2021/051564)  
[87] (WO2022/094710)  
[30] US (63/109,136) 2020-11-03

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[21] **3,197,436**  
[13] A1

[51] **Int.Cl. C25B 1/04 (2021.01) C25B 15/00 (2006.01) G01N 27/48 (2006.01)**  
[25] EN  
[54] **ACCELERATED EVALUATION METHOD FOR ANODE**  
[54] **PROCEDE D'EVALUATION ACCELEREE D'ANODE**  
[72] MITSUSHIMA, SHIGENORI, JP  
[72] KURODA, YOSHIYUKI, JP  
[72] NAGASAWA, KENSAKU, JP  
[72] ABDELHALEEM, ASHRAF, JP  
[72] ZAENAL, AWALUDIN, JP  
[72] NISHIKI, YOSHINORI, JP  
[71] DE NORA PERMELEC LTD, JP  
[71] NATIONAL UNIVERSITY CORPORATION YOKOHAMA NATIONAL UNIVERSITY, JP  
[85] 2023-05-03  
[86] 2021-11-17 (PCT/JP2021/042309)  
[87] (WO2022/107828)  
[30] JP (2020-193246) 2020-11-20

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[13] A1

[51] **Int.Cl. A61B 17/04 (2006.01) A61B 90/00 (2016.01) A61F 2/08 (2006.01)**  
[25] EN  
[54] **TENSIONABLE KNOTLESS ANCHORS AND METHODS OF TISSUE REPAIR**  
[54] **ANCrages SANS NOEUD POUVANT ETRE TENDUS ET PROCEDES DE REPARATION TISSULAIRE**  
[72] VERMA, NIKHIL N., US  
[72] GRIFFIN, JUSTIN W., US  
[72] HUANG, MICHAEL J., US  
[72] BEDI, ASHEESH, US  
[72] PETRY, ANDREW C., US  
[72] DREYFUSS, PETER J., US  
[71] ARTHREX, INC., US  
[85] 2023-05-03  
[86] 2021-08-20 (PCT/US2021/046829)  
[87] (WO2022/125153)  
[30] US (17/113,499) 2020-12-07

[21] **3,197,454**  
[13] A1

[51] **Int.Cl. E04H 15/48 (2006.01) E04H 15/18 (2006.01) E04H 15/54 (2006.01) E04H 15/58 (2006.01)**  
[25] EN  
[54] **SIX-DEVICE-IN-ONE ROBOT-ASSEMBLED ARTHRITIC-ASSISTING GAZEBO**  
[54] **CHAPITEAU A ASSISTANCE ARTHRITIQUE ASSEMBLE PAR UN ROBOT SIX EN UN**  
[72] VOLIN, DEE, US  
[71] VOLIN, DEE, US  
[85] 2023-05-03  
[86] 2021-11-14 (PCT/US2021/059294)  
[87] (WO2023/048742)  
[30] US (17/480,767) 2021-09-21

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[13] A1

[51] **Int.Cl. H01P 5/00 (2006.01) B01J 8/24 (2006.01) B01J 19/12 (2006.01)**  
[25] EN  
[54] **MICROWAVE MODE TRANSFORMER**  
[54] **TRANSFORMATEUR DE MODE MICRO-ONDES**  
[72] TRANQUILLA, JAMES M., CA  
[72] CLARK, KENNETH, CA  
[71] NUIONIC TECHNOLOGIES (CANADA) INC., CA  
[85] 2023-05-03  
[86] 2021-11-04 (PCT/CA2021/051574)  
[87] (WO2022/094716)  
[30] US (63/109,711) 2020-11-04

[21] **3,197,485**  
[13] A1

[51] **Int.Cl. A61M 1/00 (2006.01)**  
[25] EN  
[54] **QUANTIFYING BLOOD LOSS WITH A MEDICAL WASTE COLLECTION SYSTEM**  
[54] **QUANTIFICATION DE LA PERTE DE SANG AVEC UN SYSTEME DE COLLECTE DE DECHETS MEDICAUX**  
[72] FAUL, STEPHEN, IE  
[72] VANDERWOUDE, BRIAN JAMES, US  
[72] MACLACHLAN, BRIAN, US  
[72] BUCKLEY, KEVIN, IE  
[72] LADUKE, PETER, US  
[72] NUNAN, GERARD, IE  
[72] ZOLLINGER, MICHAEL, US  
[71] STRYKER CORPORATION, US  
[85] 2023-05-04  
[86] 2021-11-11 (PCT/US2021/058891)  
[87] (WO2022/103912)  
[30] US (63/112,382) 2020-11-11

[21] **3,197,487**  
[13] A1

[51] **Int.Cl. B65G 59/10 (2006.01)**  
[25] EN  
[54] **DESTACKER UNIT AND SYSTEM FOR DESTACKING OF OBJECTS**  
[54] **UNITE DE DESEMPILAGE ET SYSTEME DE DESEMPILAGE D'OBJETS**  
[72] STRENGSHOLT, THOMAS, DK  
[72] HANSEN, RENE, DK  
[71] JS STAL APS, DK  
[85] 2023-05-04  
[86] 2021-11-04 (PCT/EP2021/080656)  
[87] (WO2022/096581)  
[30] DK (PA 2020 70730) 2020-11-04

[21] **3,197,492**  
[13] A1

[51] **Int.Cl. B65H 75/36 (2006.01)**  
[25] EN  
[54] **HOUSING UNIT AND WOUND BODY**  
[54] **UNITE DE BOITIER ET CORPS ENROULE**  
[72] SATO, TAKAFUMI, JP  
[72] ISHIOKA, MASAYUKI, JP  
[72] INAGAKI, RYO, JP  
[72] OSATO, KEN, JP  
[71] FUJIKURA LTD., JP  
[85] 2023-05-04  
[86] 2021-09-07 (PCT/JP2021/032855)  
[87] (WO2022/137660)  
[30] JP (2020-215489) 2020-12-24

[21] **3,197,498**  
[13] A1

[51] **Int.Cl. A61M 39/08 (2006.01)**  
[25] EN  
[54] **MEDICAL DEVICES FOR ANTI-BUBBLE MEDICATION DELIVERY**  
[54] **DISPOSITIFS MEDICAUX POUR ADMINISTRATION ANTIBULLE DE MEDICATION**  
[72] TRAINER, LAWRENCE J., US  
[72] SEVINC, ZEHRA, US  
[72] BOGGAVARAPU, SAJIV, US  
[71] CAREFUSION 303, INC., US  
[85] 2023-05-04  
[86] 2021-11-09 (PCT/US2021/058657)  
[87] (WO2022/115235)  
[30] US (17/103,459) 2020-11-24

[21] **3,197,500**  
[13] A1

[51] **Int.Cl. B41M 5/52 (2006.01) B44F 1/04 (2006.01)**  
[25] EN  
[54] **PRINTABLE FILMS**  
[54] **FILMS IMPRIMABLES**  
[72] WEI, GUANGXUE, US  
[72] AGASHE, NIKHIL R., US  
[71] AVERY DENNISON CORPORATION, US  
[85] 2023-05-04  
[86] 2021-10-07 (PCT/US2021/053891)  
[87] (WO2022/108678)  
[30] US (63/114,593) 2020-11-17

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[13] A1

[51] **Int.Cl. B03C 1/03 (2006.01) B03C 1/032 (2006.01) B03C 1/034 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR REMOVING IRON ORE PARTICLES ATTACHED BY MAGNETIC HYSTERESIS TO A MAGNETIC MATRIX OF A VERTICAL MAGNETIC SEPARATOR**  
[54] **PROCEDE ET SYSTEME D'ELIMINATION DE PARTICULES DE MINERAI DE FER ADHERANT PAR HYSTERESIS MAGNETIQUE A UNE MATRICE MAGNETIQUE D'UN SEPARATEUR MAGNETIQUE VERTICAL**  
[72] SOUZA, LEONARDO CAVALHO OLIVEIRA DE, BR  
[72] LIMA, NEYMAYER PEREIRA, BR  
[72] EUZEBIO, THIAGO ANTONIO MELO, BR  
[72] PINTO, THOMAS VARGAS BARSANTE, BR  
[72] SILVA, KLAYDISON CARLAILE, BR  
[71] VALE S.A., BR  
[85] 2023-05-04  
[86] 2021-11-08 (PCT/BR2021/050485)  
[87] (WO2022/099394)  
[30] BR (BR102020023390-4) 2020-11-16

[21] **3,197,511**  
[13] A1

[51] **Int.Cl. D21F 3/02 (2006.01)**  
[25] EN  
[54] **A METHOD FOR MANUFACTURING A SUPPORT BODY ARRANGEMENT, AND A SUPPORT BODY ARRANGEMENT**  
[54] **PROCEDE DE FABRICATION D'UN AGENCEMENT DE CORPS DE SUPPORT, ET AGENCEMENT DE CORPS DE SUPPORT**  
[72] LEANDERSSON, ANDERS, SE  
[72] BERG, JONAS, SE  
[72] BRATTSTROM, ANDERS, SE  
[72] JARKEBORN, PETER, SE  
[72] NORDIN, ADAM, SE  
[71] VALMET AB, SE  
[85] 2023-05-04  
[86] 2021-11-23 (PCT/EP2021/082582)  
[87] (WO2022/122369)  
[30] SE (2051422-0) 2020-12-07

[21] **3,197,512**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61K 39/145 (2006.01) A61K 39/25 (2006.01)**  
[25] EN  
[54] **IMPROVED GENE THERAPY METHODS**  
[54] **PROCEDES DE THERAPIE GENIQUE AMELIORES**  
[72] ILES-SOMARATNE, JANET NANCY, US  
[71] HOMOLOGY MEDICINES, INC., US  
[85] 2023-05-04  
[86] 2021-11-05 (PCT/US2021/072258)  
[87] (WO2022/099299)  
[30] US (63/110,257) 2020-11-05

[21] **3,197,513**  
[13] A1

[51] **Int.Cl. A23J 3/22 (2006.01) A23L 33/105 (2016.01) A23L 33/185 (2016.01) A23P 30/10 (2016.01)**  
[25] EN  
[54] **BINDER SYSTEM FOR A MEAT ANALOGUE PRODUCT**  
[54] **SYSTEME DE LIANT POUR UN PRODUIT ANALOGUE DE VIANDE**  
[72] FERNANDEZ, FARRES ISABEL, CH  
[72] LOUTAN, JONATHAN, CH  
[72] SCHEERMEIJER, ROOSMARIJN ANTOINETTE, CH  
[71] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2023-05-04  
[86] 2021-11-24 (PCT/EP2021/082800)  
[87] (WO2022/112315)  
[30] EP (20209642.6) 2020-11-24

[21] **3,197,514**  
[13] A1

[51] **Int.Cl. A61K 35/74 (2015.01) C12Q 1/06 (2006.01) C12Q 1/68 (2018.01)**  
[25] EN  
[54] **PRODUCING FUNCTIONAL MICROBIAL CONSORTIA**  
[54] **PRODUCTION DE CONSORTIUMS MICROBIENS FONCTIONNELS**  
[72] SLATER, STEVEN C., US  
[72] GOLDMAN, BARRY S., US  
[72] WOLF, BENJAMIN M., US  
[72] GUGGISBERG, ANN M., US  
[72] BECKMAN, DIANA L., US  
[72] ADU-OPPONG, BOAHEMAA, US  
[72] NARZINSKI, KIRK D., US  
[71] PLUTON BIOSCIENCES, INC., US  
[85] 2023-05-04  
[86] 2021-12-07 (PCT/US2021/062279)  
[87] (WO2022/125591)  
[30] US (63/122,889) 2020-12-08

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[13] A1

[51] **Int.Cl. A61K 9/20 (2006.01) A61K 9/26 (2006.01) A61K 9/48 (2006.01) A61K 31/047 (2006.01)**  
[25] EN  
[54] **DELAYED RELEASE SOFTGEL CAPSULES**  
[54] **CAPSULES MOLLES A LIBERATION RETARDEE**  
[72] SUKURU, KARUNAKAR, US  
[72] FANG, QI, US  
[71] R.P. SCHERER TECHNOLOGIES, LLC, US  
[85] 2023-05-04  
[86] 2021-11-10 (PCT/US2021/072325)  
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[51] **Int.Cl. A61B 3/00 (2006.01)**  
[25] EN  
[54] **SELECTION OF A PREFERRED INTRAOCULAR LENS BASED ON RAY TRACING**  
[54] **SELECTION D'UNE LENTILLE INTRAOCULAIRE PREFEREE SUR LA BASE D'UN TRACAGE DE RAYON**  
[72] PETTIT, GEORGE HUNTER, US  
[72] ZIELKE, MARK ANDREW, US  
[72] CAMPIN, JOHN ALFRED, US  
[72] GRUNDIG, MARTIN, DE  
[72] NEKRASSOV, DANIIL, DE  
[71] ALCON INC., CH  
[85] 2023-05-04  
[86] 2021-10-14 (PCT/IB2021/059477)  
[87] (WO2022/123340)  
[30] US (63/124,333) 2020-12-11

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[51] **Int.Cl. B01L 3/00 (2006.01) C12Q 1/6806 (2018.01) C12N 15/10 (2006.01) G01N 21/07 (2006.01) G01N 30/00 (2006.01) G01N 33/49 (2006.01) G01N 33/50 (2006.01) G01N 33/574 (2006.01)**  
[25] EN  
[54] **A METHOD FOR ISOLATING MOLECULES AND/OR MOLECULAR COMPLEXES**  
[54] **PROCEDE POUR ISOLER DES MOLECULES ET/OU DES COMPLEXES MOLECULAIRES**  
[72] CERF, ALINE, FR  
[72] VIEU, CHRISTOPHE, FR  
[72] CAYRON, HELENE, FR  
[72] BABI, MOUHANAD, CA  
[72] ESTRADE, DENIS, FR  
[72] LARROCHE, ALEXIANE, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS), FR  
[71] INSTITUT NATIONAL DES SCIENCES APPLIQUEES DE TOULOUSE (INSAT), FR  
[85] 2023-05-04  
[86] 2021-12-07 (PCT/EP2021/084657)  
[87] (WO2022/122764)  
[30] EP (20306512.3) 2020-12-07

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[13] A1

[51] **Int.Cl. F16K 27/00 (2006.01) F16K 31/68 (2006.01) F01P 7/16 (2006.01)**  
[25] EN  
[54] **THERMO-VALVE AND THERMO-VALVE CONNECTING BODY**  
[54] **VANNE THERMIQUE ET CORPS DE RACCORDEMENT DE VANNE THERMIQUE**  
[72] YAJIMA, NORIYASU, JP  
[71] NIPPON THERMOSTAT CO., LTD., JP  
[85] 2023-05-04  
[86] 2021-09-09 (PCT/JP2021/033134)  
[87] (WO2022/102230)  
[30] JP (2020-190117) 2020-11-16

[21] **3,197,522**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/20 (2006.01) A61K 9/28 (2006.01)**  
[25] EN  
[54] **DELAYED RELEASE SOFTGEL CAPSULES**  
[54] **CAPSULES MOLLES A LIBERATION RETARDEE**  
[72] SUKURU, KARUNAKAR, US  
[72] FANG, QI, US  
[71] R.P. SCHERER TECHNOLOGIES, LLC, US  
[85] 2023-05-04  
[86] 2021-11-10 (PCT/US2021/072326)  
[87] (WO2022/104339)  
[30] US (63/112,453) 2020-11-11

[21] **3,197,523**  
[13] A1

[51] **Int.Cl. C03B 1/00 (2006.01) G06T 7/90 (2017.01) C03C 1/00 (2006.01) G01J 3/46 (2006.01)**  
[25] FR  
[54] **METHOD FOR PROCESSING CULLET USING COLORIMETRIC ANALYSIS**  
[54] **PROCEDE DE TRAITEMENT D'UN CALCIN PAR ANALYSE COLORIMETRIQUE**  
[72] CLATOT, RICHARD, FR  
[72] GROSS, ISABELL, FR  
[71] SAINT-GOBAIN ISOVER, FR  
[85] 2023-05-04  
[86] 2021-11-10 (PCT/FR2021/051989)  
[87] (WO2022/106771)  
[30] FR (FR2011757) 2020-11-17

[21] **3,197,526**  
[13] A1

[51] **Int.Cl. A01N 43/80 (2006.01) C07D 261/04 (2006.01) C07D 413/10 (2006.01)**  
[25] EN  
[54] **HERBICIDAL COMPOUNDS**  
[54] **COMPOSES HERBICIDES**  
[72] WHITTINGHAM, WILLIAM GUY, GB  
[72] WILLIAMS, JOHN, GB  
[71] SYNGENTA CROP PROTECTION AG, CH  
[85] 2023-05-04  
[86] 2021-11-17 (PCT/EP2021/082014)  
[87] (WO2022/112072)  
[30] EP (20209638.4) 2020-11-24

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[13] A1

[51] **Int.Cl. C07K 14/485 (2006.01) C07K 14/495 (2006.01)**  
[25] EN  
[54] **A PROCESS FOR PRODUCING EGF**  
[54] **PROCEDE DE PRODUCTION D'EGF**  
[72] BARLOS, KLEOMENIS, GR  
[72] BARLOS, KONSTANTINOS, GR  
[71] CHEMICAL & BIOPHARMACEUTICAL LABORATORIES OF PATRAS S.A., GR  
[85] 2023-05-04  
[86] 2021-11-05 (PCT/IB2021/060271)  
[87] (WO2022/106951)  
[30] GR (20200100690) 2020-11-20

[21] **3,197,528**  
[13] A1

[51] **Int.Cl. G06T 7/00 (2017.01)**  
[25] EN  
[54] **ARTIFICIAL INTELLIGENCE CAMERA FOR VISUAL INSPECTION WITH NEURAL NETWORK TRAINING ONBOARD**  
[54] **CAMERA D'INTELLIGENCE ARTIFICIELLE POUR INSPECTION VISUELLE AVEC ENTRAINEMENT DE RESEAU DE NEURONES EMBARQUE**  
[72] DAVIS, ELIYAHU, US  
[71] DEEVIEW CORP, US  
[85] 2023-05-04  
[86] 2021-11-18 (PCT/US2021/059974)  
[87] (WO2022/115314)  
[30] US (63/118,607) 2020-11-25

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[51] **Int.Cl. C07K 14/47 (2006.01) C12N 9/22 (2006.01) C12N 9/88 (2006.01) G01N 21/64 (2006.01) G01N 33/50 (2006.01)**

[25] EN

[54] **HIGH THROUGHPUT DRUG SCREENING METHODS**

[54] **PROCEDES DE CRIBLAGE DE MEDICAMENT A HAUT RENDEMENT**

[72] BABIC, IVAN, US

[72] NURMAMMADOV, ELMAR, US

[71] NERD BIO LLC, US

[85] 2023-05-04

[86] 2021-11-17 (PCT/US2021/059743)

[87] (WO2022/109039)

[30] US (63/114,927) 2020-11-17

[21] **3,197,537**  
[13] A1

[51] **Int.Cl. C07K 16/10 (2006.01) A61P 31/16 (2006.01)**

[25] EN

[54] **ANTIBODIES AGAINST INFLUENZA A VIRUSES**

[54] **ANTICORPS CONTRE LES VIRUS DE LA GRIPPE A**

[72] CORTI, DAVIDE, CH

[72] PIZZUTO, MATTEO SAMUELE, CH

[72] ZATTA, FABRIZIA, CH

[72] CAMERONI, ELISABETTA, CH

[72] SNELL, GYORGY, US

[71] VIR BIOTECHNOLOGY, INC., US

[71] HUMABS BIOMED SA, CH

[85] 2023-05-04

[86] 2021-11-19 (PCT/US2021/060123)

[87] (WO2022/109291)

[30] US (63/117,437) 2020-11-23

[30] US (63/123,419) 2020-12-09

[21] **3,197,538**  
[13] A1

[51] **Int.Cl. A61B 3/10 (2006.01) A61B 3/18 (2006.01)**

[25] EN

[54] **MULTI-DETECTOR ANALYSIS OF THE TEAR FILM OF AN EYE**

[54] **ANALYSE A DETECTEURS MULTIPLES DU FILM LACRYMAL D'UN ?IL**

[72] CAMPIN, JOHN ALFRED, US

[72] GRUNDIG, MARTIN, DE

[72] NEKRASSOV, DANIL, DE

[72] PETTIT, GEORGE HUNTER, US

[72] ZIEGER, PETER, DE

[71] ALCON, INC., CH

[85] 2023-05-04

[86] 2021-10-14 (PCT/IB2021/059478)

[87] (WO2022/130044)

[30] US (63/126,441) 2020-12-16

[21] **3,197,540**  
[13] A1

[51] **Int.Cl. H04W 24/06 (2009.01) H04W 24/10 (2009.01) H04L 43/08 (2022.01) G06N 3/08 (2023.01)**

[25] EN

[54] **WIFI DEVICE COMPATIBILITY ANALYZER FOR SATELLITE NETWORKS**

[54] **ANALYSEUR DE COMPATIBILITE DE DISPOSITIFS WI-FI POUR RESEAUX SATELLITAIRES**

[72] SITARAM, SHIVARAM, US

[72] KUBBA, RAJEEV, US

[72] WANG, YING, US

[72] GONG, JUNYU, US

[71] HUGHES NETWORK SYSTEMS, LLC, US

[85] 2023-05-04

[86] 2021-12-10 (PCT/US2021/062947)

[87] (WO2022/125983)

[30] US (63/124,017) 2020-12-10

[30] US (17/548,309) 2021-12-10

[21] **3,197,543**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01) C07K 16/30 (2006.01)**

[25] EN

[54] **GPC3 BINDING AGENTS, CONJUGATES THEREOF AND METHODS OF USING THE SAME**

[54] **AGENTS DE LIAISON DE GPC3, LEURS CONJUGUES ET LEURS PROCEDES D'UTILISATION**

[72] SMITH, MARIA LEIA, US

[72] SUTHERLAND, MAY KUNG, US

[71] ARDEAGEN CORPORATION, US

[85] 2023-05-04

[86] 2021-11-19 (PCT/US2021/060192)

[87] (WO2022/109334)

[30] US (63/116,001) 2020-11-19

[21] **3,197,544**  
[13] A1

[51] **Int.Cl. H01M 4/04 (2006.01) H01M 4/139 (2010.01) H01M 10/0525 (2010.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR RECLAMATION OF LI-ION CATHODE MATERIALS USING MICROWAVE PLASMA PROCESSING**

[54] **PROCEDES ET SYSTEMES DE RECLAMATION DE MATERIAUX DE CATHODE LI-ION AU MOYEN D'UN TRAITEMENT AU PLASMA PAR MICRO-ONDES**

[72] HOLMAN, RICHARD K., US

[72] WROBEL, GREGORY M., US

[71] 6K INC., US

[85] 2023-05-04

[86] 2022-01-06 (PCT/US2022/070066)

[87] (WO2022/150828)

[30] US (63/135,948) 2021-01-11

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[51] **Int.Cl. H04B 1/00 (2006.01) H04B 7/00 (2006.01) H04B 7/185 (2006.01) H04B 17/00 (2015.01)**

[25] EN  
[54] **POINTING ERROR MITIGATION**  
[54] **ATTENUATION D'ERREUR DE POINTAGE**

[72] KAY, STAN, US  
[72] BHASKAR, UDAYA, US  
[71] HUGHES NETWORK SYSTEMS LLC, US

[85] 2023-05-04  
[86] 2021-12-29 (PCT/US2021/065498)  
[87] (WO2022/147115)  
[30] US (17/136,821) 2020-12-29

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[13] A1

[51] **Int.Cl. A61F 9/008 (2006.01)**

[25] EN  
[54] **ADJUSTING LASER PULSES TO COMPENSATE FOR INTERFERING OBJECTS**  
[54] **REGLAGE D'IMPULSIONS LASER POUR COMPENSER DES OBJETS INTERFERENTS**

[72] ABRAHAM, MARIO, DE  
[72] WITTNEBEL, MICHAEL, DE  
[71] ALCON, INC., CH

[85] 2023-05-04  
[86] 2021-12-09 (PCT/IB2021/061508)  
[87] (WO2022/130137)  
[30] US (63/126,278) 2020-12-16

[21] **3,197,549**  
[13] A1

[51] **Int.Cl. B32B 27/12 (2006.01) D05C 17/02 (2006.01) D06N 7/00 (2006.01)**

[25] EN  
[54] **FILAMENTS WITH IMPROVED LUSTER**  
[54] **FILAMENTS A BRILLANCE AMELIOREE**

[72] NORTH, MELISSA, US  
[72] CASCIO, ANTHONY, US  
[71] ALADDIN MANUFACTURING CORPORATION, US

[85] 2023-05-04  
[86] 2021-11-17 (PCT/US2021/059614)  
[87] (WO2022/108964)  
[30] US (63/116,334) 2020-11-20

[21] **3,197,551**  
[13] A1

[51] **Int.Cl. E04B 7/22 (2006.01) E04C 2/288 (2006.01)**

[25] EN  
[54] **BUILDING CLADDING ELEMENTS AND SYSTEMS**  
[54] **ELEMENTS ET SYSTEMES DE PLACEMENT DE BATIMENT**

[72] ANGER, JESSE, AU  
[72] CONWAY, JONATHAN, AU  
[72] EVERHART II, ROBERT ELLIOTT, US

[72] BANTA, JOSEPH, AU  
[72] SMITH, RON, AU  
[72] ZONDANOS, STEVE, AU  
[72] BATRES, BENJAMIN, US  
[71] JAMES HARDIE TECHNOLOGY LIMITED, IE

[85] 2023-05-04  
[86] 2021-11-30 (PCT/US2021/061243)  
[87] (WO2022/119846)  
[30] US (63/120,037) 2020-12-01  
[30] AU (2021903483) 2021-11-01

[21] **3,197,552**  
[13] A1

[51] **Int.Cl. B65B 35/24 (2006.01) B65B 11/10 (2006.01)**

[25] EN  
[54] **METHOD FOR PRODUCING PACKAGED EDIBLE MATERIALS**  
[54] **PROCEDE DE FABRICATION DE MATIERES COMESTIBLES EMBALLEES**

[72] CORBY, DODD, US  
[72] WILSON, KEVIN, US  
[72] MINARD, REBECCA, US  
[71] SMARTPAK EQUINE LLC, US

[85] 2023-05-04  
[86] 2021-11-05 (PCT/US2021/058269)  
[87] (WO2022/099019)  
[30] US (63/110,319) 2020-11-05

[21] **3,197,554**  
[13] A1

[51] **Int.Cl. A47J 36/00 (2006.01) A47J 37/00 (2006.01) A47J 37/06 (2006.01) A47J 37/07 (2006.01)**

[25] EN  
[54] **PELLET GRILL WITH TWO PIECE FIREBOX**  
[54] **GRIL A PASTILLES COMBUSTIBLES AVEC FOYER EN DEUX PARTIES**

[72] AHMED, MALLIK, US  
[72] ROBERTS, BRUCE, US  
[72] HAMILTON, ANTHONY, US  
[72] RAHMANI, RAMIN KHOSRAVI, US  
[72] ABDALLAH, SLEIMAN, US  
[72] GILLESPIE, BRAD, US  
[72] CORSO, DAN, US  
[71] W.C. BRADLEY COMPANY, US

[85] 2023-05-04  
[86] 2021-11-04 (PCT/US2021/058103)  
[87] (WO2022/098904)  
[30] US (63/109,682) 2020-11-04

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[13] A1

[51] **Int.Cl. C01G 53/00 (2006.01) H01M 4/525 (2010.01)**

[25] EN  
[54] **A POSITIVE ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE BATTERIES**  
[54] **MATERIAU ACTIF D'ELECTRODE POSITIVE POUR BATTERIES RECHARGEABLES**

[72] KUMAKURA, SHINICHI, BE  
[72] KANG, JIHOON, KR  
[72] YANG, TAEHYEON, KR  
[72] PAULSEN, JENS MARTIN, KR  
[71] UMICORE, BE  
[71] UMICORE KOREA LTD., KR

[85] 2023-05-04  
[86] 2021-11-03 (PCT/EP2021/080432)  
[87] (WO2022/096473)  
[30] EP (20205588.5) 2020-11-04

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[13] A1

[51] **Int.Cl. B65D 5/26 (2006.01) B65D 5/28 (2006.01) B65D 5/30 (2006.01) B65D 77/20 (2006.01)**

[25] EN  
[54] **TRAY FOR FOOD PRODUCTS**  
[54] **PLATEAU POUR PRODUITS ALIMENTAIRES**

[72] KEARNS, MATTHEW R., US  
[72] BRINK, THOMAS, US  
[72] STRAND, SCOTT THOMAS, US  
[72] HITHERSAY, ELLIOT, GB  
[71] GRAPHIC PACKAGING INTERNATIONAL, LLC, US

[85] 2023-05-04  
[86] 2021-11-04 (PCT/US2021/058049)  
[87] (WO2022/098866)

[30] US (63/110,578) 2020-11-06  
[30] US (63/110,582) 2020-11-06  
[30] US (63/110,587) 2020-11-06  
[30] US (63/174,724) 2021-04-14  
[30] US (63/128,418) 2020-12-21  
[30] US (63/178,116) 2021-04-22  
[30] US (63/191,412) 2021-06-01  
[30] US (63/139,341) 2021-01-20  
[30] US (63/126,157) 2020-12-16  
[30] US (63/169,302) 2021-04-01  
[30] US (63/169,418) 2021-04-01

[21] **3,197,559**  
[13] A1

[51] **Int.Cl. A47J 27/08 (2006.01) A47J 27/088 (2006.01) A47J 27/09 (2006.01) F16J 15/10 (2006.01) H05B 6/64 (2006.01)**

[25] EN  
[54] **CONTAINER SEAL OVER-PRESSURE VENT MECHANISM**  
[54] **MECANISME D'EVENT DE SURPRESSION DE JOINT DE RECIPIENT**

[72] ALBAUM, GARY JOSEPH, US  
[72] MERRILL, WILLIAM JACK, US  
[72] PARADISE, CHARLES, US  
[71] PEPSICO, INC., US

[85] 2023-05-04  
[86] 2021-11-05 (PCT/US2021/058297)  
[87] (WO2022/099042)

[30] US (63/110,797) 2020-11-06

[21] **3,197,560**  
[13] A1

[51] **Int.Cl. G01S 3/02 (2006.01) G01S 7/02 (2006.01) G01S 7/38 (2006.01) G01S 13/68 (2006.01)**

[25] EN  
[54] **ZENITHAL REACTIVE JAMMER**  
[54] **BROUILLEUR REACTIF ZENITHAL**

[72] ARDOINO, RICCARDO, IT  
[72] BENVENUTI, DARIO, IT  
[72] GRAZZINI, MARCO, IT  
[72] PIEZZO, MARCO, IT  
[72] TORTI, ROBERTO, IT  
[71] ELETTRONICA S.P.A., IT

[85] 2023-05-04  
[86] 2021-11-05 (PCT/IB2021/060275)  
[87] (WO2022/097089)

[30] EP (20425047.6) 2020-11-05

[21] **3,197,561**  
[13] A1

[51] **Int.Cl. B27N 3/04 (2006.01) B32B 5/20 (2006.01) B32B 5/22 (2006.01) B32B 5/28 (2006.01)**

[25] EN  
[54] **LOW DENSITY CELLULOSE BASED INSULATING LAMINATED PRODUCTS AND METHODS OF MAKING THE SAME**  
[54] **PRODUITS STRATIFIES ISOLANTS A BASE DE CELLULOSE BASSE DENSITE ET LEURS PROCEDES DE FABRICATION**

[72] STRIMLING, JONATHAN, US  
[72] BILODEAU, MICHAEL, US  
[72] DONOWICK, EDWARD, US  
[71] CLEANFIBER, LLC, US

[85] 2023-05-04  
[86] 2021-11-05 (PCT/US2021/058351)  
[87] (WO2022/099086)

[30] US (63/110,484) 2020-11-06

[21] **3,197,565**  
[13] A1

[51] **Int.Cl. B23K 26/00 (2014.01) B23K 26/356 (2014.01) C21D 8/12 (2006.01) C21D 9/46 (2006.01) C22C 38/00 (2006.01) C22C 38/60 (2006.01) H01F 1/147 (2006.01)**

[25] EN  
[54] **GRAIN-ORIENTED ELECTRICAL STEEL SHEET AND PRODUCTION METHOD THEREFOR**  
[54] **TOLE D'ACIER ELECTROMAGNETIQUE A GRAINS ORIENTES ET SON PROCEDE DE FABRICATION**

[72] OMURA, TAKESHI, JP  
[72] ICHIHARA, YOSHIHISA, JP  
[72] SENDA, KUNIHIRO, JP  
[71] JFE STEEL CORPORATION, JP

[85] 2023-05-04  
[86] 2021-09-29 (PCT/JP2021/035983)  
[87] (WO2022/113517)

[30] JP (2020-197435) 2020-11-27

[21] **3,197,566**  
[13] A1

[51] **Int.Cl. G06V 10/44 (2022.01) G06V 10/82 (2022.01) G06V 30/18 (2022.01) G06V 30/226 (2022.01)**

[25] EN  
[54] **HANDWRITING RECOGNITION**  
[54] **RECONNAISSANCE D'ECRITURE MANUSCRITE**

[72] DEY, RAUNAK, US  
[72] VENI, GOPALKRISHNA BALKRISHNA, US  
[72] FUJIMOTO, MASAKI STANLEY, US  
[72] YU, YEN-YUN, US  
[72] LEE, JINSOL, US  
[71] ANCESTRY.COM OPERATIONS INC., US

[85] 2023-05-04  
[86] 2021-12-09 (PCT/US2021/062609)  
[87] (WO2022/125777)

[30] US (63/124,316) 2020-12-11

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[21] **3,197,569**  
[13] A1

[51] **Int.Cl. B65G 1/04 (2006.01) B65G 1/06 (2006.01) B65G 1/137 (2006.01)**

[25] EN

[54] **AN ACCESS STATION FOR AN AUTOMATED STORAGE AND RETRIEVAL SYSTEM AND METHOD FOR USING SAME**

[54] **POSTE D'ACCES POUR SYSTEME AUTOMATISE DE STOCKAGE ET DE RECUPERATION ET SON PROCEDE D'UTILISATION**

[72] AUSTRHEIM, TROND, NO

[72] FJELDHEIM, IVAR, NO

[72] HATTELAND, MAGNE, NO

[72] AARSETH, SIMEN, NO

[71] AUTOSTORE TECHNOLOGY AS, NO

[85] 2023-05-04

[86] 2021-12-20 (PCT/EP2021/086850)

[87] (WO2022/136299)

[30] NO (20201433) 2020-12-23

[21] **3,197,573**  
[13] A1

[51] **Int.Cl. C04B 28/02 (2006.01) C04B 28/14 (2006.01) C04B 28/16 (2006.01)**

[25] EN

[54] **CONSTRUCTION MATERIAL BASED ON A MINERAL BINDER COMPRISING SYNERGISTICALLY EFFECTIVE HYDROPHOBISATION AGENT COMBINATIONS**

[54] **MATERIAU DE CONSTRUCTION A BASE D'UN LIANT MINERAL COMPRENANT DES COMBINAISONS D'AGENTS D'HYDROPHOBISATION A EFFICACITE SYNERGIQUE**

[72] GAJSKI, JAKUB, PL

[72] BOGOBOWICZ, AGNIESZKA, PL

[72] FOLTYSKA, KATARZYNA, PL

[71] KNAUF GIPS KG, DE

[85] 2023-05-04

[86] 2020-11-24 (PCT/EP2020/000202)

[87] (WO2022/111783)

[21] **3,197,579**  
[13] A1

[51] **Int.Cl. C12N 9/00 (2006.01) C12N 15/52 (2006.01) C12N 15/81 (2006.01) C12P 21/02 (2006.01)**

[25] EN

[54] **GLUTAMATE-CYSTEINE LIGASE VARIANT AND METHOD FOR PRODUCING GLUTATHIONE USING SAME**

[54] **VARIANT DE GLUTAMATE-CYSTEINE LIGASE ET PROCEDE DE PRODUCTION DE GLUTATHION L'UTILISANT**

[72] KIM, YEONSOO, KR

[72] HA, CHEOL WOONG, KR

[72] YANG, EUN BIN, KR

[72] IM, YEONG EUN, KR

[71] CJ CHEILJEDANG CORPORATION, KR

[85] 2023-05-04

[86] 2021-09-08 (PCT/KR2021/012176)

[87] (WO2022/145623)

[30] KR (10-2021-0000361) 2021-01-04

[21] **3,197,572**  
[13] A1

[51] **Int.Cl. C12N 1/12 (2006.01) C12N 15/82 (2006.01) C12P 7/64 (2022.01)**

[25] EN

[54] **RECOMBINANT ALGAE HAVING HIGH LIPID PRODUCTIVITY**

[54] **ALGUES RECOMBINANTES PRESENTANT UNE PRODUCTIVITE LIPIDIQUE ELEVEE**

[72] IMAM, SAHEED, US

[72] MOELLERING, ERIC R., US

[72] PEACH, LUKE, US

[72] LAMBERT, WILLIAM F., US

[72] KWOK, KATHLEEN, US

[71] VIRIDOS, INC., US

[85] 2023-05-04

[86] 2021-11-04 (PCT/US2021/058092)

[87] (WO2022/098897)

[30] US (63/110,301) 2020-11-05

[21] **3,197,578**  
[13] A1

[51] **Int.Cl. A23K 20/137 (2016.01) A23K 50/80 (2016.01)**

[25] EN

[54] **A FEED ADDITIVE FOR INCREASING OMEGA-3/OMEGA-6 POLYUNSATURATED FATTY ACIDS RATIO IN AQUATIC ANIMALS**

[54] **ADDITIF ALIMENTAIRE PERMETTANT D'AUGMENTER LE RAPPORT DES ACIDES GRAS POLYINSATURES OMEGA-3/OMEGA-6 CHEZ LES ANIMAUX AQUATIQUES**

[72] JACINTO MORAIS, SOFIA, ES

[72] SOLA PARERA, JOSE, ES

[71] LUCTA, S.A., ES

[85] 2023-05-04

[86] 2021-12-03 (PCT/EP2021/084155)

[87] (WO2022/117810)

[30] EP (20383060.9) 2020-12-04

[21] **3,197,580**  
[13] A1

[51] **Int.Cl. C04B 41/60 (2006.01) C04B 41/71 (2006.01)**

[25] EN

[54] **STARCH AS A PRIMER FOR SUBSTRATES**

[54] **AMIDON UTILISE EN TANT QU'APPRET POUR SUBSTRATS**

[72] GAMBICHLER, CAROLINE, DE

[72] RUCKEL, ANNE, DE

[72] KEPLER, LINDA, DE

[71] KNAUF GIPS KG, DE

[85] 2023-05-04

[86] 2021-11-16 (PCT/EP2021/000143)

[87] (WO2022/106047)

[30] EP (20000419.0) 2020-11-23

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[21] **3,197,582**  
[13] A1

[51] **Int.Cl. E04F 13/08 (2006.01)**  
[25] EN  
[54] **MODULAR CLADDING PANELS FOR BUILDINGS AND ASSOCIATED METHODS**  
[54] **PANNEAUX DE PAREMENT MODULAIRES POUR BATIMENTS ET PROCEDES ASSOCIES**  
[72] BELLISSIMO, MARK JOSEPH, US  
[72] KELSCH, ROBERT FRANCIS, US  
[72] BEARD, STANLEY CLARK JR., US  
[72] HUNSINGER, JASON DARYL, US  
[71] BUILDZ, LLC, US  
[85] 2023-05-04  
[86] 2021-11-12 (PCT/US2021/059106)  
[87] (WO2022/104034)  
[30] US (63/112,965) 2020-11-12

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[21] **3,197,584**  
[13] A1

[51] **Int.Cl. B01J 13/14 (2006.01) C08J 7/12 (2006.01) C08J 7/16 (2006.01) C08L 23/06 (2006.01) C08L 23/12 (2006.01) C08L 27/06 (2006.01)**  
[25] EN  
[54] **STABILITY AND ACTIVITY OF ENZYMES BY IMMOBILIZATION**  
[54] **STABILITE ET ACTIVITE D'ENZYMES PAR IMMOBILISATION**  
[72] WELTZ, JAMES S., US  
[72] KAAR, JOEL L., US  
[72] SCHWARTZ, DANIEL K., US  
[72] SANCHEZ-MORAN, HECTOR, US  
[71] THE REGENTS OF THE UNIVERSITY OF COLORADO A BODY CORPORATE, US  
[85] 2023-05-04  
[86] 2021-11-15 (PCT/US2021/072409)  
[87] (WO2022/104385)  
[30] US (63/113,234) 2020-11-13

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[21] **3,197,585**  
[13] A1

[51] **Int.Cl. D21H 11/12 (2006.01) D21C 1/06 (2006.01) D21C 1/10 (2006.01) D21C 3/02 (2006.01) D21H 11/20 (2006.01)**  
[25] EN  
[54] **DISPERSIBLE NON-WOOD PULP**  
[54] **PULPE NON-LIGNEUSE DISPERSABLE**  
[72] PAULSON, DAVID J., US  
[72] SHANNON, THOMAS G., US  
[72] ACKERLY, SAMANTHA C., US  
[72] UNDERHILL, RICHARD L., US  
[72] YU, ZHIYING, US  
[71] KIMBERLY-CLARK WORLDWIDE, INC., US  
[85] 2023-05-04  
[86] 2021-11-05 (PCT/US2021/058191)  
[87] (WO2022/098958)  
[30] US (63/110,597) 2020-11-06

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[21] **3,197,587**  
[13] A1

[51] **Int.Cl. E04D 15/02 (2006.01) H02S 20/25 (2014.01)**  
[25] EN  
[54] **ROOFING SHINGLES WITH HANDLES**  
[54] **BARDEAUX DE TOITURE A POIGNEES**  
[72] BUNEA, GABRIELA, US  
[72] NGUYEN, THIERRY, US  
[72] KUIPER, MICHAEL, US  
[72] WRAY, EVAN, US  
[72] WEST, BRIAN, US  
[71] GAF ENERGY LLC, US  
[85] 2023-05-04  
[86] 2021-11-11 (PCT/US2021/058990)  
[87] (WO2022/103968)  
[30] US (63/113,072) 2020-11-12  
[30] US (63/122,025) 2020-12-07

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[21] **3,197,588**  
[13] A1

[51] **Int.Cl. C10G 1/10 (2006.01) C10G 1/06 (2006.01)**  
[25] EN  
[54] **CO-PROCESSING OF POLYMER WASTE-BASED MATERIAL FOR JET FUEL PRODUCTION**  
[54] **CO-TRAITEMENT DE MATERIAU A BASE DE DECHETS POLYMERES POUR LA PRODUCTION DE CARBUREACTEUR**  
[72] PAASIKALLIO, VILLE, FI  
[72] SANDBERG, KATI, FI  
[72] SAIKKONEN, PIIRJO, FI  
[72] PEREZ NEBRED, ANDREA, FI  
[71] NESTE OYJ, FI  
[85] 2023-05-04  
[86] 2021-12-30 (PCT/FI2021/050917)  
[87] (WO2022/144505)  
[30] FI (20206383) 2020-12-30

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[21] **3,197,589**  
[13] A1

[51] **Int.Cl. G06F 16/635 (2019.01)**  
[25] EN  
[54] **IDENTIFICATION OF MEDIA ITEMS FOR TARGET GROUPS**  
[54] **IDENTIFICATION D'ELEMENTS MULTIMEDIAS POUR DES GROUPES CIBLES**  
[72] LEBECQUE, PIERRE, BE  
[72] DECOTTIGNIES, PHILIPPE, FR  
[72] LIDY, THOMAS, AT  
[72] WEISS, THOMAS, AT  
[72] SPECHTLER, ANDREAS, AT  
[71] MUSIMAP SA, BE  
[85] 2023-05-04  
[86] 2020-11-05 (PCT/EP2020/081197)  
[87] (WO2022/096114)

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[21] **3,197,590**  
[13] A1

[51] **Int.Cl. D21H 11/12 (2006.01) D21C 1/06 (2006.01) D21C 1/10 (2006.01) D21C 3/02 (2006.01) D21H 11/20 (2006.01)**

[25] EN

[54] **HIGH BRIGHTNESS NON-WOOD PULP**

[54] **PATE NON LIGNEUSE AYANT UNE LUMINOSITE ELEVEE**

[72] SHANNON, THOMAS G., US

[72] ACKERLY, SAMANTHA C., US

[72] YU, ZHIYING, US

[72] PAULSON, DAVID J., US

[72] WEI, NING, US

[71] KIMBERLY-CLARK WORLDWIDE, INC., US

[85] 2023-05-04

[86] 2021-11-05 (PCT/US2021/058196)

[87] (WO2022/098962)

[30] US (63/110,600) 2020-11-06

[21] **3,197,592**  
[13] A1

[51] **Int.Cl. A61P 27/16 (2006.01) C07K 14/015 (2006.01) C12N 15/86 (2006.01)**

[25] EN

[54] **VARIANT ADENO-ASSOCIATED VIRUS (AAV)CAPSID POLYPEPTIDES AND GENE THERAPEUTICS THEREOF FOR TREATMENT OF HEARING LOSS**

[54] **POLYPEPTIDES DE CAPSIDE DE VIRUS ADENO-ASSOCIE (AAV) VARIANT ET AGENTS DE THERAPIE GENIQUE CORRESPONDANTS POUR LE TRAITEMENT DE LA PERTE AUDITIVE**

[72] PENNOCK, STEVEN, US

[72] TIMMERS, ADRIAN M., US

[72] SHEARMAN, MARK, US

[72] BARTOLOME, CHRISTOPHER, US

[72] WANG, XIAOBO, US

[72] MATHUR, PRANAV DINESH, US

[72] URIBE, PHILLIP M., US

[72] SZOBOTA, STEPHANIE, US

[72] JACQUES, BONNIE E., US

[72] FOSTER, ALAN C., US

[72] PIU, FABRICE, US

[71] ELI LILLY AND COMPANY, US

[85] 2023-05-04

[86] 2021-11-05 (PCT/US2021/058255)

[87] (WO2022/099007)

[30] US (63/110,697) 2020-11-06

[30] US (63/146,269) 2021-02-05

[21] **3,197,593**  
[13] A1

[51] **Int.Cl. E04D 1/28 (2006.01) E04D 1/34 (2006.01)**

[25] EN

[54] **ROOFING SHINGLE AND METHOD OF MANUFACTURING THEREOF**

[54] **BARDEAU DE TOITURE ET SON PROCEDE DE FABRICATION**

[72] SVEC, JAMES A., US

[71] BMIC LLC, US

[85] 2023-05-04

[86] 2021-11-12 (PCT/US2021/059206)

[87] (WO2022/104111)

[30] US (63/113,618) 2020-11-13

[21] **3,197,594**  
[13] A1

[51] **Int.Cl. G06Q 30/02 (2023.01) G06Q 30/06 (2023.01)**

[25] EN

[54] **IDENTIFICATION OF USERS OR USER GROUPS BASED ON PERSONALITY PROFILES**

[54] **IDENTIFICATION D'UTILISATEURS OU DE GROUPES D'UTILISATEURS SUR LA BASE DE PROFILS DE PERSONNALITE**

[72] LEBECQUE, PIERRE, BE

[72] DECOTTIGNIES, PHILIPPE, FR

[72] LIDY, THOMAS, AT

[72] WEISS, THOMAS, AT

[72] SPECHTLER, ANDREAS, AT

[71] MUSIMAP SA, BE

[85] 2023-05-04

[86] 2020-11-05 (PCT/EP2020/081196)

[87] (WO2022/096113)

[21] **3,197,595**  
[13] A1

[51] **Int.Cl. A61K 31/4418 (2006.01) A61K 31/451 (2006.01) A61K 31/4545 (2006.01) A61P 21/00 (2006.01) A61P 25/00 (2006.01)**

[25] EN

[54] **USE OF PRIDOPIDINE AND ANALOGS FOR TREATING RETT SYNDROME**

[54] **UTILISATION DE PRIDOPIDINE ET D'ANALOGUES POUR LE TRAITEMENT DU SYNDROME DE RETT**

[72] GEVA, MICHAL, IL

[72] HAYDEN, MICHAEL, IL

[71] PRILENIA NEUROTHERAPEUTICS LTD., IL

[85] 2023-05-04

[86] 2021-11-19 (PCT/IL2021/051383)

[87] (WO2022/107146)

[30] US (16/952,123) 2020-11-19

[30] US (17/498,075) 2021-10-11

[21] **3,197,597**  
[13] A1

[51] **Int.Cl. D21H 11/12 (2006.01) D21C 1/06 (2006.01) D21C 1/10 (2006.01) D21C 3/02 (2006.01) D21H 11/20 (2006.01)**

[25] EN

[54] **NON-WOOD PULP HAVING HIGH BRIGHTNESS AND LOW DEBRIS**

[54] **PATE NON LIGNEUSE AYANT UNE LUMINOSITE ELEVEE ET UNE FAIBLE QUANTITE DE DEBRIS**

[72] YU, ZHIYING, US

[72] SHANNON, THOMAS G., US

[72] WEI, NING, US

[71] KIMBERLY-CLARK WORLDWIDE, INC., US

[85] 2023-05-04

[86] 2021-11-05 (PCT/US2021/058198)

[87] (WO2022/098963)

[30] US (63/110,600) 2020-11-06

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[21] **3,197,598**  
[13] A1

[51] **Int.Cl. H02S 40/34 (2014.01)**  
[25] EN  
[54] **PHOTOVOLTAIC MODULE SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES POUR MODULES PHOTOVOLTAIQUES**  
[72] BUNEA, GABRIELA, US  
[72] NGUYEN, THIERRY, US  
[72] PERKINS, RICHARD, US  
[72] BOITNOTT, NICHOLAS, US  
[72] KAVULAK, DAVID, US  
[72] ABRA, LEWIS, US  
[71] GAF ENERGY LLC, US  
[85] 2023-05-04  
[86] 2021-11-10 (PCT/US2021/058785)  
[87] (WO2022/103841)  
[30] US (63/113,503) 2020-11-13

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[21] **3,197,600**  
[13] A1

[51] **Int.Cl. G06F 16/635 (2019.01)**  
[25] EN  
[54] **GENERATION OF PERSONALITY PROFILES**  
[54] **GENERATION DE PROFILS DE PERSONNALITE**  
[72] LEBECQUE, PIERRE, BE  
[72] DECOTTIGNIES, PHILIPPE, FR  
[72] LIDY, THOMAS, AT  
[72] WEISS, THOMAS, AT  
[72] SPECHTLER, ANDREAS, AT  
[71] MUSIMAP SA, BE  
[85] 2023-05-04  
[86] 2020-11-05 (PCT/EP2020/081176)  
[87] (WO2022/096109)

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[21] **3,197,601**  
[13] A1

[51] **Int.Cl. G06V 20/80 (2022.01) G06V 10/46 (2022.01) G06V 10/771 (2022.01) G06V 20/56 (2022.01)**  
[25] EN  
[54] **EXTRACTION OF EXTRACTION INFORMATION FROM SCANNING INFORMATION OF A SURFACE FOR USE WITH A DATABASE**  
[54] **EXTRACTION D'INFORMATIONS D'EXTRACTION A PARTIR D'INFORMATIONS DE BALAYAGE D'UNE SURFACE A UTILISER AVEC UNE BANQUE DE DONNEES**  
[72] BEHLING, JAN, DE  
[72] ROTGERI, MATHIAS, DE  
[72] EMMERICH, JAN SOREN, DE  
[72] HONING, DIRK, DE  
[72] KLOKOWSKI, PATRICK, DE  
[72] HAMMERMEISTER, CHRISTIAN, DE  
[71] FRAUNHOFER-GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2023-05-04  
[86] 2021-11-05 (PCT/EP2021/080787)  
[87] (WO2022/096653)  
[30] DE (10 2020 214 002.2) 2020-11-08

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[21] **3,197,603**  
[13] A1

[51] **Int.Cl. A23G 3/20 (2006.01) A23G 9/24 (2006.01) A23G 9/26 (2006.01) A23G 9/48 (2006.01) A23G 9/50 (2006.01)**  
[25] EN  
[54] **PROCESS AND DEVICE FOR APPLICATION OF PARTICLES ONTO FROZEN CONFECTIONERY**  
[54] **PROCEDE ET DISPOSITIF D'APPLICATION DE PARTICULES SUR DES CONFISERIES CONGELEES**  
[72] AMEND, THOMAS ALOISIUS VALENTINUS, SG  
[71] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2023-05-04  
[86] 2021-12-10 (PCT/EP2021/085279)  
[87] (WO2022/128813)  
[30] EP (20214326.9) 2020-12-15

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[21] **3,197,604**  
[13] A1

[51] **Int.Cl. G05D 1/02 (2020.01)**  
[25] EN  
[54] **METHOD FOR EFFICIENT ROUTE PLANNING OF VEHICLES IN A SORTING SYSTEM**  
[54] **PROCEDE DE PLANIFICATION D'ITINERAIRE EFFICACE DE VEHICULES DANS UN SYSTEME DE TRI**  
[72] ROIDL, MORITZ, DE  
[72] EMMERICH, JAN SOREN, DE  
[72] BENKENSTEIN, LEONIE, DE  
[72] KLOKOWSKI, PATRICK, DE  
[72] HAMMERMEISTER, CHRISTIAN, DE  
[71] FRAUNHOFER-GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2023-05-04  
[86] 2021-11-05 (PCT/EP2021/080790)  
[87] (WO2022/096655)  
[30] DE (10 2020 214 005.7) 2020-11-08

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[21] **3,197,605**  
[13] A1

[51] **Int.Cl. A22B 5/00 (2006.01)**  
[25] EN  
[54] **METHOD OF SORTING BEEF CARCASSES**  
[54] **PROCEDE DE TRI DE CARCASSES DE B?UF**  
[72] HOWARD, SCOTT T., US  
[72] ROSE, CHANCIE B., US  
[71] CARGILL, INCORPORATED, US  
[85] 2023-05-04  
[86] 2021-11-09 (PCT/US2021/058631)  
[87] (WO2022/099198)  
[30] US (63/111,260) 2020-11-09



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[21] **3,197,606**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 35/12 (2015.01) A61K 38/08 (2019.01) C12N 5/12 (2006.01)**

[25] EN

[54] **METHODS FOR TREATING SHORT BOWEL SYNDROME AND/OR HIGH OUTPUT OSTOMY**

[54] **PROCEDES DE TRAITEMENT DU SYNDROME DE L'INTESTIN COURT ET/OU D'UNE STOMIE A HAUT DEBIT**

[72] GRIFFIN, PATRICK H., US

[72] BARAK, NIR, US

[72] APPAJOSYULA, SIREESH, US

[71] 9 METERS BIOPHARMA, INC., US

[85] 2023-05-04

[86] 2021-11-09 (PCT/US2021/058522)

[87] (WO2022/103710)

[30] US (63/111,869) 2020-11-10

[21] **3,197,609**  
[13] A1

[51] **Int.Cl. A01D 34/00 (2006.01) B25F 5/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR TOOL-FREE GARDEN MACHINE DETACHABLE IMPLEMENT CHANGE**

[54] **SYSTEMES ET PROCEDES DE CHANGEMENT D'ACCESSOIRE DETACHABLE DE MACHINE DE JARDINAGE SANS OUTIL**

[72] LUO, HENG, CN

[71] TECHTRONIC CORDLESS GP, US

[85] 2023-05-04

[86] 2020-11-09 (PCT/CN2020/127460)

[87] (WO2022/095015)

[21] **3,197,611**  
[13] A1

[51] **Int.Cl. B60L 5/40 (2006.01) B60L 5/04 (2006.01) B60L 5/36 (2006.01) B60M 1/34 (2006.01)**

[25] EN

[54] **SYSTEM FOR ELECTRICALLY FEEDING AT LEAST ONE ELECTRICALLY POWERED VEHICLE**

[54] **SYSTEME D'ALIMENTATION ELECTRIQUE D'AU MOINS UN VEHICULE ELECTRIQUE**

[72] OLIVER, JAMES, AU

[72] SPRAGUE, ANTHONY, AU

[72] ROBINSON, CALEB, AU

[71] BLUVEIN INNOVATION PTY. LTD., AU

[85] 2023-05-04

[86] 2021-11-05 (PCT/EP2021/080811)

[87] (WO2022/096665)

[30] EP (PCT/EP2020/081199) 2020-11-05

[21] **3,197,612**  
[13] A1

[51] **Int.Cl. E04G 21/28 (2006.01)**

[25] EN

[54] **SCAFFOLDING ELEMENT, METHOD FOR MANUFACTURING THE SAME, A SCAFFOLDING STRUCTURE AND A KIT OF PARTS FOR A SCAFFOLDING STRUCTURE.**

[54] **ELEMENT D'ECHAFAUDAGE, SON PROCEDE DE FABRICATION, STRUCTURE D'ECHAFAUDAGE ET KIT DE PIECES POUR UNE STRUCTURE D'ECHAFAUDAGE.**

[72] ANDERSSON, JOHNNY, SE

[71] BYGGINSATSEN I NACKA AB, SE

[85] 2023-05-04

[86] 2021-10-25 (PCT/SE2021/051075)

[87] (WO2022/103313)

[30] SE (2051324-8) 2020-11-12

[21] **3,197,613**  
[13] A1

[51] **Int.Cl. A61J 1/20 (2006.01)**

[25] EN

[54] **VIAL ADAPTER WITH AIR MANAGEMENT DEVICE**

[54] **ADAPTATEUR DE FLACON AVEC DISPOSITIF DE GESTION D'AIR**

[72] MARICI, PAUL PAIA, US

[71] BECTON, DICKINSON AND COMPANY, US

[85] 2023-05-04

[86] 2021-11-09 (PCT/US2021/058540)

[87] (WO2022/103717)

[30] US (63/111,681) 2020-11-10

[21] **3,197,615**  
[13] A1

[51] **Int.Cl. A61B 17/122 (2006.01)**

[25] EN

[54] **HEMOSTATIC CLIP**

[54] **PINCE HEMOSTATIQUE**

[72] YANG, XUEFENG, CN

[72] JIANG, LU, CN

[72] WANG, ZHEN, CN

[72] WANG, QUANBIN, CN

[71] MICROPOR UROCARE (JIAXING) CO., LTD., CN

[71] MICROPOR UROCARE (SHANGHAI) CO., LTD., CN

[85] 2023-05-04

[86] 2021-10-22 (PCT/CN2021/125598)

[87] (WO2022/095724)

[30] CN (202011232996.0) 2020-11-06

[21] **3,197,616**  
[13] A1

[51] **Int.Cl. H03K 19/195 (2006.01) H01G 5/16 (2006.01)**

[25] EN

[54] **SYSTEMS, ARTICLES, AND METHODS FOR A TUNABLE CAPACITOR**

[54] **SYSTEMES, ARTICLES ET PROCEDES POUR UN CONDENSATEUR ACCORDABLE**

[72] STERLING, GEORGE E.G., CA

[71] D-WAVE SYSTEMS INC., CA

[85] 2023-05-04

[86] 2021-11-16 (PCT/US2021/059555)

[87] (WO2022/115278)

[30] US (63/117,851) 2020-11-24

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[21] <b>3,197,617</b> [13] A1	[21] <b>3,197,621</b> [13] A1	[21] <b>3,197,627</b> [13] A1
[51] <b>Int.Cl. C10C 3/00 (2006.01) C10C 3/02 (2006.01) D01F 9/145 (2006.01)</b>	[51] <b>Int.Cl. A61B 5/15 (2006.01) A61B 5/154 (2006.01) A61M 25/06 (2006.01)</b>	[51] <b>Int.Cl. A61K 9/16 (2006.01) A61K 33/243 (2019.01) A61K 31/337 (2006.01) A61K 39/395 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>METHODS FOR ENHANCING THE FORMATION OF MESOPHASE IN PITCH COMPOSITIONS DERIVED FROM HYDROCARBON FEEDSTOCKS</b>	[54] <b>BLOOD COLLECTION DEVICES, SYSTEMS, AND METHODS</b>	[54] <b>INHALABLE DRY POWDER FORMULATIONS COMPRISING ANGIOGENESIS INHIBITORS</b>
[54] <b>PROCEDES D'AMELIORATION DE LA FORMATION DE MESOPHASE DANS DES COMPOSITIONS DE BRAI ISSUES DE CHARGES D'HYDROCARBURES</b>	[54] <b>PROCEDES DE PRELEVEMENT SANGUIN</b>	[54] <b>FORMULATIONS DE POUDRE SECHE POUR INHALATION COMPRENANT DES INHIBITEURS DE L'ANGIOGENESE</b>
[72] GOPINADHAN, MANESH, US	[72] XUE, YUEQIANG, CN	[72] SHEPARD, KIMBERLY, US
[72] SMITH, STUART E., US	[72] YAN, BO, CN	[72] BANKS, MICHAEL, US
[72] CALLEN, NICOLE M., US	[72] BURKHOLZ, JONATHAN KARL, US	[72] VODAK, DAVID, US
[72] CHASE, CLARENCE E., US	[72] NATESAN, MOHANKUMAR, SG	[71] LONZA BEND INC., US
[72] EDMOND, KAZEM V., US	[72] CHENG, KIAT JIN, SG	[85] 2023-05-04
[72] RAJAGOPALAN, SRINIVASAN, US	[71] BECTON, DICKINSON AND COMPANY, US	[86] 2021-11-17 (PCT/US2021/059774)
[72] SIROTA, ERIC B., US	[85] 2023-05-04	[87] (WO2022/109059)
[72] RYAN, DANIEL J., US	[86] 2021-11-09 (PCT/US2021/058606)	[30] US (63/115,255) 2020-11-18
[71] EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY, US	[87] (WO2022/108786)	[30] US (63/151,499) 2021-02-19
[85] 2023-05-04	[30] CN (202011289322.4) 2020-11-18	[30] US (63/174,926) 2021-04-14
[86] 2021-11-10 (PCT/US2021/072320)	[21] <b>3,197,625</b> [13] A1	[30] US (63/184,513) 2021-05-05
[87] (WO2022/154984)	[51] <b>Int.Cl. A61K 31/7105 (2006.01) C12N 15/113 (2010.01) C12Q 1/6886 (2018.01) C12N 15/11 (2006.01)</b>	
[30] US (63/136,695) 2021-01-13	[25] EN	[21] <b>3,197,628</b> [13] A1
	[54] <b>MEDIATORS OF GENE SILENCING</b>	[51] <b>Int.Cl. B60R 21/00 (2006.01) B60R 21/34 (2011.01) B62D 35/00 (2006.01) B62D 35/02 (2006.01)</b>
	[54] <b>MEDIATEURS DE SILENCAGE GENIQUE</b>	[25] EN
	[72] GULLEROVA, MONIKA, GB	[54] <b>VEHICLE PROTECTION ADAPTER</b>
	[71] CANCER RESEARCH TECHNOLOGY LIMITED, GB	[54] <b>ADAPTATEUR DE PROTECTION DE VEHICULE</b>
	[85] 2023-05-04	[72] WHITEHEAD, SCOTT, US
	[86] 2021-11-24 (PCT/GB2021/053039)	[71] SCRAPE ARMOR, INC., US
	[87] (WO2022/112753)	[71] WHITEHEAD, SCOTT, US
	[30] GB (2018570.8) 2020-11-25	[85] 2023-05-05
[21] <b>3,197,618</b> [13] A1		[86] 2021-11-05 (PCT/US2021/058301)
[51] <b>Int.Cl. B01J 19/12 (2006.01) H01M 4/131 (2010.01) H01M 10/0525 (2010.01) C01D 15/00 (2006.01) C01D 15/02 (2006.01)</b>		[87] (WO2022/099045)
[25] EN		[30] US (17/090,819) 2020-11-05
[54] <b>SINGLE CRYSTAL CATHODE MATERIALS USING MICROWAVE PLASMA PROCESSING</b>		
[54] <b>MATERIAUX DE CATHODE MONOCRISTALLINS UTILISANT UN TRAITEMENT AU PLASMA MICRO-ONDE</b>		
[72] HOLMAN, RICHARD K., US		
[72] PULLEN, ADRIAN, US		
[72] WROBEL, GREGORY M., US		
[72] COLWELL, JOHN, US		
[71] 6K INC., US		
[85] 2023-05-04		
[86] 2022-01-18 (PCT/US2022/012821)		
[87] (WO2022/159401)		
[30] US (63/139,198) 2021-01-19		

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[21] **3,197,634**  
[13] A1

[51] **Int.Cl. B62D 1/10 (2006.01)**  
[25] FR  
[54] **METHOD AND SYSTEM FOR NEUTRALISING RISING JOLTS SUPPORTED BY A VEHICLE STEERING COLUMN**  
[54] **PROCEDE ET SYSTEME DE NEUTRALISATION DE REMONTEE DE SECOUSSES SUPPORTEES PAR UNE COLONNE DE DIRECTION DE VEHICULE**  
[72] FERRAZZO, JULIEN, FR  
[71] CKP ENGINEERING, FR  
[85] 2023-05-05  
[86] 2021-11-29 (PCT/EP2021/083332)  
[87] (WO2022/117495)  
[30] FR (FR2012740) 2020-12-05

[21] **3,197,636**  
[13] A1

[51] **Int.Cl. B64D 25/14 (2006.01) B64C 1/14 (2006.01)**  
[25] FR  
[54] **AIRCRAFT DOOR ARCHITECTURE COMPRISING AN EMERGENCY ENERGY SOURCE**  
[54] **ARCHITECTURE DE PORTE D'AERONEF COMPORTANT UNE SOURCE D'ENERGIE DE SECOURS**  
[72] DEVILLEZ, SEBASTIEN, FR  
[71] LATECOERE, FR  
[85] 2023-05-05  
[86] 2021-11-26 (PCT/EP2021/083153)  
[87] (WO2022/117453)  
[30] FR (FR2012739) 2020-12-05

[21] **3,197,641**  
[13] A1

[51] **Int.Cl. G01N 1/10 (2006.01) G01N 1/22 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR SUBSAMPLING A GASEOUS SUBSAMPLE FROM A MONOPHASIC FLUID FOR NOBLE GAS ANALYSIS**  
[54] **SYSTEME ET PROCEDE DE SOUS-ECHANTILLONNAGE D'UN SOUS-ECHANTILLON GAZEUX A PARTIR D'UN FLUIDE MONOPHASIQUE POUR ANALYSE DE GAZ NOBLE**  
[72] PUJOL, MAGALI, FR  
[72] SCOTT, JAMES-ALEXANDER, FR  
[72] PAULY, JEROME, FR  
[71] TOTALENERGIES ONE TECH, FR  
[85] 2023-05-05  
[86] 2021-12-21 (PCT/EP2021/087166)  
[87] (WO2022/136478)  
[30] EP (20306665.9) 2020-12-22

[21] **3,197,656**  
[13] A1

[51] **Int.Cl. H01M 8/0267 (2016.01) H01M 8/0202 (2016.01) H01M 8/04014 (2016.01) H01M 8/04029 (2016.01) H01M 8/10 (2016.01)**  
[25] EN  
[54] **A FUEL CELL AND METHODS OF DECOUPLING REACTANT AND COOLANT FLUID FLOW IN A FUEL CELL**  
[54] **PILE A COMBUSTIBLE ET PROCEDES DE DECOUPLAGE DE L'ECOULEMENT DU FLUIDE REACTIF ET DU FLUIDE DE REFROIDISSEMENT DANS UNE PILE A COMBUSTIBLE**  
[72] MASON, THOMAS JAMES, GB  
[72] ENGBRETSEN, ERIK CHARLES, GB  
[71] BRAMBLE ENERGY LIMITED, GB  
[85] 2023-05-05  
[86] 2021-11-16 (PCT/GB2021/052967)  
[87] (WO2022/106818)  
[30] GB (2018069.1) 2020-11-17

[21] **3,197,658**  
[13] A1

[51] **Int.Cl. G01N 27/07 (2006.01) G01N 33/18 (2006.01)**  
[25] EN  
[54] **COMBINED TRANSFER MODULE WITH INTEGRATED CONDUCTIVITY MEASUREMENT**  
[54] **MODULE DE TRANSFERT COMBINE A MESURE DE CONDUCTIVITE INTEGREE**  
[72] KOSENKA, PAUL, US  
[72] FRANASZCZUK, KRZYSZTOF, US  
[72] SCHIFFNER, BRYAN, US  
[72] VANHOUDT, PAULUS, US  
[72] PRIETO, HELEN, US  
[72] ENGEL, JOSH, US  
[71] BL TECHNOLOGIES INC., US  
[85] 2023-05-05  
[86] 2021-11-05 (PCT/US2021/058149)  
[87] (WO2022/098928)  
[30] US (63/110,466) 2020-11-06

[21] **3,197,663**  
[13] A1

[51] **Int.Cl. A01H 1/00 (2006.01) A01H 6/20 (2018.01) A01H 5/10 (2018.01) C07K 14/415 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**  
[25] EN  
[54] **NEW NATIVE CLUBROOT RESISTANCE IN RAPESEED BRASSICA NAPUS**  
[54] **NOUVELLE RESISTANCE ENDOGENE A LA HERNIE DES CRUCIFERES CHEZ LE COLZA BRASSICA NAPUS**  
[72] RIETZ, STEFFEN, DE  
[71] NPZ INNOVATION GMBH, DE  
[85] 2023-05-05  
[86] 2021-12-20 (PCT/EP2021/086738)  
[87] (WO2022/136239)  
[30] EP (20216193.1) 2020-12-21

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[21] **3,197,666**  
[13] A1

[51] **Int.Cl. B60L 53/80 (2019.01)**  
[25] EN  
[54] **BATTERY SWAP SYSTEM**  
[54] **SYSTEME DE PERMUTATION DE BATTERIE**  
[72] BOYCE, RYAN ALEXANDER, US  
[72] OMOHUNDRO, ZACHARY MEYER, US  
[72] PENMETS, PRAVEEN VARMA, US  
[71] ZIMENO, INC. DBA MONARCH TRACTOR, US  
[85] 2023-05-05  
[86] 2021-11-09 (PCT/US2021/058580)  
[87] (WO2022/099183)  
[30] US (63/111,372) 2020-11-09

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[21] **3,197,674**  
[13] A1

[51] **Int.Cl. E05D 11/08 (2006.01) E05D 11/10 (2006.01)**  
[25] EN  
[54] **INERTIAL LOCK FRICTION HINGE**  
[54] **CHARNIERE A FRICTION A VERROUILLAGE INERTIEL**  
[72] ANDERSON, BENJAMIN, US  
[72] LARSON, GEORGE, US  
[72] BEALE, HORACE, US  
[71] REELL PRECISION MANUFACTURING CORPORATION, US  
[85] 2023-05-05  
[86] 2021-11-11 (PCT/US2021/059023)  
[87] (WO2022/103989)  
[30] US (63/112,366) 2020-11-11

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[21] **3,197,677**  
[13] A1

[51] **Int.Cl. H01L 31/0687 (2012.01) H01L 31/0725 (2012.01) H01L 31/076 (2012.01)**  
[25] EN  
[54] **TANDEM PHOTOVOLTAIC DEVICE COMBINING A SILICON-BASED SUB-CELL AND A PEROVSKITE-BASED SUB-CELL COMPRISING A P- OR N-TYPE MATERIAL/PEROVSKITE COMPOSITE LAYER**  
[54] **DISPOSITIF PHOTOVOLTAIQUE TANDEM COMBINANT UNE SOUS-CELLULE A BASE DE SILICIUM ET UNE SOUS-CELLULE A BASE DE PEROVSKITE COMPORTANT UNE COUCHE COMPOSITE PEROVSKITE/MATERIAU DE TYPE P OU**  
[72] MANCEAU, MATTHIEU, FR  
[72] DUPRE, OLIVIER, FR  
[72] LEMAITRE, NOELLA, FR  
[71] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, FR  
[71] 3SUN S.R.L., IT  
[85] 2023-05-05  
[86] 2021-10-25 (PCT/FR2021/051876)  
[87] (WO2022/096802)  
[30] FR (FR2011346) 2020-11-05

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[21] **3,197,682**  
[13] A1

[25] EN  
[54] **TANDEM PHOTOVOLTAIC DEVICE COMBINING A SILICON-BASED SUB-CELL AND A PEROVSKITE-BASED SUB-CELL INCLUDING AN N-LAYER WITH A CONTROLLED CARBON CONTENT**  
[54] **DISPOSITIF PHOTOVOLTAIQUE TANDEM COMBINANT UNE SOUS-CELLULE A BASE DE SILICIUM ET UNE SOUS-CELLULE A BASE DE PEROVSKITE COMPORTANT UNE COUCHE N A TAUX DE CARBONE CONTROLE**  
[72] MANCEAU, MATTHIEU, FR  
[72] CROS, STEPHANE, FR  
[72] DALLY, PIA, FR  
[72] DUPRE, OLIVIER, FR  
[72] LEMAITRE, NOELLA, FR  
[71] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, FR  
[71] 3SUN S.R.L., IT  
[85] 2023-05-05  
[86] 2021-10-25 (PCT/FR2021/051874)  
[87] (WO2022/096801)  
[30] FR (FR2011348) 2020-11-05

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[21] **3,197,684**  
[13] A1

[51] **Int.Cl. B31D 1/02 (2006.01)**  
[25] EN  
[54] **DEVICE FOR REPAIRING OBJECTS FIXED TO A WEB, WITH A FLEXIBLE FEED MECHANISM OF THE WEB**  
[54] **DISPOSITIF DE REPARATION D'OBJETS FIXES A UNE BANDE, DOTE D'UN MECANISME D'ACHEMINEMENT FLEXIBLE DE LA BANDE**  
[72] BONEV, IVAN, DE  
[71] NIKKA RESEARCH DEUTSCHLAND GMBH, DE  
[85] 2023-05-05  
[86] 2021-10-25 (PCT/EP2021/079559)  
[87] (WO2022/096308)  
[30] DE (10 2020 214 042.1) 2020-11-09

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[21] **3,197,686**  
[13] A1

[51] **Int.Cl. A61K 8/34 (2006.01) A61K 8/39 (2006.01) A61K 8/46 (2006.01)**  
[25] EN  
[54] **SKIN CLEANSING COMPOSITION**  
[54] **COMPOSITION POUR NETTOYAGE DE LA PEAU**  
[72] CAO, YIXUAN, CN  
[72] SHENG, SAIHONG, CN  
[72] SUN, YINGQING, CN  
[72] ZHU, SUNXIN, CN  
[71] UNILEVER GLOBAL IP LIMITED, GB  
[85] 2023-05-05  
[86] 2021-11-09 (PCT/EP2021/081009)  
[87] (WO2022/117289)  
[30] CN (PCT/CN2020/133451) 2020-12-02  
[30] EP (21151535.8) 2021-01-14

[21] **3,197,689**  
[13] A1

[51] **Int.Cl. D21B 1/32 (2006.01) D21B 1/02 (2006.01)**  
[25] EN  
[54] **METHOD FOR PROCESSING FIBROUS MATTER FROM WASTE MATERIAL**  
[54] **PROCEDE DE TRAITEMENT DE MATIERE FIBREUSE A PARTIR DE DECHETS**  
[72] SHAH, SHIKHA, IN  
[71] SHAH, SHIKHA, IN  
[85] 2023-05-05  
[86] 2021-11-09 (PCT/IN2021/051059)  
[87] (WO2022/097175)  
[30] IN (202021048897) 2020-11-09

[21] **3,197,691**  
[13] A1

[51] **Int.Cl. B65D 5/26 (2006.01) B65D 5/28 (2006.01) B65D 5/30 (2006.01) B65D 77/20 (2006.01)**  
[25] EN  
[54] **TRAY FOR FOOD PRODUCTS**  
[54] **PLATEAU POUR PRODUITS ALIMENTAIRES**  
[72] BRINK, THOMAS, US  
[72] KEARNS, MATTHEW R., US  
[72] KASTANEK, RAYMOND S., US  
[72] STRAND, SCOTT THOMAS, US  
[72] WALSH, JOSEPH C., US  
[71] GRAPHIC PACKAGING INTERNATIONAL, LLC, US  
[85] 2023-05-05  
[86] 2021-11-04 (PCT/US2021/058050)  
[87] (WO2022/098867)  
[30] US (63/110,587) 2020-11-06  
[30] US (63/169,302) 2021-04-01  
[30] US (63/174,724) 2021-04-14  
[30] US (63/178,116) 2021-04-22  
[30] US (63/110,578) 2020-11-06  
[30] US (63/139,341) 2021-01-20  
[30] US (63/126,157) 2020-12-16  
[30] US (63/191,412) 2021-06-01  
[30] US (63/169,418) 2021-04-01  
[30] US (63/110,582) 2020-11-06  
[30] US (63/128,418) 2020-12-21

[21] **3,197,694**  
[13] A1

[51] **Int.Cl. H04L 45/74 (2022.01) H04L 69/22 (2022.01)**  
[25] EN  
[54] **PROGRAMMATICALLY DETERMINING NEXT-HOP MAC ADDRESS**  
[54] **DETERMINATION PROGRAMMATIQUE D'UNE ADRESSE MAC DE SAUT SUIVANT**  
[72] BLACK, GABRIEL, US  
[71] KRATOS INTEGRAL HOLDINGS, LLC, US  
[85] 2023-05-05  
[86] 2021-11-08 (PCT/US2021/058468)  
[87] (WO2022/099142)  
[30] US (63/111,487) 2020-11-09

[21] **3,197,701**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01)**  
[25] EN  
[54] **METHOD FOR CRYOPRESERVING ENGINEERED TREGS**  
[54] **PROCEDE DE CRYOPRESERVATION DE TREG MODIFIES**  
[72] MCGILL, IAIN, GB  
[71] QUELL THERAPEUTICS LIMITED, GB  
[85] 2023-05-05  
[86] 2021-11-09 (PCT/EP2021/081101)  
[87] (WO2022/096744)  
[30] GB (2017678.0) 2020-11-09  
[30] GB (2107418.2) 2021-05-25

[21] **3,197,702**  
[13] A1

[51] **Int.Cl. A63B 21/00 (2006.01) A63B 23/04 (2006.01) A63B 71/04 (2006.01)**  
[25] EN  
[54] **INFLATABLE PLYOMETRIC BOX**  
[54] **BOITE PLYOMETRIQUE GONFLABLE**  
[72] ANDRASFI, CSABA, US  
[72] PARK, CHAD CHAEHONG, US  
[71] PARK, CHAD CHAEHONG, US  
[85] 2023-05-05  
[86] 2021-11-03 (PCT/US2021/072200)  
[87] (WO2022/150227)  
[30] US (17/091,685) 2020-11-06

[21] **3,197,703**  
[13] A1

[51] **Int.Cl. G02B 6/38 (2006.01)**  
[25] EN  
[54] **FIBER OPTIC CONNECTORS HAVING AN INTERNAL RETENTION BODY**  
[54] **CONNECTEURS DE FIBRES OPTIQUES AYANT UN CORPS DE RETENUE INTERNE**  
[72] GOMEZ, MICHELLE AMOR, DE  
[72] JANASZ, LUKASZ PIOTR, PL  
[72] KRYGIER, IZABELA JANINA, PL  
[72] PRZEMYSKA, MAGDALENA CZESLAWA, PL  
[71] CORNING RESEARCH & DEVELOPMENT CORPORATION, US  
[85] 2023-05-05  
[86] 2021-11-01 (PCT/US2021/057552)  
[87] (WO2022/098600)  
[30] US (63/110,098) 2020-11-05

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[21] **3,197,704**  
[13] A1

[51] **Int.Cl. C11D 1/62 (2006.01) C11D 3/33 (2006.01)**  
[25] EN  
[54] **AQUEOUS ALKALINE ABRASIVE CLEANING COMPOSITION**  
[54] **COMPOSITION DE NETTOYAGE AQUEUSE ALCALINE ABRASIVE**  
[72] BAGGI, PAOLA, IT  
[72] CROWLEY, GILES JAMES, GB  
[72] JAMIESON, ANDREW STEPHEN, GB  
[72] LECCE, TERESA, IT  
[72] LUPI, LAURA, IT  
[71] UNILEVER GLOBAL IP LIMITED, GB  
[85] 2023-05-05  
[86] 2021-10-22 (PCT/EP2021/079349)  
[87] (WO2022/100982)  
[30] EP (20206582.7) 2020-11-10

[21] **3,197,709**  
[13] A1

[51] **Int.Cl. G06F 3/046 (2006.01) G06F 3/0362 (2013.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR FINGER INPUT SENSING**  
[54] **PROCEDE ET APPAREIL DE DETECTION D'ENTREE DIGITALE**  
[72] WANG, JU, CA  
[72] VOGEL, DANIEL, CA  
[72] SALEHI-ABARI, OMID, CA  
[72] KATSURAGAWA, KEIKO, CA  
[71] NATIONAL RESEARCH COUNCIL OF CANADA, CA  
[71] VOGEL, DANIEL, CA  
[71] SALEHI-ABARI, OMID, CA  
[71] KATSURAGAWA, KEIKO, CA  
[85] 2023-05-05  
[86] 2021-11-05 (PCT/IB2021/060280)  
[87] (WO2022/097093)  
[30] CA (3,098,749) 2020-11-06

[21] **3,197,713**  
[13] A1

[51] **Int.Cl. A63B 53/00 (2015.01) A63B 69/36 (2006.01)**  
[25] EN  
[54] **ALIGNMENT AID ON GOLF GRIP OR GOLF SHAFT**  
[54] **AIDE A L'ALIGNEMENT SUR UNE POIGNEE DE GOLF OU UN MANCHE DE GOLF**  
[72] CARROLL, JAMES HOWARD, US  
[71] CARROLL, JAMES HOWARD, US  
[85] 2023-05-05  
[86] 2021-12-30 (PCT/US2021/065642)  
[87] (WO2022/147219)  
[30] US (63/205,623) 2020-12-30

[21] **3,197,716**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) A61K 31/404 (2006.01) A61K 31/4045 (2006.01) A61P 25/00 (2006.01) A61P 25/24 (2006.01) A61P 37/06 (2006.01)**  
[25] EN  
[54] **A METHOD OF TREATING DEPRESSION BY IMMUNE MODULATION**  
[54] **PROCEDE DE TRAITEMENT DE LA DEPRESSION PAR MODULATION IMMUNITAIRE**  
[72] JEFFERIES, WILFRED, CA  
[71] MYND LIFE SCIENCES INC., CA  
[71] THE UNIVERSITY OF BRITISH COLUMBIA, CA  
[85] 2023-05-05  
[86] 2021-11-05 (PCT/CA2021/051579)  
[87] (WO2022/094719)  
[30] US (63/110,421) 2020-11-06

[21] **3,197,718**  
[13] A1

[51] **Int.Cl. C09K 3/00 (2006.01) C09K 8/52 (2006.01) C09K 8/54 (2006.01) C10G 1/10 (2006.01)**  
[25] EN  
[54] **GREEN COMPOSITIONS FOR USE IN DOWNHOLE AND INDUSTRIAL APPLICATIONS**  
[54] **COMPOSITIONS CRUES POUR L'UTILISATION DANS LES APPLICATIONS DE FOND DE TROU ET INDUSTRIELLES**  
[72] LANE, LLOYD, US  
[71] DELTA-ENERGY GROUP, LLC, US  
[85] 2023-05-05  
[86] 2021-11-09 (PCT/US2021/058652)  
[87] (WO2022/099203)  
[30] US (63/111,399) 2020-11-09  
[30] US (17/223,930) 2021-04-06  
[30] US (63/122,770) 2020-12-08

[21] **3,197,720**  
[13] A1

[51] **Int.Cl. A61K 49/00 (2006.01) C07D 209/20 (2006.01) G01N 33/553 (2006.01)**  
[25] EN  
[54] **NEAR INFRARED-II PROBES AS HIGH AFFINITY TARGETING IMAGING AGENTS AND USES THEREOF**  
[54] **SONDES PROCHE INFRAROUGE II UTILISEES EN TANT QU'AGENTS D'IMAGERIE DE CIBLAGE A HAUTE AFFINITE ET LEURS UTILISATIONS**  
[72] KULARATNE, SUMITH A., US  
[71] ON TARGET LABORATORIES, LLC, US  
[85] 2023-05-05  
[86] 2021-11-16 (PCT/US2021/059529)  
[87] (WO2022/108929)  
[30] US (63/115,132) 2020-11-18

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[21] **3,197,723**  
[13] A1

[51] **Int.Cl. A62D 3/02 (2007.01)**  
[25] EN  
[54] **TREATMENT OF BAUXITE RESIDUE**  
[54] **TRAITEMENT DE RESIDUS DE BAUXITE**  
[72] HUANG, LONGBIN, AU  
[72] YOU, FANG, AU  
[71] THE UNIVERSITY OF QUEENSLAND, AU  
[85] 2023-05-05  
[86] 2021-11-10 (PCT/AU2021/051328)  
[87] (WO2022/099360)  
[30] AU (2020904127) 2020-11-11

[21] **3,197,732**  
[13] A1

[51] **Int.Cl. H01M 50/152 (2021.01) H01M 50/159 (2021.01) H01M 50/559 (2021.01) H01M 50/564 (2021.01)**  
[25] EN  
[54] **SECONDARY BATTERY, BATTERY PACK, AND AUTOMOBILE**  
[54] **BATTERIE SECONDAIRE, BLOC-BATTERIE ET AUTOMOBILE**  
[72] JO, MINKI, KR  
[72] KIM, DO GYUN, KR  
[72] HWANG BO, KWANG SU, KR  
[72] MIN, GEON WOO, KR  
[72] CHOI, SUJI, KR  
[72] KANG, BOHYUN, KR  
[71] LG ENERGY SOLUTION, LTD., KR  
[85] 2023-05-05  
[86] 2022-02-23 (PCT/KR2022/002677)  
[87] (WO2022/182144)  
[30] KR (10-2021-0024422) 2021-02-23

[21] **3,197,737**  
[13] A1

[51] **Int.Cl. A61B 5/283 (2021.01) A61M 39/10 (2006.01)**  
[25] EN  
[54] **CATHETER CONNECTORS FOR ECG-BASED CATHETER POSITIONING SYSTEMS**  
[54] **CONNECTEURS DE CATHETER POUR SYSTEMES DE POSITIONNEMENT DE CATHETER PAR ECG**  
[72] NEWTON, ALEXANDER, XX  
[72] SHEUNG, SHING YUE, XX  
[72] THEDA, CHRISTIANE, XX  
[72] YOUSUF, MUBIN, XX  
[71] NAVI MEDICAL TECHNOLOGIES PTY LTD, AU  
[85] 2023-05-05  
[86] 2021-11-06 (PCT/IB2021/060293)  
[87] (WO2022/097103)  
[30] AU (2020904044) 2020-11-06

[21] **3,197,741**  
[13] A1

[51] **Int.Cl. H04W 24/10 (2009.01) H04W 36/06 (2009.01) H04W 48/18 (2009.01) H04W 84/12 (2009.01) H04W 88/12 (2009.01)**  
[25] EN  
[54] **BAND STEERING AND/OR CHANNEL STEERING IN WIFI COMMUNICATIONS SYSTEMS**  
[54] **PROCEDES ET APPAREIL POUR PRENDRE EN CHARGE UNE DIRECTION DE BANDE ET/OU UNE DIRECTION DE CANAL DANS DES SYSTEMES DE COMMUNICATIONS WIFI**  
[72] MALLADI, PRATYUSHA, US  
[71] CHARTER COMMUNICATIONS OPERATING, LLC, US  
[85] 2023-05-05  
[86] 2021-11-04 (PCT/US2021/058101)  
[87] (WO2022/098902)  
[30] US (17/090,861) 2020-11-05

[21] **3,197,743**  
[13] A1

[51] **Int.Cl. G10C 3/08 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR GROUND TRUTHING REMOTELY SENSED DATA**  
[54] **SYSTEMES ET PROCEDES POUR LA VERIFICATION DE REALITE DE TERRAIN DE DONNEES DETECTEES A DISTANCE**  
[72] KABACHNIK, LORNA, US  
[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US  
[85] 2023-05-05  
[86] 2021-11-09 (PCT/US2021/072310)  
[87] (WO2022/099324)  
[30] US (63/111,344) 2020-11-09

[21] **3,197,745**  
[13] A1

[51] **Int.Cl. A61B 17/00 (2006.01) A61F 2/00 (2006.01) A61F 2/04 (2013.01) A61M 25/00 (2006.01)**  
[25] EN  
[54] **CATHETER PLACEMENT SYSTEM**  
[54] **SYSTEME DE MISE EN PLACE DE CATHETER**  
[72] BALJI, JACK, US  
[72] ROTHENBERG, ASHLEY RACHEL, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-05-05  
[86] 2021-11-09 (PCT/US2021/058545)  
[87] (WO2022/103719)  
[30] US (63/113,055) 2020-11-12

[21] **3,197,746**  
[13] A1

[51] **Int.Cl. H02G 15/34 (2006.01)**  
[25] EN  
[54] **SUSPENDED SUPERCONDUCTING TRANSMISSION LINES**  
[54] **LIGNES DE TRANSPORT SUPRACONDUCTRICES SUSPENDUES**  
[72] ASHWORTH, STEPHEN PAUL, US  
[72] MORICONI, FRANCO, US  
[72] HEIDEL, TIMOTHY DAVID, US  
[71] VEIR, INC., US  
[85] 2023-05-05  
[86] 2021-11-11 (PCT/US2021/058926)  
[87] (WO2022/108818)  
[30] US (63/115,140) 2020-11-18

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[21] **3,197,748**  
[13] A1

[51] **Int.Cl. A61K 35/768 (2015.01)**  
[25] EN  
[54] **MIR-375- AND MIR-1-  
REGULATED COXSACKIEVIRUS  
B3 HAS NO PANCREAS AND  
HEART TOXICITY BUT STRONG  
ANTITUMOR EFFICIENCY IN  
COLORECTAL CARCINOMAS**  
[54] **COXSACKIEVIRUS B3 REGULE  
PAR MIR-375 ET MIR-1 SANS  
TOXICITE PANCREATIQUE NI  
TOXICITE CARDIAQUE MAIS  
PRESENTANT UNE EFFICACITE  
ANTITUMORALE ELEVEE DANS  
LES CARCINOMES  
COLORECTAUX**  
[72] FECHNER, HENRY, DE  
[72] HAZINI, AHMET, DE  
[71] TECHNISCHE UNIVERSITAT  
BERLIN, DE  
[85] 2023-05-05  
[86] 2021-08-04 (PCT/EP2021/071767)  
[87] (WO2022/100898)  
[30] DE (10 2020 130 072.7) 2020-11-13

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[13] A1

[51] **Int.Cl. C07H 15/04 (2006.01) A61K  
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(2006.01) A61P 31/04 (2006.01) A61P  
31/12 (2006.01) A61P 31/16 (2006.01)  
A61P 33/02 (2006.01) A61P 37/08  
(2006.01) A61P 39/02 (2006.01)**  
[25] EN  
[54] **NOVEL  
AMINOALKYLGLUCOSAMINIDE  
4-PHOSPHATE DERIVATIVE**  
[54]  
[72] KOBAYASHI, HIROYUKI, JP  
[72] OKA, TATSUYA, JP  
[72] FUKUYAMA, YOSHIKO, JP  
[71] DAIICHI SANKYO COMPANY,  
LIMITED, JP  
[85] 2023-05-05  
[86] 2021-11-10 (PCT/JP2021/041323)  
[87] (WO2022/102652)  
[30] JP (2020-188350) 2020-11-11

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[21] **3,197,750**  
[13] A1

[51] **Int.Cl. C07D 491/107 (2006.01) C07C  
211/31 (2006.01) C07C 309/43  
(2006.01) C07C 327/18 (2006.01)  
C07D 215/40 (2006.01) C07D 231/50  
(2006.01) C07D 239/48 (2006.01)  
C07D 311/02 (2006.01) C07D 455/04  
(2006.01) C07D 491/20 (2006.01)  
C07D 517/20 (2006.01)**  
[25] EN  
[54] **FLUORESCENT SENSORS**  
[54] **CAPTEURS FLUORESCENTS**  
[72] NEW, ELIZABETH, AU  
[72] MITCHELL, LINDA, AU  
[72] SHEN, CLARA, AU  
[71] THE UNIVERSITY OF SYDNEY, AU  
[85] 2023-05-05  
[86] 2021-11-12 (PCT/AU2021/051345)  
[87] (WO2022/099374)  
[30] AU (2020904179) 2020-11-13

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[21] **3,197,752**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/15  
(2006.01) A61M 25/00 (2006.01)  
A61M 25/088 (2006.01) A61M 39/00  
(2006.01) A61M 39/12 (2006.01)**  
[25] EN  
[54] **BLOOD COLLECTION DEVICES,  
SYSTEMS, AND METHODS**  
[54] **DISPOSITIFS, SYSTEMES ET  
PROCEDES DE PRELEVEMENT  
SANGUIN**  
[72] COOK, KEVIN JERRY, US  
[71] AVIA VASCULAR, LLC, US  
[85] 2023-05-05  
[86] 2021-11-26 (PCT/US2021/060888)  
[87] (WO2022/115653)  
[30] US (63/118,679) 2020-11-26  
[30] US (63/225,992) 2021-07-27  
[30] US (63/256,625) 2021-10-17

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[21] **3,197,753**  
[13] A1

[51] **Int.Cl. A61L 2/07 (2006.01)**  
[25] EN  
[54] **TOOL FOR HOLDING SEALED  
TRANSFER BAGS IN AN  
AUTOCLAVE STERILISATION  
FACILITY**  
[54] **OUTIL DE MAINTIEN DE SACS  
DE TRANSFERT ETANCHE DANS  
UNE INSTALLATION DE  
STERILISATION PAR  
AUTOCLAVAGE**  
[72] MOUNIER, CYRIL, FR  
[72] GILBERT, ANNE-CLAUDE, FR  
[72] BOSCO, NICOLAS, FR  
[71] GETINGE LIFE SCIENCE FRANCE,  
FR  
[85] 2023-05-05  
[86] 2021-10-29 (PCT/FR2021/051909)  
[87] (WO2022/096811)  
[30] FR (FR2011427) 2020-11-06

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[21] **3,197,755**  
[13] A1

[51] **Int.Cl. A61F 13/02 (2006.01) A61M  
5/158 (2006.01) A61M 25/02 (2006.01)**  
[25] EN  
[54] **PORT PROTECTOR AND COVER  
SYSTEM AND METHOD OF USE**  
[54] **SYSTEME DE CAPOT ET DE  
PROTECTION D'ORIFICE ET  
PROCEDE D'UTILISATION**  
[72] CRAIN, SCOTT A., US  
[71] MARSCO MEDICAL, LLC, US  
[85] 2023-05-05  
[86] 2021-11-08 (PCT/US2021/058408)  
[87] (WO2022/099110)  
[30] US (63/110,698) 2020-11-06



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[21] **3,197,757**  
[13] A1

[51] **Int.Cl. B22D 1/00 (2006.01) C21C 7/00 (2006.01)**

[25] EN

[54] **METHOD FOR MELTING FERROUS METALS, NON-FERROUS METALS, MACHINING WASTE AND SCRAP AND STEEL**

[54] **PROCEDE DE FUSION DE METAUX FERREUX, DE METAUX NON FERREUX, DE DECHETS D'USINAGE ET DE FERRAILLE ET D'ACIER**

[72] CARPANETO, TOMMASO BRANDO, IT

[71] COMPAGNIA COMMERCIALE SRL, IT

[85] 2023-05-05

[86] 2021-11-12 (PCT/EP2021/081517)

[87] (WO2022/117315)

[30] IT (10202000029678) 2020-12-03

[21] **3,197,762**  
[13] A1

[51] **Int.Cl. A01N 43/40 (2006.01) A01N 43/836 (2006.01)**

[25] EN

[54] **FUNGICIDAL COMPOSITIONS**

[54] **COMPOSITIONS FONGICIDES**

[72] DUVARESCH, DHIEGO, BR

[72] QUARANTA, LAURA, CH

[72] HAAS, ULRICH JOHANNES, CH

[71] SYNGENTA CROP PROTECTION AG, CH

[85] 2023-05-05

[86] 2021-12-01 (PCT/EP2021/083778)

[87] (WO2022/117653)

[30] EP (20211348.6) 2020-12-02

[30] EP (20213345.0) 2020-12-11

[30] EP (21196079.4) 2021-09-10

[21] **3,197,763**  
[13] A1

[51] **Int.Cl. A61K 38/16 (2006.01) A61K 39/00 (2006.01) A61K 39/39 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR ENHANCING T CELL PENETRATION OF TUMORS AND CANCERS**

[54] **COMPOSITIONS ET METHODES POUR AMELIORER LA PENETRATION DE LYMPHOCYTES T DE TUMEURS ET DE CANCERS**

[72] CATO, ALLEN, US

[72] SUTTON, LYNDIA, US

[72] SMITH, JILL P., US

[71] CANCER ADVANCES INC., US

[71] GEORGETOWN UNIVERSITY, US

[71] SMITH, JILL P., US

[85] 2023-05-05

[86] 2021-11-08 (PCT/US2021/058447)

[87] (WO2022/099128)

[30] US (63/110,905) 2020-11-06

[21] **3,197,766**  
[13] A1

[51] **Int.Cl. A61J 1/03 (2023.01) B29C 65/74 (2006.01) B29C 65/78 (2006.01)**

[25] EN

[54] **SEAL AND CUT ASSEMBLY FOR HEAT SEALING MACHINE**

[54] **ENSEMBLE DE SCELLAGE ET DE COUPE POUR MACHINE DE THERMOSCELLAGE**

[72] LEVAN, MARVIN, US

[71] SONOCO PRODUCTS CO., US

[85] 2023-05-05

[86] 2021-11-09 (PCT/US2021/058630)

[87] (WO2022/099197)

[30] US (63/111,539) 2020-11-09

[21] **3,197,768**  
[13] A1

[51] **Int.Cl. B60L 58/10 (2019.01) B60L 50/60 (2019.01) B60L 7/10 (2006.01)**

[25] EN

[54] **ELECTRIC VEHICLES WITH BATTERY MANAGEMENT AND SENSORS**

[54] **VEHICULES ELECTRIQUES AVEC GESTION DE BATTERIE ET CAPTEURS**

[72] MANKOWSKI, PETER, CA

[72] JAGER, WILLEM, CA

[72] COELHO, LUCAS MALTA VALLE, CA

[71] ACCELERATED SYSTEMS INC., CA

[85] 2023-05-05

[86] 2021-11-12 (PCT/IB2021/060511)

[87] (WO2022/106971)

[30] US (63/114,584) 2020-11-17

[21] **3,197,769**  
[13] A1

[51] **Int.Cl. C12M 1/04 (2006.01) C12M 1/34 (2006.01) C12M 3/00 (2006.01)**

[25] EN

[54] **ENGINEERING OF ORGANOID CULTURE FOR ENHANCED ORGANOGENESIS IN A DISH**

[54] **INGENIERIE GENETIQUE DE CULTURE D'ORGANOIDES POUR UNE ORGANOGENESE AMELIOREE DANS UN PLAT**

[72] HUH, DONGUEN, US

[72] PARK, SUNGHEE ESTELLE, US

[71] THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, US

[85] 2023-05-05

[86] 2021-12-06 (PCT/US2021/072762)

[87] (WO2022/120391)

[30] US (63/121,684) 2020-12-04

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[21] **3,197,771**  
[13] A1

[51] **Int.Cl. H04W 12/02 (2009.01)**  
[25] EN  
[54] **COMMUNICATION METHOD, RELATED APPARATUS, AND SYSTEM**  
[54] **PROCEDE DE COMMUNICATION, ET APPAREIL ET SYSTEME ASSOCIES**  
[72] MA, LONG, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2023-05-05  
[86] 2021-11-05 (PCT/CN2021/129025)  
[87] (WO2022/095966)  
[30] CN (202011232419.1) 2020-11-06

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[21] **3,197,772**  
[13] A1

[51] **Int.Cl. E04B 1/00 (2006.01)**  
[25] EN  
[54] **BALCONY DEVELOPMENTS AMENAGEMENTS DE BALCON**  
[72] HILL, TIM, GB  
[72] PALLISTER, KARL, GB  
[72] PARSONS, ANDREW, GB  
[71] SAPPHIRE BALCONIES LIMITED, GB  
[85] 2023-05-05  
[86] 2021-11-05 (PCT/EP2021/080836)  
[87] (WO2022/096684)  
[30] GB (2017660.8) 2020-11-09  
[30] GB (2017645.9) 2020-11-09  
[30] GB (2017647.5) 2020-11-09  
[30] GB (2017650.9) 2020-11-09  
[30] GB (2017655.8) 2020-11-09

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[21] **3,197,773**  
[13] A1

[51] **Int.Cl. D06F 33/37 (2020.01) D06F 34/14 (2020.01)**  
[25] EN  
[54] **SUPPLY SYSTEM FOR LAUNDRY TREATMENT COMPOSITION**  
[54] **SYSTEME D'ALIMENTATION POUR COMPOSITION DE TRAITEMENT DE LINGE**  
[72] DOYLE, MICHAEL JOSEPH DEMPSEY, US  
[72] CARACCI, DAVID JOSEPH, US  
[72] ANDERSON, JEFFREY DAVID, US  
[71] THE PROCTER & GAMBLE COMPANY, US  
[85] 2023-05-05  
[86] 2022-05-23 (PCT/US2022/030469)  
[87] (WO2022/251087)  
[30] US (17/331,307) 2021-05-26

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[21] **3,197,777**  
[13] A1

[51] **Int.Cl. B42D 25/324 (2014.01) B42D 25/328 (2014.01) B42D 25/351 (2014.01) B42D 25/355 (2014.01)**  
[25] EN  
[54] **OPTICAL DEVICES AND METHODS OF MANUFACTURE THEREOF**  
[54] **DISPOSITIFS OPTIQUES ET LEURS PROCEDES DE FABRICATION**  
[72] HOLMES, BRIAN, GB  
[72] FOURNIER, FREDERIC, GB  
[72] KING, MARIA, GB  
[71] DE LA RUE INTERNATIONAL LIMITED, GB  
[85] 2023-05-05  
[86] 2021-11-04 (PCT/GB2021/052868)  
[87] (WO2022/096892)  
[30] GB (2017586.5) 2020-11-06

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[21] **3,197,779**  
[13] A1

[51] **Int.Cl. C07C 273/02 (2006.01) C07C 273/04 (2006.01) C07C 273/14 (2006.01)**  
[25] EN  
[54] **UREA PRILLING PROCESS**  
[54] **PROCEDE DE GRELONAGE D'UREE**  
[72] MARRONE, LEONARDO, IT  
[72] BERETTI, ANDREA, IT  
[71] CASALE SA, CH  
[85] 2023-05-05  
[86] 2021-09-10 (PCT/EP2021/074915)  
[87] (WO2022/096182)  
[30] EP (20206201.4) 2020-11-06

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[21] **3,197,780**  
[13] A1

[51] **Int.Cl. A61F 2/02 (2006.01) A61F 2/04 (2013.01) A61F 2/48 (2006.01)**  
[25] FR  
[54] **IMPLANTABLE MEDICAL DEVICE**  
[54] **DISPOSITIF MEDICAL IMPLANTABLE**  
[72] LAMRAOUI, HAMID, FR  
[72] HO, THIERRY, FR  
[71] UROMEMS, FR  
[85] 2023-05-05  
[86] 2021-12-09 (PCT/FR2021/052248)  
[87] (WO2022/123180)  
[30] FR (2013008) 2020-12-10

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[21] **3,197,781**  
[13] A1

[51] **Int.Cl. A46B 13/00 (2006.01) E01H 1/05 (2006.01)**  
[25] EN  
[54] **CABLE BROOM**  
[54] **BALAI A CABLE**  
[72] CALLOWAY, BRITT R., US  
[72] MAYES, ROBERT, US  
[72] STUMPH, TIM, US  
[72] TURNER, CHRIS, US  
[71] OLD DOMINION BRUSH COMPANY, US  
[85] 2023-05-05  
[86] 2021-11-19 (PCT/US2021/060119)  
[87] (WO2022/109288)  
[30] US (63/116,450) 2020-11-20  
[30] US (17/353,321) 2021-06-21

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[21] **3,197,782**  
[13] A1

[51] **Int.Cl. H04L 9/40 (2022.01)**  
[25] EN  
[54] **IDENTIFICATION AND AUTHENTICATION OF MULTIPLE CONTROLLERS**  
[54] **IDENTIFICATION ET AUTHENTIFICATION DE MULTIPLES CONTROLEURS**  
[72] ATEF AYOUB, MICHAEL, US  
[72] WASILY, NABIL, US  
[71] THIRDWAYV, INC., US  
[85] 2023-05-05  
[86] 2021-11-10 (PCT/US2021/058855)  
[87] (WO2022/103890)  
[30] US (63/111,800) 2020-11-10

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[21] **3,197,783**  
[13] A1

[51] **Int.Cl. A61K 35/30 (2015.01) C12N 5/0793 (2010.01) A61K 35/545 (2015.01) A61P 25/28 (2006.01) C12N 5/00 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL COMPOSITION FOR TREATING DEGENERATIVE BRAIN DISEASE, INCLUDING NEURAL PRECURSOR CELLS DERIVED FROM PLURIPOTENT STEM CELLS**

[54] **COMPOSITION PHARMACEUTIQUE POUR LE TRAITEMENT D'UNE MALADIE CEREBRALE DEGENERATIVE, COMPRENANT DES CELLULES PRECURSEURS NEURALES DERIVEES DE CELLULES SOUCHES PLURIPOTENTES**

[72] KIM, MINYOUNG, KR  
[72] CHOUNG, JINSEUNG, KR  
[72] HWANG, DONG-YOUN, KR  
[72] KIM, HYUN-MUN, KR  
[71] SBIOMEDICS, KR  
[85] 2023-05-05  
[86] 2021-11-04 (PCT/KR2021/015866)  
[87] (WO2022/098110)  
[30] KR (10-2020-0147335) 2020-11-06

[21] **3,197,784**  
[13] A1

[51] **Int.Cl. E21B 17/02 (2006.01) E21B 43/12 (2006.01)**

[25] EN

[54] **ADVANCED INSULATION AND JACKETING FOR DOWNHOLE POWER AND MOTOR LEAD CABLES**

[54] **ISOLATION ET CHEMISAGE AVANCES POUR CABLES CONDUCTEURS DE MOTEUR ET D'ALIMENTATION DE FOND DE TROU**

[72] TRIPATHY, AMIYA R., US  
[72] MATUSZAK, DENNIS JOSEPH, US  
[72] LIVINGSTON, DAVID WILLIAM, US  
[72] GUNTER, SHAWN, US  
[71] BAKER HUGHES OILFIELD OPERATIONS LLC, US  
[85] 2023-05-05  
[86] 2021-11-11 (PCT/US2021/072358)  
[87] (WO2022/104356)  
[30] US (63/112,588) 2020-11-11

[21] **3,197,785**  
[13] A1

[51] **Int.Cl. A46B 7/04 (2006.01) A46B 3/14 (2006.01) E01H 1/05 (2006.01)**

[25] EN

[54] **GUTTER BROOM**

[54] **BALAI DE CANIVEAU**

[72] CALLOWAY, BRITT R., US  
[72] COKER, JOSH, US  
[72] MAYES, ROBERT, US  
[72] STUMPH, TIM, US  
[72] TURNER, CHRIS, US  
[71] OLD DOMINION BRUSH COMPANY, US  
[85] 2023-05-05  
[86] 2021-11-19 (PCT/US2021/060121)  
[87] (WO2022/109290)  
[30] US (63/116,263) 2020-11-20

[21] **3,197,788**  
[13] A1

[51] **Int.Cl. A61B 17/00 (2006.01) A61F 2/00 (2006.01) A61F 2/02 (2006.01)**

[25] EN

[54] **SURGICAL DELIVERY DEVICES, SYSTEMS, AND METHODS**

[54] **DISPOSITIFS, SYSTEMES ET PROCEDES D'IMPLANTATION CHIRURGICALE**

[72] BARBOT, JUSTIN, US  
[72] THOMPSON, RICHARD ARTHUR II, US  
[72] TEDHAM, THOMAS ARTHUR, US  
[72] SAUNDERS, REED OLIVER, US  
[71] VITA SOLUTIONS LLC, US  
[85] 2023-05-05  
[86] 2021-11-05 (PCT/US2021/058312)  
[87] (WO2022/099054)  
[30] US (17/092,017) 2020-11-06

[21] **3,197,789**  
[13] A1

[51] **Int.Cl. F04B 11/00 (2006.01) F04B 15/02 (2006.01) F04B 39/00 (2006.01) F04B 53/00 (2006.01) F04B 53/16 (2006.01) F16L 55/04 (2006.01)**

[25] EN

[54] **RECIPROCATING PUMP SUCTION MANIFOLD AUGER ASSEMBLY**

[54] **ENSEMBLE TARIERE DE COLLECTEUR D'ASPIRATION A POMPE ALTERNATIVE**

[72] HARRIS, RALPH E., US  
[72] FIGGS, DAVID THEODORE, US  
[72] POEHLS, JUSTIN LANE, US  
[72] DOCHERTY, CONNOR JAMES, US  
[71] SPM OIL & GAS INC., US  
[85] 2023-05-05  
[86] 2021-10-21 (PCT/US2021/056119)  
[87] (WO2022/103563)  
[30] US (63/112,535) 2020-11-11

[21] **3,197,790**  
[13] A1

[51] **Int.Cl. B64C 25/42 (2006.01) H02K 26/00 (2006.01)**

[25] FR

[54] **BISTABLE ELECTROMAGNETIC ACTUATOR AND AIRCRAFT BRAKE VALVE PROVIDED WITH SUCH AN ACTUATOR**

[54] **ACTIONNEUR ELECTROMAGNETIQUE BISTABLE ET VALVE DE FREIN D'AERONEF EQUIPEE D'UN TEL ACTIONNEUR**

[72] MONSAINT, LAURENT, FR  
[72] GLINEC, JULIEN, FR  
[72] DURAND, GUILLAUME, FR  
[72] GENGOUX, MATHIEU, FR  
[71] SAFRAN LANDING SYSTEMS, FR  
[85] 2023-05-05  
[86] 2021-11-10 (PCT/EP2021/081294)  
[87] (WO2022/101298)  
[30] FR (FR2011623) 2020-11-12

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[21] **3,197,792**  
[13] A1

[51] **Int.Cl. B63B 27/34 (2006.01) B67D 9/00 (2010.01) B63B 21/50 (2006.01) B63B 22/02 (2006.01) B65G 5/00 (2006.01) E21B 41/00 (2006.01) F17C 5/00 (2006.01) F17D 3/00 (2006.01)**

[25] EN

[54] **SUBSEA FLUID HANDLING SYSTEM AND METHOD FOR LONG TERM STORAGE OF FLUIDS IN A SUBTERRANEAN VOID**

[54] **SYSTEME DE TRAITEMENT DE FLUIDE SOUS-MARIN ET PROCEDE DE STOCKAGE A LONG TERME DE FLUIDES DANS UN VIDE SOUTERRAIN**

[72] HAUKELIDSATER EIDSEN, BJORGULF, NO

[71] HORIZONT ENERGI AS, NO

[85] 2023-05-05

[86] 2021-10-20 (PCT/EP2021/079057)

[87] (WO2022/096264)

[30] EP (20206071.1) 2020-11-06

[21] **3,197,794**  
[13] A1

[51] **Int.Cl. A61N 1/36 (2006.01) A61N 1/372 (2006.01)**

[25] EN

[54] **ACTIVE IMPLANTABLE MEDICAL DEVICE COMPRISING AN OPTICAL ACTION TRIGGER**

[54] **DISPOSITIF MEDICAL IMPLANTABLE ACTIF COMPRENANT UN DECLENCHEUR D'ACTION OPTIQUE**

[72] DOGUET, PASCAL, BE

[72] BOTQUIN, YOAN, BE

[72] GARNIER, JEROME, BE

[71] SYNERGIA MEDICAL, BE

[85] 2023-05-05

[86] 2020-11-10 (PCT/EP2020/081568)

[87] (WO2022/100811)

[21] **3,197,796**  
[13] A1

[51] **Int.Cl. E21B 23/03 (2006.01)**

[25] EN

[54] **GAS LIFT SIDE POCKET MANDREL WITH MODULAR INTERCHANGEABLE POCKETS**

[54] **MANDRIN A POCHEES LATERALES D'ASCENSION PAR POUSSEE DE GAZ AVEC POCHEES INTERCHANGEABLES MODULAIRES**

[72] BISSET, STEPHEN, US

[72] SHIRK, TYLER, US

[72] BROWN, DONAVAN, US

[71] BAKER HUGHES OILFIELD OPERATIONS LLC, US

[85] 2023-05-05

[86] 2021-11-11 (PCT/US2021/058973)

[87] (WO2022/103956)

[30] US (63/112,561) 2020-11-11

[21] **3,197,797**  
[13] A1

[51] **Int.Cl. A61K 31/5383 (2006.01) A61K 31/407 (2006.01) A61P 27/02 (2006.01) A61P 31/04 (2006.01)**

[25] EN

[54] **OPHTHALMIC COMPOSITION CONTAINING LEVOFLOXACIN AND KETOROLAC, METHOD FOR THE PREPARATION AND USE THEREOF**

[54] **COMPOSITION OPHTALMIQUE CONTENANT DE LA LEVOFLOXACINE ET DU KETOROLAC, SON PROCEDE DE PREPARATION ET SON UTILISATION**

[72] MARCELLONI, LUCIANO, IT

[72] BERTOCCHI, FEDERICO, IT

[72] RASSIA, IOANNA, GR

[72] CHALKIAS, GEORGE, GR

[72] CHATZELLIS, KONSTANTINOS, GR

[72] FOSTIERI, EFROSINI, GR

[71] NTC S.R.L., IT

[71] RAFARM UK LIMITED, GB

[85] 2023-05-05

[86] 2021-11-08 (PCT/EP2021/080870)

[87] (WO2022/096702)

[30] IT (10202000026690) 2020-11-09

[21] **3,197,798**  
[13] A1

[51] **Int.Cl. A61B 17/122 (2006.01) A61B 17/128 (2006.01)**

[25] EN

[54] **HEMOSTATIC CLIP**

[54] **PINCE HEMOSTATIQUE**

[72] YANG, XUEFENG, CN

[72] JIANG, LU, CN

[72] WANG, ZHEN, CN

[72] WANG, QUANBIN, CN

[71] MICROPORT UROCARE (JIAXING) CO., LTD., CN

[71] MICROPORT UROCARE (SHANGHAI) CO., LTD., CN

[85] 2023-05-05

[86] 2021-10-22 (PCT/CN2021/125599)

[87] (WO2022/095725)

[30] CN (202011232973.X) 2020-11-06

[21] **3,197,802**  
[13] A1

[51] **Int.Cl. C12P 3/00 (2006.01) C12P 7/06 (2006.01)**

[25] EN

[54] **TAIL GAS UTILIZATION FOR MIXED ALCOHOLS PRODUCTION**

[54] **UTILISATION DE GAZ RESIDUAIRE POUR LA PRODUCTION D'ALCOOLS MIXTES**

[72] RIDLEY, RICHARD JR., US

[72] PARDUN, MICHAEL, US

[71] STANDARD ALCOHOL COMPANY OF AMERICA, INC., US

[85] 2023-05-05

[86] 2021-11-09 (PCT/US2021/058512)

[87] (WO2022/103707)

[30] US (63/112,237) 2020-11-11

[30] US (17/521,829) 2021-11-08

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[21] **3,197,803**  
[13] A1

[51] **Int.Cl. C09D 5/02 (2006.01) C09D 7/40 (2018.01) C09D 7/42 (2018.01) C09D 7/43 (2018.01) C09D 7/80 (2018.01)**

[25] EN  
[54] **METHOD FOR TUNING GLOSS OR COLOR IN PAINT FORMULATIONS**  
[54] **PROCEDE POUR L'AJUSTEMENT DE LA BRILLANCE OU DE LA COULEUR DANS DES FORMULATIONS DE PEINTURE**

[72] BOHLING, JAMES C., US  
[72] ERYAZICI, IBRAHIM, US  
[72] HARSH, PHILIP R., US  
[72] MAJUMDAR, PARTHA S., US  
[72] MIRABELLI, MARIO G. L., US  
[72] NUNGESSER, EDWIN A., US  
[72] PHILLIPS, TERESA A., US  
[72] SAUCY, DANIEL A., US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2023-05-05  
[86] 2021-06-21 (PCT/US2021/038241)  
[87] (WO2022/103439)  
[30] US (63/114,128) 2020-11-16

[21] **3,197,804**  
[13] A1

[51] **Int.Cl. A61K 31/19 (2006.01) A61P 19/02 (2006.01)**

[25] EN  
[54] **HICA FOR USE IN PROPHYLAXIS AND/OR TREATMENT OF A DISEASE OR CONDITION INVOLVING DEGRADATION OF CARTILAGE AND/OR DISRUPTION OF CARTILAGE HOMEOSTASIS AND/OR INTEGRITY**  
[54] **HICA DESTINE A ETRE UTILISE DANS LA PROPHYLAXIE ET/OU LE TRAITEMENT D'UNE MALADIE OU D'UN ETAT PATHOLOGIQUE IMPLIQUANT LA DEGRADATION DU CARTILAGE ET/OU LA RUPTURE DE L'HOMEOSTASIE ET/OU DE L'INTEGRITE DU CARTILAG**

[72] SORSA, TIMO, FI  
[72] TERVAHARTIALA, TAINA, FI  
[72] KARILA, TUOMO, FI  
[72] COHEN, BENIAMIN, FI  
[71] SALARUSTA OY, FI  
[85] 2023-05-05  
[86] 2021-11-05 (PCT/FI2021/050750)  
[87] (WO2022/096789)  
[30] FI (20206124) 2020-11-06

[21] **3,197,806**  
[13] A1

[51] **Int.Cl. G06Q 20/20 (2012.01) H04W 12/08 (2021.01) G06Q 20/32 (2012.01) G06Q 20/38 (2012.01) H04L 9/40 (2022.01)**

[25] FR  
[54] **METHOD FOR PROCESSING AN OPERATION INVOLVING SECRET DATA, CORRESPONDING TERMINAL, SYSTEM AND COMPUTER PROGRAM**  
[54] **PROCEDE DE TRAITEMENT D'UNE OPERATION IMPLIQUANT DES DONNEES SECRETES, TERMINAL, SYSTEME ET PROGRAMME D'ORDINATEUR CORRESPONDANT**

[72] BLANCHET, JEAN-BERNARD, FR  
[71] BANKS AND ACQUIRERS INTERNATIONAL HOLDING, FR  
[85] 2023-05-05  
[86] 2021-11-12 (PCT/EP2021/081573)  
[87] (WO2022/101437)  
[30] FR (FR2011627) 2020-11-13

[21] **3,197,808**  
[13] A1

[51] **Int.Cl. H01M 8/18 (2006.01) H01M 10/627 (2014.01)**

[25] EN  
[54] **NON-AQUEOUS REDOX FLOW BATTERIES**  
[54] **BATTERIES A FLUX REDOX NON AQUEUX**

[72] ABBONDANZA, LUIGI, IT  
[72] SCHIMPERNA, GIULIANA, IT  
[72] TACCA, ALESSANDRA, IT  
[71] ENI S.P.A., IT  
[85] 2023-05-05  
[86] 2021-11-23 (PCT/IB2021/060847)  
[87] (WO2022/112932)  
[30] IT (102020000028295) 2020-11-25

[21] **3,197,809**  
[13] A1

[51] **Int.Cl. G06Q 20/20 (2012.01) G06Q 20/32 (2012.01) G06Q 20/34 (2012.01) G07F 7/08 (2006.01) H01Q 1/12 (2006.01) H01Q 1/22 (2006.01) H01Q 7/00 (2006.01)**

[25] FR  
[54] **RADIO COMMUNICATIONS ANTENNA CONSTITUTED BY A PREVIOUSLY BENT RIGID METAL WIRE, SUPPORT STRUCTURE AND CORRESPONDING PAYMENT TERMINAL**  
[54] **ANTENNE DE COMMUNICATIONS RADIO CONSTITUEE D'UN FIL METALLIQUE RIGIDE PREALABLEMENT CINTRE, STRUCTURE DE SUPPORT ET TERMINAL DE PAIEMENT CORRESPONDANT**

[72] HERNANDEZ, VINCENT, FR  
[72] BAPTISTE, REGIS, FR  
[71] BANKS AND ACQUIRERS INTERNATIONAL HOLDING, FR  
[85] 2023-05-05  
[86] 2021-11-12 (PCT/EP2021/081534)  
[87] (WO2022/101415)  
[30] FR (FR2011615) 2020-11-12

[21] **3,197,810**  
[13] A1

[51] **Int.Cl. A61K 31/7088 (2006.01) A61K 31/712 (2006.01) A61K 45/06 (2006.01)**

[25] EN  
[54] **METHODS AND COMPOSITIONS FOR TREATING FIBROTIC DISEASES**  
[54] **METHODES ET COMPOSITIONS POUR TRAITER DES MALADIES FIBROTIQUES**

[72] PARHAMI, FARHAD, US  
[72] STAPPENBECK, FRANK, US  
[72] WANG, FENG, US  
[71] MAX BIOPHARMA, INC., US  
[85] 2023-05-05  
[86] 2021-11-04 (PCT/US2021/058106)  
[87] (WO2022/098907)  
[30] US (63/110,147) 2020-11-05

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[21] **3,197,811**  
[13] A1

[51] **Int.Cl. E21B 19/15 (2006.01) E21B 19/20 (2006.01)**  
[25] EN  
[54] **A ROD HANDLING SYSTEM FOR DRILLING RIGS**  
[54] **SYSTEME DE MANIPULATION DE TIGE POUR APPAREIL DE FORAGE**  
[72] LITTLE, GRAHAM PATRICK, AU  
[72] FLANDERS, KEITH WILLIAM, AU  
[71] EVOLUTION DRILL RIGS PTY LTD, AU  
[85] 2023-05-05  
[86] 2021-11-18 (PCT/AU2021/051376)  
[87] (WO2022/104426)  
[30] AU (2020904294) 2020-11-20

[21] **3,197,814**  
[13] A1

[51] **Int.Cl. C03B 5/235 (2006.01) B09B 3/29 (2022.01) C03B 5/187 (2006.01) C03B 5/193 (2006.01)**  
[25] FR  
[54] **METHOD FOR TREATING GLASS WASTE**  
[54] **PROCEDE DE TRAITEMENT DE DECHETS VERRIERS**  
[72] DUPEUX, GUILLAUME, FR  
[72] BARBA ROSSA, GUILLAUME, FR  
[71] SAINT-GOBAIN ISOVER, FR  
[85] 2023-05-05  
[86] 2021-11-26 (PCT/FR2021/052108)  
[87] (WO2022/112723)  
[30] FR (FR2012400) 2020-11-30

[21] **3,197,816**  
[13] A1

[51] **Int.Cl. E21B 34/08 (2006.01) E21B 43/12 (2006.01)**  
[25] EN  
[54] **A FLOW CONTROL DEVICE AND METHOD**  
[54] **DISPOSITIF ET PROCEDE DE REGULATION DU DEBIT**  
[72] MATHIESEN, VIDAR, NO  
[72] AAKRE, HAAVARD, NO  
[72] WERSWICK, BJORNAR, NO  
[71] INFLOWCONTROL AS, NO  
[85] 2023-05-05  
[86] 2021-10-25 (PCT/EP2021/079503)  
[87] (WO2022/106156)  
[30] NO (20201249) 2020-11-17

[21] **3,197,812**  
[13] A1

[51] **Int.Cl. F15B 15/22 (2006.01) F15B 15/14 (2006.01)**  
[25] EN  
[54] **INTEGRATED CYLINDER PISTON AND BEARING AS A HYDRAULIC CUSHION**  
[54] **PISTON ET PALIER DE CYLINDRE INTEGRES EN TANT QUE COUSSIN HYDRAULIQUE**  
[72] GOSLOVICH, KURT S., US  
[72] YEUNG, THOMAS K., US  
[72] PONNUSAMY, ANANDA S., US  
[71] CATERPILLAR INC., US  
[85] 2023-05-05  
[86] 2021-11-15 (PCT/US2021/059328)  
[87] (WO2022/104182)  
[30] US (17/098,775) 2020-11-16

[21] **3,197,815**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/10 (2006.01) A61K 9/107 (2006.01) A61K 31/00 (2006.01) A61K 47/20 (2006.01) A61K 47/24 (2006.01) A61K 47/38 (2006.01) A61P 17/14 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR DEEP DERMAL DRUG DELIVERY**  
[54] **COMPOSITIONS ET PROCEDES D'ADMINISTRATION DE MEDICAMENTS PAR VOIE CUTANEE PROFONDE**  
[72] OSBORNE, DAVID W., US  
[72] TOFIG, BABAK N., US  
[71] ARCUTIS BIOTHERAPEUTICS, INC., US  
[85] 2023-05-05  
[86] 2021-11-16 (PCT/US2021/059479)  
[87] (WO2022/108911)  
[30] US (63/114,887) 2020-11-17  
[30] US (63/221,349) 2021-07-13

[21] **3,197,817**  
[13] A1

[51] **Int.Cl. A01N 47/06 (2006.01)**  
[25] EN  
[54] **PESTICIDAL COMPOSITIONS**  
[54] **COMPOSITIONS PESTICIDES**  
[72] FALLUTO, FRANCESCA, GB  
[72] HALLAM-BARNES, GEMMA, GB  
[71] SYNGENTA CROP PROTECTION AG, CH  
[85] 2023-05-05  
[86] 2021-11-26 (PCT/EP2021/083127)  
[87] (WO2022/112487)  
[30] EP (20210432.9) 2020-11-27

[21] **3,197,813**  
[13] A1

[51] **Int.Cl. G06Q 40/02 (2023.01) G06N 3/04 (2023.01) G06N 3/08 (2023.01)**  
[25] EN  
[54] **MACHINE-LEARNING TECHNIQUES INVOLVING MONOTONIC RECURRENT NEURAL NETWORKS**  
[54] **TECHNIQUES D'APPRENTISSAGE AUTOMATIQUE IMPLIQUANT DES RESEAUX NEURONAUX RECURRENTS MONOTONES**  
[72] BOARDMAN, JONATHAN, US  
[72] HUANG, XIAO, US  
[71] EQUIFAX INC., US  
[85] 2023-05-05  
[86] 2021-11-09 (PCT/US2021/072309)  
[87] (WO2022/104329)  
[30] US (17/094,262) 2020-11-10

[21] **3,197,820**  
[13] A1

[51] **Int.Cl. A61K 35/16 (2015.01) A61P 3/02 (2006.01) A61P 17/02 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR PREPARING UNIVERSAL PLASMA**  
[54] **PROCEDE ET DISPOSITIF DE PREPARATION DE PLASMA UNIVERSEL**  
[72] GREINACHER, ANDREAS, DE  
[72] AURICH, KONSTANZE, DE  
[71] UNIVERSITATSMEDIZIN GREIFSWALD, DE  
[85] 2023-05-05  
[86] 2021-10-05 (PCT/EP2021/077371)  
[87] (WO2022/073966)  
[30] DE (10 2020 212 609.7) 2020-10-06

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[21] **3,197,821**  
[13] A1

[51] **Int.Cl. G06Q 20/34 (2012.01) G06Q 20/32 (2012.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR GENERATING A DYNAMIC CARD VERIFICATION VALUE FOR PROCESSING A TRANSACTION**  
[54] **PROCEDE ET SYSTEME DE GENERATION DE VALEUR DE VERIFICATION DE CARTE DYNAMIQUE POUR LE TRAITEMENT D'UNE TRANSACTION**  
[72] LOWE, ADAM, US  
[72] NUZUM, TODD, US  
[71] COMPOSECURE, LLC, US  
[85] 2023-05-05  
[86] 2021-11-17 (PCT/US2021/059607)  
[87] (WO2022/108959)  
[30] US (63/115,888) 2020-11-19

[21] **3,197,822**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01)**  
[25] EN  
[54] **METHODS OF TREATING AXL-EXPRESSING CANCERS WITH ANTI-AXL ANTIBODIES, ANTIBODY FRAGMENTS AND THEIR IMMUNOCONJUGATES**  
[54] **PROCEDES DE TRAITEMENT DE CANCERS EXPRIMANT AXL AVEC DES ANTICORPS ANTI-AXL, DES FRAGMENTS D'ANTICORPS ET LEURS IMMUNOCONJUGUES**  
[72] SIEVERS, ERIC, US  
[72] MARTIN, PHILIPPE, US  
[71] BIOATLA, INC., US  
[85] 2023-05-05  
[86] 2021-11-10 (PCT/US2021/058747)  
[87] (WO2022/103811)  
[30] US (63/113,040) 2020-11-12

[21] **3,197,827**  
[13] A1

[51] **Int.Cl. C11D 3/37 (2006.01) C11D 3/50 (2006.01) C11D 11/00 (2006.01) C11D 17/00 (2006.01) C11D 17/04 (2006.01)**  
[25] EN  
[54] **DETERGENT COMPOSITIONS**  
[54] **COMPOSITIONS DETERGENTES**  
[72] ADRIAENSSENS, KRIS, BE  
[72] BIANCHETTI, GIULIA OTTAVIA, BE  
[72] GOMES DE OLIVEIRA FIORIO, FRANCIELE, BE  
[72] JUKES, AMANDA KISER, BE  
[71] THE PROCTER & GAMBLE COMPANY, US  
[85] 2023-05-05  
[86] 2022-06-23 (PCT/US2022/034694)  
[87] (WO2022/271929)  
[30] EP (21181636.8) 2021-06-25  
[30] EP (22162165.9) 2022-03-15

[21] **3,197,830**  
[13] A1

[51] **Int.Cl. B65D 5/38 (2006.01) B65D 5/66 (2006.01) B65D 5/68 (2006.01)**  
[25] EN  
[54] **COVER WITH TACTILE DISCONTINUITY**  
[54] **COUVERCLE A DISCONTINUTE TACTILE**  
[72] HOEFTE, PAULUS ANTONIUS AUGUSTINUS, BE  
[72] NG PAKLEUNG, CLARA SOPHIE LEA, BE  
[71] THE PROCTER & GAMBLE COMPANY, US  
[85] 2023-05-05  
[86] 2022-02-07 (PCT/US2022/015415)  
[87] (WO2022/173682)  
[30] EP (21156127.9) 2021-02-09

[21] **3,197,832**  
[13] A1

[51] **Int.Cl. B21D 22/28 (2006.01) B21D 22/30 (2006.01) B21D 35/00 (2006.01) B21D 51/26 (2006.01) B44B 5/00 (2006.01) C22F 1/04 (2006.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING A METALLIC CONTAINER**  
[54] **PROCEDE DE PRODUCTION D'UN RECIPIENT METALLIQUE**  
[72] VAN DAM, WILLEM LEENDERT PIETER, NL  
[71] ARDAGH METAL PACKAGING EUROPE GMBH, CH  
[85] 2023-05-05  
[86] 2021-11-05 (PCT/EP2021/080783)  
[87] (WO2022/096650)  
[30] DE (10 2020 129 484.0) 2020-11-09

[21] **3,197,833**  
[13] A1

[51] **Int.Cl. E03D 11/18 (2006.01)**  
[25] EN  
[54] **FLUSH VALVE AND TOILET ASSEMBLY**  
[54] **ROBINET DE CHASSE ET ASSEMBLAGE POUR TOILETTES**  
[72] SUDOL, JR. RICHARD B., US  
[71] AS AMERICA, INC., US  
[85] 2023-05-05  
[86] 2021-11-22 (PCT/US2021/060307)  
[87] (WO2022/109382)  
[30] US (63/117,216) 2020-11-23

[21] **3,197,834**  
[13] A1

[51] **Int.Cl. E21B 23/14 (2006.01) G06Q 10/04 (2023.01) E21B 43/119 (2006.01) E21B 43/26 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR CONTROLLING WELL OPERATIONS**  
[54] **SYSTEME ET PROCEDE DE COMMANDE D'OPERATIONS DANS UN Puits**  
[72] DUNCAN, ROBERT, CA  
[72] MARTIN, BRADLEY ROBERT, CA  
[72] SKINNER, MICHEAL DANE, CA  
[71] INTELLIGENT WELLHEAD SYSTEMS INC., CA  
[85] 2023-05-05  
[86] 2021-10-06 (PCT/CA2021/051410)  
[87] (WO2022/126237)  
[30] US (63/125,604) 2020-12-15

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[21] **3,197,835**  
[13] A1

[51] **Int.Cl. A62C 3/02 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR PREVENTING THE SPREAD OF FIRE**  
[54] **SYSTEMES ET PROCEDES PERMETTANT D'EMPECHER LA PROPAGATION D'UN INCENDIE**  
[72] MCLEAN, DOUGLAS, US  
[72] STANLEY, DAVID, US  
[71] WILDFIRE SHIELD, US  
[85] 2023-05-05  
[86] 2021-11-05 (PCT/US2021/058230)  
[87] (WO2022/098988)  
[30] US (63/110,885) 2020-11-06  
[30] US (17/519,389) 2021-11-04

[21] **3,197,836**  
[13] A1

[51] **Int.Cl. A61K 31/506 (2006.01) C12Q 1/6886 (2018.01) A61K 45/06 (2006.01) A61P 35/02 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITION COMPRISING FOR THE TREATMENT OF MYELOID LEUKEMIA**  
[54] **COMPOSITION PHARMACEUTIQUE POUR LE TRAITEMENT DE LA LEUCEMIE COMPRENANT UN INHIBITEUR DE FLT3**  
[72] BAE, IN HWAN, KR  
[72] SONG, JI YOUNG, KR  
[72] CHOI, JAE YUL, KR  
[72] AHN, YOUNG GIL, KR  
[71] HANMI PHARM. CO., LTD., KR  
[85] 2023-05-05  
[86] 2021-11-03 (PCT/KR2021/015794)  
[87] (WO2022/098083)  
[30] KR (10-2020-0147156) 2020-11-05

[21] **3,197,837**  
[13] A1

[51] **Int.Cl. C07D 311/30 (2006.01)**  
[25] EN  
[54] **PREPARATION METHOD FOR CANNFLAVIN COMPOUNDS**  
[54] **PROCEDE DE PREPARATION DE COMPOSES DE CANNFLAVINE**  
[72] LUO, JUNLU, CN  
[72] MOU, HONGTAO, CN  
[72] DU, YESONG, CN  
[72] TAN, XIN, CN  
[72] WANG, SHUBIN, CN  
[72] ZHANG, PINGPING, CN  
[72] LAN, LAN, CN  
[71] DEYI PHARMACEUTICAL LTD., CN  
[85] 2023-05-05  
[86] 2021-01-21 (PCT/CN2021/073144)  
[87] (WO2022/099930)  
[30] CN (202011261866.X) 2020-11-12

[21] **3,197,838**  
[13] A1

[51] **Int.Cl. C07D 311/30 (2006.01)**  
[25] EN  
[54] **PREPARATION METHOD FOR CANNFLAVIN COMPOUNDS**  
[54] **PROCEDE DE PREPARATION DE COMPOSES DE CANNFLAVINE**  
[72] LUO, JUNLU, CN  
[72] MOU, HONGTAO, CN  
[72] DU, YESONG, CN  
[72] TAN, XIN, CN  
[72] WANG, SHUBIN, CN  
[72] ZHANG, PINGPING, CN  
[72] LAN, LAN, CN  
[71] DEYI PHARMACEUTICAL LTD., CN  
[85] 2023-05-05  
[86] 2021-01-21 (PCT/CN2021/073145)  
[87] (WO2022/099931)  
[30] CN (202011262162.4) 2020-11-12

[21] **3,197,841**  
[13] A1

[51] **Int.Cl. G06N 3/08 (2023.01)**  
[25] EN  
[54] **A MULTI-RESOLUTION ATTENTION NETWORK FOR VIDEO ACTION RECOGNITION**  
[54] **RESEAU D'ATTENTION MULTIRESOLUTION POUR LA RECONNAISSANCE D'ACTIONS DANS UNE VIDEO**  
[72] CARVALHO, SCHUBERT R., US  
[72] FOLKMAN, TYLER, US  
[72] BUTLER, RICHARD RAY, US  
[71] BRANDED ENTERTAINMENT NETWORK, INC., US  
[85] 2023-05-05  
[86] 2021-11-16 (PCT/US2021/059568)  
[87] (WO2022/104281)  
[30] US (63/114,344) 2020-11-16

[21] **3,197,842**  
[13] A1

[51] **Int.Cl. G01N 33/543 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR SIGNAL CALIBRATION IN A SENSOR SYSTEM**  
[54] **SYSTEME ET PROCEDE D'ETALONNAGE DE SIGNAUX DANS UN SYSTEME DE CAPTEURS**  
[72] VAN REENEN, ALEXANDER, NL  
[71] SIEMENS HEALTHINEERS NEDERLAND B.V., NL  
[85] 2023-05-05  
[86] 2021-12-09 (PCT/EP2021/084960)  
[87] (WO2022/128729)  
[30] US (63/127,428) 2020-12-18

[21] **3,197,844**  
[13] A1

[51] **Int.Cl. E05B 51/02 (2006.01) E05B 83/36 (2014.01)**  
[25] EN  
[54] **SAFETY SYSTEM FOR AN ENCLOSURE**  
[54] **SYSTEME DE SECURITE POUR UNE ENCEINTE**  
[72] DAGA, PRUTHVIRAJ, IN  
[72] PATWARDHAN, AJIT, IN  
[71] SIEMENS MOBILITY GMBH, DE  
[85] 2023-05-05  
[86] 2020-12-11 (PCT/EP2020/085737)  
[87] (WO2022/122168)



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[21] **3,197,846**  
[13] A1

[51] **Int.Cl. G06N 3/04 (2023.01)**  
[25] EN  
[54] **A TEMPORAL BOTTLENECK ATTENTION ARCHITECTURE FOR VIDEO ACTION RECOGNITION**

[54] **ARCHITECTURE D'ATTENTION DE GOULOT D'ETRANGLEMENT TEMPOREL DESTINEE A LA RECONNAISSANCE D'ACTIONS VIDEO**

[72] CARVALHO, SCHUBERT R., US  
[72] BERTAGNOLLI, NICOLAS M., US  
[72] FOLKMAN, TYLER, US  
[72] BUTLER, RICHARD RAY, US  
[71] BRANDED ENTERTAINMENT NETWORK, INC., US  
[85] 2023-05-05  
[86] 2021-11-15 (PCT/US2021/059372)  
[87] (WO2022/104202)  
[30] US (63/114,344) 2020-11-16  
[30] US (17/350,283) 2021-06-17

[21] **3,197,883**  
[13] A1

[51] **Int.Cl. F25D 13/04 (2006.01) F25D 25/04 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD OF TEMPERATURE CONTROL IN AN AUTOMATED GRID BASED STORAGE AND RETRIEVAL SYSTEM**

[54] **SYSTEME ET PROCEDE DE REGULATION DE TEMPERATURE DANS UN SYSTEME DE STOCKAGE ET DE RECUPERATION AUTOMATISE BASE SUR UN RESEAU**

[72] HADDELAND, OLE ANDREAS, NO  
[72] FAGERLAND, INGVAR, NO  
[71] AUTOSTORE TECHNOLOGY AS, NO  
[85] 2023-05-08  
[86] 2021-11-19 (PCT/EP2021/082371)  
[87] (WO2022/112137)  
[30] NO (20201296) 2020-11-25

[21] **3,197,888**  
[13] A1

[51] **Int.Cl. H04L 67/306 (2022.01) H04M 1/253 (2006.01) H04M 1/57 (2006.01) H04M 3/42 (2006.01) H04M 3/436 (2006.01)**  
[25] EN  
[54] **A DIGITAL TELEPHONY SESSION INSTANTIATION AND CONTROL SYSTEM**

[54] **SYSTEME D'INSTANCIATION ET DE COMMANDE DE SESSION DE TELEPHONIE NUMERIQUE**

[72] DUTTON, CHRISTOPHER, AU  
[71] DUTTON, CHRISTOPHER, AU  
[85] 2023-05-08  
[86] 2021-11-18 (PCT/AU2021/051372)  
[87] (WO2022/104422)  
[30] AU (2020904273) 2020-11-19

[21] **3,197,895**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/0215 (2006.01) A61B 5/026 (2006.01) A61F 2/24 (2006.01)**  
[25] EN  
[54] **INTERATRIAL SHUNT HAVING PHYSIOLOGIC SENSOR**

[54] **SHUNT INTERAURICULAIRE DOTE D'UN CAPTEUR PHYSIOLOGIQUE**

[72] EIGLER, NEAL, US  
[72] ROZENFELD, EREZ, IL  
[72] NAE, NIR, IL  
[72] BUKHDROKER, NATHAN, IL  
[72] ROSEN, LIOR, IL  
[72] WHITING, JAMES S., US  
[72] WARDLE, JOHN, US  
[72] HAFELFINGER, WERNER, US  
[71] V-WAVE LTD., IL  
[85] 2023-05-08  
[86] 2021-11-12 (PCT/IB2021/060473)  
[87] (WO2022/101832)  
[30] US (17/098,251) 2020-11-13

[21] **3,197,898**  
[13] A1

[51] **Int.Cl. A61N 5/067 (2006.01) H05B 45/10 (2020.01) H05B 45/20 (2020.01) H05B 47/11 (2020.01)**  
[25] EN  
[54] **DEVICE, METHOD AND SYSTEM FOR BIOLOGICALLY BALANCED LIGHTING**

[54] **DISPOSITIF, PROCEDE ET SYSTEME D'ECLAIRAGE EQUILIBRE BIOLOGIQUEMENT**

[72] ZELE, ANDREW J., AU  
[72] FEIGL, BEATRIX, AU  
[72] CARTER, DREW D., AU  
[71] QUEENSLAND UNIVERSITY OF TECHNOLOGY, AU  
[85] 2023-05-08  
[86] 2021-11-09 (PCT/AU2021/051324)  
[87] (WO2022/094678)  
[30] AU (2020904090) 2020-11-09

[21] **3,197,901**  
[13] A1

[51] **Int.Cl. A61B 5/145 (2006.01)**  
[25] EN  
[54] **DEVICES FOR ANALYTE MONITORING**

[54] **DISPOSITIFS DE SURVEILLANCE D'ANALYTE**

[72] MITCHELL, STEVEN, US  
[72] SIMMONS, MATTHEW, US  
[71] ABBOTT DIABETES CARE INC., US  
[85] 2023-05-08  
[86] 2021-12-30 (PCT/US2021/065791)  
[87] (WO2022/147329)  
[30] US (63/132,075) 2020-12-30  
[30] US (63/182,511) 2021-04-30

[21] **3,197,902**  
[13] A1

[51] **Int.Cl. G01M 5/00 (2006.01) G01N 1/04 (2006.01) G01N 3/02 (2006.01) G01N 3/12 (2006.01)**  
[25] EN  
[54] **A PIPE TESTING APPARATUS AND METHOD**

[54] **APPAREIL ET PROCEDE DE TEST DE TUYAU**

[72] ROBERTS, PETER, GB  
[71] VERDERG PIPE TECHNOLOGY LIMITED, GB  
[85] 2023-05-08  
[86] 2021-10-22 (PCT/GB2021/052745)  
[87] (WO2022/101606)  
[30] GB (2017699.6) 2020-11-10

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[21] **3,197,903**  
[13] A1

[51] **Int.Cl. A61L 31/02 (2006.01) A61L 31/08 (2006.01) A61L 31/12 (2006.01)**

[25] EN

[54] **METAL MATERIAL FOR MEDICAL DEVICE, METHOD OF MANUFACTURING METAL MATERIAL FOR MEDICAL DEVICE, AND MEDICAL DEVICE**

[54] **MATERIAU METALLIQUE POUR DISPOSITIF MEDICAL, PROCEDE DE FABRICATION DE MATERIAU METALLIQUE POUR DISPOSITIF MEDICAL, ET DISPOSITIF MEDICAL**

[72] MAEGAWA, SHUNTO, JP

[72] HASEBE, TERUMITSU, JP

[71] GLOBAL VASCULAR CO., LTD., JP

[71] HASEBE, TERUMITSU, JP

[85] 2023-05-08

[86] 2020-11-09 (PCT/JP2020/041737)

[87] (WO2022/097300)

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[21] **3,197,904**  
[13] A1

[51] **Int.Cl. A61C 7/28 (2006.01)**

[25] EN

[54] **ORTHODONTIC SELF-LOCKING SYSTEM ADAPTED FOR RIBBON ARCH WIRE**

[54] **SYSTEME ORTHODONTIQUE AUTO-LIGATURANT ADAPTE A UN ARC ORTHODONTIQUE EN RUBAN**

[72] LIANG, JIAXING, CN

[71] LIANG, JIAXING, CN

[85] 2023-05-08

[86] 2021-11-08 (PCT/CN2021/129410)

[87] (WO2022/096010)

[30] CN (202011242231.5) 2020-11-09

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[21] **3,197,909**  
[13] A1

[51] **Int.Cl. A63F 3/00 (2006.01) A63F 13/46 (2014.01) A63F 3/04 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR PROVIDING AN INTERACTIVE, JUMBLED-LETTER WORD PUZZLE**

[54] **SYSTEME ET METHODE POUR FOURNIR UN PUZZLE DE MOTS INTERACTIF A LETTRES DESORDONNEES**

[72] RAWLINGS, KENNETH MAXWELL, AU

[71] KRAKEN 119 PTY LTD, AU

[85] 2023-05-08

[86] 2021-11-09 (PCT/AU2021/051322)

[87] (WO2022/094676)

[30] AU (2020904082) 2020-11-09

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[21] **3,197,912**  
[13] A1

[51] **Int.Cl. G06N 3/063 (2023.01)**

[25] EN

[54] **ELECTRONIC COMPUTING DEVICE FOR GENERATING BOOLEAN FUNCTIONS AND CONDUCTIVE MODULE THEREOF**

[54] **DISPOSITIF INFORMATIQUE ELECTRONIQUE POUR GENERATION DE FONCTIONS BOOLEENNES ET MODULE CONDUCTEUR ASSOCIE**

[72] MILANI, PAOLO, IT

[72] MIRIGLIANO, MATTEO, IT

[72] PAROLI, BRUNO, IT

[71] UNIVERSITA' DEGLI STUDI MILANO, IT

[85] 2023-05-08

[86] 2021-11-04 (PCT/IB2021/060210)

[87] (WO2022/101742)

[30] IT (102020000026900) 2020-11-11

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[21] **3,197,914**  
[13] A1

[51] **Int.Cl. H04B 1/3888 (2015.01) H04M 1/02 (2006.01)**

[25] EN

[54] **CELL PHONE COMPACT VERSATILE MOUNT**

[54] **SUPPORT POLYVALENT COMPACT DE TELEPHONE CELLULAIRE**

[72] MARKS, JOEL, US

[72] MARKS, MICHAEL, US

[71] INVENTION CITY, INC., US

[85] 2023-05-08

[86] 2021-11-05 (PCT/US2021/058161)

[87] (WO2022/098935)

[30] US (63/111,041) 2020-11-08

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[21] **3,197,915**  
[13] A1

[51] **Int.Cl. G06F 21/31 (2013.01) G06Q 30/02 (2023.01) G06F 21/55 (2013.01) G06F 16/957 (2019.01) H04L 67/02 (2022.01) H04L 67/50 (2022.01)**

[25] EN

[54] **TECHNIQUES FOR CLICKSTREAM TRACKING ACROSS BROWSER TABS**

[54] **TECHNIQUES DE SUIVI DE FLUX DE CLICS PAR L'INTERMEDIAIRE D'ONGLETS DE NAVIGATEUR**

[72] PUTNAM, ARTHUR JACOB, US

[72] MONNIG, NATHAN DANIEL, US

[71] KOUNT INC., US

[85] 2023-05-08

[86] 2021-11-10 (PCT/US2021/072329)

[87] (WO2022/104341)

[30] US (63/112,285) 2020-11-11

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[21] <b>3,197,916</b> [13] A1	[21] <b>3,197,918</b> [13] A1	[21] <b>3,197,923</b> [13] A1
[51] <b>Int.Cl. C07K 7/06 (2006.01) A61P 3/04 (2006.01) A61P 3/10 (2006.01)</b> [25] EN [54] <b>COMPOUNDS AND THEIR USE IN TREATMENT OF TACHYKININ RECEPTOR MEDIATED DISORDERS</b> [54] <b>COMPOSES ET LEUR UTILISATION DANS LE TRAITEMENT DE TROUBLES A MEDIATION PAR DES RECEPTEURS DE TACHYKININE</b> [72] GUSTAFSSON, MAGNUS BERNT FREDRIK, DK [72] MADSEN, JOHNNY, DK [72] MULVAD, OLIVIA, DK [72] HOGENDORF, WOUTER FREDERIK JOHAN, DK [72] HANSEN, JAKOB BONDO, DK [71] EMBARK BIOTECH APS, DK [85] 2023-05-08 [86] 2021-11-09 (PCT/EP2021/081057) [87] (WO2022/096736) [30] EP (20206509.0) 2020-11-09	[51] <b>Int.Cl. B07B 1/42 (2006.01) B07B 1/46 (2006.01) B07B 1/48 (2006.01) E21B 21/06 (2006.01)</b> [25] EN [54] <b>SCREEN AND SCREEN RETENTION SYSTEM FOR A SHALE SHAKER</b> [54] <b>TAMIS ET SYSTEME DE RETENUE DE TAMIS POUR TAMIS VIBRANT</b> [72] GARZA, CARLOS, US [71] 7DYNAMICS, LLC, US [85] 2023-05-08 [86] 2021-11-02 (PCT/US2021/057749) [87] (WO2022/098658) [30] US (63/111,411) 2020-11-09	[51] <b>Int.Cl. A61K 31/4045 (2006.01) A61K 45/06 (2006.01) C07D 209/16 (2006.01)</b> [25] EN [54] <b>NOVEL PSILOCIN ANALOG COMPOSITIONS AND METHODS OF SYNTHESIZING THE SAME</b> [54] <b>NOUVELLES COMPOSITIONS D'ANALOGUE DE PSILOCINE ET LEURS PROCEDES DE SYNTHESE</b> [72] HOYER, DENTON W., US [72] ROSCOW, ROBERT F., US [71] MYDECINE INNOVATIONS GROUP INC., US [85] 2023-05-08 [86] 2021-12-03 (PCT/US2021/061826) [87] (WO2022/120181) [30] US (63/121,052) 2020-12-03
[21] <b>3,197,917</b> [13] A1	[21] <b>3,197,920</b> [13] A1	[21] <b>3,197,925</b> [13] A1
[51] <b>Int.Cl. B29C 64/141 (2017.01)</b> [25] EN [54] <b>METHOD OF ADDITIVE FORMING OF A 3D OBJECT BY LAYERING BASIC BLOCKS</b> [54] <b>PROCEDE DE FORMATION ADDITIVE D'UN OBJET 3D PAR STRATIFICATION DE BLOCS DE BASE</b> [72] JANCOSEK, MICHAL, SK [71] JANCOSEK, MICHAL, SK [85] 2023-05-08 [86] 2020-11-09 (PCT/SK2020/050019) [87] (WO2022/098315)	[51] <b>Int.Cl. A61K 39/12 (2006.01) A61K 47/42 (2017.01) A61P 31/12 (2006.01) C12N 7/00 (2006.01) C12N 15/861 (2006.01)</b> [25] EN [54] <b>HUMAN PAPILOMA VIRUS VACCINES AND USES OF THE SAME FOR HPV ASSOCIATED DISEASES</b> [54] <b>VACCINS CONTRE LE PAPILOMAVIRUS HUMAIN ET LEURS UTILISATIONS POUR DES MALADIES ASSOCIEES AU HPV</b> [72] BROUGH, DOUGLAS E., US [72] ETTYREDDY, DAMODAR R., US [72] YANG, QI, US [72] WANG, CHEN, US [71] PRECIGEN, INC., US [85] 2023-05-08 [86] 2021-11-23 (PCT/US2021/060605) [87] (WO2022/115470) [30] US (63/118,222) 2020-11-25	[51] <b>Int.Cl. C07K 16/32 (2006.01)</b> [25] EN [54] <b>CHIMERIC ANTI-HUMAN BRAF V600E ANTIBODIES AND METHODS FOR MAKING AND USING THEM</b> [54] <b>ANTICORPS ANTI-BRAF V600E CHIMERES HUMAINS, LEURS PROCEDES DE FABRICATION ET D'UTILISATION</b> [72] SORENSEN, MORTEN DRAEBY, US [72] HOFF, KIRSTEN, US [71] AGILENT TECHNOLOGIES, INC., US [85] 2023-05-08 [86] 2021-11-15 (PCT/US2021/059368) [87] (WO2022/104200) [30] US (63/114,123) 2020-11-16
	[21] <b>3,197,921</b> [13] A1	
	[51] <b>Int.Cl. B23K 9/00 (2006.01) B23K 9/02 (2006.01) B23K 9/16 (2006.01) B23K 9/32 (2006.01)</b> [25] EN [54] <b>END ASSEMBLY FOR WELDING DEVICE</b> [54] <b>ENSEMBLE EXTREMITE POUR UN DISPOSITIF DE SOUDAGE</b> [72] COOPER, EDWARD L., US [71] ELCO ENTERPRISES, INC., US [85] 2023-05-08 [86] 2020-11-10 (PCT/US2020/059821) [87] (WO2022/103385)	

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[13] A1

[51] **Int.Cl. C07D 213/80 (2006.01) A01N 43/04 (2006.01) C07D 401/04 (2006.01) C07D 405/04 (2006.01) C07D 407/04 (2006.01) C07D 413/04 (2006.01) C07D 491/04 (2006.01)**

[25] EN  
[54] **HERBICIDAL DERIVATIVES**  
[54] **DERIVES HERBICIDES**  
[72] SEDEN, PETER TIMOTHY, GB  
[72] EMMETT, EDWARD JOHN, GB  
[72] DALE, SUZANNA, GB  
[72] BURNS, DAVID, GB  
[72] WHALLEY, LOUISA, GB  
[72] MORRIS, JAMES ALAN, GB  
[71] SYNGENTA CROP PROTECTION AG, CH  
[85] 2023-05-08  
[86] 2021-11-26 (PCT/EP2021/083128)  
[87] (WO2022/117445)  
[30] GB (2018994.0) 2020-12-02

[21] **3,197,934**  
[13] A1

[51] **Int.Cl. A61K 31/496 (2006.01) A61K 9/00 (2006.01) A61K 9/107 (2006.01) A61P 1/06 (2006.01) A61P 17/00 (2006.01) A61P 17/02 (2006.01) A61P 17/06 (2006.01) A61P 17/10 (2006.01) A61P 17/14 (2006.01) A61P 17/18 (2006.01) A61P 19/02 (2006.01) A61P 29/00 (2006.01) A61P 37/00 (2006.01)**

[25] EN  
[54] **COMPOUNDS, COMPOSITIONS, AND METHODS FOR TREATING INFLAMMATORY OR IMMUNE-MEDIATED CONDITIONS OF SURFACE TISSUES**  
[54] **COMPOSES, COMPOSITIONS ET METHODES POUR LE TRAITEMENT D'ETATS INFLAMMATOIRES OU D'ETATS MEDIES PAR L'IMMUNITE DE TISSUS DE SURFACE**  
[72] BASSAGANYA-RIERA, JOSEP, US  
[72] HONTECILLAS, RAQUEL, US  
[72] LEBER, ANDREW, US  
[71] NIMMUNE BIOPHARMA, INC., US  
[85] 2023-05-08  
[86] 2021-11-17 (PCT/US2021/059670)  
[87] (WO2022/108997)  
[30] US (63/115,814) 2020-11-19

[21] **3,197,936**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 9/19 (2006.01) A61K 9/51 (2006.01) A61K 48/00 (2006.01) A61P 27/16 (2006.01) C07K 16/22 (2006.01)**

[25] EN  
[54] **ANTI-VEGF ANTIBODY CONSTRUCTS AND RELATED METHODS FOR TREATING VESTIBULAR SCHWANNOMA ASSOCIATED SYMPTOMS**  
[54] **CONSTRUCTIONS D'ANTICORPS ANTI-VEGF ET PROCEDES ASSOCIES POUR LE TRAITEMENT DE SYMPTOMES ASSOCIES AU NEURINOME DE L'ACOUSTIQUE**  
[72] SIMONS, EMMANUEL JOHN, US  
[72] NG, ROBERT, US  
[72] MCKENNA, MICHAEL, US  
[71] AKOUOS, INC., US  
[85] 2023-05-08  
[86] 2021-11-30 (PCT/US2021/061205)  
[87] (WO2022/119839)  
[30] US (63/120,189) 2020-12-01  
[30] US (63/152,832) 2021-02-23

[21] **3,197,939**  
[13] A1

[51] **Int.Cl. A61L 2/28 (2006.01) B67B 7/92 (2006.01)**

[25] EN  
[54] **AMPOULE BREAKER FOR A BIOLOGICAL INDICATOR**  
[54] **DISPOSITIF DE RUPTURE D'AMPOULE POUR INDICATEUR BIOLOGIQUE**  
[72] NGUYEN, NICK N., US  
[72] RHODES, SAMUEL J., US  
[72] LUBONG, MARK J., US  
[72] TAN, DERRICK C., US  
[71] ADVANCED STERILIZATION PRODUCTS, INC., US  
[85] 2023-05-08  
[86] 2021-11-04 (PCT/IB2021/060235)  
[87] (WO2022/101750)  
[30] US (63/112,069) 2020-11-10

[21] **3,197,941**  
[13] A1

[51] **Int.Cl. G01W 1/14 (2006.01)**

[25] EN  
[54] **METHOD AND APARATUS FOR DETECTING SUBCOOLED LIQUID PRECIPITATION**  
[54] **PROCEDE ET DISPOSITIF DE DETECTION DE PRECIPITATION DE LIQUIDE DE CONGELATION**  
[72] BEINHORN, JOACHIM, DE  
[72] PEPPER, CHRISTOPH, DE  
[72] WINDOLPH, HERBERT, DE  
[71] ADOLF THIES GMBH & CO. KG, DE  
[85] 2023-05-08  
[86] 2021-11-05 (PCT/EP2021/080759)  
[87] (WO2022/101099)  
[30] EP (20206578.5) 2020-11-10

[21] **3,197,944**  
[13] A1

[51] **Int.Cl. A61K 35/12 (2015.01) A61K 35/22 (2015.01) C12Q 1/68 (2018.01)**

[25] EN  
[54] **ENRICHED BIOACTIVE RENAL CELL POPULATIONS, CHARACTERISTICS AND USES THEREOF**  
[54] **POPULATIONS DE CELLULES RENALES BIOACTIVES ENRICHIES, LEURS CARACTERISTIQUES ET UTILISATIONS**  
[72] BERTRAM, TIMOTHY A., KY  
[72] JAIN, DEEPAK, US  
[71] BERTRAM, TIMOTHY A., KY  
[71] JAIN, DEEPAK, US  
[85] 2023-05-08  
[86] 2021-11-12 (PCT/US2021/059215)  
[87] (WO2022/104120)  
[30] US (63/113,437) 2020-11-13  
[30] US (63/214,483) 2021-06-24  
[30] US (63/255,704) 2021-10-14

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[51] <b>Int.Cl. A61K 9/107 (2006.01) A61K 31/138 (2006.01) A61K 31/7036 (2006.01) A61K 31/7048 (2006.01) A61K 33/24 (2019.01) A61P 33/02 (2006.01)</b>	[51] <b>Int.Cl. B22F 1/00 (2022.01) B42D 25/328 (2014.01) B42D 25/351 (2014.01) B42D 25/36 (2014.01) B42D 25/364 (2014.01) B42D 25/373 (2014.01) B42D 25/378 (2014.01) C09D 11/037 (2014.01) C09D 11/101 (2014.01) C09D 11/50 (2014.01) C09D 7/40 (2018.01) C09D 7/62 (2018.01) B22F 1/054 (2022.01) B22F 1/0545 (2022.01) B22F 1/103 (2022.01) B22F 1/107 (2022.01) B22F 9/24 (2006.01) C08K 9/04 (2006.01) C09D 5/29 (2006.01)</b>	[51] <b>Int.Cl. A61K 39/395 (2006.01) A61P 35/02 (2006.01) C07K 16/28 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>COMPOSITION, PHARMACEUTICAL COMPOSITION, USE OF A STABLE TOPICAL COMPOSITION COMPRISING A NANOEMULSION AND OF AT LEAST ONE ANTILEISHMANIAL COMPOUND, AND METHOD FOR THE TREATMENT OF CUTANEOUS LEISHMANIASI</b>	[54] <b>COMPOSITIONS, COMPRISING SILVER NANOPATELETS</b>	[54] <b>MONOCLONAL ANTIBODIES DIRECTED AGAINST PROGRAMMED DEATH-1 PROTEIN AND THEIR USE IN MEDICINE</b>
[54] <b>COMPOSITION, COMPOSITION PHARMACEUTIQUE, UTILISATION D'UNE COMPOSITION TOPIQUE STABLE COMPRENANT UNE NANOEMULSION, ET D'AU MOINS UN COMPOSE ANTI-LEISHMANIOSE, ET METHODES POUR LE TRAITEMENT DE LA LEISHMANIOSE CUTANE</b>	[54] <b>COMPOSITIONS COMPRENANT DES NANOPLAQUETTES D'ARGENT</b>	[54] <b>ANTICORPS MONOCLONAUX DIRIGES CONTRE LA PROTEINE DE MORT PROGRAMMEE 1 ET LEUR UTILISATION EN MEDECINE</b>
[72] RABELLO, ANA LUCIA TELES, BR	[72] GRIGORENKO, NIKOLAY A., CH	[72] SAHIN, UGUR, DE
[72] COSTA, JORGE CARLOS SANTOS DA, BR	[72] OSWALD, ANDRE, CH	[72] BECKMANN, KARSTEN, DE
[72] QUEIROZ, DINALVA BRITO DE, BR	[71] BASF SE, DE	[72] PAULMANN, CLAUDIA, DE
[72] TEIXEIRA, ELIANE DE MORAIS, BR	[85] 2023-05-08	[72] FELLERMEIER-KOPF, SINA, DE
[71] FUNDACAO OSWALDO CRUZ, BR	[86] 2021-11-09 (PCT/EP2021/081122)	[72] GIESEKE, FRIEDERIKE, DE
[85] 2023-05-08	[87] (WO2022/101207)	[72] MUIK, ALEXANDER, DE
[86] 2021-11-08 (PCT/BR2021/050487)	[30] EP (20206698.1) 2020-11-10	[72] KUZMANOV, IVAN, DE
[87] (WO2022/094685)		[71] BIONTECH SE, DE
[30] BR (BR102020022824-2) 2020-11-09		[85] 2023-05-08
		[86] 2021-11-11 (PCT/EP2021/081417)
		[87] (WO2022/101358)
		[30] EP (PCT/EP2020/081746) 2020-11-11
	[21] <b>3,197,948</b> [13] A1	[21] <b>3,197,953</b> [13] A1
	[51] <b>Int.Cl. H01Q 3/36 (2006.01) H01Q 1/40 (2006.01)</b>	[51] <b>Int.Cl. A61K 35/74 (2015.01) A61K 35/741 (2015.01)</b>
	[25] EN	[25] EN
	[54] <b>NONRECIPROCAL BEAM STEERABLE METASURFACES</b>	[54] <b>COMPOSITIONS AND METHODS USING AT LEAST ONE STRAIN OF STAPHYLOCOCCUS CARNOSUS THERAPEUTICALLY OR PROPHYLACTICALLY</b>
	[54] <b>METASURFACES ORIENTABLES A FAISCEAU NON RECIPROQUE</b>	[54] <b>COMPOSITIONS ET PROCEDES UTILISANT AU MOINS UNE SOUCHE DE STAPHYLOCOCCUS CARNOSUS A DES FINS THERAPEUTIQUES OU PROPHYLACTIQUES</b>
	[72] TARAVATI, SAJJAD, CA	[72] GIANNASCA, PAUL JOSEPH, US
	[72] ELEFThERIADES, GEORGE V., CA	[72] DUBOUX, STEPHANE, CH
	[71] LATYS INTELLIGENCE INC., CA	[71] SOCIETE DES PRODUITS NESTLE S.A., CH
	[85] 2023-05-08	[85] 2023-05-08
	[86] 2020-11-09 (PCT/CA2020/051514)	[86] 2021-12-22 (PCT/EP2021/087283)
	[87] (WO2022/094686)	[87] (WO2022/136544)
		[30] US (63/129,808) 2020-12-23

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[13] A1

[51] **Int.Cl. G01M 3/00 (2006.01) G01M 3/04 (2006.01) G01M 3/28 (2006.01) G03B 37/00 (2021.01) G03B 37/04 (2021.01)**

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[54] **LEAK DETECTION**  
[54] **DETECTION DE FUITE**  
[72] LANGDALE, SIMON JOHN, GB  
[71] SYNOVATE LIMITED, GB  
[85] 2023-05-08  
[86] 2021-11-11 (PCT/GB2021/052916)  
[87] (WO2022/101628)  
[30] GB (2017856.2) 2020-11-12

[21] **3,197,958**  
[13] A1

[51] **Int.Cl. C10G 11/18 (2006.01) C01B 3/32 (2006.01) C10G 69/04 (2006.01) C10K 3/04 (2006.01)**

[25] EN  
[54] **FCC CO-PROCESSING OF BIOMASS OIL**  
[54] **CO-TRAITEMENT D'UNE HUILE DE BIOMASSE PAR CRAQUAGE CATALYTIQUE FLUIDE**  
[72] KIM, HYUNG R., US  
[72] DAKKA, JIHAD M., US  
[72] XU, XIAOCHUN, US  
[71] EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY, US  
[85] 2023-05-08  
[86] 2021-11-02 (PCT/US2021/072172)  
[87] (WO2022/104314)  
[30] US (63/112,935) 2020-11-12

[21] **3,197,959**  
[13] A1

[51] **Int.Cl. A61K 31/685 (2006.01)**

[25] EN  
[54] **TRANSDERMAL DELIVERY FORMULATIONS**  
[54] **FORMULATIONS POUR ADMINISTRATION TRANSDERMIQUE**  
[72] FRIEDMAN, JOEL M., US  
[71] ALBERT EINSTEIN COLLEGE OF MEDICINE, US  
[85] 2023-05-08  
[86] 2021-11-09 (PCT/US2021/058611)  
[87] (WO2022/099193)  
[30] US (63/111,160) 2020-11-09  
[30] US (63/235,880) 2021-08-23  
[30] US (63/161,696) 2021-03-16

[21] **3,197,960**  
[13] A1

[51] **Int.Cl. A61G 7/10 (2006.01)**

[25] EN  
[54] **TRANSFER BOARDS**  
[54] **CARTES DE TRANSFERT**  
[72] CLARKE, CHRISTINE, GB  
[72] BUCKINGHAM, BRADLEY, GB  
[71] CLARKE, CHRISTINE, GB  
[71] BUCKINGHAM, BRADLEY, GB  
[85] 2023-05-08  
[86] 2021-11-11 (PCT/GB2021/052919)  
[87] (WO2022/101630)  
[30] GB (2017808.3) 2020-11-11

[21] **3,197,961**  
[13] A1

[51] **Int.Cl. C07K 1/22 (2006.01) A61K 47/62 (2017.01) C07C 49/16 (2006.01) C07K 1/10 (2006.01) C07K 7/06 (2006.01) C07K 7/08 (2006.01)**

[25] EN  
[54] **PEPTIDE CROSSLINKING AGENT AND CROSSLINKED PEPTIDE WHICH IS CROSSLINKED USING SAID CROSSLINKING AGENT**  
[54] **AGENT DE RETICULATION PEPTIDIQUE ET PEPTIDE RETICULE QUI EST RETICULE A L'AIDE DUDIT AGENT DE RETICULATION**  
[72] ITO, YUJI, JP  
[72] NAKAYAMA, HIROSHI, JP  
[72] RAFIQUE, MD ABDUR, JP  
[71] KAGOSHIMA UNIVERSITY, JP  
[85] 2023-05-08  
[86] 2021-10-22 (PCT/JP2021/039054)  
[87] (WO2022/097500)  
[30] JP (2020-186833) 2020-11-09  
[30] JP (2021-082739) 2021-05-14

[21] **3,197,962**  
[13] A1

[51] **Int.Cl. C12N 15/81 (2006.01)**

[25] EN  
[54] **YEAST PLATFORM FOR THE PRODUCTION OF VACCINES**  
[54] **PLATE-FORME DE LEVURES POUR LA PRODUCTION DE VACCINS**  
[72] MEHLGARTEN, CONSTANCE, DE  
[72] BREUNIG, KARIN, DE  
[72] ZABEL, RENE, DE  
[72] FRANKE, VOLKER, DE  
[72] KLEINDIENST, CAROLIN, DE  
[71] SERYMUN YEAST GMBH, DE  
[85] 2023-05-08  
[86] 2021-11-12 (PCT/EP2021/081604)  
[87] (WO2022/101456)  
[30] EP (20207352.4) 2020-11-13

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[21] **3,197,964**  
[13] A1

[51] **Int.Cl. H04L 67/02 (2022.01) H04L 9/40 (2022.01)**

[25] EN  
[54] **A SMART PASSWORD IMPLEMENTATION METHOD, APPARATUS, ELECTRONIC DEVICE AND COMPUTER-READABLE MEDIUM**  
[54] **PROCEDE ET APPAREIL DE MISE EN ?UVRE DE MOTS DE PASSE INTELLIGENTS, DISPOSITIF ELECTRONIQUE ET SUPPORT LISIBLE PAR ORDINATEUR**  
[72] JIANG, YUNFAN, CN  
[71] JIANG, YUNFAN, CN  
[85] 2023-05-08  
[86] 2021-12-16 (PCT/CN2021/138583)  
[87] (WO2022/174665)  
[30] CN (202110182503.5) 2021-02-16

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[13] A1

[51] **Int.Cl. A61K 31/05 (2006.01) A61P 25/20 (2006.01) A61P 25/22 (2006.01) A61P 25/24 (2006.01)**

[25] EN

[54] **USE OF CANNABIDIOL FOR THE TREATMENT OF PSYCHOLOGICAL DISTRESS**

[54] **UTILISATION DE CANNABIDIOL POUR LE TRAITEMENT D'UNE DETRESSE PSYCHOLOGIQUE**

[72] ROTH, SEBASTIAN, AU  
[72] VICKERY, ALISTAIR, AU  
[71] EMYRIA, AU  
[85] 2023-05-08  
[86] 2021-10-22 (PCT/AU2021/051235)  
[87] (WO2022/099347)  
[30] AU (2020904152) 2020-11-12  
[30] AU (2021901086) 2021-04-14

[21] **3,197,968**  
[13] A1

[51] **Int.Cl. B66C 13/12 (2006.01) E02F 1/00 (2006.01) E02F 9/00 (2006.01) E21C 25/00 (2006.01)**

[25] EN

[54] **ROTATION APPARATUS FOR BOOM OF MINING VEHICLE AND MINING VEHICLE**

[54] **APPAREIL DE ROTATION POUR BRAS DE VEHICULE MINIER ET VEHICULE MINIER**

[72] PIIPPONEN, JUHA, FI  
[72] ANTTONEN, PEKKA, FI  
[72] MAKSIMAINEN, JUSSI, FI  
[72] LAUNIS, SIRPA, FI  
[72] JARKKALA, JUHO, FI  
[72] KALLINEN, RISTO, FI  
[72] CONNELLY, STEPHEN, FI  
[72] ERONEN, KIMMO, FI  
[71] SANDVIK MINING AND CONSTRUCTION OY, FI  
[85] 2023-05-08  
[86] 2021-11-26 (PCT/EP2021/083181)  
[87] (WO2022/117460)  
[30] EP (20210928.6) 2020-12-01

[21] **3,197,971**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61P 31/14 (2006.01) C07K 14/005 (2006.01)**

[25] EN

[54] **PROTEIN-BASED NANOPARTICLE VACCINE FOR METAPNEUMOVIRUS**

[54] **VACCIN A NANOPARTICULES A BASE DE PROTEINE POUR METAPNEUMOVIRUS**

[72] FELDHAUS, ANDREW LAWRENCE, US  
[72] HOLTZMAN, DOUGLAS ANDREW, US  
[72] WOLF, CLANCEY BUCHANAN, US  
[71] ICOSAVAX, INC., US  
[85] 2023-05-08  
[86] 2021-11-11 (PCT/US2021/058989)  
[87] (WO2022/103967)  
[30] US (63/113,686) 2020-11-13

[21] **3,197,972**  
[13] A1

[51] **Int.Cl. A23N 12/08 (2006.01) A23F 5/04 (2006.01) A23N 12/12 (2006.01)**

[25] EN

[54] **METHOD TO CHECK A COFFEE BEANS ROASTING SYSTEM**

[54] **PROCEDE DE CONTROLE D'UN SYSTEME DE TORREFACTION DE GRAINS DE CAFE**

[72] MOREND, JOEL, CH  
[72] DUBIEF, FLAVIEN FLORENT, CH  
[72] BAEKELANDT, MAXIME, BE  
[71] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2023-05-08  
[86] 2021-12-06 (PCT/EP2021/084433)  
[87] (WO2022/144149)  
[30] EP (20217999.0) 2020-12-31

[21] **3,197,973**  
[13] A1

[51] **Int.Cl. C09C 1/04 (2006.01) C09D 7/62 (2018.01) C09C 3/06 (2006.01) C09D 5/10 (2006.01) C09D 183/02 (2006.01) C09D 201/00 (2006.01) C23C 26/00 (2006.01)**

[25] EN

[54] **RUST PREVENTIVE COATING COMPOSITION, RUST PREVENTIVE FILM, AND ARTICLE, AND ZINC-BASED COMPOSITE PARTICLES AND COMPOSITION CONTAINING ZINC-BASED COMPOSITE PARTICLES**

[54] **COMPOSITION DE REVETEMENT ANTIROUILLE, FILM ANTIROUILLE ET ARTICLE ET PARTICULES COMPOSITES A BASE DE ZINC ET COMPOSITION CONTENANT DES PARTICULES COMPOSITES A BASE DE ZINC**

[72] OHTANI, TAKAHIKO, JP  
[72] TAMAKI, SATORU, JP  
[72] KURAMOTO, TOMOKO, JP  
[72] NAKAO, TAKAYUKI, JP  
[72] TAMAURA, HIROKI, JP  
[71] NOF METAL COATINGS ASIA PACIFIC CO.,LTD., JP  
[71] TOYO ALUMINIUM KABUSHIKI KAISHA, JP  
[85] 2023-05-08  
[86] 2021-10-12 (PCT/JP2021/037790)  
[87] (WO2022/118539)  
[30] JP (2020-200323) 2020-12-02

[21] **3,197,975**  
[13] A1

[51] **Int.Cl. A61L 27/36 (2006.01)**

[25] EN

[54] **CARDIAC VALVE PROSTHESIS**

[54] **PROTHESE DE VALVULE CARDIAQUE**

[72] SCHMITT, BORIS, DE  
[71] GROWNVALVE GMBH, DE  
[85] 2023-05-08  
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[87] (WO2022/122979)  
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[21] **3,197,976**  
[13] A1

[51] **Int.Cl. B65D 41/00 (2006.01)**  
[25] EN  
[54] **CONTAINERS AND METHODS OF USING THE SAME**  
[54] **CONTENANTS ET PROCEDES D'UTILISATION DE TELS CONTENANTS**  
[72] KNOBEL, SIMON, US  
[72] LEUNG, DAVID TAI WAI, US  
[72] ANDERSSON, PETER GUSTAV, US  
[72] BAZIRGAN, COLETTE EUGENIE, US  
[72] CORDEIRO, MANUEL ARMATA, US  
[72] RENZI, ROBERT JAKE, US  
[71] CR PACKAGING LLC, US  
[85] 2023-05-08  
[86] 2021-11-10 (PCT/US2021/058832)  
[87] (WO2022/103872)  
[30] US (63/112,135) 2020-11-10  
[30] US (63/195,662) 2021-06-01

[21] **3,197,979**  
[13] A1

[51] **Int.Cl. H04L 65/60 (2022.01) H04L 65/61 (2022.01) H04L 65/612 (2022.01) H04L 65/80 (2022.01)**  
[25] EN  
[54] **METHOD AND CONTROLLER FOR AUDIO AND/OR VIDEO CONTENT DELIVERY**  
[54] **PROCEDE ET DISPOSITIF DE COMMANDE DE DISTRIBUTION DE CONTENU AUDIO ET/OU VIDEO**  
[72] BICHOT, GUILLAUME, FR  
[72] GUERY, PIERRE-JEAN, FR  
[72] RICHARD, VINCENT, FR  
[72] LE SCOUARNEC, NICOLAS, FR  
[71] BROADPEAK, FR  
[85] 2023-05-08  
[86] 2021-11-09 (PCT/EP2021/081053)  
[87] (WO2022/101176)  
[30] EP (20306377.1) 2020-11-13

[21] **3,197,980**  
[13] A1

[51] **Int.Cl. A61B 17/86 (2006.01)**  
[25] EN  
[54] **FASTENING DEVICES, SYSTEMS, AND METHODS**  
[54] **DISPOSITIFS, SYSTEMES ET PROCEDES DE FIXATION**  
[72] HYER, RICHARD JUSTIN, US  
[72] BITTER, JONATHAN, US  
[71] RTG SCIENTIFIC, LLC, US  
[85] 2023-05-08  
[86] 2021-11-19 (PCT/US2021/060175)  
[87] (WO2022/109322)  
[30] US (63/116,092) 2020-11-19  
[30] US (63/147,640) 2021-02-09  
[30] US (17/314,028) 2021-05-06  
[30] US (17/314,030) 2021-05-06

[21] **3,197,983**  
[13] A1

[51] **Int.Cl. G01N 1/28 (2006.01) G01N 1/44 (2006.01) G01N 33/483 (2006.01)**  
[25] EN  
[54] **UV COATINGS AND DYES FOR LASER CAPTURE MICRODISSECTION**  
[54] **REVETEMENTS ET COLORANTS UV POUR LA MICRODISSECTION PAR CAPTURE LASER**  
[72] LIOTTA, LANCE A., US  
[72] KUNKEL, ALESSANDRA LUCHINI, US  
[72] HOWARD, MARISSA ASHTON, US  
[72] STILL, AMANDA HAYMOND, US  
[72] SOMANCHI, HARINI, US  
[72] PAPPALARDO, PHILIP ANDREW, US  
[71] GEORGE MASON RESEARCH FOUNDATION, INC., US  
[85] 2023-05-08  
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[87] (WO2022/103754)  
[30] US (63/111,955) 2020-11-10

[21] **3,197,985**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) C07D 403/14 (2006.01)**  
[25] EN  
[54] **DIHYDROISOQUINOLINONE AND ISOINDOLINONE DERIVATIVES AND USES THEREOF**  
[54] **DERIVES DE DIHYDROISOQUINOLINONE ET D'ISOINDOLINONE ET LEURS UTILISATIONS**  
[72] LIU, QINGSONG, CN  
[72] LIU, JING, CN  
[72] WU, YUN, CN  
[72] WANG, BEILEI, CN  
[72] WANG, AOLI, CN  
[72] HU, CHEN, CN  
[72] LIU, QINGWANG, CN  
[72] ZOU, FENGMING, CN  
[72] WANG, WENCHAO, CN  
[72] WANG, ZUOWEI, CN  
[72] CAO, JIANGYAN, CN  
[72] SHI, CHENLIANG, CN  
[72] WANG, LI, CN  
[71] HEFEI INSTITUTES OF PHYSICAL SCIENCE, CHINESE ACADEMY OF SCIENCES, CN  
[85] 2023-05-08  
[86] 2021-10-21 (PCT/CN2021/125280)  
[87] (WO2022/105526)  
[30] CN (202011308146.4) 2020-11-20

[21] **3,197,986**  
[13] A1

[51] **Int.Cl. A61K 31/357 (2006.01) A61P 13/12 (2006.01)**  
[25] EN  
[54] **DUAL TNFR1 ANTAGONISTS AND TNFR2 AGONISTS FOR USE IN RENAL DISEASES**  
[54] **COMPOSES A DOUBLE ACTION ANTAGONISTES DU TNFR1 ET AGONISTES DU TNFR2 DESTINES A ETRE UTILISES DANS DES NEPHROPATHIES**  
[72] STEINNESS, EVA, DK  
[72] SKARSFELDT, TORBEN FRANK, DK  
[71] SERODUS ASA, NO  
[85] 2023-05-08  
[86] 2021-11-12 (PCT/EP2021/081482)  
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[21] **3,197,987**  
[13] A1

[51] **Int.Cl. C12P 19/14 (2006.01) C12P 7/10 (2006.01)**

[25] EN

[54] **METHOD FOR CONTROLLING THE PRETREATMENT AND/OR ENZYMATIC HYDROLYSIS OF A LIGNOCELLULOSIC MATERIAL**

[54] **PROCEDE POUR REGULER UN PRETRAITEMENT ET/OU UNE HYDROLYSE ENZYMATIQUE D'UNE MATIERE LIGNOCELLULOSIQUE**

[72] CAVKA, ADNAN, SE

[72] SUNDVALL, ELIAS, SE

[71] SEKAB E-TECHNOLOGY AB, SE

[85] 2023-05-08

[86] 2021-12-09 (PCT/EP2021/084982)

[87] (WO2022/122912)

[30] EP (20213392.2) 2020-12-11

[21] **3,197,990**  
[13] A1

[51] **Int.Cl. C12P 7/10 (2006.01) C12P 19/14 (2006.01)**

[25] EN

[54] **METHOD FOR CONTROLLED PRETREATMENT AND/OR ENZYMATIC HYDROLYSIS OF A LIGNOCELLULOSIC MATERIAL**

[54] **PROCEDE DE PRETRAITEMENT CONTROLE ET/OU D'HYDROLYSE ENZYMATIQUE D'UNE MATIERE LIGNOCELLULOSIQUE**

[72] CAVKA, ADNAN, SE

[72] SUNDVALL, ELIAS, SE

[71] SEKAB E-TECHNOLOGY AB, SE

[85] 2023-05-08

[86] 2021-12-09 (PCT/EP2021/084976)

[87] (WO2022/122907)

[30] EP (20213385.6) 2020-12-11

[21] **3,197,993**  
[13] A1

[51] **Int.Cl. H04N 21/266 (2011.01) H04N 21/2668 (2011.01) H04N 21/6405 (2011.01) H04N 21/6408 (2011.01) H04N 21/81 (2011.01) H04N 21/8358 (2011.01) H04N 21/845 (2011.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR CUSTOMIZED AUDIO AND/OR VIDEO CONTENT DELIVERY**

[54] **PROCEDE ET SYSTEME DE DISTRIBUTION DE CONTENU AUDIO ET/OU VIDEO PERSONNALISE**

[72] LE SCOUARNEC, NICOLAS, FR

[72] STERKERS, DAMIEN, FR

[71] BROADPEAK, FR

[85] 2023-05-08

[86] 2021-11-10 (PCT/EP2021/081192)

[87] (WO2022/101243)

[30] EP (20306373.0) 2020-11-13

[21] **3,197,988**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01) A61K 39/135 (2006.01) C07K 14/09 (2006.01) C12N 7/00 (2006.01) C12N 9/50 (2006.01) C12N 15/42 (2006.01) C12N 15/56 (2006.01) C12N 15/85 (2006.01) C12P 21/00 (2006.01)**

[25] EN

[54] **DNA CONSTRUCT FOR STABLY PRODUCING EMPTY CAPSIDS OF THE FOOT-AND-MOUTH DISEASE VIRUS IN MAMMALIAN CELLS; PROCESSES, USES, AND COMPOSITIONS THEREOF**

[54] **CONSTRUCTION D'ADN POUR PRODUIRE DE MANIERE STABLE DES CAPSIDES VIDES DU VIRUS DE LA FIEVRE APHTEUSE DANS DES CELLULES DE MAMMIFERE ; PROCEDES, UTILISATIONS ET COMPOSITIONS DE CELLE-C**

[72] MIGNAQUI, ANA CLARA, AR

[72] WIGODOROVITZ, ANDRES, AR

[72] DUROCHER, YVES, CA

[71] INSTITUTO NACIONAL DE TECNOLOGIA AGROPECUARIA, AR

[71] NATIONAL RESEARCH COUNCIL OF CANADA, CA

[85] 2023-05-08

[86] 2021-11-09 (PCT/CA2021/051592)

[87] (WO2022/094730)

[30] AR (P20200103102) 2020-11-09

[21] **3,197,992**  
[13] A1

[51] **Int.Cl. H01M 4/02 (2006.01) H01M 4/04 (2006.01) H01M 4/12 (2006.01) H01M 4/24 (2006.01) H01M 10/30 (2006.01) H01M 12/06 (2006.01) H01M 12/08 (2006.01)**

[25] EN

[54] **METHOD OF IRON ELECTRODE MANUFACTURE AND ARTICLES AND SYSTEMS THEREFROM**

[54] **PROCEDE DE FABRICATION D'ELECTRODE EN FER ET ARTICLES ET SYSTEMES A PARTIR DE CELUI-CI**

[72] GIBSON, MICHAEL ANDREW, US

[72] PANTANO, JOSEPH ANTHONY, US

[72] CHAKRABORTY, RUPAK, US

[72] PERKINS, NICHOLAS REED, US

[72] WOODFORD, WILLIAM HENRY, US

[72] SACHA, VALERIE CHRISTINE, US

[72] MORGAN, ROBERT WESLEY, US

[72] WEBER, ERIC, US

[72] CHEVRIER, VINCENT, US

[72] LIOTTA, ANDREW HAYNES, US

[72] THOMAS-ALYEA, KAREN, US

[72] NATION, LEAH, US

[72] CHON, MICHAEL, US

[72] EISENACH, REBECCA MARIE, US

[71] FORM ENERGY, INC., US

[85] 2023-05-08

[86] 2021-11-10 (PCT/US2021/058859)

[87] (WO2022/103893)

[30] US (63/112,539) 2020-11-11

[30] US (63/193,424) 2021-05-26

[21] **3,197,994**  
[13] A1

[51] **Int.Cl. A61B 5/145 (2006.01) A61B 5/1486 (2006.01) A61M 5/14 (2006.01)**

[25] EN

[54] **AN ANALYTE SENSOR AND SHARP FOR DELIVERING A THERAPEUTIC AGENT IN CLOSE PROXIMITY TO AN ANALYTE SENSOR AND METHODS THEREFORE**

[54] **CAPTEUR D'ANALYTE ET EMBOUT POINTU POUR L'ADMINISTRATION D'UN AGENT THERAPEUTIQUE A PROXIMITE IMMEDIATE D'UN CAPTEUR D'ANALYTE ET METHODES ASSOCIEES**

[72] CLARY, JACOB, US

[72] LATOUR, JOHN V., US

[72] HOSS, UDO, US

[72] OU, JUNLI, US

[72] CANNADY, NOLAN R., US

[71] ABBOTT DIABETES CARE INC., US

[85] 2023-05-08

[86] 2022-01-03 (PCT/US2022/011058)

[87] (WO2022/147512)

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[21] **3,197,999**  
[13] A1

[51] **Int.Cl. C12N 15/35 (2006.01) C07K 14/015 (2006.01)**  
[25] EN  
[54] **RECOMBINANT ADENO-ASSOCIATED VIRUSES WITH ENHANCED LIVER TROPISM AND USES THEREOF**  
[54] **VIRUS ADENO-ASSOCIES RECOMBINES A TROPISME HEPATIQUE AMELIORE ET LEURS UTILISATIONS**  
[72] ZHANG, TINGTING, CN  
[72] WANG, CHAO, CN  
[71] BEIJING SOLOBIO GENETECHNOLOGY CO., LTD., CN  
[85] 2023-05-08  
[86] 2021-11-16 (PCT/CN2021/130784)  
[87] (WO2022/100748)  
[30] CN (PCT/CN2020/129001) 2020-11-16

[21] **3,198,002**  
[13] A1

[51] **Int.Cl. A61K 47/46 (2006.01) A23L 29/00 (2016.01) A23L 29/10 (2016.01) A23L 29/20 (2016.01) A23L 33/105 (2016.01) A23L 33/15 (2016.01) A23L 33/16 (2016.01) A23L 3/3472 (2006.01) A23L 3/3481 (2006.01) A61K 9/14 (2006.01) A61K 45/00 (2006.01) A61K 47/12 (2006.01) A61K 47/14 (2017.01) A61K 47/26 (2006.01) A61K 47/36 (2006.01) A61P 3/02 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS COMPRISING VITAMINS/MINERALS IN A POLYPHENOLIC MATRIX, METHODS AND USES THEREOF**  
[54] **COMPOSITIONS COMPRENANT DES VITAMINES/MINERAUX DANS UNE MATRICE POLYPHENOLIQUE, PROCEDES ET UTILISATIONS DE CELLES-CI**  
[72] DI STEFANO, FABRIZIO, CA  
[71] PROMEDX INNOVATIONS INC., CA  
[85] 2023-05-08  
[86] 2021-11-03 (PCT/CA2021/051555)  
[87] (WO2022/094704)  
[30] US (63/110,495) 2020-11-06

[21] **3,198,003**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) C12N 15/117 (2010.01) A61K 39/39 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **ANTI-GARP/TGF? ANTIBODIES AND METHODS OF USE**  
[54] **ANTICORPS ANTI-GARP/TGF? ET METHODES D'UTILISATION**  
[72] WANG, JIIN-TARNG, CN  
[72] TSENG, CHI-LING, CN  
[72] JIANG, WEI-DONG, CN  
[72] CHEN, BIN, CN  
[72] XU, YAO, CN  
[72] GAO, JIE, CN  
[71] SHANGHAI HENLIUS BIOTECH, INC., CN  
[85] 2023-05-08  
[86] 2021-11-24 (PCT/CN2021/132753)  
[87] (WO2022/116877)  
[30] CN (PCT/CN2020/133398) 2020-12-02

[21] **3,198,004**  
[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01)**  
[25] EN  
[54] **METHODS USING CHARACTERISTICS OF URINARY AND OTHER DNA**  
[54] **PROCEDES UTILISANT DES CARACTERISTIQUES DE L'URINE ET D'AUTRES ADN**  
[72] LO, YUK-MING DENNIS, CN  
[72] CHAN, KWAN CHEE, CN  
[72] JIANG, PEIYONG, CN  
[72] CHENG, SUK HANG, CN  
[72] ZHOU, ZE, CN  
[72] XIE, TINGTING, CN  
[72] WANG, GUANGYA, CN  
[72] DING, CHEN, CN  
[71] THE CHINESE UNIVERSITY OF HONG KONG, CN  
[71] GRAIL, INC., US  
[85] 2023-05-08  
[86] 2021-12-07 (PCT/CN2021/136087)  
[87] (WO2022/121894)  
[30] US (63/122,669) 2020-12-08  
[30] US (63/193,508) 2021-05-26

[21] **3,198,005**  
[13] A1

[51] **Int.Cl. B65G 1/04 (2006.01) B65G 63/00 (2006.01)**  
[25] EN  
[54] **MULTI-LEVEL CONTAINER STORAGE SYSTEM AND HIGH-BAY CONTAINER STORAGE**  
[54] **SYSTEME DE STOCKAGE DE CONTENEURS MULTI-NIVEAUX ET STOCKAGE GRANDE HAUTEUR DE CONTENEURS**  
[72] MATIKAINEN, JANI, FI  
[72] PIIRTO, JOUNI, FI  
[71] PESMEL OY, FI  
[85] 2023-05-08  
[86] 2020-11-09 (PCT/FI2020/050740)  
[87] (WO2022/096773)

[21] **3,198,006**  
[13] A1

[51] **Int.Cl. E02F 3/40 (2006.01)**  
[25] EN  
[54] **TILT BUCKET ASSEMBLY FOR AN EXCAVATOR**  
[54] **ENSEMBLE GODET D'INCLINAISON POUR EXCAVATRICE**  
[72] FREY, STEVEN OSCAR, CA  
[72] MYER, DWIGHT COLIN, CA  
[71] AMI ATTACHMENTS INC., CA  
[85] 2023-05-08  
[86] 2021-10-21 (PCT/CA2021/051480)  
[87] (WO2022/094693)  
[30] US (63/111,242) 2020-11-09

[21] **3,198,008**  
[13] A1

[51] **Int.Cl. F41J 5/02 (2006.01) F41A 17/08 (2006.01) F41G 3/26 (2006.01) F41J 5/04 (2006.01) F41J 9/14 (2006.01)**  
[25] EN  
[54] **TRAINING APPARATUS INCLUDING A WEAPON**  
[54]  
[72] THOMA, MARCEL, CH  
[71] MERITIS AG, CH  
[85] 2023-05-08  
[86] 2021-10-22 (PCT/EP2021/079338)  
[87] (WO2022/096288)  
[30] DE (10 2020 129 255.4) 2020-11-06

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[21] **3,198,010**  
[13] A1

[51] **Int.Cl. B66B 19/00 (2006.01)**  
[25] EN  
[54] **MODULAR ELEVATOR SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES D'ASCENSEUR MODULAIRE**  
[72] BELLISSIMO, MARK JOSEPH, US  
[72] KELSCH, ROBERT FRANCIS, US  
[72] BEARD JR., STANLEY CLARK, US  
[72] HUNSINGER, JASON DARYL, US  
[71] BUILDZ, LLC, US  
[85] 2023-05-08  
[86] 2021-11-10 (PCT/US2021/058724)  
[87] (WO2022/103795)  
[30] US (63/111,989) 2020-11-10

[21] **3,198,011**  
[13] A1

[51] **Int.Cl. A24F 40/50 (2020.01) A24F 40/46 (2020.01) A24F 40/51 (2020.01) A24F 40/57 (2020.01)**  
[25] EN  
[54] **AEROSOL GENERATING APPARATUS AND METHOD FOR CONTROLLING HEATING TIME OF HEATER**  
[54] **APPAREIL DE PRODUCTION D'AEROSOL ET PROCEDE DE COMMANDE DE TEMPS DE CHAUFFAGE DE DISPOSITIF DE CHAUFFAGE**  
[72] KIM, YONG HWAN, KR  
[72] YOON, SUNG WOOK, KR  
[72] LEE, SEUNG WON, KR  
[72] JANG, SEOK SU, KR  
[72] HAN, DAE NAM, KR  
[71] KT&G CORPORATION, KR  
[85] 2023-05-08  
[86] 2021-12-28 (PCT/KR2021/095142)  
[87] (WO2022/149808)  
[30] KR (10-2021-0000842) 2021-01-05

[21] **3,198,012**  
[13] A1

[51] **Int.Cl. B65D 21/08 (2006.01) B65D 51/28 (2006.01)**  
[25] EN  
[54] **A CONTAINER**  
[54] **CONTENANT**  
[72] LIDSTRAND, MARTIN, SE  
[72] SVENSSON, RICHARD, SE  
[72] PATEL, PANKAJ, US  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-05-08  
[86] 2021-11-19 (PCT/GB2021/053012)  
[87] (WO2022/106845)  
[30] US (63/116,357) 2020-11-20

[21] **3,198,013**  
[13] A1

[51] **Int.Cl. E04B 1/343 (2006.01) E04B 1/348 (2006.01)**  
[25] EN  
[54] **CONNECTORS FOR ASSEMBLING MODULAR BUILDING UNITS**  
[54] **CONNECTEURS POUR L'ASSEMBLAGE D'UNITES DE CONSTRUCTION MODULAIRES**  
[72] BELLISSIMO, MARK JOSEPH, US  
[72] KELSCH, ROBERT FRANCIS, US  
[72] BEARD, STANLEY CLARK JR., US  
[72] HUNSINGER, JASON DARYL, US  
[71] BUILDZ, LLC, US  
[85] 2023-05-08  
[86] 2021-11-11 (PCT/US2021/058922)  
[87] (WO2022/103928)  
[30] US (63/112,484) 2020-11-11

[21] **3,198,014**  
[13] A1

[51] **Int.Cl. A61K 31/4152 (2006.01) A61P 21/04 (2006.01) A61P 25/28 (2006.01) A61P 39/06 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITION FOR ORAL ADMINISTRATION OF EDARAVONE AND METHOD OF ADMINISTERING SAME**  
[54] **COMPOSITION PHARMACEUTIQUE POUR L'ADMINISTRATION PAR VOIE ORALE D'EDARAVONE ET PROCEDE POUR SON ADMINISTRATION**  
[72] SHIMIZU, HIDETOSHI, JP  
[72] NAKAMARU, YOSHINOBU, JP  
[72] NISHIMURA, YUKIKO, JP  
[71] MITSUBISHI TANABE PHARMA CORPORATION, JP  
[85] 2023-05-08  
[86] 2021-11-12 (PCT/JP2021/041673)  
[87] (WO2022/102737)  
[30] JP (2020-188514) 2020-11-12

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[21] **3,198,017**  
[13] A1

[51] **Int.Cl. E06B 9/84 (2006.01) E05F 15/40 (2015.01) E05F 15/684 (2015.01)**  
[25] EN  
[54] **EMERGENCY BRAKE DEVICE FOR OCCURRENCE OF ACCELERATION OF ELEVATOR DOOR**  
[54] **DISPOSITIF DE FREINAGE D'URGENCE EN CAS D'APPARITION D'UNE ACCELERATION DE PORTE D'ASCENSEUR**  
[72] LEE, KYONG KYU, KR  
[71] JOKANGFOD CO., LTD., KR  
[85] 2023-05-08  
[86] 2021-11-03 (PCT/KR2021/015818)  
[87] (WO2022/103061)  
[30] KR (10-2020-0151343) 2020-11-12

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[21] **3,198,022**  
[13] A1

[51] **Int.Cl. B26D 1/22 (2006.01) B26D 1/24 (2006.01) B26D 1/26 (2006.01) B26F 1/20 (2006.01) B26F 1/44 (2006.01)**

[25] EN

[54] **DIE CUTTING STATION FOR A PACKAGING LINE**

[54] **POSTE DE DECOUPAGE A LA FORME POUR UNE CHAINE DE CONDITIONNEMENT**

[72] FORMAN, JO ANNE, US

[72] LINCOLN, ROBERT E., US

[71] SEALSTRIP CORPORATION, US

[85] 2023-05-08

[86] 2021-11-16 (PCT/US2021/059515)

[87] (WO2022/108925)

[30] US (16/950,626) 2020-11-17

[21] **3,198,024**  
[13] A1

[51] **Int.Cl. C07D 239/91 (2006.01) A61M 1/16 (2006.01) C07C 235/56 (2006.01) C07D 207/16 (2006.01) C07D 213/81 (2006.01) C07D 239/88 (2006.01) C07D 239/90 (2006.01) C07D 239/94 (2006.01) C07D 239/96 (2006.01) C07D 275/03 (2006.01) C07D 277/56 (2006.01) C07D 333/38 (2006.01) C07D 401/06 (2006.01) C07D 401/10 (2006.01) C07D 401/12 (2006.01) C07D 401/14 (2006.01) C07D 403/06 (2006.01) C07D 403/10 (2006.01) C07D 413/10 (2006.01) C07D 417/06 (2006.01) C07D 417/12 (2006.01) C07D 417/14 (2006.01) C07D 471/04 (2006.01) C07D 487/04 (2006.01) C07D 495/04 (2006.01)**

[25] EN

[54] **DICHLOROPHENOL HSD17B13 INHIBITORS AND USES THEREOF**

[54] **INHIBITEURS DE DICHLOROPHENOL HSD17B13 ET UTILISATIONS DE CEUX-CI**

[72] ANANDAN, SAMPATH KUMAR, US

[72] ODINGO, JOSHUA, US

[72] HSU, HEATHER KAY WEBB, US

[72] FLORIO, VINCENT, US

[72] TANTRY, SUBRAMANYAM JANARDHAN, IN

[72] DURAISWAMY, ATHISAYAMANI JEYARAJ, IN

[71] INIPHARM, INC., US

[85] 2023-05-08

[86] 2021-11-11 (PCT/US2021/058978)

[87] (WO2022/103960)

[30] US (63/113,555) 2020-11-13

[30] US (63/113,557) 2020-11-13

[30] US (63/170,855) 2021-04-05

[30] US (63/225,282) 2021-07-23

[21] **3,198,025**  
[13] A1

[51] **Int.Cl. A61M 1/14 (2006.01) A61M 1/16 (2006.01) A61M 1/28 (2006.01) A61M 1/36 (2006.01)**

[25] EN

[54] **DIALYSIS SYSTEM AND METHODS**

[54] **SYSTEME ET PROCEDES DE DIALYSE**

[72] HU, DEAN, US

[72] RIVAS, LOGAN, US

[71] OUTSET MEDICAL, INC., US

[85] 2023-05-08

[86] 2021-11-09 (PCT/US2021/058651)

[87] (WO2022/099202)

[30] US (63/111,360) 2020-11-09

[21] **3,198,027**  
[13] A1

[51] **Int.Cl. C12N 15/10 (2006.01) C12N 15/67 (2006.01)**

[25] EN

[54] **CELLS, TISSUES, ORGANS, AND ANIMALS HAVING ONE OR MORE MODIFIED GENES FOR ENHANCED XENOGRAFT SURVIVAL AND TOLERANCE**

[54] **CELLULES, TISSUS, ORGANES ET ANIMAUX AYANT UN OU PLUSIEURS GENES MODIFIES POUR UNE SURVIE ET UNE TOLERANCE DE XENOGREFFE AMELIOREES**

[72] LAYER, JACOB, US

[72] QIN, WENNING, US

[72] KAN, YINAN, US

[72] CRABTREE, JULIET, US

[72] YOUD, MICHELE, US

[72] HEJA, DAVID, US

[72] ANGELES ALBORES, DAVID, US

[72] ANAND, RANJITH, US

[72] PERRAT, PAOLA, US

[72] ERNST, RUSSELL, US

[72] PARAGAS, VIOLETTE, US

[71] EGENESIS, INC., US

[85] 2023-05-08

[86] 2021-11-12 (PCT/US2021/059265)

[87] (WO2022/104155)

[30] US (63/113,650) 2020-11-13

[30] US (63/218,080) 2021-07-02

[30] US (63/247,544) 2021-09-23

[21] **3,198,031**  
[13] A1

[51] **Int.Cl. A43B 21/24 (2006.01) A43B 1/04 (2022.01) A43B 5/10 (2006.01) A43B 5/18 (2006.01)**

[25] EN

[54] **RAPID-ENTRY FOOTWEAR HAVING A SPLIT BACK**

[54] **ARTICLE CHAUSSANT A ENTREE RAPIDE AYANT UN DOS FENDU**

[72] CHENEY, CRAIG, US

[72] JOHNSON, BRADLEY, US

[71] FAST IP, LLC, US

[85] 2023-05-08

[86] 2021-11-16 (PCT/US2021/059496)

[87] (WO2022/108917)

[30] US (63/116,395) 2020-11-20

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[21] **3,198,046**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/10 (2006.01) A61K 9/107 (2006.01) A61K 9/14 (2006.01) A61K 31/00 (2006.01) A61K 47/14 (2017.01) A61K 47/20 (2006.01) A61K 47/24 (2006.01) A61K 47/32 (2006.01) A61K 47/34 (2017.01) A61K 47/38 (2006.01) A61P 17/00 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR DEEP DERMAL DRUG DELIVERY**

[54] **COMPOSITIONS ET PROCEDES POUR L'ADMINISTRATION DE MEDICAMENTS PAR VOIE INTRADERMIQUE PROFONDE**

[72] OSBORNE, DAVID W., US

[72] TOFIG, BABAK N., US

[71] ARCUTIS BIOTHERAPEUTICS, INC., US

[85] 2023-05-09

[86] 2021-11-16 (PCT/US2021/059487)

[87] (WO2022/108913)

[30] US (63/114,887) 2020-11-17

[30] US (63/221,349) 2021-07-13

[21] **3,198,071**  
[13] A1

[51] **Int.Cl. B65D 5/38 (2006.01) B65D 5/66 (2006.01) B65D 5/68 (2006.01)**

[25] EN

[54] **COVER WITH FIRST, SECOND AND THIRD ACTUATION AREAS**

[54] **COUVERCLE DOTE D'UNE PREMIERE, D'UNE DEUXIEME ET D'UNE TROISIEME SURFACE D'ACTIONNEMENT**

[72] HOEFTE, PAULUS ANTONIUS AUGUSTINUS, BE

[72] NG PAKLEUNG, CLARA SOPHIE LEA, BE

[71] THE PROCTER & GAMBLE COMPANY, US

[85] 2023-05-09

[86] 2022-02-07 (PCT/US2022/015412)

[87] (WO2022/173680)

[30] EP (21156133.7) 2021-02-09

[21] **3,198,078**  
[13] A1

[51] **Int.Cl. A61K 9/50 (2006.01) B01J 13/04 (2006.01) B01J 13/22 (2006.01) C11D 3/50 (2006.01)**

[25] EN

[54] **ENCASED OIL CORE MICROCAPSULES**

[54] **MICROCAPSULES A NOYAU D'HUILE ENVELOPPE**

[72] BIFFI, GIULIA, CH

[72] ROZAS, LUIS, CH

[72] BEN HADJ YOUSSEF, NESRINE, CH

[72] DIENER, MICHAEL, CH

[71] MICROCAPS AG, CH

[85] 2023-05-09

[86] 2021-11-15 (PCT/EP2021/081705)

[87] (WO2022/106361)

[30] CH (01473/20) 2020-11-18

[30] CH (00214/21) 2021-02-26

[21] **3,198,133**  
[13] A1

[51] **Int.Cl. B32B 27/32 (2006.01) B65D 1/00 (2006.01) C08L 23/14 (2006.01)**

[25] EN

[54] **POLYPROPYLENE MULTILAYER SHEET**

[54] **FEUILLE MULTICOUCHE DE POLYPROPYLENE**

[72] UENO, SHINGO, JP

[72] NAKAJIMA, TAKESHI, JP

[72] IKEDA, MASAYUKI, JP

[71] FP CORPORATION, JP

[71] SUNALLOMER LTD., JP

[85] 2023-05-09

[86] 2021-11-11 (PCT/JP2021/041523)

[87] (WO2022/102705)

[30] JP (2020-189249) 2020-11-13

[21] **3,198,134**  
[13] A1

[51] **Int.Cl. G16B 20/10 (2019.01) C12Q 1/6869 (2018.01) G16B 20/20 (2019.01)**

[25] EN

[54] **IMMUNOTHERAPY RESPONSE SIGNATURE**

[54] **SIGNATURE DE LA REPONSE A UNE IMMUNOTHERAPIE**

[72] ABRAHAM, JIM, US

[72] SPETZLER, DAVID, US

[71] CARIS MPI, INC., US

[85] 2023-05-09

[86] 2021-11-10 (PCT/US2021/058741)

[87] (WO2022/103809)

[30] US (63/112,035) 2020-11-10

[30] US (63/112,359) 2020-11-11

[21] **3,198,135**  
[13] A1

[51] **Int.Cl. G01S 13/89 (2006.01) G01S 13/90 (2006.01) H04B 7/185 (2006.01)**

[25] EN

[54] **MULTI-STATIC SYNTHETIC APERTURE RADAR USING LOW EARTH ORBIT COLLECTION**

[54] **RADAR A OUVERTURE SYNTHETIQUE MULTI-STATIQUE UTILISANT UNE COLLECTE D'ORBITE TERRESTRE BASSE**

[72] MILLER, CRAIG A., US

[72] GREENIDGE, DAVID D., US

[72] BUER, KENNETH V., US

[72] HANCHARIK, DAVID J., US

[71] VIASAT INC., US

[85] 2023-05-09

[86] 2020-11-13 (PCT/US2020/060602)

[87] (WO2022/103403)

[21] **3,198,136**  
[13] A1

[51] **Int.Cl. H02J 3/32 (2006.01)**

[25] EN

[54] **ENERGY CONTROL UTILIZING A VIRTUAL POWER PLANT**

[54] **REGULATION ENERGETIQUE UTILISANT UNE CENTRALE VIRTUELLE**

[72] MACAULAY, JEFFREY, US

[72] WEINKAM, JAMES, US

[72] RUTH, MICHAEL K., US

[72] HARSAMIZADEH TEHRANI, NIMA, US

[72] YOUNG, ERIC J., US

[71] POWER MANAGEMENT HOLDINGS (U.S.), INC., US

[85] 2023-05-09

[86] 2021-09-01 (PCT/US2021/048705)

[87] (WO2022/098424)

[30] US (63/111,580) 2020-11-09

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[21] **3,198,138**  
[13] A1

[51] **Int.Cl. A61K 47/64 (2017.01) A61P 19/08 (2006.01) A61P 25/28 (2006.01) C07K 14/78 (2006.01)**

[25] EN

[54] **MACROPINOCYTOSIS SELECTIVE MONOBODY-DRUG CONJUGATES**

[54] **CONJUGUES MONOCORPS-MEDICAMENT SELECTIFS DE MACROPINOCYTOSE**

[72] RAMIREZ, CRAIG, US

[72] HAUSER, ANDREW, US

[72] BEALS, NATHAN, US

[72] BAR-SAGI, DAFNA, US

[72] KOIDE, AKIKO, US

[72] KOIDE, SHOHEI, US

[71] NEW YORK UNIVERSITY, US

[85] 2023-05-09

[86] 2021-11-10 (PCT/US2021/058807)

[87] (WO2022/103856)

[30] US (63/112,039) 2020-11-10

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[21] **3,198,139**  
[13] A1

[51] **Int.Cl. G06Q 30/06 (2023.01) G06Q 10/08 (2023.01) G06Q 30/02 (2023.01) G06Q 40/02 (2023.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR IMPROVED VEHICLE TRANSACTION PLATFORMS**

[54] **SYSTEMES ET PROCEDES POUR PLATES-FORMES DE TRANSACTIONS DE VEHICULES AMELIOREES**

[72] LETAYF, MAZEN, US

[72] FAIRCLOTH, JOHN, US

[72] GUPTA, RAHUL, US

[71] COX AUTOMOTIVE, INC., US

[85] 2023-05-09

[86] 2021-11-05 (PCT/US2021/058328)

[87] (WO2022/108775)

[30] US (63/115,967) 2020-11-19

[30] US (17/129,497) 2020-12-21

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[21] **3,198,140**  
[13] A1

[51] **Int.Cl. A61F 2/30 (2006.01) A61F 2/38 (2006.01)**

[25] EN

[54] **KNEE REPLACEMENT IMPLANT HAVING STACKABLE SPACERS**

[54] **IMPLANT DE REMPLACEMENT DU GENOU COMPORTANT DES ENTRETOISES EMPILABLES**

[72] GREEN, JOHN M. II, US

[72] SMALL, LAURA, US

[71] ENCORE MEDICAL, L.P. (D/B/A DJO SURGICAL), US

[85] 2023-05-09

[86] 2021-11-29 (PCT/US2021/061017)

[87] (WO2022/119777)

[30] US (63/119,802) 2020-12-01

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[21] **3,198,150**  
[13] A1

[51] **Int.Cl. A61K 31/785 (2006.01) A61K 47/10 (2017.01) A61K 47/18 (2017.01) A61P 27/02 (2006.01) A61P 31/02 (2006.01) A61P 31/04 (2006.01)**

[25] EN

[54] **FORMULATION BASED ON POLYHEXAMETHYLENE BIGUANIDE FOR USE IN THE TREATMENT OF ACANTHAMOEBA KERATITIS AND/OR FUNGAL INFECTIONS**

[54] **FORMULATION A BASE DE POLYHEXAMETHYLENE BIGUANIDE DESTINEE A ETRE UTILISEE DANS LE TRAITEMENT DE LA KERATITE A ACANTHAMOEBA ET/OU D'INFECTIONS FONGIQUES**

[72] MOSCHETTI, VALERIA, IT

[72] PAPA, VINCENZO, IT

[72] SUDANO ROCCARO, ANDREA, IT

[72] SPINA, DONATO, IT

[72] ABBATE, ILENIA, IT

[71] SIFI S.P.A., IT

[85] 2023-05-09

[86] 2021-11-11 (PCT/IB2021/060451)

[87] (WO2022/101821)

[30] IT (10202000027155) 2020-11-12

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[21] **3,198,151**  
[13] A1

[51] **Int.Cl. G01N 23/20 (2018.01) G06N 20/00 (2019.01) G01N 23/223 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR IMPROVED MATERIAL SAMPLE ANALYSIS AND QUALITY CONTROL**

[54] **SYSTEMES ET PROCEDES D'ANALYSE ET DE CONTROLE DE QUALITE AMELIORES D'ECHANTILLON DE MATERIAU**

[72] DRAKE, BRANDON LEE GOODCHILD, US

[72] ZAWADZKI, RY NATHANIEL, AU

[71] DECISION TREE, LLC, US

[71] BLY IP INC., US

[85] 2023-05-09

[86] 2021-11-11 (PCT/US2021/058966)

[87] (WO2022/103952)

[30] US (63/112,518) 2020-11-11

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[21] **3,198,152**  
[13] A1

[51] **Int.Cl. A61M 25/00 (2006.01)**

[25] EN

[54] **REDUCED-SPILL HYDROPHILIC CATHETER PRODUCT WITH FOAMED HYDRATION LIQUID**

[54] **PRODUIT DE CATHETER HYDROPHILE A DEVERSEMENT REDUIT AVEC LIQUIDE D'HYDRATATION MOUSSE**

[72] PANESAR, SATWINDER S., US

[72] O'MALLEY, SHANE, US

[72] MCNULTY, VIVIENNE, US

[71] HOLLISTER INCORPORATED, US

[85] 2023-05-09

[86] 2021-11-02 (PCT/US2021/057656)

[87] (WO2022/108750)

[30] US (63/116,774) 2020-11-20

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[21] **3,198,154**  
[13] A1

[51] **Int.Cl. A24F 40/90 (2020.01) A24F 40/95 (2020.01) H01R 3/00 (2006.01) H01R 13/24 (2006.01) H01R 13/62 (2006.01) H02J 7/00 (2006.01)**

[25] EN

[54] **AEROSOL-GENERATING SYSTEM WITH IMPROVED ELECTRICAL CONNECTOR**

[54] **SYSTEME DE PRODUCTION D'AEROSOL A CONNECTEUR ELECTRIQUE PERFECTIONNE**

[72] AW, SZE CHIEK, SG  
[72] CHAN, TECK YAN, SG  
[72] EOW, YEONG TAUR, SG  
[72] RUSCIO, DANI, CH  
[71] PHILIP MORRIS PRODUCTS S.A., CH

[85] 2023-05-09  
[86] 2021-11-12 (PCT/EP2021/081602)  
[87] (WO2022/101454)  
[30] EP (20207598.2) 2020-11-13

[21] **3,198,155**  
[13] A1

[51] **Int.Cl. H01Q 1/22 (2006.01) H01Q 3/40 (2006.01) H01Q 21/06 (2006.01)**

[25] EN

[54] **INTEGRATED ANTENNA ARRAY WITH BEAMFORMER IC CHIPS HAVING MULTIPLE SURFACE INTERFACES**

[54] **RESEAU D'ANTENNES INTEGRE AYANT DES PUCES DE CIRCUIT INTEGRE DE FORMATION DE FAISCEAUX AYANT DE MULTIPLES INTERFACES DE SURFACE**

[72] FRANSON, STEVEN J., US  
[71] VIASAT INC., US  
[85] 2023-05-09  
[86] 2020-11-13 (PCT/US2020/060599)  
[87] (WO2022/103402)

[21] **3,198,156**  
[13] A1

[51] **Int.Cl. A01N 25/02 (2006.01) A01N 33/12 (2006.01) A01N 37/02 (2006.01) A01N 37/06 (2006.01) A01N 37/16 (2006.01) A01P 1/00 (2006.01) A23B 4/20 (2006.01) A23B 4/24 (2006.01)**

[25] EN

[54] **METHODS AND COMPOSITIONS FOR REDUCING MICROBIAL CONTAMINANTS DURING POULTRY PROCESSING**

[54] **PROCEDES ET COMPOSITIONS POUR REDUIRE LES CONTAMINANTS MICROBIENS PENDANT LE TRAITEMENT DE LA VOLAILLE**

[72] PINGULKAR, SARVESH D., IN  
[72] MHAISKAR, CHINTAMANI, IN  
[72] PAREKH, VISHAL J., IN  
[72] LIMBAUGH, DAVID, US  
[71] DIVERSEY, INC., US

[85] 2023-05-09  
[86] 2021-11-12 (PCT/US2021/059102)  
[87] (WO2022/104031)  
[30] IN (202031049758) 2020-11-13

[21] **3,198,158**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61P 25/28 (2006.01) C12N 15/00 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR CONTROLLED PROTEIN DEGRADATION IN NEURODEGENERATIVE DISEASE**

[54] **COMPOSITIONS ET METHODES DE DEGRADATION CONTROLEE DES PROTEINES DANS UNE MALADIE NEURODEGENERATIVE**

[72] BUTLER, DAVID, US  
[72] MESSER, ANNE, US  
[72] TEMPLE, SALLY, US  
[71] REGENERATIVE RESEARCH FOUNDATION, US

[85] 2023-05-09  
[86] 2021-11-11 (PCT/US2021/059001)  
[87] (WO2022/103977)  
[30] US (63/112,381) 2020-11-11  
[30] US (63/112,383) 2020-11-11  
[30] US (63/112,385) 2020-11-11

[21] **3,198,161**  
[13] A1

[51] **Int.Cl. G01N 33/68 (2006.01)**

[25] EN

[54] **USE OF ONE OR MORE BIOMARKERS TO DETERMINE TRAUMATIC BRAIN INJURY (TBI) IN A SUBJECT HAVING RECEIVED A HEAD COMPUTERIZED TOMOGRAPHY SCAN THAT IS NEGATIVE FOR A TBI**

[54] **UTILISATION D'UN OU PLUSIEURS BIOMARQUEURS POUR DETERMINER UN TRAUMATISME CRANIE (TBI) CHEZ UN SUJET SOUMIS A UN BALAYAGE DE TOMODENSITOMETRIE ASSISTEE PAR ORDINATEUR DE LA TETE A TBI NEGATI**

[72] MCQUISTON, BETH, US  
[72] DATWYLER, SAUL, US  
[72] CHANDRAN, RAJ, US  
[72] MARINO, JAIME, US  
[72] ZHANG, HONGWEI, US  
[71] ABBOTT LABORATORIES, US

[85] 2023-05-09  
[86] 2021-11-30 (PCT/US2021/061215)  
[87] (WO2022/119841)  
[30] US (63/120,062) 2020-12-01  
[30] US (63/170,873) 2021-04-05

[21] **3,198,162**  
[13] A1

[51] **Int.Cl. A61K 31/19 (2006.01) A61K 45/06 (2006.01)**

[25] EN

[54] **USE OF SHORT CHAIN FATTY ACIDS IN CANCER PREVENTION**

[54] **UTILISATION D'ACIDES GRAS A CHAINE COURTE DANS LA PREVENTION DU CANCER**

[72] FEITELSON, MARK A., US  
[72] ARZUMANYAN, ALLA, US  
[72] SPECTOR, IRA, US  
[71] TEMPLE UNIVERSITY OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION, US  
[71] SFA THERAPEUTICS, INC., US  
[71] FEITELSON, MARK A., US  
[71] ARZUMANYAN, ALLA, US  
[71] SPECTOR, IRA, US

[85] 2023-05-09  
[86] 2021-11-12 (PCT/US2021/059211)  
[87] (WO2022/104116)  
[30] US (63/112,783) 2020-11-12

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[21] **3,198,164**  
[13] A1

[51] **Int.Cl. A24D 3/18 (2006.01) A24F 13/02 (2006.01) A24F 13/04 (2006.01) A24F 13/06 (2006.01)**

[25] EN  
[54] **CAP**  
[54] **CAPUCHON**  
[72] HUGHES, STEVEN, GB  
[72] FRASER, RORY, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-05-09  
[86] 2021-09-29 (PCT/GB2021/052522)  
[87] (WO2022/101602)  
[30] GB (2017941.2) 2020-11-13

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[21] **3,198,167**  
[13] A1

[51] **Int.Cl. A24F 7/00 (2006.01) A24F 9/16 (2006.01) B65D 41/00 (2006.01)**

[25] EN  
[54] **CAP FOR SIMULATED SMOKING SYSTEMS**  
[54] **CAPUCHON POUR SYSTEMES DE SIMULATION DE L'ACTE DE FUMER**  
[72] SPINOLA, BONIFACIO, IT  
[72] ABDULLAH, AYAH, CA  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-05-09  
[86] 2021-09-29 (PCT/GB2021/052521)  
[87] (WO2022/101601)  
[30] GB (2017939.6) 2020-11-13

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[21] **3,198,284**  
[13] A1

[51] **Int.Cl. F16B 31/02 (2006.01) F16B 37/02 (2006.01) F16B 39/24 (2006.01) F16B 39/282 (2006.01) F16B 39/284 (2006.01)**

[25] EN  
[54] **TORQUE ABSORBING SURFACE**  
[54] **SURFACE D'ABSORPTION DE COUPLE**  
[72] BOWMAN, MATTHEW A., US  
[72] MADARA, SCOTT D., US  
[71] VICTAULIC COMPANY, US  
[85] 2023-05-10  
[86] 2021-10-26 (PCT/US2021/056558)  
[87] (WO2022/103571)  
[30] US (63/112,194) 2020-11-11

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[21] **3,198,295**  
[13] A1

[51] **Int.Cl. A23J 1/14 (2006.01) A23L 27/60 (2016.01) A23L 29/206 (2016.01) A23L 33/185 (2016.01)**

[25] EN  
[54] **POWDERED CHICKPEA-PROTEIN BASED EMULSIFIER, USES AND METHODS OF MANUFACTURE**  
[54] **EMULSIFIANT A BASE DE PROTEINES DE POIS CHICHES EN POUDRE, UTILISATIONS ET PROCEDES DE FABRICATION**  
[72] NGUYEN, QUYEN, US  
[72] YANG, XIN, US  
[72] ZHANG, CHRISTOPHER, US  
[71] CORN PRODUCTS DEVELOPMENT INC., US  
[85] 2023-05-10  
[86] 2021-10-27 (PCT/US2021/056733)  
[87] (WO2022/108714)  
[30] US (63/115,404) 2020-11-18

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[21] **3,199,186**  
[13] A1

[51] **Int.Cl. G21B 1/13 (2006.01) G21G 1/02 (2006.01)**

[25] EN  
[54] **BREEDER BLANKET**  
[54] **ENVELOPPE DE REGENERATION**  
[72] DAVIS, THOMAS, GB  
[72] MIDDLEBURGH, SIMON, GB  
[72] ASTBURY, JACK, GB  
[72] KAMAL, GURDEEP, GB  
[71] TOKAMAK ENERGY LTD, GB  
[85] 2023-05-16  
[86] 2021-11-19 (PCT/EP2021/082283)  
[87] (WO2022/106609)  
[30] GB (2018198.8) 2020-11-19

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[21] **3,199,370**  
[13] A1

[51] **Int.Cl. G01S 7/48 (2006.01) G01S 7/486 (2020.01) G01S 13/93 (2020.01) G01S 17/93 (2020.01)**

[25] EN  
[54] **SYSTEMS AND METHODS FOR VIDEO OBJECT SEGMENTATION**  
[54] **SYSTEMES ET PROCEDES DE SEGMENTATION D'OBJET VIDEO**  
[72] HOMAYOUNFAR, NAMDAR, US  
[72] MA, WEI-CHIU, US  
[72] URTASUN, RAQUEL, US  
[71] UATC, LLC, US  
[85] 2023-05-17  
[86] 2021-11-17 (PCT/US2021/059674)  
[87] (WO2022/109000)  
[30] US (63/114,811) 2020-11-17

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[21] **3,199,374**  
[13] A1

[51] **Int.Cl. H04N 5/60 (2006.01) H04N 21/439 (2011.01) H04N 7/15 (2006.01)**

[25] EN  
[54] **PROCESSING AND DISTRIBUTION OF AUDIO SIGNALS IN A MULTI-PARTY CONFERENCING ENVIRONMENT**  
[54] **TRAITEMENT ET DISTRIBUTION DE SIGNAUX AUDIO DANS UN ENVIRONNEMENT DE CONFERENCE COMPRENANT DE MULTIPLES PARTICIPANTS**  
[72] MALAN, D. HUGO, US  
[71] KELLY PROPERTIES, LLC, US  
[85] 2023-05-17  
[86] 2021-11-10 (PCT/US2021/058760)  
[87] (WO2022/108802)  
[30] US (63/115,596) 2020-11-18  
[30] US (17/453,949) 2021-11-08



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[21] **3,199,565**  
[13] A1

[51] **Int.Cl. E21B 33/12 (2006.01) E21B 47/26 (2012.01) E21B 47/06 (2012.01) E21B 47/12 (2012.01)**

[25] EN

[54] **WELL BARRIER SENSOR DATA STORAGE AND RETRIEVAL**

[54] **STOCKAGE ET RECUPERATION DE DONNEES DE CAPTEUR DE BARRIERE DE PUIT**

[72] ADAMS, KEITH, GB

[72] HUMPHREY, JON, GB

[71] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US

[85] 2023-05-18

[86] 2021-08-27 (PCT/US2021/047835)

[87] (WO2022/132247)

[30] US (17/126,599) 2020-12-18

[21] **3,199,686**  
[13] A1

[51] **Int.Cl. G02C 7/04 (2006.01) G02C 7/08 (2006.01) G02F 1/1339 (2006.01)**

[25] EN

[54] **FLEXIBLE LIQUID CRYSTAL-CONTAINING LENSES**

[54] **LENTILLES SOUPLES CONTENANT DES CRISTAUX LIQUIDES**

[72] OAG, ROBERT, GB

[72] FRITH, ROBIN, GB

[72] BASHTANOV, MIKHAIL, GB

[71] COOPERVISION INTERNATIONAL LIMITED, GB

[85] 2023-05-19

[86] 2022-01-25 (PCT/GB2022/050191)

[87] (WO2022/162350)

[30] US (63/143,157) 2021-01-29

[21] **3,199,706**  
[13] A1

[51] **Int.Cl. B65D 25/00 (2006.01)**

[25] EN

[54] **GAS INLET STRUCTURE FOR REAGENT KIT**

[54] **STRUCTURE D'ENTREE D'AIR POUR KIT**

[72] HAO, SHUSHUN, CN

[72] SUI, YANJUN, CN

[72] CHEN, LIZHU, CN

[72] XING, SHIYUAN, CN

[72] YAO, ZHAOHUI, CN

[71] SHIJIAZHUANG HIPRO BIOTECHNOLOGY CO., LTD., CN

[85] 2023-05-19

[86] 2021-09-10 (PCT/CN2021/117658)

[87] (WO2022/105385)

[30] CN (202011317116.X) 2020-11-23

[21] **3,199,870**  
[13] A1

[51] **Int.Cl. A01K 61/60 (2017.01) A01K 63/10 (2017.01) B08B 1/00 (2006.01) B08B 1/04 (2006.01) B62D 55/26 (2006.01)**

[25] EN

[54] **CLEANING DEVICE**

[54] **DISPOSITIF DE NETTOYAGE**

[72] JAKOBSEN, HANS EINAR, NO

[72] LILLEBO, HAVARD, NO

[71] WATBOTS AS, NO

[85] 2023-05-23

[86] 2021-11-18 (PCT/NO2021/050242)

[87] (WO2022/114962)

[30] NO (20201292) 2020-11-25

[21] **3,199,883**  
[13] A1

[51] **Int.Cl. A41D 1/06 (2006.01)**

[25] EN

[54] **ADAPTIVE PANTS (OR TROUSERS)**

[54] **PANTALON ADAPTATIF**

[72] CAMILLERI, ISABEL, CA

[71] IZ INC., CA

[85] 2023-05-23

[86] 2021-11-12 (PCT/CA2021/051606)

[87] (WO2022/104454)

[30] US (63/117,179) 2020-11-23

[21] **3,199,901**  
[13] A1

[51] **Int.Cl. G01S 17/88 (2006.01) G02F 1/225 (2006.01) H01S 5/06 (2006.01)**

[25] EN

[54] **HEAT DISSIPATION FOR LIDAR SENSORS**

[54] **DISSIPATION DE CHALEUR POUR CAPTEURS LIDAR**

[72] LIN, SEN, US

[72] WANG, LEI, US

[71] OURS TECHNOLOGY, LLC, US

[85] 2023-05-23

[86] 2021-11-22 (PCT/US2021/060388)

[87] (WO2022/109413)

[30] US (63/117,310) 2020-11-23

[30] US (17/530,925) 2021-11-19

[21] **3,199,903**  
[13] A1

[51] **Int.Cl. H05B 3/12 (2006.01) B82Y 30/00 (2011.01) C08K 3/01 (2018.01) B32B 7/025 (2019.01) B32B 3/08 (2006.01) C08L 83/04 (2006.01)**

[25] EN

[54] **ELECTROTHERMIC COMPOSITIONS AND RELATED COMPOSITE MATERIALS AND METHODS**

[54] **COMPOSITIONS ELECTROTHERMIQUES ET MATERIAUX COMPOSITES ET PROCEDES ASSOCIES**

[72] SPENCELEY, JAMES W., CA

[72] FAGHIHI, FARHAD, CA

[71] FLEXAHOPPER PLASTICS LTD., CA

[85] 2023-05-23

[86] 2021-10-06 (PCT/CA2021/051408)

[87] (WO2023/056541)

[21] **3,199,916**  
[13] A1

[51] **Int.Cl. G02B 6/34 (2006.01) G01S 7/481 (2006.01) G02B 6/12 (2006.01) G02B 6/27 (2006.01) G02B 6/30 (2006.01)**

[25] EN

[54] **OPTICAL COUPLER FOR LIDAR SENSOR**

[54] **COUPLEUR OPTIQUE POUR CAPTEUR LIDAR**

[72] LIN, SEN, US

[72] MICHAELS, ANDREW STEIL, US

[71] OURS TECHNOLOGY, LLC, US

[85] 2023-05-23

[86] 2021-11-22 (PCT/US2021/060393)

[87] (WO2022/109418)

[30] US (63/117,316) 2020-11-23

[30] US (17/531,029) 2021-11-19

[21] **3,200,101**  
[13] A1

[51] **Int.Cl. F28D 9/00 (2006.01) F28F 3/04 (2006.01) F28F 3/08 (2006.01)**

[25] EN

[54] **HEAT TRANSFER PLATE**

[54] **PLAQUE DE TRANSFERT DE CHALEUR**

[72] HEDBERG, MAGNUS, SE

[71] ALFA LAVAL CORPORATE AB, SE

[85] 2023-05-25

[86] 2021-11-25 (PCT/EP2021/082951)

[87] (WO2022/128386)

[30] EP (20214275.8) 2020-12-15

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[21] **3,200,205**  
[13] A1

[51] **Int.Cl. D21F 5/20 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR REHEATING AIR IN DRYERS**  
[54] **SYSTEME DE RECHAUFFAGE DE L'AIR DANS DES SECHOIRS**  
[72] URIBE ARANCIBIA, REINALDO AUGUSTO, CL  
[72] NOWAKOWSKI, GEORGE Z., CA  
[71] CMPC TISSUE S.A., CL  
[71] ANDRITZ LTD., CA  
[85] 2023-05-25  
[86] 2022-03-31 (PCT/IB2022/053049)  
[87] (WO2022/214926)  
[30] US (17/223,242) 2021-04-06

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[21] **3,200,247**  
[13] A1

[51] **Int.Cl. A01D 34/135 (2006.01) A01D 34/17 (2006.01)**  
[25] EN  
[54] **MOWER KNIFE DEVICE**  
[54] **DISPOSITIF DE TYPE A LAMES DE TONTE**  
[72] WEPFER, HANS, CH  
[71] WEPFER TECHNICS AG, CH  
[85] 2023-04-28  
[86] 2021-10-28 (PCT/EP2021/080041)  
[87] (WO2022/090421)  
[30] EP (20204706.4) 2020-10-29  
[30] EP (20204705.6) 2020-10-29

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[21] **3,200,259**  
[13] A1

[51] **Int.Cl. G06F 30/23 (2020.01)**  
[25] EN  
[54] **FRACTURE DENSITY MODEL SYSTEM, METHODS, AND APPARATUSES**  
[54] **SYSTEME, PROCEDES ET APPAREILS DE MODELE DE DENSITE DE FRACTURE**  
[72] BHUIYAN, A B M ABDUL ALI, US  
[72] LOWNDS, CHARLES MICHAEL, US  
[72] PREECE, DALE S., US  
[71] DYNO NOBEL INC., US  
[85] 2023-04-28  
[86] 2021-11-02 (PCT/US2021/057767)  
[87] (WO2022/098668)  
[30] US (63/109,033) 2020-11-03

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[21] **3,200,260**  
[13] A1

[51] **Int.Cl. F16L 55/04 (2006.01) E21B 43/26 (2006.01) E21B 43/267 (2006.01) F04B 17/06 (2006.01) F16L 55/05 (2006.01)**  
[25] EN  
[54] **WEAR INSERTS FOR WELL SERVICE REACTIVE DAMPENERS**  
[54] **INSERTS D'USURE POUR AMORTISSEURS REACTIFS D'ENTRETIEN DE PUIT**  
[72] ROGERS, JOHN THOMAS, US  
[71] PERFORMANCE PULSATION CONTROL, INC., US  
[85] 2023-04-28  
[86] 2021-11-01 (PCT/US2021/057607)  
[87] (WO2022/094419)  
[30] US (63/107,936) 2020-10-30

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[21] **3,200,261**  
[13] A1

[51] **Int.Cl. A61P 27/02 (2006.01) C12N 5/00 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR CELLULAR COMPONENT TRANSFER THERAPY**  
[54] **COMPOSITIONS ET METHODES DE THERAPIE PAR TRANSFERT DE COMPOSANTS CELLULAIRES**  
[72] SINGH, MANDEEP, US  
[72] BLACKSHAW, SETH, US  
[72] JOHNSTON, ROBERT, US  
[72] QIAN, JIANG, US  
[72] LIU, YING, US  
[71] THE JOHNS HOPKINS UNIVERSITY, US  
[71] SINGH, MANDEEP, US  
[71] BLACKSHAW, SETH, US  
[71] JOHNSTON, ROBERT, US  
[71] QIAN, JIANG, US  
[71] LIU, YING, US  
[85] 2023-04-28  
[86] 2021-11-01 (PCT/US2021/057586)  
[87] (WO2022/094410)  
[30] US (63/108,415) 2020-11-01

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[21] **3,200,262**  
[13] A1

[51] **Int.Cl. C07K 1/107 (2006.01) C07K 1/20 (2006.01) C07K 16/00 (2006.01)**  
[25] EN  
[54] **MATERIALS AND METHODS FOR PROTEIN PROCESSING**  
[54] **MATERIAUX ET PROCEDES DE TRAITEMENT DE PROTEINES**  
[72] SURAVAJJALA, SREEKANTH, US  
[72] LIPPENS, JENNIFER LYNN, US  
[71] AMGEN INC., US  
[85] 2023-04-28  
[86] 2021-11-01 (PCT/US2021/057519)  
[87] (WO2022/098595)  
[30] US (63/110,087) 2020-11-05

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[21] **3,200,263**  
[13] A1

[51] **Int.Cl. C07K 16/10 (2006.01) A61P 31/14 (2006.01) C07K 14/165 (2006.01)**  
[25] EN  
[54] **ANTI-SARS-COV-2 ANTIGEN ANTIBODIES AND RELATED COMPOSITIONS AND METHODS**  
[54] **ANTICORPS ANTIGENIQUES ANTI-SARS-COV-2 ET COMPOSITIONS ET METHODES ASSOCIEES**  
[72] YUSKO, ERIK, US  
[72] EBERT, PETER J. R., US  
[72] GILBERT, AMY, US  
[72] KEITANY, GLADYS, US  
[72] KLINGER, MARK, US  
[72] RUBIN, BEN, US  
[71] ADAPTIVE BIOTECHNOLOGIES CORPORATION, US  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/US2021/057452)  
[87] (WO2022/094343)  
[30] US (63/108,158) 2020-10-30  
[30] US (63/108,791) 2020-11-02  
[30] US (63/112,096) 2020-11-10  
[30] US (63/190,097) 2021-05-18

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[21] **3,200,264**  
[13] A1

[51] **Int.Cl. G06F 9/44 (2018.01)**  
[25] EN  
[54] **DEVICES AND METHODS FOR REMOTE PROGRAMMING OF IMPLANTED NEUROSTIMULATION SYSTEMS**  
[54] **DISPOSITIFS ET PROCÉDES DE PROGRAMMATION A DISTANCE DE SYSTEMES DE NEUROSTIMULATION IMPLANTES**  
[72] WOOCK, JOHN, US  
[72] SAMA, RINDA, US  
[72] MATHUR, PRABODH, US  
[72] BORLASE, CHARLES, US  
[72] ABDEEN, FAIZAL, US  
[72] JIANG, GUANGQIANG, US  
[71] AXONICS, INC., US  
[85] 2023-04-28  
[86] 2021-10-28 (PCT/US2021/057125)  
[87] (WO2022/094135)  
[30] US (63/108,087) 2020-10-30

[21] **3,200,265**  
[13] A1

[51] **Int.Cl. C12N 5/0783 (2010.01) A61K 35/17 (2015.01) A61K 39/00 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **DUAL TARGETING CHIMERIC ANTIGEN RECEPTORS**  
[54] **RECEPTEURS ANTIGENIQUES CHIMERIQUES A DOUBLE CIBLAGE**  
[72] DOTI, GIANPIETRO, US  
[72] DU, HONGWEI, US  
[72] HIRABAYASHI, KOICHI, JP  
[72] XU, YANG, CN  
[71] THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, US  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/US2021/057407)  
[87] (WO2022/094314)  
[30] US (63/108,047) 2020-10-30

[21] **3,200,267**  
[13] A1

[51] **Int.Cl. A61K 47/59 (2017.01) A61K 49/12 (2006.01) A61P 25/28 (2006.01) A61P 35/00 (2006.01) C08G 83/00 (2006.01)**  
[25] EN  
[54] **RADIOLABELED ETHER DENDRIMER CONJUGATES FOR IMAGING AND RADIOTHERAPY**  
[54] **CONJUGUES DE DENDRIMERES D'ETHER RADIOMARQUES POUR L'IMAGERIE PAR TEP ET LA RADIOTHERAPIE**  
[72] CLELAND, JEFFREY L., US  
[72] SHARMA, RISHI, US  
[72] SUN, MINGHAO, US  
[72] APPIANI LA ROSA, SANTIAGO, US  
[71] ASHVATTHA THERAPEUTICS, INC., US  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/US2021/057430)  
[87] (WO2022/094327)  
[30] US (63/108,230) 2020-10-30  
[30] US (63/187,851) 2021-05-12  
[30] US (63/253,308) 2021-10-07

[21] **3,200,269**  
[13] A1

[51] **Int.Cl. B65B 25/24 (2006.01) B65B 11/04 (2006.01) B65B 27/06 (2006.01)**  
[25] EN  
[54] **ROBOT SYSTEM AND METHOD FOR COIL PACKAGING**  
[54] **SYSTEME DE ROBOT ET PROCEDE D'EMBALLAGE DE BOBINES**  
[72] ROBERT, ADRIAN, SE  
[72] JARTE, PETTER, SE  
[72] FORSSBLAD, MARCUS, SE  
[72] ROSENLIND, FREDRIK, SE  
[72] OLSSON, KRISTOFFER, SE  
[71] LAMIFLEX GROUP AB, SE  
[85] 2023-04-28  
[86] 2021-12-23 (PCT/SE2021/051310)  
[87] (WO2022/139673)  
[30] SE (2051554-0) 2020-12-23

[21] **3,200,270**  
[13] A1

[51] **Int.Cl. G06N 10/00 (2022.01)**  
[25] EN  
[54] **OPERATOR IMPLEMENTATIONS FOR QUANTUM COMPUTATION**  
[54] **MISES EN ŒUVRE D'OPERATEURS POUR CALCUL QUANTIQUE**  
[72] IZMAYLOV, ARTUR, CA  
[72] ANAND, ABHINAV, CA  
[72] KOTTMANN, JAKOB, CA  
[72] ASPURU-GUZIK, ALAN, CA  
[72] LANG, ROBERT, CA  
[72] YEN, TZU-CHING, TW  
[71] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA  
[85] 2023-04-28  
[86] 2021-10-19 (PCT/CA2021/051467)  
[87] (WO2022/087718)  
[30] US (63/106,423) 2020-10-28  
[30] US (63/222,546) 2021-07-16

[21] **3,200,273**  
[13] A1

[51] **Int.Cl. B66F 9/075 (2006.01) B66F 9/24 (2006.01)**  
[25] EN  
[54] **INDUSTRIAL TRUCK COMPRISING A ROTARY STEERING DRIVE**  
[54] **CHARIOT DE MANUTENTION COMPRENANT UN ENTRAINEMENT DE DIRECTION ROTATIF**  
[72] KNACKER, RABAN, DE  
[71] HUBTEX MASCHINENBAU GMBH & CO. KG, DE  
[85] 2023-04-28  
[86] 2021-10-05 (PCT/EP2021/077430)  
[87] (WO2022/089891)  
[30] DE (10 2020 128 489.6) 2020-10-29

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[21] **3,200,278**  
[13] A1

[51] **Int.Cl. B31F 1/00 (2006.01) D21J 1/02 (2006.01) D21J 1/04 (2006.01)**

[25] EN

[54] **A METHOD FOR EDGE-FORMING CELLULOSE PRODUCTS IN A FORMING MOULD SYSTEM, AND A FORMING MOULD SYSTEM FOR FORMING EDGES OF CELLULOSE PRODUCTS**

[54] **PROCEDE DE FORMATION DE BORDS DE PRODUITS DE CELLULOSE DANS UN SYSTEME DE MOULE DE FORMAGE ET SYSTEME DE MOULE DE FORMAGE POUR FORMER DES BORDS DE PRODUITS DE CELLULOSE**

[72] LJUNGBERG, MARTIN, SE  
[72] BERGFJORD, MATHIAS, SE  
[71] PULPAC AB, SE  
[85] 2023-04-28  
[86] 2021-10-12 (PCT/EP2021/078164)  
[87] (WO2022/089934)  
[30] EP (20205198.3) 2020-11-02

[21] **3,200,279**  
[13] A1

[51] **Int.Cl. B21D 5/00 (2006.01) B21D 5/02 (2006.01) B21D 37/14 (2006.01) B21D 43/02 (2006.01) B21D 43/10 (2006.01) B21D 43/11 (2006.01) B25H 3/00 (2006.01) B65H 1/08 (2006.01) G05B 19/418 (2006.01)**

[25] EN

[54] **FULLY AUTOMATED SHEET METAL BENDING CELL**

[54] **CELLULE DE PLIAGE DE TOLES ENTIEREMENT AUTOMATISEE**

[72] PITANCE, GERARD, BE  
[71] CONCEPT & FORME DEVELOPPEMENTS SA, BE  
[85] 2023-04-28  
[86] 2021-10-26 (PCT/EP2021/079727)  
[87] (WO2022/090258)  
[30] EP (20204355.0) 2020-10-28  
[30] EP (21156189.9) 2021-02-10  
[30] EP (21160343.6) 2021-03-02

[21] **3,200,281**  
[13] A1

[51] **Int.Cl. G02B 5/00 (2006.01) G02B 27/00 (2006.01)**

[25] EN

[54] **AN ELECTRO-OPTICAL SYSTEM AND A METHOD OF DESIGNING THE SAME**

[54] **SYSTEME ELECTRO-OPTIQUE ET PROCEDE DE CONCEPTION ASSOCIE**

[72] EDWARDS, MICHAEL, GB  
[71] LEONARDO UK LTD, GB  
[85] 2023-04-28  
[86] 2021-10-28 (PCT/EP2021/079967)  
[87] (WO2022/090385)  
[30] GB (2017140.1) 2020-10-29

[21] **3,200,283**  
[13] A1

[51] **Int.Cl. C23C 16/513 (2006.01) B01J 2/00 (2006.01) B05D 1/00 (2006.01) C23C 16/44 (2006.01) C23C 16/442 (2006.01) C23C 16/452 (2006.01) C23C 16/455 (2006.01) H05H 1/46 (2006.01)**

[25] EN

[54] **POWDER COATING METHOD**

[54] **PROCEDE D'ENROBAGE DE POUVRE**

[72] SCHELTJENS, GILL, BE  
[72] HEYBERGER, REGIS, FR  
[72] JACOBS, MARC, LU  
[72] PESCOD, RUSSEL, BE  
[72] VAN DER GUCHT, FILIP, BE  
[71] PARTIX, BE  
[85] 2023-04-28  
[86] 2021-10-29 (PCT/EP2021/080217)  
[87] (WO2022/090518)  
[30] EP (20204638.9) 2020-10-29

[21] **3,200,292**  
[13] A1

[51] **Int.Cl. C10G 47/22 (2006.01) C01B 3/24 (2006.01) C07C 11/04 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR PRODUCING A DECARBONIZED BLUE HYDROGEN GAS FOR CRACKING OPERATIONS**

[54] **SYSTEMES ET PROCEDES DE PRODUCTION D'UN GAZ HYDROGENE BLEU DECARBONISE POUR DES OPERATIONS DE CRAQUAGE**

[72] JONES, THOMAS M., US  
[71] BECHTEL ENERGY TECHNOLOGIES & SOLUTIONS, INC., US  
[85] 2023-05-26  
[86] 2022-08-22 (PCT/US2022/041049)  
[87] (WO2023/034057)  
[30] US (63/239,844) 2021-09-01

[21] **3,200,297**  
[13] A1

[51] **Int.Cl. E21B 19/16 (2006.01) E21B 19/10 (2006.01) E21B 19/20 (2006.01) E21B 21/08 (2006.01)**

[25] EN

[54] **DRILLING AUTOMATION SYSTEM**

[54] **SYSTEME D'AUTOMATISATION DE FORAGE**

[72] BAKER, JASON, US  
[72] BRANIFF, BARRY, US  
[72] MCCLAUGHERTY, SHANE, US  
[72] MCKAIG, SCOTT, US  
[72] BOUGHTON, KEITH, US  
[72] COADY, MICHAEL, US  
[71] TRANSOCEAN OFFSHORE DEEPWATER DRILLING INC., US  
[85] 2023-03-29  
[86] 2021-09-29 (PCT/US2021/052556)  
[87] (WO2022/072429)  
[30] US (63/084,822) 2020-09-29  
[30] US (63/159,300) 2021-03-10

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[51] <b>Int.Cl. B01J 23/75 (2006.01) B01J 23/755 (2006.01) B01J 23/78 (2006.01) B01J 23/80 (2006.01) B01J 23/83 (2006.01) C07C 209/04 (2006.01) C07C 211/03 (2006.01)</b>	[51] <b>Int.Cl. C07K 16/28 (2006.01) A61P 35/00 (2006.01) C07K 14/00 (2006.01) C12P 21/00 (2006.01)</b>	[51] <b>Int.Cl. C12Q 1/6823 (2018.01) C12Q 1/6853 (2018.01) C12Q 1/6858 (2018.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>AMINATION CATALYST AND PREPARATION AND USE THEREOF</b>	[54] <b>INHIBITORS OF ANGIOGENIC FACTORS</b>	[54] <b>GENERIC CARTRIDGE AND METHOD FOR MULTIPLEX NUCLEIC ACID DETECTION</b>
[54] <b>CATALYSEUR D'AMINATION AINSI QUE SA PREPARATION ET SON UTILISATION</b>	[54] <b>INHIBITEURS DE FACTEURS ANGIOGENIQUES</b>	[54] <b>CARTOUCHE GENERIQUE ET PROCEDE DE DETECTION MULTIPLEX D'ACIDE NUCLEIQUE</b>
[72] TIAN, BAOLIANG, CN	[72] ZHANG, JINZHONG, US	[72] DEVOGELAERE, BENOIT, BE
[72] TANG, GUOQI, CN	[72] SHEN, WEI YONG, AU	[72] CLAES, BART, BE
[72] XIANG, LIANGYU, CN	[72] SEMBA, CHARLES, US	[72] PIOFCZYK, THOMAS, BE
[72] ZHANG, XIAORONG, CN	[72] HU, JOHN ZHENZE, US	[71] BIOCARTIS NV, BE
[72] WANG, GUOQING, CN	[72] XIA, ZHEN QIN, US	[85] 2023-04-28
[72] PENG, HUI, CN	[71] ELUMINEX BIOSCIENCES (SUZHOU) LIMITED, CN	[86] 2021-10-26 (PCT/CN2021/126470)
[72] YANG, YI, CN	[85] 2023-04-28	[87] (WO2022/089440)
[72] ZHANG, LIJUN, CN	[86] 2021-10-26 (PCT/CN2021/126470)	[30] US (63/204,904) 2020-10-30
[72] SONG, CHAO, CN	[87] (WO2022/089440)	
[72] JIANG, JIANZHUN, CN	[30] US (63/204,904) 2020-10-30	
[72] MAN, YI, CN		
[71] CHINA PETROLEUM & CHEMICAL CORPORATION, CN	[21] <b>3,200,309</b> [13] A1	
[71] BEIJING RESEARCH INSTITUTE OF CHEMICAL INDUSTRY, CHINA PETROLEUM & CHEMICAL CORPORATION, CN	[51] <b>Int.Cl. C12N 15/14 (2006.01) A61P 3/04 (2006.01) A61P 3/10 (2006.01) A61P 9/10 (2006.01) A61P 25/16 (2006.01) A61P 25/28 (2006.01) C07K 14/765 (2006.01)</b>	
[85] 2023-04-28	[25] EN	
[86] 2021-10-26 (PCT/CN2021/126422)	[54] <b>USE OF HUMAN SERUM ALBUMIN IN TREATMENT OF DISEASES</b>	
[87] (WO2022/089425)	[54] <b>UTILISATION D'ALBUMINE SERIQUE HUMAINE DANS LE TRAITEMENT DE MALADIES</b>	
[30] CN (202011187666.4) 2020-10-30	[72] LUO, YONGZHANG, CN	
[30] CN (202011188198.2) 2020-10-30	[72] FU, YAN, CN	
[30] CN (202011188203.X) 2020-10-30	[72] LIU, HONGYI, CN	
[30] CN (202011192975.0) 2020-10-30	[72] JU, ANJI, CN	
[30] CN (202011188652.4) 2020-10-30	[72] TANG, JIAZE, CN	
	[72] JIANG, YI, CN	
	[72] MA, BOYUAN, CN	
	[72] JIANG, XIAOQIN, CN	
	[72] FENG, YU, CN	
	[72] CHANG, GUODONG, CN	
	[72] LI, HUI, CN	
	[71] SHENZHEN PROTGEN LTD., CN	
	[85] 2023-04-28	
	[86] 2021-11-01 (PCT/CN2021/127957)	
	[87] (WO2022/089639)	
	[30] CN (202011200484.6) 2020-10-30	

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[51] <b>Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) C07K 16/30 (2006.01)</b>	[51] <b>Int.Cl. A61K 31/00 (2006.01) A61P 35/00 (2006.01) C07D 215/44 (2006.01) C07D 401/12 (2006.01)</b>	[51] <b>Int.Cl. H04N 21/234 (2011.01) H04N 21/222 (2011.01) H04N 21/232 (2011.01) H04N 21/235 (2011.01) H04N 21/2387 (2011.01) H04N 21/435 (2011.01) H04N 21/44 (2011.01) H04N 21/6547 (2011.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>MULTITARGETING BISPECIFIC ANTIGEN-BINDING MOLECULES OF INCREASED SELECTIVITY</b>	[54] <b>ECTONUCLEOTIDE PYROPHOSPHATASE-PHOSPHODIESTERASE-1 (ENPP1) INHIBITORS AND USES THEREOF</b>	[54] <b>SYSTEMS AND METHODS OF ALTERNATIVE NETWORKED APPLICATION SERVICES</b>
[54] <b>MOLECULES BISPECIFIQUES MULTICIBLES DE LIAISON A UN ANTIGENE A SELECTIVITE ACCRUE</b>	[54] <b>INHIBITEURS D'ECTONUCLEOTIDE PYROPHOSPHATASE-PHOSPHODIESTERASE 1 (ENPP1) ET LEURS UTILISATIONS</b>	[54] <b>SYSTEMES ET PROCEDES DE SERVICES D'APPLICATION EN RESEAU ALTERNATIFS</b>
[72] EVERTS, STEPHANIE, DE	[72] PUJALA, BRAHMAM, IN	[72] BROCKMANN, RONALD A., US
[72] KLINGER, MATTHIAS, DE	[72] ANSARI, AMANTULLAH, IN	[72] HOEBEN, MAARTEN, US
[72] NAEGELE, VIRGINIE, DE	[72] SAPRA, SHREYA, IN	[71] ACTIVEVIDEO NETWORKS, INC., US
[72] ZALEWSKI, ADAM, DE	[72] JADHAVAR, PRADEEP S., IN	[85] 2023-05-26
[72] BLUEMEL, CLAUDIA, DE	[72] PENDHARKAR, DHANANJAY, IN	[86] 2021-12-03 (PCT/US2021/061896)
[72] BOEHM, THOMAS, DE	[72] RAMACHANDRAN, SREEKANTH A., IN	[87] (WO2022/125401)
[72] BROZY, JOHANNES, DE	[72] SAEED, UZMA, IN	[30] US (63/122,425) 2020-12-07
[72] D'ANGELO, IGOR, US	[72] DANODIA, ABHINANDAN, IN	
[72] KUFER, PETER, DE	[72] KHAN, FARHA, IN	
[72] LUTTERBUESE, PETRA, DE	[72] PATNI, SAGAR, IN	
[72] MUENZ, MARKUS, DE	[72] SONI, SANJEEV, IN	
[72] RAU, DORIS, DE	[72] GUPTA, ASHU, IN	
[72] RAUM, TOBIAS, DE	[72] CHAKRAVARTY, SARVAJIT, US	
[72] RATTEL, BENNO, DE	[72] SATHE, BALAJI DASHRATH, IN	
[72] THOMAS, OLIVER, DE	[71] 1CBIO, INC., US	
[72] ULLRICH, INES, DE	[85] 2023-04-28	
[72] WAHL, JOACHIM, DE	[86] 2021-10-30 (PCT/IB2021/060074)	
[72] WEBHOFER, CHRISTIAN, DE	[87] (WO2022/091048)	
[72] WEIDLER, SASCHA, DE	[30] US (63/107,818) 2020-10-30	
[72] PHAM, ELIZABETH, US	[30] US (63/192,605) 2021-05-25	
[72] BAILIS, JULIE, US		
[71] AMGEN INC., US		
[71] AMGEN RESEARCH (MUNICH) GMBH, DE		
[85] 2023-04-28		
[86] 2021-11-08 (PCT/EP2021/080956)		
[87] (WO2022/096716)		
[30] US (63/110,957) 2020-11-06		
[30] US (63/231,877) 2021-08-11		

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<p>[51] <b>Int.Cl. C07D 235/08 (2006.01) C07D 207/323 (2006.01) C07D 213/16 (2006.01) C07D 215/04 (2006.01) C07D 235/10 (2006.01) C07D 235/12 (2006.01) C07D 277/66 (2006.01) C07D 401/04 (2006.01) C07D 405/04 (2006.01) C07D 409/04 (2006.01) C12P 17/04 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>METHOD FOR PREPARING NITROGEN-CONTAINING HETEROCYCLIC COMPOUND AND DERIVATIVE THEREOF BY ENZYMATIC-CHEMICAL CASCADE METHOD</b></p> <p>[54] <b>PROCEDE DE PREPARATION D'UN COMPOSE HETEROCYCLIQUE CONTENANT DE L'AZOTE ET SON DERIVE A L'AIDE D'UN PROCEDE EN CASCADE ENZYMATO-CHIMIQUE</b></p> <p>[72] ZHU, CHENJIE, CN [72] YING, HANJIE, CN [72] TAN, ZHUOTAO, CN [72] ZHUANG, WEI, CN [72] FU, YAPING, CN [72] HAN, YAOYING, CN [72] LI, MING, CN [72] CHEN, YONG, CN [72] LIU, DONG, CN [72] NIU, HUANQING, CN [72] YANG, PENG PENG, CN [71] NANJING TECH UNIVERSITY, CN [85] 2023-05-26 [86] 2021-08-18 (PCT/CN2021/113184) [87] (WO2022/110916) [30] CN (202011362322.2) 2020-11-27</p>	<p>[51] <b>Int.Cl. C12N 15/86 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>METHODS FOR PURIFICATION OF AAV VECTORS BY ANION EXCHANGE CHROMATOGRAPHY</b></p> <p>[54] <b>METHODES DE PURIFICATION DE VECTEURS DE VAA PAR CHROMATOGRAPHIE D'ECHANGE D'ANIONS</b></p> <p>[72] BERRILL, ALEXANDER, US [72] KISH, WILLIAM S., US [72] LIGHTHOLDER, JOHN R., US [72] ROACH, MATTHEW K., US [72] WELLBORN, WILLIAM B., US [72] ZEKOVIC, TAMARA, US [71] PFIZER INC., US [85] 2023-04-28 [86] 2021-11-01 (PCT/IB2021/060095) [87] (WO2022/097008) [30] US (63/109,049) 2020-11-03 [30] US (63/217,194) 2021-06-30 [30] US (63/253,215) 2021-10-07</p>	<p>[51] <b>Int.Cl. A61K 31/00 (2006.01) A61K 31/155 (2006.01) A61K 31/215 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>USE OF ETHOXYLATED ALCOHOLS TO IMPEDE ENVELOPED VIRAL SPREAD</b></p> <p>[54] <b>UTILISATION D'ALCOOLS ETHOXYLES POUR EMPECHER UNE PROPAGATION DE VIRUS ENVELOPPES</b></p> <p>[72] SLOAN, GINA PARISE, US [71] MICROBAN PRODUCTS COMPANY, US [85] 2023-05-01 [86] 2021-10-19 (PCT/US2021/055535) [87] (WO2022/093571) [30] US (63/108,689) 2020-11-02 [30] US (17/504,050) 2021-10-18</p>
	[21] <b>3,200,402</b> [13] A1	[21] <b>3,200,404</b> [13] A1
	<p>[51] <b>Int.Cl. G01V 1/50 (2006.01) E21B 47/12 (2012.01) G01H 9/00 (2006.01) G01V 1/00 (2006.01) G01V 1/52 (2006.01) G01V 8/24 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>GAUGE LENGTH CORRECTION FOR SEISMIC ATTENUATION FROM DISTRIBUTED ACOUSTIC SYSTEM FIBER OPTIC DATA</b></p> <p>[54] <b>CORRECTION DE LONGUEUR ENTRE REPERES POUR ATTENUATION SISMIQUE A PARTIR DE DONNEES DE FIBRES OPTIQUES D'UN SYSTEME ACOUSTIQUE DISTRIBUE</b></p> <p>[72] WILLIS, MARK ELLIOTT, US [72] LOPEZ, OSCAR BARRIOS, US [72] PALACIOS, PEDRO WILLIAM, US [71] HALLIBURTON ENERGY SERVICES, INC., US [85] 2023-05-01 [86] 2021-03-23 (PCT/US2021/023733) [87] (WO2022/186842) [30] US (17/191,506) 2021-03-03</p>	<p>[51] <b>Int.Cl. F16K 31/12 (2006.01) F16K 31/00 (2006.01) F16K 31/122 (2006.01) F16K 31/126 (2006.01) F16K 37/00 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>SENSING METHOD, SYSTEM AND ASSEMBLY FOR RAILWAY ASSETS</b></p> <p>[54] <b>PROCEDE, SYSTEME ET ENSEMBLE DE DETECTION POUR ELEMENTS DE CHEMIN DE FER</b></p> <p>[72] LIDGETT, JUSTIN M., US [72] MARTIN, ANDREW H., US [72] TAILLON, ARMAND P., US [72] WEINER, EVAN, US [71] AMSTED RAIL COMPANY, INC., US [85] 2023-05-01 [86] 2021-10-25 (PCT/US2021/056508) [87] (WO2022/093720) [30] US (63/108,717) 2020-11-02 [30] US (17/510,096) 2021-10-25</p>

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[13] A1

[51] **Int.Cl. G06F 16/907 (2019.01) G06Q 50/10 (2012.01) G06F 21/32 (2013.01)**  
[25] EN  
[54] **CONTENT-MODIFICATION SYSTEM WITH LOCAL AVAIL DETECTION AND CORRECTION FEATURES**  
[54] **SYSTEME DE MODIFICATION DE CONTENU DOTE DE CARACTERISTIQUES DE DETECTION ET DE CORRECTION DE DISPONIBILITE LOCALE**  
[72] SAHU, RIMI, US  
[72] BADAM, SANDEEP, US  
[72] MOKSZAN, KRZYSZTOF, US  
[72] RAGHAVENDRA, SUNKU, US  
[72] RANGAPPA, KARTHIK HIREYEMMIGANUR, US  
[72] DEBELAIR, VIRGINIE MARIE, US  
[72] JOSHI, SUBHA, US  
[72] URMANO, MARIE ELIZABETH, US  
[71] ROKU, INC., US  
[85] 2023-05-01  
[86] 2021-10-29 (PCT/US2021/057333)  
[87] (WO2022/098580)  
[30] US (63/109,208) 2020-11-03  
[30] US (17/513,272) 2021-10-28  
[30] US (17/513,482) 2021-10-28

[21] **3,200,406**  
[13] A1

[51] **Int.Cl. H01H 71/08 (2006.01)**  
[25] EN  
[54] **TERMINAL ASSEMBLIES AND METHODS OF USING AND MAKING THE SAME**  
[54] **ENSEMBLES DE BORNE ET LEURS PROCEDES D'UTILISATION ET DE FABRICATION**  
[72] PUGLIA, FRANK JOSEPH, US  
[72] HALL, JEFF, US  
[72] TREBUKHOVA, SVETLANA, US  
[72] SANTEE, STUART, US  
[72] CAVANAGH, MIKE, US  
[72] COOK, CHRISTINE, US  
[72] WALLACE, JOE, US  
[71] EAGLEPICHER TECHNOLOGIES, LLC, US  
[85] 2023-05-01  
[86] 2021-11-01 (PCT/US2021/057567)  
[87] (WO2022/098604)  
[30] US (63/109,202) 2020-11-03

[21] **3,200,407**  
[13] A1

[51] **Int.Cl. A61K 8/64 (2006.01) A61L 27/54 (2006.01) A61L 29/16 (2006.01) C07K 16/12 (2006.01) C07K 16/18 (2006.01)**  
[25] EN  
[54] **ANTIGEN-BINDING MOLECULES THAT BIND TO PORPHYROMONAS GINGIVALIS**  
[54] **MOLECULES DE LIAISON A UN ANTIGENE QUI SE LIENT A PORPHYROMONAS GINGIVALIS**  
[72] NARA, PETER L., US  
[72] SINDELAR, DANIEL L., US  
[71] KEYSTONE BIO, INC., US  
[85] 2023-05-01  
[86] 2021-11-02 (PCT/US2021/057758)  
[87] (WO2022/098661)  
[30] US (63/109,286) 2020-11-03  
[30] US (63/135,878) 2021-01-11  
[30] US (63/208,873) 2021-06-09  
[30] US (63/221,405) 2021-07-13  
[30] US (63/225,295) 2021-07-23  
[30] US (63/231,964) 2021-08-11

[21] **3,200,408**  
[13] A1

[51] **Int.Cl. B67B 7/16 (2006.01)**  
[25] EN  
[54] **MOUNTED BOTTLE OPENER**  
[54] **DECAPSULEUR MONTE**  
[72] LIN, JIN-JIE, US  
[71] SIMPSON STRONG-TIE COMPANY, INC., US  
[85] 2023-05-01  
[86] 2021-11-02 (PCT/US2021/057768)  
[87] (WO2022/094481)  
[30] US (17/087,578) 2020-11-02

[21] **3,200,409**  
[13] A1

[51] **Int.Cl. A23J 1/00 (2006.01) B02B 1/00 (2006.01)**  
[25] EN  
[54] **IMPROVED FEED INGREDIENT FROM DRIED DISTILLERS GRAINS USING DRY TRIBO-ELECTROSTATIC SEPARATION**  
[54] **INGREDIENT ALIMENTAIRE AMELIORE OBTENU A PARTIR DE DRECHES DE DISTILLERIE SECHEES AU MOYEN D'UNE SEPARATION TRIBO-ELECTROSTATIQUE PAR VOIE SECHE**  
[72] BARBER, NATSUKI, US  
[72] FLYNN, KYLE P., US  
[72] GUPTA, ABHISHEK, US  
[71] SEPARATION TECHNOLOGIES LLC, US  
[85] 2023-05-01  
[86] 2021-11-05 (PCT/US2021/058304)  
[87] (WO2022/099047)  
[30] US (63/110,640) 2020-11-06

[21] **3,200,411**  
[13] A1

[51] **Int.Cl. A62D 1/00 (2006.01)**  
[25] EN  
[54] **WATER-BASED AEROGEL EFFICIENT FIRE-EXTINGUISHING AGENT AND PREPARATION METHOD THEREFOR**  
[54] **AGENT EXTINCTEUR EFFICACE A BASE D'AEROGEL AQUEUX ET SON PROCEDE DE PREPARATION**  
[72] AN, CHUN, CN  
[72] SHEN, JUN, CN  
[71] ANHUA FIRE NEW MATERIAL TECHNOLOGY (JIANGSU) CO., LTD., CN  
[85] 2023-04-28  
[86] 2021-05-20 (PCT/CN2021/094856)  
[87] (WO2022/088654)  
[30] CN (202011182063.5) 2020-10-29



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[13] A1

[51] **Int.Cl. B05B 12/08 (2006.01) E01C 23/22 (2006.01) G01C 15/00 (2006.01)**

[25] EN

[54] **METHOD OF SPRAYING PAINT WITH PAINTING ASSEMBLY ATTACHED DISTANCE MEASURING WHEEL**

[54] **PROCEDE DE PULVERISATION DE PEINTURE AU MOYEN D'UN ENSEMBLE DE PULVERISATION DE PEINTURE RELIE A UNE ROUE DE MESURE DE DISTANCE**

[72] SHI, XIN, CN  
[72] LIU, KUI, CN  
[72] XING, DAVID, US  
[71] NORTHWEST INSTRUMENT INC., US

[85] 2023-04-28  
[86] 2021-07-06 (PCT/CN2021/104659)  
[87] (WO2022/095490)  
[30] CN (202011222621.6) 2020-11-05

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[21] **3,200,413**  
[13] A1

[51] **Int.Cl. B01J 23/75 (2006.01) B01J 23/755 (2006.01) B01J 23/78 (2006.01) B01J 23/80 (2006.01) B01J 23/83 (2006.01) C07C 209/04 (2006.01) C07C 211/03 (2006.01)**

[25] EN

[54] **AMINATION CATALYST AND PREPARATION AND USE THEREOF**

[54] **CATALYSEUR D'AMINATION ET SA PREPARATION ET SON UTILISATION**

[72] TIAN, BAOLIANG, CN  
[72] WANG, GUOQING, CN  
[72] PENG, HUI, CN  
[72] TANG, GUOQI, CN  
[72] XIANG, LIANGYU, CN  
[72] YANG, YI, CN  
[72] ZHANG, LIJUN, CN  
[72] SONG, CHAO, CN  
[72] ZHANG, XIAORONG, CN  
[72] CHEN, SONG, CN  
[72] LIU, JING, CN  
[71] CHINA PETROLEUM & CHEMICAL CORPORATION, CN  
[71] BEIJING RESEARCH INSTITUTE OF CHEMICAL INDUSTRY, CHINA PETROLEUM & CHEMICAL CORPORATION, CN

[85] 2023-04-28  
[86] 2021-10-26 (PCT/CN2021/126326)  
[87] (WO2022/089404)  
[30] CN (202011187657.5) 2020-10-30  
[30] CN (202011192987.3) 2020-10-30  
[30] CN (202011187667.9) 2020-10-30  
[30] CN (202011188178.5) 2020-10-30

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[21] **3,200,416**  
[13] A1

[51] **Int.Cl. A61M 1/16 (2006.01) B01D 63/02 (2006.01)**

[25] EN

[54] **OXYGENATOR OF ORGANIC FLUIDS**

[54] **OXYGENATEUR DE FLUIDES ORGANIQUES**

[72] GALAVOTTI, DANIELE, IT  
[71] QURA S.R.L., IT

[85] 2023-04-28  
[86] 2021-10-28 (PCT/IT2021/050357)  
[87] (WO2022/091163)  
[30] IT (102020000025762) 2020-10-29

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[21] **3,200,418**  
[13] A1

[51] **Int.Cl. A61L 27/14 (2006.01) A61L 27/18 (2006.01) A61L 27/40 (2006.01) A61L 27/52 (2006.01) A61L 27/56 (2006.01)**

[25] EN

[54] **IMMUNOISOLATION DEVICE DISPOSITIF D'IMMUNOISOLATION**

[72] KOBAYASHI, GORO, JP  
[72] KAWAGOE, MASAKO, JP  
[72] AYANO, SATORU, JP  
[71] KURARAY CO., LTD., JP

[85] 2023-04-28  
[86] 2021-10-28 (PCT/JP2021/039818)  
[87] (WO2022/092198)  
[30] JP (2020-180919) 2020-10-28

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[21] **3,200,415**  
[13] A1

[51] **Int.Cl. B23Q 3/155 (2006.01) B21D 5/00 (2006.01)**

[25] EN

[54] **TOOL GRIPPING DEVICE FOR GRIPPING A BENDING TOOL WITH A ROBOT**

[54] **DISPOSITIF DE PREHENSION D'OUTIL POUR SAISIR UN OUTIL DE CINTRAGE AVEC UN ROBOT**

[72] KONCZ, EDVARD LASZLO, HU  
[72] PEKARIK, JANOS, HU  
[72] MAJOR, ISTVAN, HU  
[72] SOMODI, VIKTOR, HU  
[71] PMT SZERSZAMGEP ZRT., HU

[85] 2023-04-28  
[86] 2021-12-14 (PCT/HU2021/050071)  
[87] (WO2022/129964)  
[30] HU (P2000433) 2020-12-16  
[30] HU (P2100423) 2021-12-07

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[21] **3,200,422**  
[13] A1

[51] **Int.Cl. A61K 35/12 (2015.01) A61L 27/16 (2006.01) A61L 27/38 (2006.01) A61L 27/40 (2006.01) A61L 27/50 (2006.01) A61L 27/52 (2006.01) C12M 3/00 (2006.01)**

[25] EN

[54] **HYDROGEL FOR CELL EMBEDDING, IMMUNOISOLATION DEVICE, AND TRANSPLANT MATERIAL**

[54] **HYDROGEL POUR ENCAPSULATION DE CELLULES, DISPOSITIF D'IMMUNOISOLATION ET MATERIAU DE TRANSPLANTATION**

[72] KOBAYASHI, GORO, JP  
[72] KAWAGOE, MASAKO, JP  
[72] FUJITA, AKIO, JP  
[72] AYANO, SATORU, JP  
[71] KURARAY CO., LTD., JP  
[85] 2023-04-28  
[86] 2021-10-28 (PCT/JP2021/039844)  
[87] (WO2022/092211)  
[30] JP (2020-180920) 2020-10-28

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[21] **3,200,424**  
[13] A1

[51] **Int.Cl. E02F 3/85 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR CONTROLLING WORK MACHINE, AND WORK MACHINE**

[54] **SYSTEME ET PROCEDE DESTINES A LA COMMANDE D'ENGIN DE CHANTIER ET ENGIN DE CHANTIER**

[72] YAMAZAKI, YUSUKE, JP  
[72] ANDOU, TOMOKI, JP  
[72] TSUMURA, SOUICHI, JP  
[71] KOMATSU LTD., JP  
[85] 2023-04-28  
[86] 2021-12-24 (PCT/JP2021/048372)  
[87] (WO2022/163272)  
[30] JP (2021-014571) 2021-02-01

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[21] **3,200,426**  
[13] A1

[51] **Int.Cl. C10B 55/00 (2006.01) C10B 55/10 (2006.01) C10B 57/04 (2006.01) C10B 57/06 (2006.01) C10G 1/00 (2006.01) C10G 9/00 (2006.01)**

[25] EN

[54] **CO-PROCESSING OF BIOMASS OIL IN COKER**

[54] **CO-TRAITEMENT D'HUILE DE BIOMASSE DANS UNE UNITE DE COKEFACTION**

[72] XU, XIAOCHUN, US  
[72] KIM, HYUNG R., US  
[72] PIERSON, MEGHAN E., US  
[72] NOVAK, WILLIAM J., US  
[72] SCHUTT, KIRSTEN E., US  
[72] MABON, ROSS, US  
[71] EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY, US

[85] 2023-05-29  
[86] 2021-11-13 (PCT/US2021/072394)  
[87] (WO2022/120318)  
[30] US (63/119,929) 2020-12-01

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[21] **3,200,504**  
[13] A1

[51] **Int.Cl. H04W 74/08 (2009.01)**

[25] EN

[54] **WIRELESS CHANNEL MONITORING, ACQUISITION, AND ALIGNMENT**

[54] **SURVEILLANCE, ACQUISITION ET ALIGNEMENT DE CANAUX SANS FIL**

[72] HEDAYAT, AHMAD REZA, US  
[71] CHARTER COMMUNICATIONS OPERATING, LLC, US

[85] 2023-05-29  
[86] 2021-12-07 (PCT/US2021/062135)  
[87] (WO2022/125502)  
[30] US (17/117,782) 2020-12-10  
[30] US (17/117,810) 2020-12-10  
[30] US (17/117,825) 2020-12-10

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[21] **3,200,510**  
[13] A1

[51] **Int.Cl. H04N 21/439 (2011.01) H04N 21/442 (2011.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR HANDLING AUDIO DISRUPTIONS**

[54] **SYSTEMES ET PROCEDES DE GESTION DE PERTURBATIONS AUDIO**

[72] CHANNAPRAGADA, SRIKANTH, IN  
[72] GUPTA, VIKRAM MAKAM, IN  
[71] ROVI GUIDES, INC., US  
[85] 2023-05-02  
[86] 2020-12-18 (PCT/US2020/065950)  
[87] (WO2022/093292)  
[30] US (17/086,743) 2020-11-02

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[21] **3,200,511**  
[13] A1

[51] **Int.Cl. E21B 43/10 (2006.01) E21B 17/08 (2006.01)**

[25] EN

[54] **NON-EXPANDING LINER HANGER**

[54] **DISPOSITIF DE SUSPENSION DE COLONNE PERDUE NON EXPANSIBLE**

[72] FRIPP, MICHAEL LINLEY, US  
[72] SEVADJIAN, EMILE EDMUND, US  
[72] GHARESI, ABDOL REZA, US  
[71] HALLIBURTON ENERGY SERVICES, INC., US

[85] 2023-05-02  
[86] 2020-12-18 (PCT/US2020/066193)  
[87] (WO2022/132179)  
[30] US (17/124,217) 2020-12-16

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[21] **3,200,512**  
[13] A1

[51] **Int.Cl. A01N 43/54 (2006.01) A01N 57/20 (2006.01) A01P 13/00 (2006.01)**

[25] EN

[54] **HERBICIDE COMPOSITIONS WITH EPYRIFENACIL AND 2,4-D TRIETHANOLAMINE SALT WITH IMPROVED PROPERTIES**

[54] **COMPOSITIONS HERBICIDES CONTENANT DE L'EPYRIFENACIL ET DU SEL DE TRIETHANOLAMINE 2,4-D PRESENTANT DES PROPRIETES AMELIOREES**

[72] JIMOH, GANIYU A., US

[71] MONSANTO TECHNOLOGY LLC, US

[85] 2023-05-02

[86] 2021-10-22 (PCT/US2021/056352)

[87] (WO2022/098522)

[30] US (63/109,929) 2020-11-05

[21] **3,200,514**  
[13] A1

[51] **Int.Cl. A61K 31/44 (2006.01) A61K 31/7068 (2006.01) A61K 45/00 (2006.01) A61P 21/00 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **THERAPIES FOR TREATMENT OF CANCER AND PHAGOCYTOSIS-DEFICIENCY RELATED DISEASES**

[54] **THERAPIES POUR LE TRAITEMENT DU CANCER ET DE MALADIES ASSOCIEES A UNE DEFICIENCE EN PHAGOCYTOSE**

[72] INABA, TARO, JP

[72] NONOMURA, KAZUHIKO, JP

[71] RDISCOVERY, LLC, US

[85] 2023-05-02

[86] 2021-11-02 (PCT/US2021/057698)

[87] (WO2022/098642)

[30] US (63/109,111) 2020-11-03

[30] US (63/145,681) 2021-02-04

[21] **3,200,516**  
[13] A1

[51] **Int.Cl. A61K 31/438 (2006.01) A61P 29/00 (2006.01) A61P 37/06 (2006.01) C07D 471/10 (2006.01) C07D 498/10 (2006.01)**

[25] EN

[54] **INHIBITING AN IMMUNE RESPONSE MEDIATED BY ONE OR MORE OF TLR2, RAGE, CCR5, CXCR4 AND CD4**

[54] **INHIBITION D'UNE REPOSE IMMUNITAIRE INDUITE PAR UN OU PLUSIEURS COMPOSANTS PARMIS TLR2, RAGE, CCR5, CXCR4 ET CD4**

[72] WANG, HOAU-YAN, US

[72] BURNS BARBIER, LINDSAY, US

[71] CASSAVA SCIENCES, INC., US

[85] 2023-05-03

[86] 2021-11-03 (PCT/US2021/057824)

[87] (WO2022/098700)

[30] US (63/109,213) 2020-11-03

[21] **3,200,513**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **TUMOR CELL VACCINES**

[54] **VACCINS A CELLULES TUMORALES**

[72] FERRARO, BERNADETTE, US

[72] ARNDT, JUSTIN JAMES, US

[72] BINDER, TODD MERRILL, US

[72] HUNTDI, MATTHIAS, US

[72] LEWIS, AMRITHA BALAKRISHNAN, US

[72] MOHLER, KENDALL M., US

[72] SHAWLER, DANIEL LEE, US

[72] YAN, JIAN, US

[72] BAGARAZZI, MARK, US

[71] NEUVOGEN, INC., US

[85] 2023-05-02

[86] 2021-11-01 (PCT/US2021/057536)

[87] (WO2022/094386)

[30] US (63/108,731) 2020-11-02

[30] US (63/196,075) 2021-06-02

[21] **3,200,515**  
[13] A1

[25] EN

[54] **METHODS AND APPARATUS FOR ONLINE TEST TAKING**

[54] **PROCEDES ET APPAREIL PERMETTANT DE REALISER UN EXAMEN EN LIGNE**

[72] DAWICKI, ERIC ROGER, US

[72] SHETTY, AKKHILAYSH KUSHAL, US

[72] DAWICKI, ANGELA MICHELE, US

[71] NORTHEAST MARITIME INSTITUTE, INC., US

[85] 2023-05-03

[86] 2021-11-02 (PCT/US2021/057722)

[87] (WO2022/098651)

[30] US (63/109,217) 2020-11-03

[21] **3,200,517**  
[13] A1

[51] **Int.Cl. C12Q 1/6806 (2018.01) C12Q 1/6869 (2018.01) C40B 50/06 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR MAKING SEQUENCING LIBRARIES**

[54] **SYSTEMES ET PROCEDES DE FABRICATION DE BANQUES DE SEQUENCAGE**

[72] MELTZER, ROBERT, US

[71] FLUENT BIOSCIENCES INC., US

[85] 2023-05-03

[86] 2021-11-03 (PCT/US2021/057857)

[87] (WO2022/098726)

[30] US (63/109,035) 2020-11-03

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[21] **3,200,518**  
[13] A1

[51] **Int.Cl. B60C 11/03 (2006.01)**  
[25] EN  
[54] **TIRE TREAD WITH MULTIPLE CIRCUMFERENTIAL ASYMMETRIES**  
[54] **BANDE DE ROULEMENT DE PNEUMATIQUE A MULTIPLES ASYMETRIES CIRCONFERENCELLES**  
[72] MINEUR, MARK H., US  
[71] AMERICAN TIRE ENGINEERING, INC., US  
[85] 2023-05-03  
[86] 2021-11-03 (PCT/US2021/057863)  
[87] (WO2022/098732)  
[30] US (63/109,862) 2020-11-04

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[21] **3,200,519**  
[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6851 (2018.01) G01N 35/08 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR DETECTING PATHOGENIC MICROBES IN A PATIENT**  
[54] **PROCEDES ET SYSTEMES POUR LA DETECTION DE MICROBES PATHOGENES CHEZ UN PATIENT**  
[72] MELTZER, ROBERT, US  
[71] FLUENT BIOSCIENCES INC., US  
[85] 2023-05-03  
[86] 2021-11-03 (PCT/US2021/057868)  
[87] (WO2022/098736)  
[30] US (63/109,037) 2020-11-03

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[21] **3,200,520**  
[13] A1

[51] **Int.Cl. B65D 5/20 (2006.01) B65D 5/26 (2006.01) B65D 5/28 (2006.01) B65D 5/30 (2006.01) B65D 77/20 (2006.01)**  
[25] EN  
[54] **TRAY FOR FOOD PRODUCTS**  
[54] **PLATEAU POUR PRODUITS ALIMENTAIRES**  
[72] BRINK, THOMAS, US  
[72] HITHERSAY, ELLIOT, GB  
[71] GRAPHIC PACKAGING INTERNATIONAL, LLC, US  
[85] 2023-05-02  
[86] 2021-11-04 (PCT/US2021/058048)  
[87] (WO2022/098865)  
[30] US (63/110,582) 2020-11-06  
[30] US (63/110,587) 2020-11-06  
[30] US (63/110,578) 2020-11-06  
[30] US (63/126,157) 2020-12-16  
[30] US (63/128,418) 2020-12-21  
[30] US (63/139,341) 2021-01-20  
[30] US (63/169,302) 2021-04-01  
[30] US (63/169,418) 2021-04-01  
[30] US (63/174,724) 2021-04-14  
[30] US (63/178,116) 2021-04-22  
[30] US (63/191,412) 2021-06-01

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[21] **3,200,521**  
[13] A1

[51] **Int.Cl. C12N 9/12 (2006.01) C12N 9/22 (2006.01) C12N 15/10 (2006.01) C12N 15/11 (2006.01) C12N 15/62 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR RNA-ENCODED DNA-REPLACEMENT OF ALLELES**  
[54] **COMPOSITIONS ET PROCEDES DE REMPLACEMENT D'ALLELES DE L'ADN CODE PAR L'ARN**  
[72] KIM, YONGJOO, US  
[72] WATTS, JOSEPH MATTHEW, US  
[72] HUMMEL, AARON, US  
[72] LAWIT, SHAI JOSHUA, US  
[72] SCHWARK, DAVID, US  
[71] PAIRWISE PLANTS SERVICES, INC., US  
[85] 2023-05-02  
[86] 2021-11-05 (PCT/US2021/058235)  
[87] (WO2022/098993)  
[30] US (63/110,386) 2020-11-06

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[21] **3,200,522**  
[13] A1

[51] **Int.Cl. B60W 50/14 (2020.01) B60W 30/00 (2006.01) B60W 40/00 (2006.01) B60W 50/00 (2006.01)**  
[25] EN  
[54] **MOVE OVER / ONCOMING VEHICLE WARNING SYSTEM**  
[54] **SYSTEME D'AVERTISSEMENT DE DEGAGEMENT DE VOIE/DE VEHICULE VENANT EN SENS INVERSE**  
[72] WATKINS, D. SCOTT, US  
[72] TIEMAN, CRAIG A., US  
[71] MOBILE VIDEO COMPUTING SOLUTIONS LLC, US  
[85] 2023-05-02  
[86] 2021-11-05 (PCT/US2021/058263)  
[87] (WO2022/099014)  
[30] US (63/110,912) 2020-11-06  
[30] US (63/116,802) 2020-11-20

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[21] **3,200,523**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01)**  
[25] EN  
[54] **ANTIBODIES FOR OPIOID TREATMENTS**  
[54] **ANTICORPS POUR TRAITEMENTS AUX OPIOIDES**  
[72] JANDA, KIM D., US  
[72] BREMER, PAUL T., US  
[72] ZHOU, BIN, US  
[71] THE SCRIPPS RESEARCH INSTITUTE, US  
[85] 2023-05-02  
[86] 2021-11-08 (PCT/US2021/058459)  
[87] (WO2022/103700)  
[30] US (63/111,699) 2020-11-10

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[21] **3,200,524**  
[13] A1

[51] **Int.Cl. A61K 31/4439 (2006.01) A61K 31/4545 (2006.01) A61K 31/506 (2006.01) A61P 35/00 (2006.01) C07D 401/14 (2006.01) C07D 405/14 (2006.01) C07D 471/04 (2006.01) C07D 471/08 (2006.01) C07D 487/04 (2006.01) C07D 487/08 (2006.01) C07D 491/10 (2006.01) C07D 498/04 (2006.01) C07D 498/08 (2006.01) C07F 7/08 (2006.01)**

[25] EN

[54] **PPAR.GAMMA. MODULATORS AND METHODS OF USE**

[54] **MODULATEURS DE PPAR.GAMMA. ET METHODES D'UTILISATION**

[72] PRAJAPATI, SUDEEP, US  
[72] LEE, HYELEE, US  
[72] IOANNIDIS, STEPHANOS, US  
[72] OMOTO, KIYOYUKI, US  
[72] ROLFE, ALAN, US  
[72] LIU, XIANG, US  
[72] SHEEHAN, MEGAN, US  
[72] DRANSFIELD, PAUL, US  
[72] COOK, ANDREW, US  
[71] EISAI R&D MANAGEMENT CO., LTD., JP  
[85] 2023-05-02  
[86] 2021-11-08 (PCT/US2021/058473)  
[87] (WO2022/099144)  
[30] US (63/111,354) 2020-11-09

[21] **3,200,531**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) G10L 25/00 (2013.01) A61B 5/08 (2006.01) A61B 5/087 (2006.01) G01N 29/024 (2006.01) G01N 33/00 (2006.01) G01N 33/497 (2006.01)**

[25] EN

[54] **DETECTING IMPAIRED PHYSIOLOGICAL FUNCTION FROM EXHALED GAS CONCENTRATIONS AND SPECTRAL ENVELOPE EXTRACTED FROM SPEECH ANALYSIS**

[54] **DETECTION DE FONCTION PHYSIOLOGIQUE ALTEREE A PARTIR DE CONCENTRATIONS EN GAZ EXHALE ET D'UNE ENVELOPPE SPECTRALE EXTRAITE D'UNE ANALYSE DE LA PAROLE**

[72] SHALLOM, ILAN D., IL  
[71] CORDIO MEDICAL LTD., IL  
[85] 2023-04-28  
[86] 2021-11-22 (PCT/IB2021/060800)  
[87] (WO2022/107091)  
[30] US (63/116,949) 2020-11-23

[21] **3,200,533**  
[13] A1

[51] **Int.Cl. A61K 9/20 (2006.01) A61K 31/4985 (2006.01) A61K 47/14 (2017.01) A61K 47/36 (2006.01) A61P 1/08 (2006.01) A61P 11/14 (2006.01)**

[25] EN

[54] **ANTI-VERTIGO COMPOUND AND PHARMACEUTICAL COMPOSITIONS THEREOF**

[54] **COMPOSE ANTI-VERTIGE ET COMPOSITIONS PHARMACEUTIQUES DE CELUI-CI**

[72] VYAS, NIRAV, IN  
[71] AMERISE PHARMACEUTICALS PVT LTD., IN  
[85] 2023-04-28  
[86] 2021-09-10 (PCT/IN2021/050886)  
[87] (WO2022/091118)  
[30] IN (202021047025) 2020-10-28

[21] **3,200,534**  
[13] A1

[51] **Int.Cl. A01G 25/09 (2006.01) B05B 15/14 (2018.01) B05B 15/60 (2018.01) B05B 3/18 (2006.01) B05B 9/00 (2006.01) B05B 13/02 (2006.01)**

[25] EN

[54] **SPRINKLER**

[54] **ARROSEUR**

[72] HOLMES, KATHLEEN, AU  
[72] HOLMES, TONY, AU  
[71] KATCO HOLDINGS PTY LTD, AU  
[85] 2023-05-01  
[86] 2021-11-10 (PCT/AU2021/051329)  
[87] (WO2022/099361)  
[30] AU (2020904148) 2020-11-12  
[30] AU (2020904151) 2020-11-12

[21] **3,200,537**  
[13] A1

[51] **Int.Cl. E01C 23/22 (2006.01) B05B 12/00 (2018.01)**

[25] EN

[54] **PAINTING ASSEMBLY FOR DISTANCE MEASURING WHEEL**

[54] **ENSEMBLE DE PULVERISATION DE PEINTURE POUR ROUE DE TELEMETRIE**

[72] SHI, XIN, CN  
[72] LIU, KUI, CN  
[72] XING, DAVID, US  
[71] NORTHWEST INSTRUMENT INC., US  
[85] 2023-05-01  
[86] 2021-07-06 (PCT/CN2021/104661)  
[87] (WO2022/095491)  
[30] CN (202011222604.2) 2020-11-05

[21] **3,200,538**  
[13] A1

[51] **Int.Cl. A61K 9/20 (2006.01) A61K 31/404 (2006.01) A61P 31/14 (2006.01)**

[25] EN

[54] **SOLID FORMULATION**

[54] **FORMULATION SOLIDE**

[72] ZHU, DONGHUA, CN  
[72] KIMPE, KRISTOF LEONARD, BE  
[72] ANDERSEN, SUNE KLINT, BE  
[72] RAVELINGIEN, MATTHIEU JEAN M., BE  
[72] SOMERS, IVAN HENRI M., BE  
[71] JANSSEN PHARMACEUTICALS, INC., US  
[85] 2023-05-01  
[86] 2021-11-03 (PCT/CN2021/128521)  
[87] (WO2022/095913)  
[30] CN (PCT/CN2020/126596) 2020-11-04

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[21] **3,200,539**  
[13] A1

[51] **Int.Cl. F16L 55/165 (2006.01)**  
[25] EN  
[54] **A METHOD OF RELINING A SEWER PIPE**  
[54] **PROCEDE PERMETTANT DE REVETIR DE NOUVEAU INTERIEUREMENT UN TUYAU D'EGOUT**  
[72] SLOTH RASMUSSEN, BENT, DK  
[72] PAGTER RASMUSSEN, MOGENS, DK  
[71] PER AARSLEFF A/S, DK  
[85] 2023-05-01  
[86] 2021-11-05 (PCT/EP2021/080814)  
[87] (WO2022/096666)  
[30] EP (20206212.1) 2020-11-06

[21] **3,200,563**  
[13] A1

[51] **Int.Cl. A61K 31/7105 (2006.01) C12N 15/113 (2010.01) C12N 15/11 (2006.01)**  
[25] EN  
[54] **ENHANCING UTROPHIN EXPRESSION IN CELL BY INDUCING MUTATIONS WITHIN UTROPHIN REGULATORY ELEMENTS AND THERAPEUTIC USE THEREOF**  
[54] **AMELIORATION DE L'EXPRESSION D'UTROPHINE DANS UNE CELLULE PAR INDUCTION DE MUTATIONS DANS DES ELEMENTS REGULATEURS D'UTROPHINE ET LEUR UTILISATION THERAPEUTIQUE**  
[72] AMENDOLA, MARIO, FR  
[72] GUIRAUD, SIMON, FR  
[71] GENETHON, FR  
[71] UNIVERSITE D'EVRY VAL D'ESSONNE, FR  
[71] INSERM (INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE), FR  
[85] 2023-03-15  
[86] 2021-09-29 (PCT/EP2021/076882)  
[87] (WO2022/069598)  
[30] EP (20306112.2) 2020-09-29

[21] **3,200,566**  
[13] A1

[51] **Int.Cl. C07D 491/08 (2006.01) A61K 31/537 (2006.01) A61P 25/28 (2006.01)**  
[25] EN  
[54] **PROCESS FOR THE PREPARATION OF BIHETEROARYL COMPOUNDS AND CRYSTAL FORMS THEREOF**  
[54] **PROCEDE DE PREPARATION DE COMPOSES BIHETEROARYLE ET LEURS FORMES CRISTALLINES**  
[72] HOFFMANN-EMERY, FABIENNE, CH  
[72] KONRATH, MANUEL, CH  
[72] LAUTZ, CHRISTIAN, CH  
[72] NIEDERMANN, KATRIN MONIKA, CH  
[72] ORCEL, UGO JONATHAN, CH  
[72] CARRERA, DIANE ELIZABETH, US  
[71] GENENTECH, INC., US  
[71] F. HOFFMANN-LA ROCHE AG, CH  
[85] 2023-03-28  
[86] 2021-09-30 (PCT/US2021/053005)  
[87] (WO2022/072721)  
[30] US (63/087,109) 2020-10-02

[21] **3,200,567**  
[13] A1

[51] **Int.Cl. B32B 17/02 (2006.01) C03C 25/26 (2018.01) E04B 1/78 (2006.01)**  
[25] EN  
[54] **ADDITIVES FOR BINDER COMPOSITIONS IN FIBROUS INSULATION PRODUCTS**  
[54] **ADDITIFS POUR COMPOSITIONS DE LIANT DANS DES PRODUITS D'ISOLATION FIBREUX**  
[72] CLICK, KEVIN, US  
[72] CHEN, LIANG, US  
[72] MUELLER, GERT, US  
[72] PETTERSSON, CHARLOTTE, FI  
[72] ZHANG, XIUJUAN, US  
[71] OWENS CORNING INTELLECTUAL CAPITAL, LLC, US  
[71] PAROC GROUP OY, FI  
[85] 2023-03-28  
[86] 2021-09-30 (PCT/US2021/052755)  
[87] (WO2022/072568)  
[30] US (63/086,271) 2020-10-01

[21] **3,200,568**  
[13] A1

[51] **Int.Cl. C09D 183/04 (2006.01) E04D 5/06 (2006.01) E04D 7/00 (2006.01) E04D 11/02 (2006.01)**  
[25] EN  
[54] **AQUEOUS SILICONE ELASTOMERS AS ROOF COATINGS**  
[54] **ELASTOMERES DE SILICONE AQUEUX UTILISES COMME REVETEMENTS DE TOIT**  
[72] KRYTENBERG, TIMOTHY, US  
[71] INDUSTRIAL CONTROL DEVELOPMENT, INC., US  
[85] 2023-05-01  
[86] 2021-11-08 (PCT/US2021/058426)  
[87] (WO2022/103692)  
[30] US (63/112,519) 2020-11-11

[21] **3,200,571**  
[13] A1

[51] **Int.Cl. A61K 31/7032 (2006.01) A61P 25/00 (2006.01)**  
[25] EN  
[54] **THERAPEUTIC AGENT FOR PROGRESSIVE DISEASE CAUSED BY INCREASE IN EOMES-POSITIVE CD4-POSITIVE T CELLS**  
[54] **AGENT THERAPEUTIQUE POUR MALADIE EVOLUTIVE PROVOQUEE PAR L'AUGMENTATION DE LYMPHOCYTES T CD4-POSITIFS EOMES-POSITIFS**  
[72] YAMAMURA, TAKASHI, JP  
[72] OKI, SHINJI, JP  
[72] RAVENEY, BENJAMIN JOSEPH EDWARD, JP  
[72] SATO, WAKIRO, JP  
[72] OKAMOTO, TOMOKO, JP  
[71] NATIONAL CENTER OF NEUROLOGY AND PSYCHIATRY, JP  
[85] 2023-05-01  
[86] 2020-11-06 (PCT/JP2020/041603)  
[87] (WO2022/097287)

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[21] **3,200,572**  
[13] A1

[51] **Int.Cl. G01N 33/574 (2006.01) A61K 39/00 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01) C07K 16/30 (2006.01)**

[25] EN

[54] **ACTIVE CANCER IMMUNOTHERAPY BY IMMUNE MODULATION VIA GLOBO SERIES ANTIGENS**

[54] **IMMUNOTHERAPIE ANTICANCEREUSE ACTIVE PAR MODULATION IMMUNITAIRE PAR L'INTERMEDIAIRE D'ANTIGENES DE SERIE GLOBO**

[72] LAI, MING-TAIN, TW  
[72] YU, CHENG-DER TONY, TW  
[72] CHEN, I-JU, TW  
[72] LEE, WEI-HAN, TW  
[72] YANG, CHUEH-HAO, TW  
[72] TSAO, CHUN-YEN, TW  
[72] HSIEH, CHANG-LIN, TW  
[72] OU, CHIEN-CHIH, TW  
[72] TSAI, CHEN-EN, TW  
[71] OBI PHARMA, INC., CN  
[85] 2023-05-01  
[86] 2021-11-19 (PCT/US2021/072513)  
[87] (WO2022/109601)  
[30] US (63/116,015) 2020-11-19

[21] **3,200,577**  
[13] A1

[51] **Int.Cl. C12N 5/071 (2010.01)**

[25] EN

[54] **IN VITRO DERIVATION OF GONADAL SOMATIC CELLS**

[54] **DERIVATION IN VITRO DE CELLULES SOMATIQUES GONADIQUES**

[72] BARGAJE, RHISHIKESH, US  
[72] SERES, KARMEN BIANKA, US  
[72] HURTADO-GONZALEZ, PABLO, US  
[72] MILLER, ALYSSA, US  
[71] CONCEPTION BIOSCIENCES, INC., US  
[85] 2023-05-01  
[86] 2021-11-01 (PCT/US2021/072165)  
[87] (WO2022/094628)  
[30] US (63/108,666) 2020-11-02  
[30] US (63/222,953) 2021-07-16

[21] **3,200,578**  
[13] A1

[51] **Int.Cl. C12N 5/071 (2010.01) G01N 33/50 (2006.01)**

[25] EN

[54] **DROPLET ORGANOID-BASED IMMUNO-ONCOLOGY ASSAYS AND METHODS OF USING SAME**

[54] **DOSAGES IMMUNO-ONCOLOGIQUES A BASE D'ORGANOIDES EN GOUTTELETTES ET METHODES ASSOCIEES D'UTILISATION**

[72] SHEN, XILING, US  
[72] NATESH, NAVEEN, US  
[72] DELUBAC, DANIEL, US  
[71] DUKE UNIVERSITY, US  
[71] XILIS, INC., US  
[85] 2023-05-01  
[86] 2021-11-23 (PCT/US2021/060572)  
[87] (WO2022/115455)  
[30] US (63/117,767) 2020-11-24

[21] **3,200,580**  
[13] A1

[51] **Int.Cl. H04W 4/18 (2009.01) H04W 4/40 (2018.01) G06F 16/25 (2019.01)**

[25] EN

[54] **GENERATING STANDARDIZED FORMAT DATA FROM DISPARATE, NON-STANDARDIZED VEHICLE DATA**

[54] **GENERATION DE DONNEES DE FORMAT NORMALISE A PARTIR DE DONNEES DE VEHICULES DISPARATES ET NON NORMALISEES**

[72] KENNEDY, JOHN C., US  
[72] KOPCHINSKY, SCOTT, US  
[72] SON, DON, US  
[72] FIELDS, JACOB, US  
[72] DEMCHUK, DARRIN, US  
[71] PLATFORM SCIENCE, INC., US  
[85] 2023-05-01  
[86] 2021-11-19 (PCT/US2021/060137)  
[87] (WO2022/109298)  
[30] US (63/116,897) 2020-11-22

[21] **3,200,582**  
[13] A1

[51] **Int.Cl. G08B 13/196 (2006.01) G08B 25/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR PROPERTY MONITORING**

[54] **SYSTEME ET PROCEDE DE SURVEILLANCE DE PROPRIETE**

[72] SUBRAMANY, RAHUL, US  
[71] SIMPLISAFE, INC., US  
[85] 2023-05-01  
[86] 2021-11-18 (PCT/US2021/059844)  
[87] (WO2022/109104)  
[30] US (63/115,798) 2020-11-19

[21] **3,200,584**  
[13] A1

[51] **Int.Cl. G01N 33/68 (2006.01)**

[25] EN

[54] **REUSABLE CARTRIDGES FOR DETECTING ANALYTES IN SOLUTION**

[54] **CARTOUCHES REUTILISABLES DE DETECTION D'ANALYTES EN SOLUTION**

[72] POLLOCK, SAMUEL BENJAMIN, US  
[71] GENENTECH, INC., US  
[85] 2023-05-01  
[86] 2021-11-18 (PCT/US2021/059819)  
[87] (WO2022/109087)  
[30] US (63/116,575) 2020-11-20

[21] **3,200,586**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/95 (2013.01)**

[25] EN

[54] **DEVICES AND METHODS FOR CONTROLLING FLUID FLOW IN A DELIVERY APPARATUS**

[54] **DISPOSITIFS ET PROCEDES DE REGULATION D'UN DEBIT DE FLUIDE DANS UN APPAREIL D'ADMINISTRATION**

[72] REED, KURT KELLY, US  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2023-05-01  
[86] 2021-11-12 (PCT/US2021/059075)  
[87] (WO2022/104013)  
[30] US (63/113,322) 2020-11-13

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[21] **3,200,591**  
[13] A1

[51] **Int.Cl. F16K 5/04 (2006.01) F16K 15/18 (2006.01) F16K 27/06 (2006.01)**

[25] EN

[54] **CHECK VALVE ASSEMBLY**

[54] **ENSEMBLE CLAPET ANTIRETOUR**

[72] COSTA, STEFANO, FR

[72] ZANNI, RODOLFO, FR

[72] DELAIR, VANESSA, FR

[72] JOUBERT, PIERRE, FR

[72] CAVALIE, HENRI-XAVIER, FR

[72] REY, CHARLOTTE, FR

[72] LE GOFF, JEAN-PHILIPPE, FR

[71] ALIAXIS RESEARCH & TECHNOLOGY, FR

[85] 2023-05-01

[86] 2021-11-08 (PCT/EP2021/080955)

[87] (WO2022/096715)

[30] LU (LU102188) 2020-11-09

[21] **3,200,593**  
[13] A1

[51] **Int.Cl. A23G 1/00 (2006.01) A23G 1/18 (2006.01) A23G 3/34 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS**

[54] **PROCEDE ET APPAREIL**

[72] MCLEOD, EMMA, GB

[72] OSBORNE, ANNA, GB

[71] KRAFT FOODS SCHWEIZ HOLDING GMBH, CH

[85] 2023-05-01

[86] 2021-11-29 (PCT/EP2021/083323)

[87] (WO2022/112549)

[30] GB (2018855.3) 2020-11-30

[21] **3,200,594**  
[13] A1

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/5025 (2006.01) A61P 29/00 (2006.01)**

[25] EN

[54] **IMIDAZOPYRIDAZINE DERIVATIVES AS IL-17 MODULATORS**

[54] **DERIVES D'IMIDAZOPYRIDAZINE UTILISES EN TANT QUE MODULATEURS D'IL-17**

[72] BRACE, GARETH NEIL, GB

[72] CHU, SHUYU, GB

[72] FOLEY, ANNE MARIE, GB

[72] JOHNSON, JAMES ANDREW, GB

[72] NORMAN, TIMOTHY JOHN, GB

[72] QUINCEY, JOANNA RACHEL, GB

[72] REUBERSON, JAMES THOMAS, GB

[72] STRAKER, ROBERT, GB

[72] TOWNSEND, ROBERT JAMES, GB

[71] UCB BIOPHARMA SRL, BE

[85] 2023-05-01

[86] 2021-12-06 (PCT/EP2021/084448)

[87] (WO2022/128584)

[30] GB (2019702.6) 2020-12-14

[30] GB (2109583.1) 2021-07-02

[21] **3,200,595**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01)**

[25] EN

[54] **COAGULATION FACTOR V (F5) IRNA COMPOSITIONS AND METHODS OF USE THEREOF**

[54] **COMPOSITIONS D'ARNI DU FACTEUR DE COAGULATION V (F5) ET LEURS PROCEDES D'UTILISATION**

[72] KEATING, MARK, US

[72] MCININCH, JAMES D., US

[72] SCHLEGEL, MARK K., US

[71] ALNYLAM PHARMACEUTICALS, INC., US

[85] 2023-05-01

[86] 2021-11-12 (PCT/US2021/059047)

[87] (WO2022/103999)

[30] US (63/113,282) 2020-11-13

[30] US (63/146,115) 2021-02-05

[30] US (63/271,872) 2021-10-26

[21] **3,200,596**  
[13] A1

[51] **Int.Cl. A61K 31/662 (2006.01) A61K 31/663 (2006.01) A61P 7/06 (2006.01)**

[25] EN

[54] **NICOTINAMIDE MONONUCLEOTIDE DERIVATIVES AND USE THEREOF IN THE TREATMENT AND PREVENTION OF A RED BLOOD CELL DISORDER**

[54] **DERIVES DE NICOTINAMIDE MONONUCLEOTIDE ET UTILISATION ASSOCIEE DANS LE TRAITEMENT ET LA PREVENTION D'UN DEREGLEMENT DES GLOBULES ROUGES**

[72] BERMOND, GUILLAUME, CH

[72] GARCON, LAURENT, FR

[72] CANAULT, MATTHIAS, FR

[72] CROS, CECILE, CH

[71] NUVAMID SA, CH

[85] 2023-05-01

[86] 2021-12-17 (PCT/EP2021/086437)

[87] (WO2022/129490)

[30] EP (20215833.3) 2020-12-18

[21] **3,200,599**  
[13] A1

[51] **Int.Cl. C04B 7/12 (2006.01) C04B 14/10 (2006.01)**

[25] FR

[54] **METHOD FOR PRODUCING CALCINED CLAY**

[54] **PROCEDE DE PRODUCTION D'ARGILE CALCINEE**

[72] CHARMET, JEAN-MICHEL, FR

[71] FIVES FCB, FR

[85] 2023-05-01

[86] 2021-10-29 (PCT/FR2021/051910)

[87] (WO2022/096812)

[30] FR (FR2011381) 2020-11-05



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[21] **3,200,602**  
[13] A1

[51] **Int.Cl. A61K 39/09 (2006.01) A61P 31/00 (2006.01)**  
[25] EN  
[54] **IMMUNOGENIC COMPOSITIONS FOR USE IN PNEUMOCOCCAL VACCINES**  
[54] **COMPOSITIONS IMMUNOGENES DESTINEES A ETRE UTILISEES DANS DES VACCINS PNEUMOCOCCIQUES**  
[72] ANDERSON, ANNALIESA SYBIL, US  
[72] GANGOLLI, SEEMA SHRIDHAR, US  
[72] JANSEN, KATHRIN UTE, US  
[72] PRASAD, AVVARI KRISHNA, US  
[72] PRIDE, MICHAEL WILLIAM, US  
[72] SCULLY, INGRID LEA, US  
[72] WATSON, WENDY JO, US  
[71] PFIZER INC., US  
[85] 2023-05-01  
[86] 2021-11-01 (PCT/IB2021/060097)  
[87] (WO2022/097010)  
[30] US (63/109,423) 2020-11-04

[21] **3,200,603**  
[13] A1

[51] **Int.Cl. C07K 16/00 (2006.01)**  
[25] EN  
[54] **NOVEL LINKERS OF MULTISPECIFIC ANTIGEN BINDING DOMAINS**  
[54] **NOUVEAUX LIEURS DE DOMAINES DE LIAISON A L'ANTIGENE MULTISPECIFIQUES**  
[72] RILEY, TIMOTHY, US  
[72] GARCES, FERNANDO, US  
[72] WANG, ZHULUN, US  
[72] ESTES, BRAM, US  
[72] BATES, DARREN L., US  
[71] AMGEN INC., US  
[85] 2023-05-01  
[86] 2021-11-09 (PCT/US2021/058669)  
[87] (WO2022/103773)  
[30] US (63/112,119) 2020-11-10

[21] **3,200,655**  
[13] A1

[51] **Int.Cl. B01J 8/00 (2006.01) B01J 8/12 (2006.01) B01J 23/882 (2006.01) B01J 23/883 (2006.01) B01J 27/19 (2006.01) B01J 35/02 (2006.01) B01J 35/08 (2006.01) B01J 37/20 (2006.01) C10G 45/04 (2006.01) C10G 45/18 (2006.01)**  
[25] EN  
[54] **STANDALONE HYDRO-DEMETALLIZATION (HDM) UNIT**  
[54] **UNITE D'HYDRO-DEMETALLISATION AUTONOME (HDM)**  
[72] BARIC, JOHN JOSEPH, NL  
[72] HODES, COEN BERNHARD, NL  
[71] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL  
[85] 2023-05-02  
[86] 2021-11-11 (PCT/EP2021/081351)  
[87] (WO2022/101328)  
[30] EP (20207266.6) 2020-11-12

[21] **3,200,656**  
[13] A1

[51] **Int.Cl. A61K 31/70 (2006.01) A61K 35/745 (2015.01) A61K 35/747 (2015.01) A61K 31/702 (2006.01) A61K 36/899 (2006.01) A61P 25/24 (2006.01)**  
[25] EN  
[54] **SYNBIOTIC COMPOSITION**  
[54] **COMPOSITION SYMBIOTIQUE**  
[72] LAVEBRATT, CATHARINA, SE  
[72] RUEGG, JOELLE, SE  
[72] SCHALLING, MARTIN, SE  
[71] SYNBIOTICS AB, SE  
[85] 2023-05-01  
[86] 2021-11-12 (PCT/SE2021/051137)  
[87] (WO2022/103320)  
[30] SE (2051326-3) 2020-11-12

[21] **3,200,657**  
[13] A1

[51] **Int.Cl. A61K 35/747 (2015.01) A61K 35/744 (2015.01) A61K 31/702 (2006.01) A61P 1/00 (2006.01) A61P 31/14 (2006.01)**  
[25] EN  
[54] **SYNBIOTIC COMPOSITION**  
[54] **COMPOSITION SYMBIOTIQUE**  
[72] SVENSSON, ULLA K., SE  
[72] LAVEBRATT, CATHARINA, SE  
[72] RUEGG, JOELLE, SE  
[72] SCHALLING, MARTIN, SE  
[71] SYNBIOTICS AB, SE  
[85] 2023-05-01  
[86] 2021-11-12 (PCT/SE2021/051138)  
[87] (WO2022/103321)  
[30] SE (2051327-1) 2020-11-12

[21] **3,200,658**  
[13] A1

[51] **Int.Cl. A61N 1/04 (2006.01) A61N 1/36 (2006.01) A61N 1/362 (2006.01)**  
[25] EN  
[54] **A STIMULATION SYSTEM INCLUDING A MULTI-ELECTRODE EAR SHELL AND METHOD OF USING THE SAME**  
[54] **SYSTEME DE STIMULATION COMPRENANT UNE OREILLETTE A ELECTRODES MULTIPLES ET PROCEDE D'UTILISATION D'UN TEL SYSTEME**  
[72] KLEIN, VALMA, US  
[71] THE ALFRED E. MANN FOUNDATION FOR SCIENTIFIC RESEARCH, US  
[85] 2023-05-03  
[86] 2021-08-24 (PCT/US2021/047392)  
[87] (WO2022/103466)  
[30] US (63/112,081) 2020-11-10

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[21] **3,200,659**  
[13] A1

[51] **Int.Cl. E21B 33/04 (2006.01) E21B 33/129 (2006.01) E21B 43/10 (2006.01)**

[25] EN

[54] **SLIP PACKAGE WITH IMPROVED INITIAL SETTING**

[54] **EMBALLAGE DE COINS DE RETENUE A REGLAGE INITIAL AMELIORE**

[72] MORENO, CARLOS, US

[72] KLAUBER, KAMERON LEE, US

[72] ROUNDING, JAMES, US

[72] HERNANDEZ, MARTIN, US

[72] GORTOWSKI, ZACHARY, US

[72] HALBERT, AMANDA, US

[72] UNDERBRINK, MICHAEL, US

[71] SCHLUMBERGER CANADA LIMITED, CA

[85] 2023-05-03

[86] 2021-10-25 (PCT/US2021/056492)

[87] (WO2022/098533)

[30] US (63/109,209) 2020-11-03

[21] **3,200,660**  
[13] A1

[51] **Int.Cl. A61N 7/00 (2006.01) A61B 8/00 (2006.01) A61K 38/00 (2006.01) C12N 13/00 (2006.01) G01N 29/00 (2006.01)**

[25] EN

[54] **SONOGENIC STIMULATION OF CELLS EXPRESSING BACTERIALLY-DERIVED MECHANOSENSITIVE PROTEINS**

[54] **STIMULATION SONOGENIQUE DE CELLULES EXPRIMANT DES PROTEINES MECANOSENSIBLES DERIVEES DE BACTERIES**

[72] CHALASANI, SREEKANTH, US

[72] LEE-KUBLI, CORINNE, US

[72] MAGARAM, URI, US

[72] GIBBS, DANIEL, US

[71] SALK INSTITUTE FOR BIOLOGICAL STUDIES, US

[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US

[85] 2023-05-03

[86] 2021-11-02 (PCT/US2021/057646)

[87] (WO2022/098614)

[30] US (63/109,578) 2020-11-04

[21] **3,200,661**  
[13] A1

[51] **Int.Cl. C07K 14/705 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **ENGINEERED T CELL RECEPTORS TARGETING EGFR ANTIGENS AND METHODS OF USE**

[54] **ANTIGENES EGFR CIBLANT LES RECEPTEURS DE LYMPHOCYTES T GENETIQUEMENT MODIFIES ET LEURS METHODES D'UTILISATION**

[72] HWU, PATRICK, US

[72] YEE, CASSIAN, US

[72] LIZEE, GREGORY, US

[71] BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, US

[85] 2023-05-03

[86] 2021-11-04 (PCT/US2021/058019)

[87] (WO2022/098845)

[21] **3,200,662**  
[13] A1

[51] **Int.Cl. C07D 401/04 (2006.01)**

[25] EN

[54] **PROCESS FOR PREPARATION OF 2-HYDROXY-6-((2-(1-ISOPROPYL-1H-PYRAZOL-5-YL)PYRIDIN-3-YL)METHOXY)BENZALDEHYDE**

[54] **PROCEDE DE SYNTHESE DE 2-HYDROXY-6-((2-(1-ISOPROPYL-1H-PYRAZOL-5-YL)PYRIDIN-3-YL)METHOXY)BENZALDEHYDE**

[72] WANG, FANG, US

[72] DENG, YOUQIAN, US

[72] FRICK, MORIN MAE, US

[72] WANG, XIANG, US

[71] GLOBAL BLOOD THERAPEUTICS, INC., US

[85] 2023-05-03

[86] 2021-11-05 (PCT/US2021/058324)

[87] (WO2022/099064)

[30] US (63/110,826) 2020-11-06

[30] US (63/237,780) 2021-08-27

[21] **3,200,663**  
[13] A1

[51] **Int.Cl. B32B 27/32 (2006.01) C08L 23/16 (2006.01)**

[25] EN

[54] **MULTILAYER FILM**

[54] **FILM MULTICOUCHE**

[72] KINNAN, MICHAEL A., US

[72] GILLESPIE, BRYAN S., US

[72] KITZMILLER, BROOKE D., US

[71] BERRY GLOBAL, INC., US

[85] 2023-05-04

[86] 2021-11-04 (PCT/US2021/058058)

[87] (WO2022/098871)

[30] US (63/110,129) 2020-11-05

[21] **3,200,664**  
[13] A1

[51] **Int.Cl. A61K 9/51 (2006.01) A61K 31/436 (2006.01) A61K 38/48 (2006.01) A61K 45/00 (2006.01) A61P 13/12 (2006.01)**

[25] EN

[54] **COMPOSITIONS FOR REDUCING IMMUNE RESPONSES AGAINST IMMUNOGLOBULIN PROTEASES**

[54] **COMPOSITIONS POUR REDUIRE DES REPONSES IMMUNITAIRES CONTRE DES IMMUNOGLOBULINE PROTEASES**

[72] KISHIMOTO, TAKASHI KEI, US

[71] SELECTA BIOSCIENCES, INC., US

[85] 2023-05-04

[86] 2021-11-04 (PCT/US2021/058098)

[87] (WO2022/098901)

[30] US (63/109,760) 2020-11-04

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[21] **3,200,665**  
[13] A1

[51] **Int.Cl. C07K 14/705 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/30 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR CLASSIFICATION AND TREATMENT OF SMALL CELL LUNG CANCER**

[54] **METHODS ET COMPOSITIONS DE CLASSIFICATION ET DE TRAITEMENT DU CANCER DU POUMON A PETITES CELLULES**

[72] PARK, ELIZABETH M., US

[72] BYERS, LAUREN A., US

[72] GAY, CARL M., US

[72] HEYMACH, JOHN V., US

[71] BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, US

[85] 2023-05-04

[86] 2021-11-05 (PCT/US2021/058218)

[87] (WO2022/098979)

[30] US (63/110,664) 2020-11-06

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[21] **3,200,666**  
[13] A1

[51] **Int.Cl. C12Q 1/6886 (2018.01) A61K 39/395 (2006.01) C07K 16/30 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR TUMOR CHARACTERIZATION**

[54] **COMPOSITIONS ET PROCEDES POUR LA CHARACTERISATION DES TUMEURS**

[72] GETZ, GAD, US

[72] MARUVKA, YOSEF, US

[71] THE GENERAL HOSPITAL CORPORATION, US

[85] 2023-05-04

[86] 2021-11-05 (PCT/US2021/058241)

[87] (WO2022/098997)

[30] US (63/110,853) 2020-11-06

[30] US (63/111,415) 2020-11-09

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[21] **3,200,667**  
[13] A1

[51] **Int.Cl. C12Q 1/6886 (2018.01) A61K 39/395 (2006.01) C07K 14/47 (2006.01) C07K 16/30 (2006.01)**

[25] EN

[54] **METHODS FOR CHARACTERIZING BIOLOGICAL SAMPLES**

[54] **PROCEDES POUR CHARACTERISER DES ECHANTILLONS BIOLOGIQUES**

[72] GETZ, GAD, US

[72] MARUVKA, YOSEF, US

[72] TABORI, URI, CA

[72] CHUNG, JIIL, CA

[71] THE GENERAL HOSPITAL CORPORATION, US

[71] THE HOSPITAL FOR SICK CHILDREN, CA

[85] 2023-05-04

[86] 2021-11-05 (PCT/US2021/058252)

[87] (WO2022/099004)

[30] US (63/110,853) 2020-11-06

[30] US (63/111,415) 2020-11-09

[30] US (63/121,181) 2020-12-03

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[21] **3,200,668**  
[13] A1

[51] **Int.Cl. A46B 5/00 (2006.01) A46B 5/02 (2006.01) B29C 45/16 (2006.01)**

[25] EN

[54] **A METHOD FOR MANUFACTURING A HANDLE FOR A PERSONAL CARE IMPLEMENT**

[54] **PROCEDE DE FABRICATION D'UN MANCHE POUR UN ACCESSOIRE DE SOINS PERSONNELS**

[72] JUNGNIKEL, UWE, DE

[71] THE GILLETTE COMPANY LLC, US

[85] 2023-05-02

[86] 2021-11-04 (PCT/US2021/072227)

[87] (WO2022/099278)

[30] EP (20206120.6) 2020-11-06

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[21] **3,200,669**  
[13] A1

[51] **Int.Cl. A46B 5/00 (2006.01) A46B 5/02 (2006.01) B29C 45/16 (2006.01)**

[25] EN

[54] **HANDLE FOR A PERSONAL CARE IMPLEMENT AND PERSONAL CARE IMPLEMENT**

[54] **MANCHE POUR ACCESSOIRE DE SOINS PERSONNELS ET ACCESSOIRE DE SOINS PERSONNELS**

[72] JUNGNIKEL, UWE, DE

[71] THE GILLETTE COMPANY LLC, US

[85] 2023-05-02

[86] 2021-11-04 (PCT/US2021/072226)

[87] (WO2022/099277)

[30] EP (20206119.8) 2020-11-06

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[21] **3,200,670**  
[13] A1

[51] **Int.Cl. A46B 5/00 (2006.01) A46B 5/02 (2006.01) B29C 45/16 (2006.01)**

[25] EN

[54] **POLYMERIC HANDLE MATERIAL AND USE THEREOF**

[54] **MATERIAU DE MANCHE POLYMER ET SON UTILISATION**

[72] JUNGNIKEL, UWE, DE

[71] THE GILLETTE COMPANY LLC, US

[85] 2023-05-02

[86] 2021-11-04 (PCT/US2021/072225)

[87] (WO2022/099276)

[30] EP (20206116.4) 2020-11-06

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[21] **3,200,671**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 31/517 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **METHODS OF TREATING CANCER WITH A COMBINATION OF TUCATINIB AND AN ANTI-PD-1/ANTI-PD-L1 ANTIBODY**

[54] **METHODES DE TRAITEMENT DU CANCER AU MOYEN D'UNE ASSOCIATION DE TUCATINIB ET D'UN ANTICORPS ANTI-PD-1/ANTI-PD-L1**

[72] PETERSON, SCOTT, US  
[72] LOI, SHERENE, AU  
[71] SEAGEN INC., US  
[71] PETER MACCALLUM CANCER INSTITUTE, AU  
[85] 2023-05-02  
[86] 2021-11-16 (PCT/US2021/059534)  
[87] (WO2022/108931)  
[30] US (63/114,797) 2020-11-17

[21] **3,200,672**  
[13] A1

[51] **Int.Cl. A61B 17/28 (2006.01) A61M 29/02 (2006.01) A61M 25/09 (2006.01)**

[25] EN

[54] **MECHANICAL DILATOR**

[54] **DILATATEUR MECANIQUE**

[72] THORNLEY, KYLE G., US  
[72] BLANCHARD, DANIEL B., US  
[72] SPATARO, JOE, US  
[72] KRAEMER, ALEXANDER, US  
[72] SCHERICH, MEGAN S., US  
[71] BARD ACCESS SYSTEMS, INC., US  
[85] 2023-05-02  
[86] 2021-11-12 (PCT/US2021/059256)  
[87] (WO2022/104149)  
[30] US (63/113,719) 2020-11-13

[21] **3,200,673**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 31/496 (2006.01) A61K 45/06 (2006.01) A61P 7/04 (2006.01) A61P 9/04 (2006.01) A61P 9/10 (2006.01)**

[25] EN

[54] **METHODS OF TREATING HEART FAILURE BY ADMINISTERING OMECAMTIV MECARBIL**

[54] **METHODES DE TRAITEMENT D'INSUFFISANCE CARDIAQUE PAR L'ADMINISTRATION D'OMECAMTIV MECARBIL**

[72] HONARPOUR, NARIMON, US  
[72] MALIK, FADY, US  
[71] AMGEN INC., US  
[71] CYTOKINETICS, INC., US  
[85] 2023-05-02  
[86] 2021-11-11 (PCT/US2021/058988)  
[87] (WO2022/103966)  
[30] US (63/112,995) 2020-11-12  
[30] US (63/154,077) 2021-02-26  
[30] US (63/187,084) 2021-05-11  
[30] US (63/202,873) 2021-06-28  
[30] US (63/203,436) 2021-07-22

[21] **3,200,674**  
[13] A1

[51] **Int.Cl. E02F 9/22 (2006.01) F04B 43/067 (2006.01) F04B 45/053 (2006.01) F04B 49/06 (2006.01) F15B 11/00 (2006.01) F15B 13/04 (2006.01)**

[25] EN

[54] **HYDRAULICALLY DRIVEN DIAPHRAGM COMPRESSOR SYSTEM**

[54] **SYSTEME DE COMPRESSEUR A MEMBRANE A ENTRAINEMENT HYDRAULIQUE**

[72] BABBITT, GUY, US  
[72] TURNER, CHRIS, US  
[72] WHITEHILL, BRYCE, US  
[72] SPRENGEL, MICHAEL, US  
[72] SCHAICH, NOAH, US  
[72] PALMISCNO, KYLE, US  
[72] BECKERMAN, ALEX, US  
[72] AFZAL, KAREEM, US  
[72] JOHNSON, CARL T., US  
[71] PDC MACHINES INC., US  
[85] 2023-05-02  
[86] 2021-11-09 (PCT/US2021/058684)  
[87] (WO2022/099220)  
[30] US (63/111,356) 2020-11-09  
[30] US (63/277,125) 2021-11-08

[21] **3,200,675**  
[13] A1

[51] **Int.Cl. C22C 38/02 (2006.01) C21D 1/673 (2006.01) C21D 6/00 (2006.01) C21D 8/02 (2006.01) C21D 9/46 (2006.01) C22C 38/04 (2006.01) C22C 38/12 (2006.01) C22C 38/38 (2006.01) C23C 2/02 (2006.01) C23C 2/12 (2006.01) C23C 2/26 (2006.01) C23C 2/28 (2006.01) C23C 2/40 (2006.01) C23C 30/00 (2006.01)**

[25] EN

[54] **COATED STEEL SHEET AND HIGH STRENGTH PRESS HARDENED STEEL PART AND METHOD OF MANUFACTURING THE SAME**

[54] **TOLE D'ACIER TRAITEE, PIECE EN ACIER TREMPE SOUS PRESSE A HAUTE RESISTANCE ET LEUR PROCEDE DE FABRICATION**

[72] PHILIPPOT, CLEMENT, FR  
[72] DUMONT, ALICE, FR  
[72] HERRY, DEBORAH, FR  
[72] BEAUVAIS, MARTIN, FR  
[71] ARCELORMITTAL, LU  
[85] 2023-05-01  
[86] 2021-12-03 (PCT/IB2021/061293)  
[87] (WO2022/130102)  
[30] IB (PCT/IB2020/062044) 2020-12-16

[21] **3,200,676**  
[13] A1

[51] **Int.Cl. G01J 5/00 (2022.01) G01J 5/80 (2022.01)**

[25] EN

[54] **ESTIMATION OF THE TEMPERATURE OF A STEEL PRODUCT**

[54] **ESTIMATION DE LA TEMPERATURE D'UN PRODUIT EN ACIER**

[72] MICQUE, NOELLE, FR  
[72] LE NOC, GWENAEL, FR  
[72] FERTE, MORGAN, FR  
[71] ARCELORMITTAL, LU  
[85] 2023-05-01  
[86] 2021-12-08 (PCT/IB2021/061437)  
[87] (WO2022/130125)  
[30] IB (PCT/IB2020/061937) 2020-12-15

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[21] **3,200,677**  
[13] A1

[51] **Int.Cl. A01N 43/653 (2006.01) A01N 53/00 (2006.01) C07D 401/04 (2006.01)**

[25] EN

[54] **[(5-PHENYL-1-HETEROARYL-1H-TRIAZOL-3-YL)OXY] ACETIC ACID DERIVATIVES AS SAFENERS FOR THE PROTECTION OF USEFUL PLANTS AND CROP PLANTS**

[54] **DERIVES D'ACIDE [(5-PHENYL-1-HETEROARYL-1H-TRIAZOL-3-YL) OXY] ACETIQUE EN TANT QUE PHYTOPROTECTEURS POUR LA PROTECTION DE PLANTES UTILES ET DE PLANTES CULTIVEES**

[72] MULLER, THOMAS, DE

[72] REINGRUBER, ANNA MARIA, DE

[72] FRACKENPOHL, JENS, DE

[72] HELMKE, HENDRIK, DE

[72] DITTMEN, JAN, DE

[71] BAYER AKTIENGESELLSCHAFT, DE

[85] 2023-05-02

[86] 2021-11-02 (PCT/EP2021/080352)

[87] (WO2022/096442)

[30] EP (20206041.4) 2020-11-05

[21] **3,200,678**  
[13] A1

[51] **Int.Cl. B65D 5/20 (2006.01) B65D 5/26 (2006.01) B65D 5/28 (2006.01) B65D 5/30 (2006.01) B65D 77/20 (2006.01)**

[25] EN

[54] **TRAY FOR FOOD PRODUCTS**

[54] **PLATEAU POUR PRODUITS ALIMENTAIRES**

[72] HOLLEY, JOHN MURDICK, JR., US

[71] GRAPHIC PACKAGING INTERNATIONAL, LLC, US

[85] 2023-05-02

[86] 2021-11-04 (PCT/US2021/058043)

[87] (WO2022/098862)

[30] US (63/110,578) 2020-11-06

[30] US (63/110,587) 2020-11-06

[30] US (63/110,582) 2020-11-06

[30] US (63/126,157) 2020-12-16

[30] US (63/128,418) 2020-12-21

[30] US (63/139,341) 2021-01-20

[30] US (63/169,302) 2021-04-01

[30] US (63/169,418) 2021-04-01

[30] US (63/174,724) 2021-04-14

[30] US (63/178,116) 2021-04-22

[30] US (63/191,412) 2021-06-01

[21] **3,200,680**  
[13] A1

[51] **Int.Cl. A01N 43/56 (2006.01) C07D 401/04 (2006.01)**

[25] EN

[54] **[(1-PHENYL-5-HETEROARYL-1H-PYRAZOL-3-YL)OXY] ACETIC ACID DERIVATIVES AS SAFENERS FOR THE PROTECTION OF USEFUL PLANTS AND CROP PLANTS**

[54] **DERIVES D'ACIDE [(1-PHENYL-5-HETEROARYL-1H-PYRAZOL-3-YL)OXY] ACETIQUE UTILISES SERVANT DE PHYTOPROTECTEURS POUR LA PROTECTION DE PLANTES UTILES ET DE PLANTES CULTIVEES**

[72] MULLER, THOMAS, DE

[72] BUSCATO, ESTELLA, ES

[72] HELMKE, HENDRIK, DE

[72] JAKOBI, HARALD, DE

[72] HOFFMANN, MICHAEL GERHARD, DE

[72] DITTMEN, JAN, DE

[71] BAYER AKTIENGESELLSCHAFT, DE

[85] 2023-05-02

[86] 2021-11-02 (PCT/EP2021/080357)

[87] (WO2022/096445)

[30] EP (20206047.1) 2020-11-05

[21] **3,200,683**  
[13] A1

[51] **Int.Cl. B01J 8/00 (2006.01) B01J 8/12 (2006.01) B01J 23/883 (2006.01) B01J 35/02 (2006.01) B01J 35/08 (2006.01) B01J 35/10 (2006.01) B01J 37/20 (2006.01) B01J 37/28 (2006.01) C10G 45/04 (2006.01) C10G 45/18 (2006.01) C10G 65/04 (2006.01) C10G 65/12 (2006.01)**

[25] EN

[54] **INTEGRATED HYDRO-DEMETALLIZATION (HDM) UNIT**

[54] **UNITE D'HYDRODEMÉTALLISATION INTÉGRÉE (HDM)**

[72] BARIC, JOHN JOSEPH, NL

[72] HODES, COEN BERNHARD, NL

[71] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL

[85] 2023-05-02

[86] 2021-11-11 (PCT/EP2021/081352)

[87] (WO2022/101329)

[30] EP (20207250.0) 2020-11-12

[21] **3,200,684**  
[13] A1

[51] **Int.Cl. E05B 41/00 (2006.01) E05F 15/73 (2015.01) E05F 15/77 (2015.01) E05B 65/00 (2006.01) E05B 47/00 (2006.01)**

[25] EN

[54] **TOUCHLESS DOOR OPEN/CLOSE SYSTEM**

[54] **SYSTEME D'OUVERTURE/FERMETURE DE PORTE SANS CONTACT**

[72] ELWINE, MICHAEL, GB

[72] IRVINE, BEN, GB

[72] SAMWELL, CHRIS, GB

[72] BISHOP, ROB, GB

[71] BOBRICK WASHROOM EQUIPMENT, INC., US

[85] 2023-05-03

[86] 2021-03-30 (PCT/US2021/024991)

[87] (WO2022/098387)

[30] US (63/109,785) 2020-11-04

[21] **3,200,685**  
[13] A1

[51] **Int.Cl. A61K 31/4375 (2006.01) A61P 35/00 (2006.01) C07D 471/14 (2006.01) C07D 487/14 (2006.01) C07D 519/00 (2006.01)**

[25] EN

[54] **BRM TARGETING COMPOUNDS AND ASSOCIATED METHODS OF USE**

[54] **COMPOSES CIBLANT BRM ET PROCEDES D'UTILISATION ASSOCIES**

[72] LU, LIANG, US

[72] COMBS, ANDREW PAUL, US

[72] BASCH, COREY HOWARD, US

[72] SHETTY, RUPA, US

[72] DAI, CHAOFENG, US

[72] BERSCH, KLARE LAZOR, US

[72] ROSE, JOHN A., US

[72] ROTH, DANIELLE JULIE BEAM, US

[72] MEI, SONG, US

[71] PRELUDE THERAPEUTICS INCORPORATED, US

[85] 2023-05-03

[86] 2021-11-08 (PCT/US2021/058424)

[87] (WO2022/099117)

[30] US (63/110,688) 2020-11-06

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[21] **3,200,687**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 3/04 (2006.01) A61P 35/00 (2006.01) C07K 16/22 (2006.01)**

[25] EN

[54] **ANTI-GDF15 ANTIBODY AND A DOSAGE REGIMEN FOR THE TREATMENT OF CANCER**

[54] **ANTICORPS ANTI-GDF15 ET SCHEMA POSOLOGIQUE DESTINE AU TRAITEMENT DU CANCER**

[72] LEO, EUGEN, DE  
[72] HAAKE, MARKUS, DE  
[72] WISCHHUSEN, JORG, DE  
[72] LE BRUN, VIRGINIE, CH  
[72] JORG, SUSANNE, CH  
[71] CATALYM GMBH, DE  
[71] JULIUS-MAXIMILIANS-UNIVERSITAT WURZBURG, DE

[85] 2023-05-02  
[86] 2021-11-10 (PCT/EP2021/081236)  
[87] (WO2022/101263)  
[30] EP (20206801.1) 2020-11-10  
[30] EP (21175107.8) 2021-05-20  
[30] EP (21196910.0) 2021-09-15

[21] **3,200,688**  
[13] A1

[51] **Int.Cl. A01N 43/653 (2006.01) C07D 401/04 (2006.01) C07D 405/14 (2006.01)**

[25] EN

[54] **[(1-PHENYL-5-(HETEROARYL)-1H-1,2,4-TRIAZOL-3-YL)OXY] ACETIC ACID DERIVATIVES AS SAFENERS FOR THE PROTECTION OF USEFUL PLANTS AND CROP PLANTS**

[54] **DERIVES D'ACIDE [(1-PHENYL-5-(HETEROARYL)-1H-1,2,4-TRIAZOL-3-YL)OXY] ACETIQUE SERVANT DE PHYTOPROTECTEURS POUR LA PROTECTION DE PLANTES UTILES ET DE PLANTES CULTIVEES**

[72] MULLER, THOMAS, DE  
[72] REINGRUBER, ANNA MARIA, DE  
[72] FRACKENPOHL, JENS, DE  
[72] HELMKE, HENDRIK, DE  
[72] DITTGEN, JAN, DE  
[71] BAYER AKTIENGESELLSCHAFT, DE

[85] 2023-05-02  
[86] 2021-11-02 (PCT/EP2021/080358)  
[87] (WO2022/096446)  
[30] EP (20206033.1) 2020-11-05

[21] **3,200,689**  
[13] A1

[51] **Int.Cl. C12N 1/15 (2006.01) C12N 1/19 (2006.01) C12N 9/04 (2006.01) C12N 9/10 (2006.01) C12N 15/63 (2006.01)**

[25] EN

[54] **GLYCOSIDE PRODUCT BIOSYNTHESIS AND RECOVERY**

[54] **BIOSYNTHESE ET RECUPERATION DE PRODUITS GLYCOSIDES**

[72] KUMARAN, AJIKUMAR PARAYIL, US  
[72] SANTOS, CHRISTINE NICOLE S., US  
[72] DONALD, JASON, US  
[72] LOVE, AARON, US  
[72] ZHENG, YIYING, US  
[72] GHADERI, ADEL, US  
[72] SHASTRY, VINEET, US  
[72] CHEN, LU, US  
[72] TOOMEY, CHRISTOPHER, US  
[72] LYNCH, HANNAH, US  
[72] NIEMINEN, ERIC, US  
[71] MANUS BIO INC., US

[85] 2023-05-03  
[86] 2021-11-24 (PCT/US2021/060722)  
[87] (WO2022/115527)  
[30] US (63/117,534) 2020-11-24

[21] **3,200,691**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 35/28 (2015.01) A61K 38/57 (2006.01) A61P 31/12 (2006.01)**

[25] EN

[54] **A COMPOSITION COMPRISING EXTRA-CELLULAR VESICLES FROM MESENCHYMAL STEM CELLS AND ALPHA-1 ANTITRYPSIN FOR THE TREATMENT OF VIRAL INFECTIONS**

[54] **COMPOSITION COMPRENANT DES VESICULES EXTRACELLULAIRES A PARTIR DE CELLULES SOUCHES MESENCHYMATEUSES ET D'ALPHA-1 ANTITRYPSINE POUR TRAITER DES INFECTIONS VIRALES**

[72] STANGL, MANFRED, DE  
[72] STRASSMAIR, MICHAEL, DE  
[71] AATEC MEDICAL GMBH, DE

[85] 2023-05-02  
[86] 2021-11-08 (PCT/EP2021/080936)  
[87] (WO2022/096708)  
[30] EP (20206287.3) 2020-11-06  
[30] EP (21159620.0) 2021-02-26

[21] **3,200,693**  
[13] A1

[51] **Int.Cl. G06Q 20/34 (2012.01) G06Q 20/40 (2012.01) G07F 7/08 (2006.01)**

[25] EN

[54] **MEDIUM FOR TEMPORARY ACCOUNT ACCESS**

[54] **SUPPORT D'ACCES TEMPORAIRE A UN COMPTE**

[72] ADCOCK, LEE, US  
[72] FARHADY GHALATY, NAHID, US  
[72] PHAM, VINCENT, US  
[72] CAMENARES, CHRISTOPHER, US  
[71] CAPITAL ONE SERVICES, LLC, US

[85] 2023-05-03  
[86] 2021-11-12 (PCT/US2021/072373)  
[87] (WO2022/109529)  
[30] US (16/950,058) 2020-11-17

[21] **3,200,694**  
[13] A1

[51] **Int.Cl. G02F 1/01 (2006.01) G02F 1/015 (2006.01) H01S 5/02 (2006.01)**

[25] FR

[54] **SYSTEMS FOR EMITTING UNCOOLED LIGHT**

[54] **SYSTEMES D'EMISSION DE LUMIERE NON REFROIDIS**

[72] DEBREGEAS, HELENE, FR  
[71] ALMAE TECHNOLOGIES, FR

[85] 2023-05-02  
[86] 2021-11-02 (PCT/EP2021/080379)  
[87] (WO2022/090569)  
[30] FR (FR20211235) 2020-11-02

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[21] 3,200,695 [13] A1	[21] 3,200,696 [13] A1	[21] 3,200,697 [13] A1
[51] <b>Int.Cl. B01J 8/00 (2006.01) B01J 8/02 (2006.01) B01J 19/18 (2006.01) B01J 19/24 (2006.01) B01J 38/00 (2006.01) B01J 38/04 (2006.01) C10G 69/14 (2006.01)</b>	[51] <b>Int.Cl. A01N 25/32 (2006.01) A01N 43/56 (2006.01) C07D 231/22 (2006.01)</b>	[51] <b>Int.Cl. B01L 3/00 (2006.01) B01L 9/00 (2006.01) C12M 1/00 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>METHODS FOR REPLACING A SPENT CATALYST OF A REACTOR TRAIN OF AN OPERATING HYDROPROCESSING SYSTEM</b>	[54] <b>USE OF [(1,5-DIPHENYL-1H-PYRAZOL-3-YL)OXY] ACETIC ACID DERIVATIVES AND THEIR SALTS AND COMPOSITIONS CONTAINING THEM, FOR REDUCING PHYTOTOXIC EFFECTS OF AGROCHEMICALS, IN PARTICULAR OF HERBICIDES, IN USEFUL PLANTS AND CROP PLANTS</b>	[54] <b>MICROFLUIDIC FLOW CELL AND SYSTEM FOR ANALYZING OR DIAGNOSING BIOFILMS AND CELL CULTURES, AND THE USE THEREOF</b>
[54] <b>PROCEDES POUR REMPLACER UN CATALYSEUR USE D'UN TRAIN DE REACTEURS D'UN SYSTEME D'HYDROTRAITEMENT EN FONCTIONNEMENT</b>	[54] <b>UTILISATION DE DERIVES D'ACIDE [(1,5-DIPHENYL-1H-PYRAZOL-3-YL)OXY]ACETIQUE ET DE LEURS SELS ET COMPOSITIONS LES CONTENANT POUR REDUIRE LES EFFETS PHYTOTOXIQUES DE PRODUITS AGROCHIMIQUES, EN PARTICULIER D'HERBICIDES, DANS DES PLANTES UTILES ET DES PLANTES CULTIVEES</b>	[54] <b>CELLULE D'ECOULEMENT MICROFLUIDIQUE ET SYSTEME D'ANALYSE OU DE DIAGNOSTIC DE BIOFILMS ET DE CULTURES CELLULAIRES, ET LEUR UTILISATION</b>
[72] HODES, COEN BERNHARD, NL	[72] MULLER, THOMAS, DE	[72] HEERMANN, RALF, DE
[72] VAN DOESBURG, EDMUNDO STEVEN, NL	[72] HELMKE, HENDRIK, DE	[72] GAZANIS, ATHANASIOS, DE
[71] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL	[72] REINGRUBER, ANNA MARIA, DE	[71] JOHANNES GUTENBERG-UNIVERSITAT MAINZ, DE
[85] 2023-05-02	[72] JAKOBI, HARALD, DE	[85] 2023-05-02
[86] 2021-11-11 (PCT/EP2021/081395)	[72] HOFFMANN, MICHAEL GERHARD, DE	[86] 2021-11-22 (PCT/EP2021/082439)
[87] (WO2022/101345)	[72] DITTGEN, JAN, DE	[87] (WO2022/106673)
[30] EP (20207631.1) 2020-11-13	[71] BAYER AKTIENGESELLSCHAFT, DE	[30] DE (10 2020 130 870.1) 2020-11-23
	[85] 2023-05-02	
	[86] 2021-11-02 (PCT/EP2021/080362)	
	[87] (WO2022/096450)	
	[30] EP (20206049.7) 2020-11-05	

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[21] **3,200,699**  
[13] A1

[51] **Int.Cl. A01N 43/653 (2006.01) C07D 401/14 (2006.01)**

[25] EN

[54] **[(1,5-DI(HETEROARYL)-1H-1,2,4-TRIAZOL-3-YL)OXY]ACETIC ACID DERIVATIVES AND SALTS THEREOF, AND USEFUL PLANT-OR CROP PLANT-PROTECTING COMPOSITIONS, PROCESSES FOR PREPARATION THEREOF AND THE USE THEREOF, AND USEFUL PLANT- OR CROP PLANT-PROTECTING COMPOSITIONS COMPRISING THEM**

[54] **DERIVES D'ACIDE [(1,5-DI(HETEROARYLE)-1H-1,2,4-TRIAZOLE-3-YL)OXY] ACETIQUE ET SELS CONNEXES, COMPOSITIONS UTILES DE PROTECTION DES PLANTES OU DES CULTURES, PROCEDES DE PREPARATION, UTILISATION ET COMPOSITIONS UTILES DE PROTECTION DES PLANTES OU DES CULTURES COMPRENANT LES DERIVES**

[72] MULLER, THOMAS, DE  
[72] HELMKE, HENDRIK, DE  
[72] DITTGEN, JAN, DE  
[71] BAYER AKTIENGESELLSCHAFT, DE  
[85] 2023-05-02  
[86] 2021-11-02 (PCT/EP2021/080361)  
[87] (WO2022/096449)  
[30] EP (20206037.2) 2020-11-05

[21] **3,200,700**  
[13] A1

[51] **Int.Cl. A01N 43/56 (2006.01) C07D 401/04 (2006.01)**

[25] EN

[54] **[(5-PHENYL-5-HETEROARYL-1H-PYRAZOL-3-YL)OXY] ACETIC ACID DERIVATIVES AS SAFENERS FOR THE PROTECTION OF USEFUL PLANTS AND CROP PLANTS**

[54] **DERIVES D'ACIDE [(5-PHENYL-5-HETEROARYL-1H-PYRAZOL-3-YL) OXY] ACETIQUE EN TANT QUE PHYTOPROTECTEURS POUR LA PROTECTION DE PLANTES UTILES ET DE PLANTES CULTIVEES**

[72] MULLER, THOMAS, DE  
[72] HELMKE, HENDRIK, DE  
[72] JAKOBI, HARALD, DE  
[72] DITTGEN, JAN, DE  
[71] BAYER AKTIENGESELLSCHAFT, DE  
[85] 2023-05-02  
[86] 2021-11-02 (PCT/EP2021/080360)  
[87] (WO2022/096448)  
[30] EP (20206042.2) 2020-11-05

[21] **3,200,702**  
[13] A1

[51] **Int.Cl. C07K 14/705 (2006.01)**

[25] EN

[54] **NEW POLYPEPTIDE**

[54] **NOUVEAU POLYPEPTIDE**

[72] LOFBLOM, JOHN, SE  
[72] STAHL, STEFAN, SE  
[72] PERSSON, JONAS, SE  
[72] ERIKSSON, OLOF, SE  
[72] KORSGREN, OLOV, SE  
[71] AFFIBODY AB, SE  
[85] 2023-05-03  
[86] 2021-12-21 (PCT/EP2021/087036)  
[87] (WO2022/136397)  
[30] EP (20216069.3) 2020-12-21  
[30] EP (21188676.7) 2021-07-30

[21] **3,200,703**  
[13] A1

[51] **Int.Cl. A61B 90/00 (2016.01) A61B 90/14 (2016.01) A61B 90/17 (2016.01) A61N 5/10 (2006.01)**

[25] EN

[54] **WEARABLE INSERTER FOR REPRODUCABLE ALIGNMENT OF BODILY TISSUE FOR PROGRAMME OF EXTERNAL RADIOTHERAPY TREATMENT**

[54] **DISPOSITIF D'INSERTION POUVANT ETRE PORTE POUR UN ALIGNEMENT REPRODUCTIBLE DE TISSU CORPOREL POUR UN PROGRAMME DE TRAITEMENT DE RADIOTHERAPIE EXTERNE**

[72] POPOWSKI, GEORG, CH  
[71] POPOWSKI, GEORG, CH  
[85] 2023-05-02  
[86] 2021-11-24 (PCT/EP2021/082759)  
[87] (WO2022/112289)  
[30] EP (20209522.0) 2020-11-24

[21] **3,200,706**  
[13] A1

[51] **Int.Cl. B25F 5/00 (2006.01) C10M 171/00 (2006.01)**

[25] EN

[54] **MOBILE POWER TOOL AND METHOD**

[54] **MACHINE-OUTIL MOBILE ET PROCEDE**

[72] KONDRATIUK, JENS, CH  
[72] LORENZ, PHILLIP, DE  
[72] VENGUDUSAMY, BALASUBRAMANIAM, DE  
[72] SEEMEYER, STEFAN, DE  
[71] HILTI AKTIENGESELLSCHAFT, LI  
[85] 2023-05-03  
[86] 2021-11-26 (PCT/EP2021/083139)  
[87] (WO2022/122413)  
[30] EP (20213304.7) 2020-12-11



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[21] **3,200,707**  
[13] A1

[51] **Int.Cl. A61B 34/30 (2016.01) A61B 90/00 (2016.01) A61B 90/14 (2016.01) A61B 90/17 (2016.01) A61N 5/10 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR REPEATABLE ALIGNMENT OF BODILY TISSUE FOR PROGRAMME OF EXTERNAL RADIOTHERAPY TREATMENT**

[54] **SYSTEME ET PROCEDURE D'ALIGNEMENT REPETABLE DE TISSU CORPOREL POUR UN PROGRAMME DE TRAITEMENT DE RADIOTHERAPIE EXTERNE**

[72] POPOWSKI, GEORG, CH

[71] POPOWSKI, GEORG, CH

[85] 2023-05-02

[86] 2021-11-24 (PCT/EP2021/082768)

[87] (WO2022/112295)

[30] EP (20209528.7) 2020-11-24

[21] **3,200,708**  
[13] A1

[51] **Int.Cl. C07C 29/88 (2006.01) C07C 41/44 (2006.01) C07C 209/16 (2006.01) C08J 11/10 (2006.01)**

[25] EN

[54] **UPGRADED STABILIZED POLYOL COMPOSITION**

[54] **COMPOSITION DE POLYOL STABILISEE AMELIOREE**

[72] JOSEPH, LEEMA, IN

[71] HUNTSMAN INTERNATIONAL LLC, US

[85] 2023-05-03

[86] 2021-11-18 (PCT/EP2021/082166)

[87] (WO2022/106552)

[30] IN (202011050656) 2020-11-20

[30] EP (21150651.4) 2021-01-08

[21] **3,200,709**  
[13] A1

[51] **Int.Cl. B30B 9/30 (2006.01)**

[25] EN

[54] **ROLLER COMPACTOR**

[54] **COMPACTEUR A ROULEAU**

[72] MUCHALL, WOLFGANG, DE

[72] KLASSEN, JOHANNES, DE

[71] CCS GMBH, DE

[85] 2023-05-03

[86] 2021-11-12 (PCT/EP2021/081574)

[87] (WO2022/101438)

[30] DE (20 2020 106 511.4) 2020-11-12

[21] **3,200,710**  
[13] A1

[51] **Int.Cl. A61K 31/495 (2006.01) A61P 27/02 (2006.01) C07D 495/14 (2006.01)**

[25] EN

[54] **CYCLOPENTATHIOPHENE CARBOXAMIDE DERIVATIVES AS PLATELET ACTIVATING FACTOR RECEPTOR ANTAGONISTS**

[54] **DERIVES DE CYCLOPENTATHIOPHENE CARBOXAMIDE UTILES EN TANT QU'ANTAGONISTES DU RECEPTEUR DU FACTEUR D'ACTIVATION DES PLAQUETTES**

[72] ECKHARDT, MATTHIAS, DE

[72] WILLWACHER, MARINA KRISTINA, DE

[72] PRESTLE, JUERGEN, DE

[72] KONTES, FERENC, DE

[72] THOMAS, LEO, DE

[72] TAUTERMANN, CHRISTOFER SIEGFRIED, DE

[72] WIEDENMAYER, DIETER, DE

[71] BOEHRINGER INGELHEIM INTERNATIONAL GMBH, DE

[85] 2023-05-03

[86] 2021-11-12 (PCT/EP2021/081459)

[87] (WO2022/101377)

[30] EP (20207719.4) 2020-11-16

[21] **3,200,711**  
[13] A1

[51] **Int.Cl. C09D 11/03 (2014.01) C09D 11/033 (2014.01) C09D 11/037 (2014.01) C09D 11/101 (2014.01) C09D 11/106 (2014.01) C09D 11/50 (2014.01)**

[25] EN

[54] **UV-VIS RADIATION CURABLE SECURITY INKS FOR PRODUCING DICHROIC SECURITY FEATURES**

[54] **ENCRES DE SECURITE DURCISSABLES PAR RAYONNEMENT UV-VIS POUR LA PRODUCTION D'ELEMENTS DE SECURITE DICHROIQUES**

[72] PITTET, HERVE, CH

[72] DEMARTIN MAEDER, MARLYSE, CH

[72] VEYA, PATRICK, CH

[72] GRIGORENKO, NIKOLAY, CH

[72] OSWALD, ANDRE, DE

[71] SICPA HOLDING SA, CH

[85] 2023-05-03

[86] 2021-11-09 (PCT/EP2021/081156)

[87] (WO2022/101225)

[30] EP (20206794.8) 2020-11-10

[21] **3,200,712**  
[13] A1

[51] **Int.Cl. B41M 3/14 (2006.01) C09D 11/03 (2014.01) C09D 11/037 (2014.01) C09D 11/101 (2014.01) C09D 11/106 (2014.01) C09D 11/50 (2014.01)**

[25] EN

[54] **UV-VIS RADIATION CURABLE SECURITY INKS FOR PRODUCING DICHROIC SECURITY FEATURES**

[54] **ENCRES DE SECURITE DURCISSABLES PAR RAYONNEMENT UV-VIS POUR LA PRODUCTION D'ELEMENTS DE SECURITE DICHROIQUES**

[72] PITTET, HERVE, CH

[72] DEMARTIN MAEDER, MARLYSE, CH

[72] VEYA, PATRICK, CH

[72] GRIGORENKO, NIKOLAY, CH

[72] OSWALD, ANDRE, DE

[71] SICPA HOLDING SA, CH

[85] 2023-05-03

[86] 2021-11-09 (PCT/EP2021/081155)

[87] (WO2022/101224)

[30] EP (20206740.1) 2020-11-10

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[21] **3,200,713**  
[13] A1

[51] **Int.Cl. A61B 34/30 (2016.01) A61B 90/00 (2016.01) A61B 90/14 (2016.01) A61B 90/17 (2016.01) A61N 5/10 (2006.01)**

[25] EN

[54] **DEVICE FOR REPRODUCIBLE ALIGNMENT OF BODILY TISSUE FOR PROGRAMME OF EXTERNAL RADIOTHERAPY TREATMENT**

[54] **DISPOSITIF D'ALIGNEMENT REPRODUCTIBLE DE TISSU CORPOREL POUR UN PROGRAMME DE TRAITEMENT DE RADIOTHERAPIE EXTERNE**

[72] POPOWSKI, GEORG, CH  
[71] POPOWSKI, GEORG, CH  
[85] 2023-05-02  
[86] 2021-11-24 (PCT/EP2021/082771)  
[87] (WO2022/112297)  
[30] EP (20209534.5) 2020-11-24

[21] **3,200,714**  
[13] A1

[51] **Int.Cl. B60P 3/34 (2006.01) B60P 3/40 (2006.01) B60S 9/12 (2006.01) B65D 90/14 (2006.01) B66F 3/46 (2006.01) F15B 11/17 (2006.01)**

[25] EN

[54] **HYDRAULIC SYSTEM FOR A VEHICLE OR A CONTAINER, AND VEHICLE OR CONTAINER HAVING SUCH A HYDRAULIC SYSTEM**

[54] **SYSTEME HYDRAULIQUE POUR UN VEHICULE OU UN CONTENEUR, ET VEHICULE OU CONTENEUR AYANT UN TEL SYSTEME HYDRAULIQUE**

[72] GROOTERS, FRANK PAUL, NL  
[71] STS INDUSTRIES GMBH, DE  
[71] STS INDUSTRIES B.V., NL  
[85] 2023-05-03  
[86] 2021-11-03 (PCT/EP2021/080537)  
[87] (WO2022/111963)  
[30] EP (20209428.0) 2020-11-24

[21] **3,200,715**  
[13] A1

[51] **Int.Cl. A62C 3/16 (2006.01)**

[25] EN

[54] **THERMAL PROTECTION OF LITHIUM ION BATTERIES**

[54] **PROTECTION THERMIQUE DE BATTERIES AU LITHIUM-ION**

[72] ROBIN, MARK L., US  
[71] THE CHEMOURS COMPANY FC, LLC, US  
[85] 2023-04-25  
[86] 2021-10-28 (PCT/US2021/056952)  
[87] (WO2022/197333)  
[30] US (63/163,412) 2021-03-19

[21] **3,200,717**  
[13] A1

[51] **Int.Cl. A01K 1/01 (2006.01)**

[25] EN

[54] **SYSTEM, VEHICLE AND METHOD FOR REMOVING MANURE FROM A STALL FLOOR**

[54] **SYSTEME, VEHICULE ET PROCEDE D'ENLEVEMENT DE FUMIER D'UN SOL D'UNE ETABLE**

[72] VAN KESTER, ROBIN ANDREAS ALBERTUS, NL  
[72] STEENEVELD, FRANK HENDRIK, NL  
[71] LELY PATENT N.V., NL  
[85] 2023-05-03  
[86] 2021-12-07 (PCT/IB2021/061402)  
[87] (WO2022/130121)  
[30] NL (2027114) 2020-12-15

[21] **3,200,718**  
[13] A1

[51] **Int.Cl. E04H 7/18 (2006.01) B65D 88/52 (2006.01) B65D 90/02 (2019.01) B65D 90/08 (2006.01)**

[25] EN

[54] **DEMOUNTABLE TANK**

[54] **RESERVOIR DEMONTABLE**

[72] JEFFRIES, KIERON MICHAEL, AU  
[72] BARRY, SHAUN EDWARD, AU  
[71] CONCEPT SERVICES IP PTY LTD, AU  
[85] 2023-04-27  
[86] 2021-04-28 (PCT/AU2021/050384)  
[87] (WO2022/226574)

[21] **3,200,719**  
[13] A1

[51] **Int.Cl. G01N 23/22 (2018.01) G01N 23/223 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR MAPPING CHEMICAL ELEMENTS IN A SAMPLE**

[54] **SYSTEME ET PROCEDE POUR LA CARTOGRAPHIE D'ELEMENTS CHIMIQUES DANS UN ECHANTILLON**

[72] SHWARTZ, SHARON, IL  
[72] KLEIN, YISHAY, IL  
[71] BAR ILAN UNIVERSITY, IL  
[85] 2023-05-03  
[86] 2021-11-21 (PCT/IL2021/051385)  
[87] (WO2022/107148)  
[30] US (63/116,834) 2020-11-21

[21] **3,200,720**  
[13] A1

[51] **Int.Cl. C10B 47/30 (2006.01) C10B 53/02 (2006.01) C10B 53/08 (2006.01) C10L 5/44 (2006.01)**

[25] EN

[54] **BIOMASS SOLID FUEL MANUFACTURING DEVICE**

[54] **DISPOSITIF DE FABRICATION DE COMBUSTIBLE SOLIDE A BASE DE BIOMASSE**

[72] HAYASHI, SHIGEYA, JP  
[72] HIRAIWA, YUUSUKE, JP  
[72] OOI, NOBUYUKI, JP  
[71] MITSUBISHI UBE CEMENT CORPORATION, JP  
[85] 2023-05-01  
[86] 2021-10-07 (PCT/JP2021/037171)  
[87] (WO2022/102296)  
[30] JP (2020-187102) 2020-11-10

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[21] **3,200,721**  
[13] A1

[51] **Int.Cl. C21D 1/673 (2006.01) C21D 6/00 (2006.01) C21D 8/02 (2006.01) C21D 9/40 (2006.01) C21D 9/46 (2006.01) C22C 38/02 (2006.01) C22C 38/04 (2006.01) C22C 38/12 (2006.01) C22C 38/38 (2006.01) C23C 2/02 (2006.01) C23C 2/12 (2006.01) C23C 2/26 (2006.01) C23C 2/28 (2006.01) C23C 2/40 (2006.01)**

[25] EN

[54] **COATED STEEL SHEET AND HIGH STRENGTH PRESS HARDENED STEEL PART AND METHOD OF MANUFACTURING THE SAME**

[54] **TOLE D'ACIER REVETUE, PIECE EN ACIER TREMPE SOUS PRESSE A HAUTE RESISTANCE ET LEUR PROCEDE DE FABRICATION**

[72] PHILIPPOT, CLEMENT, FR  
[72] LE GUILLARD, SANDRA, FR  
[72] DUSSAUSOIS, DAVID, FR  
[72] SALIB, MATTHIEU, FR  
[71] ARCELORMITTAL, LU  
[85] 2023-05-03  
[86] 2021-12-03 (PCT/IB2021/061291)  
[87] (WO2022/130101)  
[30] IB (PCT/IB2020/062045) 2020-12-16

[21] **3,200,723**  
[13] A1

[51] **Int.Cl. A47B 46/00 (2006.01)**

[25] EN

[54] **PIVOTABLE OVERHEAD STORAGE UNIT**

[54] **UNITE DE RANGEMENT EN HAUTEUR PIVOTANTE**

[72] GELBER, ELEAIZER, CA  
[71] 143046 CANADA INC., CA  
[85] 2023-04-28  
[86] 2021-11-03 (PCT/CA2021/051556)  
[87] (WO2022/094705)  
[30] US (63/109,487) 2020-11-04

[21] **3,200,724**  
[13] A1

[51] **Int.Cl. B23K 26/08 (2014.01) B23K 26/38 (2014.01)**

[25] EN

[54] **PROCESS AND EQUIPMENT TO LASER CUT VERY HIGH STRENGTH METALLIC MATERIAL**

[54] **PROCEDE ET EQUIPEMENT DE DECOUPE AU LASER D'UN MATERIAU METALLIQUE A TRES HAUTE RESISTANCE**

[72] VAN WEZEMAEL, BERT, BE  
[71] ARCELORMITTAL, LU  
[85] 2023-05-03  
[86] 2021-11-04 (PCT/IB2021/060211)  
[87] (WO2022/106946)  
[30] IB (PCT/IB2020/061042) 2020-11-23

[21] **3,200,725**  
[13] A1

[51] **Int.Cl. A61F 9/007 (2006.01) A61B 34/20 (2016.01) A61B 17/32 (2006.01)**

[25] EN

[54] **SMART VITRECTOR**

[54] **DISPOSITIF DE VITRECTOMIE INTELLIGENT**

[72] DUVAL, RENAUD, CA  
[72] ABID, ALEXANDRE, CA  
[72] REZENDE, FLAVIO, CA  
[72] BOUTOPOULOS, CHRISTOS, CA  
[71] DUVAL, RENAUD, CA  
[71] ABID, ALEXANDRE, CA  
[71] REZENDE, FLAVIO, CA  
[71] BOUTOPOULOS, CHRISTOS, CA  
[85] 2023-05-02  
[86] 2021-11-03 (PCT/CA2021/051559)  
[87] (WO2022/094708)  
[30] US (63/109,040) 2020-11-03

[21] **3,200,726**  
[13] A1

[51] **Int.Cl. F21V 17/16 (2006.01) F21S 4/00 (2016.01) F21V 17/10 (2006.01)**

[25] EN

[54] **LIGHT STRIP**

[54] **BANDE LUMINEUSE**

[72] JI, WINSTON, CN  
[72] GOELZ, DAVID P., US  
[72] ZHOU, IAN, CN  
[71] IDEAL INDUSTRIES LIGHTING LLC, US  
[85] 2023-05-02  
[86] 2020-09-07 (PCT/CN2020/113730)  
[87] (WO2022/047775)

[21] **3,200,727**  
[13] A1

[51] **Int.Cl. F01K 3/00 (2006.01) F01K 3/02 (2006.01) F01K 3/18 (2006.01) F01K 3/26 (2006.01) F01K 9/00 (2006.01) F01K 25/10 (2006.01)**

[25] EN

[54] **PLANT AND PROCESS FOR ENERGY STORAGE AND METHOD FOR CONTROLLING A HEAT CARRIER IN A PLANT AND/OR IN A PROCESS FOR ENERGY STORAGE**

[54] **INSTALLATION ET PROCESSUS DE STOCKAGE D'ENERGIE ET PROCEDE DE COMMANDE D'UN CALOPORTEUR LORS D'UN PROCESSUS DE STOCKAGE D'ENERGIE**

[72] SPADACINI, CLAUDIO, IT  
[72] RIZZI, DARIO, IT  
[71] ENERGY DOME S.P.A., IT  
[85] 2023-05-03  
[86] 2021-10-27 (PCT/IB2021/059917)  
[87] (WO2022/101727)  
[30] IT (102020000026452) 2020-11-05

[21] **3,200,728**  
[13] A1

[51] **Int.Cl. B66B 5/00 (2006.01)**

[25] EN

[54] **METHOD FOR OPERATING AN ELEVATOR FOR MAINTENANCE**

[54] **PROCEDE DE FONCTIONNEMENT D'UN ASCENSEUR LORS DE LA MAINTENANCE**

[72] VILLA, VALERIO, IT  
[71] INVENTIO AG, CH  
[85] 2023-05-02  
[86] 2021-11-09 (PCT/EP2021/081136)  
[87] (WO2022/101212)  
[30] EP (20206759.1) 2020-11-10

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[21] **3,200,729**  
[13] A1

[51] **Int.Cl. A61K 9/20 (2006.01) A61K 9/50 (2006.01) A61K 31/5415 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITION COMPRISING MELOXICAM**  
[54] **COMPOSITION PHARMACEUTIQUE COMPRENANT DU MELOXICAM**  
[72] PATIL, PANKAJ DEVIDAS, IN  
[72] KHYAMGONDE, VIVEKANAND, IN  
[72] KAKARIA, RITESH, IN  
[72] JAISWAL, ASHISH, IN  
[72] DIXIT, AKHILESH, IN  
[72] CHAKRABORTY, SANTANU, IN  
[72] ANTARKAR, AMIT, IN  
[72] DESHMUKH, ABHIJIT, IN  
[72] SMITH, JEFFREY P., US  
[71] MYLAN LABORATORIES LTD, IN  
[85] 2023-05-02  
[86] 2021-11-03 (PCT/IB2021/060148)  
[87] (WO2022/097024)  
[30] IN (202041048559) 2020-11-06

[21] **3,200,730**  
[13] A1

[51] **Int.Cl. B01J 8/22 (2006.01)**  
[25] EN  
[54] **STIRRING IMPELLER, ARRANGEMENT AND USE**  
[54] **HELICE D'AGITATION, AGENCEMENT ET UTILISATION**  
[72] LATVA-KOKKO, MARKO, FI  
[72] XIA, JILIANG, FI  
[72] IMMONEN, PEKKA, FI  
[71] METSO OUTOTEC FINLAND OY, FI  
[85] 2023-05-02  
[86] 2020-11-20 (PCT/FI2020/050785)  
[87] (WO2022/106745)

[21] **3,200,734**  
[13] A1

[51] **Int.Cl. A01G 31/02 (2006.01) A01G 9/24 (2006.01) A01G 27/00 (2006.01) A01G 29/00 (2006.01)**  
[25] EN  
[54] **AN AEROPONIC FARMING SYSTEM AND A METHOD**  
[54] **SYSTEME D'AGRICULTURE AEROPONIQUE ET PROCEDE**  
[72] HERMANS, RAINE, FI  
[71] AEROPOD OY, FI  
[85] 2023-05-02  
[86] 2021-11-05 (PCT/FI2021/050749)  
[87] (WO2022/096788)  
[30] FI (20206122) 2020-11-06

[21] **3,200,736**  
[13] A1

[51] **Int.Cl. C12N 9/88 (2006.01) C12N 15/77 (2006.01) C12P 13/14 (2006.01)**  
[25] EN  
[54] **MICROORGANISM HAVING ENHANCED L-GLUTAMINE PRODUCING ABILITY, AND L-GLUTAMINE PRODUCING METHOD USING SAME**  
[54] **MICROORGANISME AYANT UNE CAPACITE DE PRODUCTION DE L-GLUTAMINE AMELIOREE ET PROCEDE DE PRODUCTION DE L-GLUTAMINE L'UTILISANT**  
[72] CHOI, SU JIN, KR  
[72] YANG, SUNYOUNG, KR  
[72] LEE, KWANG WOO, KR  
[71] CJ CHEILJEDANG CORPORATION, KR  
[85] 2023-05-02  
[86] 2021-11-19 (PCT/KR2021/017074)  
[87] (WO2022/108383)  
[30] KR (10-2020-0156903) 2020-11-20

[21] **3,200,757**  
[13] A1

[51] **Int.Cl. G06Q 20/00 (2012.01)**  
[25] EN  
[54] **SOCIAL MEDIA UNIVERSAL PAYMENT METHOD AND SYSTEM**  
[54] **PROCEDE ET SYSTEME DE PAIEMENT UNIVERSEL SUR DES MEDIAS SOCIAUX (SMUP)**  
[72] ZHANG, LIMING, US  
[71] ZHANG, LIMING, US  
[85] 2023-05-03  
[86] 2021-11-29 (PCT/US2021/060975)  
[87] (WO2022/119767)  
[30] US (63/119,894) 2020-12-01

[21] **3,200,772**  
[13] A1

[51] **Int.Cl. A61B 18/26 (2006.01)**  
[25] EN  
[54] **OPTICAL ANALYZER ASSEMBLY WITH SAFETY SHUTDOWN SYSTEM FOR INTRAVASCULAR LITHOTRIPSY DEVICE**  
[54] **ENSEMBLE ANALYSEUR OPTIQUE AVEC SYSTEME D'ARRET DE SECURITE POUR DISPOSITIF DE LITHOTRITIE INTRAVASCULAIRE**  
[72] COOK, CHRISTOPHER A., US  
[72] SCHULTHEIS, ERIC, US  
[72] TROUTMAN, RACHEL LYNN, US  
[72] SWIFT, JAMES DEE, US  
[71] BOLT MEDICAL, INC., US  
[85] 2023-05-31  
[86] 2022-05-06 (PCT/US2022/028035)  
[87] (WO2022/240674)  
[30] US (63/186,391) 2021-05-10  
[30] US (17/736,894) 2022-05-04

[21] **3,200,776**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 31/00 (2006.01) A61K 31/519 (2006.01) A61K 38/00 (2006.01) A61K 38/17 (2006.01) A61K 47/02 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITION**  
[54] **COMPOSITION PHARMACEUTIQUE DE METHOTREXATE**  
[72] SKRINER, KARL, DE  
[71] LEOPOLD MTX GMBH, DE  
[85] 2023-05-02  
[86] 2021-11-09 (PCT/EP2021/081047)  
[87] (WO2022/101173)  
[30] DE (10 2020 129 648.7) 2020-11-10

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[21] **3,200,796**  
[13] A1

[51] **Int.Cl. A01N 63/27 (2020.01) C07D 213/00 (2006.01) C07D 401/00 (2006.01) C12N 1/20 (2006.01)**

[25] EN

[54] **PSEUDOMONAS STRAINS AND THEIR METABOLITES TO CONTROL PLANT DISEASES**

[54] **SOUCHES DE PSEUDOMONAS ET LEURS METABOLITES POUR LUTTER CONTRE LES MALADIES DES PLANTES**

[72] YANG, CHING-HONG, US

[72] LIU, XIANGYANG, US

[71] T3 BIOSCIENCE, LLC, US

[71] UWM RESEARCH FOUNDATION, INC., US

[85] 2023-03-28

[86] 2020-10-05 (PCT/US2020/054303)

[87] (WO2022/075969)

[21] **3,200,829**  
[13] A1

[51] **Int.Cl. G06N 20/00 (2019.01) G06T 15/08 (2011.01) G06T 17/05 (2011.01)**

[25] EN

[54] **A DEVICE SUITABLE FOR SWEET SPOT-BASED MACHINE LEARNING (SSML) AND/OR PROCESSING METHOD IN ASSOCIATION WITH COMPLETION-BASED MACHINE LEARNING (COMML)**

[54] **DISPOSITIF APPROPRIE POUR APPRENTISSAGE MACHINE BASE SUR UN POINT IDEAL (SSML) ET/OU UN PROCEDE DE TRAITEMENT EN ASSOCIATION AVEC UN APPRENTISSAGE AUTOMATIQUE BASE SUR LA COMPLETION (COMML)**

[72] LEEM, JUNGHUN, MY

[72] TAN, CHEE PHUAT, MY

[72] CHE YUSOFF, MUHAMAD FAKHARUDDIN BIN, MY

[72] MD ZAIN @ MD DIN, ZAHIDAH, MY

[72] ALTAF, IFTIKHAR, MY

[72] MAZELI, ABD HAKIM, MY

[72] KANTAATMADJA, BUDI P., MY

[72] TEWARI, RAJ DEO, MY

[72] JONES, ERNEST A JR., MY

[72] M AZAM ZAKI, SHAHRUZZAMAN, MY

[72] ISMAIL, MUHAMAD KHUZAIFAH, MY

[71] PETROLIAM NASIONAL BERHAD (PETRONAS), MY

[85] 2023-05-02

[86] 2021-11-16 (PCT/MY2021/050101)

[87] (WO2022/108441)

[30] MY (PI2020006118) 2020-11-20

[21] **3,200,830**  
[13] A1

[51] **Int.Cl. A63B 21/00 (2006.01) A63B 21/005 (2006.01)**

[25] EN

[54] **HEADSTAND BENCH**

[54] **BANC A POSITION DU POIRIER**

[72] JOHNSTON, MARNI NICOLE, AU

[71] JOHNSTON, MARNI NICOLE, AU

[85] 2023-05-03

[86] 2021-10-29 (PCT/AU2021/051262)

[87] (WO2022/099349)

[30] US (63/112,064) 2020-11-10

[21] **3,200,831**  
[13] A1

[51] **Int.Cl. G01B 9/02 (2022.01) G01H 9/00 (2006.01) G01N 21/17 (2006.01) G01N 21/47 (2006.01) G02B 6/02 (2006.01)**

[25] EN

[54] **DISTRIBUTED VIBRATION SENSING OVER OPTICAL FIBERS**

[54] **DETECTION DE VIBRATION DISTRIBUEE PAR FIBRES OPTIQUES**

[72] LIBERMAN, TUVIA, IL

[72] MILLER, DAVID, IL

[71] TELDOR CABLES & SYSTEMS LTD., IL

[85] 2023-05-03

[86] 2021-11-16 (PCT/IL2021/051359)

[87] (WO2022/107128)

[30] IL (278789) 2020-11-17

[21] **3,200,832**  
[13] A1

[51] **Int.Cl. C07D 489/08 (2006.01) C07D 489/02 (2006.01)**

[25] EN

[54] **NOVEL PROCESS FOR THE SYNTHESIS OF NOROXYMORPHINE FROM MORPHINE**

[54] **NOUVEAU PROCEDE POUR LA SYNTHESE DE NOROXYMORPHINE A PARTIR DE MORPHINE**

[72] GORBACHEV, DMITRY, GB

[72] LAM, HON WAI, GB

[72] SAXENA, AAKARSH, IN

[72] SAXENA, NAVIN SATYAPAL, IN

[71] NAVIN SAXENA RESEARCH & TECHNOLOGY PVT. LTD., IN

[85] 2023-05-03

[86] 2021-03-15 (PCT/IN2021/050262)

[87] (WO2022/144911)

[30] IN (202021056621) 2020-12-28

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[13] A1

[51] **Int.Cl. C12N 15/70 (2006.01) C12N 15/75 (2006.01) C12N 15/81 (2006.01)**  
[25] EN  
[54] **PRODUCTION OF VIRUS VECTOR PLASMID IN BACILLUS SUBTILIS**  
[54] **PRODUCTION DE PLASMIDE VECTEUR VIRAL DANS BACILLUS SUBTILIS**  
[72] SAITO, SHUNSUKE, JP  
[72] TSUGE, KENJI, JP  
[71] SYNPROGEN CO., LTD., JP  
[85] 2023-05-03  
[86] 2021-11-02 (PCT/JP2021/040410)  
[87] (WO2022/097646)  
[30] JP (2020-184495) 2020-11-04

[21] **3,200,835**  
[13] A1

[51] **Int.Cl. C12N 1/21 (2006.01) C12N 7/01 (2006.01) C12N 15/34 (2006.01) C12N 15/35 (2006.01) C12N 15/75 (2006.01) C12N 15/86 (2006.01)**  
[25] EN  
[54] **INTEGRATIVE PLASMID**  
[54] **PLASMIDE INTEGRATIF**  
[72] SAITO, SHUNSUKE, JP  
[72] TSUGE, KENJI, JP  
[71] SYNPROGEN CO., LTD., JP  
[85] 2023-05-03  
[86] 2021-11-02 (PCT/JP2021/040411)  
[87] (WO2022/097647)  
[30] JP (2020-184491) 2020-11-04

[21] **3,200,836**  
[13] A1

[51] **Int.Cl. C07K 16/24 (2006.01)**  
[25] EN  
[54] **ANTIBODIES AGAINST INTERLEUKIN-22**  
[54] **ANTICORPS CONTRE L'INTERLEUKINE-22**  
[72] RASTRICK, JOSEPH MICHAEL DAVID, GB  
[72] SILVA, JOHN PAUL, GB  
[72] TYSON, KERRY LOUISE, GB  
[72] ELLIOTT, PETER CHARLES, GB  
[72] LEYSEN, SEPPE FRANS ROMAN, GB  
[72] AHDASH, ZAINAB, GB  
[71] UCB BIOPHARMA SRL, BE  
[85] 2023-05-04  
[86] 2021-12-06 (PCT/EP2021/084400)  
[87] (WO2022/122652)  
[30] EP (20212127.3) 2020-12-07

[21] **3,200,838**  
[13] A1

[51] **Int.Cl. A61B 17/92 (2006.01) A61B 17/00 (2006.01)**  
[25] EN  
[54] **BI-SPRING SURGICAL IMPACT TOOL**  
[54] **OUTIL D'IMPACT CHIRURGICAL A DEUX RESSORTS**  
[72] SLOCUM, ALEXANDER, US  
[72] OBLAS, NICHOLAS, US  
[72] O'DONNELL, TOM, US  
[71] ZIMMER, INC., US  
[85] 2023-05-04  
[86] 2021-11-10 (PCT/US2021/058776)  
[87] (WO2022/103835)  
[30] US (63/111,789) 2020-11-10

[21] **3,200,839**  
[13] A1

[51] **Int.Cl. F04B 43/06 (2006.01) F04B 45/04 (2006.01) F04B 45/053 (2006.01) F16K 7/17 (2006.01) G01F 11/08 (2006.01)**  
[25] EN  
[54] **ACTIVE OIL INJECTION SYSTEM FOR A DIAPHRAGM COMPRESSOR**  
[54] **SYSTEME D'INJECTION D'HUILE ACTIVE POUR COMPRESSEUR A MEMBRANE**  
[72] BABBIT, GUY, US  
[72] TURNER, CHRIS, US  
[72] WHITEHILL, BRYCE, US  
[72] SPRENGEL, MICHAEL, US  
[72] AFZAL, KAREEM, US  
[71] PDC MACHINES INC., US  
[85] 2023-05-04  
[86] 2021-11-09 (PCT/US2021/058683)  
[87] (WO2022/099219)  
[30] US (63/111,356) 2020-11-09  
[30] US (63/277,125) 2021-11-08

[21] **3,200,840**  
[13] A1

[51] **Int.Cl. A61M 31/00 (2006.01)**  
[25] EN  
[54] **TRANSCERVICAL ACCESS SYSTEMS FOR INTRAUTERINE FLUID EXCHANGE, SUCH AS PLACEMENT OF HYDROGELS FORMED IN SITU**  
[54] **SYSTEMES D'ACCES TRANSCERVICAL POUR ECHANGE DE LIQUIDE INTRA-UTERIN, TELS QUE LA MISE EN PLACE D'HYDROGELS FORMES IN SITU**  
[72] BASSETT, MICHAEL, US  
[72] FELDBERG, IAN, US  
[71] PRAMAND LLC, US  
[85] 2023-05-04  
[86] 2021-11-09 (PCT/US2021/058644)  
[87] (WO2022/103762)  
[30] US (63/113,013) 2020-11-12  
[30] US (17/494,752) 2021-10-05

[21] **3,200,841**  
[13] A1

[51] **Int.Cl. A61K 38/08 (2019.01) A61P 9/10 (2006.01) C07K 7/06 (2006.01)**  
[25] EN  
[54] **PEPTIDE INHIBITORS OF HUMAN MITOCHONDRIAL FISSION PROTEIN 1 AND METHODS OF USE**  
[54] **INHIBITEURS PEPTIDIQUES DE LA PROTEINE 1 DE FISSION MITOCHONDRIALE HUMAINE ET METHODES D'UTILISATION**  
[72] EGNER, JOHN MICHAEL, US  
[72] HILL, R. BLAKE, US  
[72] WIDLANSKY, MICHAEL E., US  
[72] MEACHAM, KELSEY, US  
[71] THE MEDICAL COLLEGE OF WISCONSIN, INC., US  
[85] 2023-05-04  
[86] 2021-11-08 (PCT/US2021/058437)  
[87] (WO2022/099123)  
[30] US (63/110,457) 2020-11-06

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[51] <b>Int.Cl. C07C 237/46 (2006.01) C07C 255/53 (2006.01) C07C 255/60 (2006.01) C07D 211/34 (2006.01) C07D 413/14 (2006.01) C07D 471/04 (2006.01)</b>	[51] <b>Int.Cl. G06F 16/9535 (2019.01) G06F 21/31 (2013.01) G06F 16/955 (2019.01) G06F 16/957 (2019.01) G06F 16/958 (2019.01)</b>	[51] <b>Int.Cl. C22B 3/16 (2006.01) C22B 7/00 (2006.01) C22B 11/00 (2006.01) C22B 13/00 (2006.01) C22B 15/00 (2006.01) C22B 17/00 (2006.01) C22B 19/20 (2006.01) C22B 23/00 (2006.01) C22B 25/00 (2006.01) C22B 25/06 (2006.01) C22B 30/06 (2006.01) C22B 43/00 (2006.01) C22B 58/00 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>PROCESS FOR MAKING A PD-1/PD-L1 INHIBITOR AND SALTS AND CRYSTALLINE FORMS THEREOF</b>	[54] <b>SYSTEM AND METHOD FOR FACILITATING PRESENTATION MODIFICATION OF A USER INTERFACE</b>	[54] <b>LEACHING OF PRECIOUS AND CHALCOPHILE METALS</b>
[54] <b>PROCESSUS DE FABRICATION D'UN INHIBITEUR PD-1/PD-L1 AINSI QUE DE SES SELS ET FORMES CRISTALLINES</b>	[54] <b>SYSTEME ET PROCEDE POUR FACILITER LA MODIFICATION D'UNE PRESENTATION D'UNE INTERFACE UTILISATEUR</b>	[54] <b>LIXIVIATION DE METAUX PRECIEUX ET DE METAUX CHALCOPHILES</b>
[72] WANG, DENGJIN, US	[72] DOUGLAS, LAWRENCE, US	[72] ABDALLA, ELSAYED ABDELRAHY ORABY, AU
[72] CARPER, DANIEL, US	[72] RULE, JEFFREY, US	[72] EKSTEEN, JACOBUS JOHANNES, AU
[72] JIA, ZHONGJIANG, US	[72] NEWMAN, KAITLIN, US	[71] MINING AND PROCESS SOLUTIONS PTY LTD, AU
[72] SHEN, BO, US	[71] CAPITAL ONE SERVICES, LLC, US	[85] 2023-05-04
[72] SCLAFANI, JOSEPH A., US	[85] 2023-05-04	[86] 2021-11-18 (PCT/AU2021/051377)
[72] WILSON, ROBERT, US	[86] 2021-11-03 (PCT/US2021/057826)	[87] (WO2022/104427)
[72] ZHOU, JIACHENG, US	[87] (WO2022/098702)	[30] AU (2020904261) 2020-11-18
[72] SULEIMAN, OSAMA, GB	[30] US (17/091,827) 2020-11-06	
[72] WRIGHT, MARK, GB		
[71] INCYTE CORPORATION, US	[21] <b>3,200,847</b> [13] A1	[21] <b>3,200,849</b> [13] A1
[85] 2023-05-04	[51] <b>Int.Cl. C07K 16/24 (2006.01)</b>	[51] <b>Int.Cl. G09B 9/00 (2006.01) A63F 13/28 (2014.01) A47C 1/00 (2006.01) A47C 7/72 (2006.01)</b>
[86] 2021-11-05 (PCT/US2021/058334)	[25] EN	[25] EN
[87] (WO2022/099071)	[54] <b>MULTI-SPECIFIC ANTIBODIES AND ANTIBODY COMBINATIONS</b>	[54] <b>MOTION SIMULATOR CHAIR</b>
[30] US (63/110,792) 2020-11-06	[54] <b>ANTICORPS MULTI-SPECIFIQUES ET COMBINAISONS D'ANTICORPS</b>	[54] <b>CHAISE SIMULATRICE DE MOUVEMENT</b>
	[72] RASTRICK, JOSEPH MICHAEL DAVID, GB	[72] GAGNON, STEPHAN, CA
	[72] SILVA, JOHN PAUL, GB	[72] DESAUTELS, ROBERT, CA
	[72] LIGHTWOOD, DANIEL JOHN, GB	[72] MENARD, JEAN-FRANCOIS, CA
	[72] ADAMS, RALPH, GB	[71] D-BOX TECHNOLOGIES INC., CA
	[72] PALFRAMAN, ROGER THOMAS, GB	[85] 2023-05-04
	[72] TYSON, KERRY LOUISE, GB	[86] 2022-01-10 (PCT/CA2022/050026)
	[72] ELLIOTT, PETER CHARLES, GB	[87] (WO2022/147630)
	[72] MAYANK, SEEMA, GB	[30] US (63/135,185) 2021-01-08
	[72] CROSBY, ANDREA JULIE, GB	
	[72] BARRY, EMILY MARY CAIRISTINE, GB	
	[72] LEYSEN, SEPPE FRANS ROMAN, GB	
	[72] AHDASH, ZAINAB, GB	
	[71] UCB BIOPHARMA SRL, BE	
	[85] 2023-05-04	
	[86] 2021-12-06 (PCT/EP2021/084402)	
	[87] (WO2022/122654)	
	[30] EP (20212128.1) 2020-12-07	
[21] <b>3,200,845</b> [13] A1		
[51] <b>Int.Cl. G06Q 30/02 (2023.01) G06Q 10/04 (2023.01) G06Q 30/00 (2023.01)</b>		
[25] EN		
[54] <b>METHODS AND SYSTEMS FOR ONLINE INVENTORY PRICING</b>		
[54] <b>PROCEDES ET SYSTEMES DE TARIFICATION DE STOCK EN LIGNE</b>		
[72] ABRAHAMS, JASON, US		
[71] TIRE TUTOR, US		
[85] 2023-05-04		
[86] 2021-11-04 (PCT/US2021/057983)		
[87] (WO2022/125222)		
[30] US (63/109,457) 2020-11-04		

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[13] A1

[51] **Int.Cl. H04W 48/20 (2009.01)**  
[25] EN  
[54] **KEY GENERATION METHOD AND APPARATUS**  
[54] **APPAREIL ET PROCEDE DE GENERATION DE CLE**  
[72] GUO, LONGHUA, CN  
[72] ZHU, YUANPING, CN  
[72] HU, LI, CN  
[72] WU, RONG, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2023-05-04  
[86] 2020-11-06 (PCT/CN2020/127300)  
[87] (WO2022/094976)

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[13] A1

[51] **Int.Cl. A63C 5/08 (2006.01) B62B 13/00 (2006.01)**  
[25] EN  
[54] **SNOW VEHICLE**  
[54] **VEHICULE A NEIGE**  
[72] LAATIKAINEN, MARKKU, FI  
[71] ARCTIC RIDES OY, FI  
[85] 2023-05-04  
[86] 2021-09-27 (PCT/FI2021/050633)  
[87] (WO2022/096775)  
[30] FI (20206119) 2020-11-06  
[30] FI (U20214034) 2021-03-15  
[30] FI (U20214058) 2021-05-25

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[21] **3,200,857**  
[13] A1

[51] **Int.Cl. F04D 29/54 (2006.01)**  
[25] EN  
[54] **AEROENGINE COMPRESSOR AND POSITION HOLDING STRUCTURE OF ADJUSTABLE STATOR VANE**  
[54] **COMPRESSEUR DE MOTEUR AERONAUTIQUE ET SA STRUCTURE DE MAINTIEN DE POSITION DE PALE DE STATOR REGLABLE**  
[72] WANG, JIAGUANG, CN  
[72] ZHU, BIN, CN  
[72] ZHANG, MIAOMIAO, CN  
[72] GAO, HAOMAI, CN  
[72] CAO, CHUANJUN, CN  
[71] AECC SHANGHAI COMMERCIAL AIRCRAFT ENGINE MANUFACTURING CO., LTD., CN  
[71] AECC COMMERCIAL AIRCRAFT ENGINE CO., LTD., CN  
[85] 2023-05-04  
[86] 2021-10-22 (PCT/CN2021/125464)  
[87] (WO2022/095719)  
[30] CN (202011226873.6) 2020-11-06

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[21] **3,200,862**  
[13] A1

[51] **Int.Cl. A63B 21/00 (2006.01) A63B 21/02 (2006.01) A63B 22/00 (2006.01) A63B 23/035 (2006.01) A63B 23/04 (2006.01) A63B 21/04 (2006.01) A63B 21/16 (2006.01)**  
[25] EN  
[54] **EXERCISE APPARATUS**  
[54] **APPAREIL D'EXERCICE**  
[72] ELLIOTT, DAVID, GB  
[71] ALIGN-PILATES EQUIPMENT LTD, GB  
[85] 2023-05-04  
[86] 2020-11-04 (PCT/EP2020/081011)  
[87] (WO2021/089652)  
[30] GB (1916039.9) 2019-11-04  
[30] GB (2007364.9) 2020-05-18

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[21] **3,200,863**  
[13] A1

[51] **Int.Cl. A61K 38/18 (2006.01) A61K 48/00 (2006.01) A61P 7/06 (2006.01) C07K 14/505 (2006.01) C12N 15/864 (2006.01)**  
[25] EN  
[54] **COMPOSITION AND USES THEREOF**  
[54] **COMPOSITION ET UTILISATIONS DE CELLE-CI**  
[72] TRAAS, ANNE, US  
[72] WILSON, MATTHEW J., US  
[71] SCOUT BIO, INC., US  
[85] 2023-03-28  
[86] 2021-09-24 (PCT/US2021/052023)  
[87] (WO2022/067080)  
[30] US (63/084,490) 2020-09-28

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[21] **3,200,865**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/46 (2006.01) C12N 15/13 (2006.01) C12N 15/63 (2006.01)**  
[25] EN  
[54] **ANTI-CLAUDIN18.2 AND CD3 BISPECIFIC ANTIBODY AND USE THEREOF**  
[54] **ANTICORPS BISPECIFIQUE ANTI-CLAUDINE 18.2 ET CD3 ET SON UTILISATION**  
[72] ZHOU, SHUAIXIANG, CN  
[72] GUAN, ZHE, CN  
[72] WU, WEIWEI, CN  
[72] GAO, YARONG, CN  
[71] INNOVENT BIOLOGICS (SUZHOU) CO., LTD., CN  
[85] 2023-03-28  
[86] 2021-09-28 (PCT/CN2021/121286)  
[87] (WO2022/068810)  
[30] CN (202011054428.6) 2020-09-29



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[21] **3,200,866**  
[13] A1

[51] **Int.Cl. F16L 21/03 (2006.01) F16L 25/10 (2006.01) F16L 47/06 (2006.01) F16L 47/08 (2006.01)**

[25] EN

[54] **INTEGRATED JUNCTION SYSTEM FOR TUBULAR FLUID DISTRIBUTION ELEMENTS**

[54] **SYSTEME DE RACCORDEMENT INTEGRE POUR ELEMENTS TUBULAIRES DE DISTRIBUTION DE FLUIDE**

[72] DL LIBERTO, LUCA, IT

[72] GRANATA, GIACOMO, ES

[72] CERDA', MIGUEL, ES

[71] PIPES & FITTINGS EQOFLUIDS S.L., ES

[85] 2023-05-04

[86] 2021-10-29 (PCT/EP2021/025424)

[87] (WO2022/096146)

[30] IT (10202000026242) 2020-11-04

[21] **3,200,869**  
[13] A1

[51] **Int.Cl. B41F 11/02 (2006.01) B42D 25/369 (2014.01) B42D 25/41 (2014.01) B41F 13/193 (2006.01) B41F 19/00 (2006.01) B41F 23/00 (2006.01) B41F 23/04 (2006.01) B41M 3/14 (2006.01)**

[25] EN

[54] **MACHINE FOR GENERATING OPTICALLY VARIABLE IMAGE ELEMENTS**

[54] **MACHINE POUR GENERER DES ELEMENTS D'IMAGE OPTIQUEMENT VARIABLES**

[72] KREPS, EDWIN, DE

[72] THONY, EMMANUEL, CH

[71] KOENIG & BAUER AG, DE

[85] 2023-05-04

[86] 2021-08-18 (PCT/EP2021/072888)

[87] (WO2022/069107)

[30] DE (10 2020 125 728.7) 2020-10-01

[30] DE (10 2020 125 727.9) 2020-10-01

[21] **3,200,872**  
[13] A1

[51] **Int.Cl. E21B 1/12 (2006.01) E21B 1/14 (2006.01) E21B 1/24 (2006.01) E21B 1/26 (2006.01) E21B 1/36 (2006.01) E21B 4/14 (2006.01) E21B 6/00 (2006.01) E21B 7/24 (2006.01)**

[25] EN

[54] **DRILLING DEVICE WITH FLUID COLUMN RESONATOR**

[54] **DISPOSITIF DE FORAGE AVEC RESONATEUR A COLONNE DE FLUIDE**

[72] KESKINIVA, MARKKU, FI

[71] MINCON INTERNATIONAL LIMITED, IE

[85] 2023-05-04

[86] 2021-11-05 (PCT/EP2021/080802)

[87] (WO2022/096661)

[30] IE (S2020/0253) 2020-11-06

[21] **3,200,875**  
[13] A1

[51] **Int.Cl. F16G 13/16 (2006.01) H02G 11/00 (2006.01) F16L 3/01 (2006.01) H02G 3/04 (2006.01)**

[25] EN

[54] **DISPENSING DEVICE FOR A FLEXIBLE LINE ARRANGEMENT AND LINE GUIDE APPARATUS WITH CONVEYING UNIT**

[54] **APPAREIL DE DEROULEMENT POUR UN AGENCEMENT DE LIGNES FLEXIBLES, ET DISPOSITIF DE GUIDAGE DE LIGNE COMPRENANT UNE UNITE DE DISTRIBUTION**

[72] HERMEY, ANDREAS, DE

[72] HOWOLD, PHILIP, DE

[71] IGUS GMBH, DE

[85] 2023-05-04

[86] 2021-11-08 (PCT/EP2021/080996)

[87] (WO2022/096730)

[30] DE (20 2020 106 401.0) 2020-11-06

[21] **3,200,877**  
[13] A1

[51] **Int.Cl. B01D 15/38 (2006.01) C07K 1/22 (2006.01) C07K 14/31 (2006.01) C07K 16/06 (2006.01)**

[25] EN

[54] **SEPARATION MATRIX**

[54] **MATRICE DE SEPARATION**

[72] ANDER, MATS, SE

[72] RODRIGO, GUSTAV, SE

[72] BJORKMAN, TOMAS, SE

[71] CYTIVA BIOPROCESS R&D AB, SE

[85] 2023-05-04

[86] 2021-11-10 (PCT/EP2021/081214)

[87] (WO2022/111997)

[30] GB (2018588.0) 2020-11-26

[21] **3,200,878**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61K 39/215 (2006.01) A61P 31/14 (2006.01) C07K 14/165 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **ANTIBODIES CONJUGATED OR FUSED TO THE RECEPTOR-BINDING DOMAIN OF THE SARS-COV-2 SPIKE PROTEIN AND USES THEREOF FOR VACCINE PURPOSES**

[54] **ANTICORPS CONJUGUES OU FUSIONNES AU DOMAINE DE LIAISON AU RECEPTEUR DE LA PROTEINE DE SPICULE DU SARS-COV-2 ET LEURS UTILISATIONS A DES FINS DE VACCINATION**

[72] LEVY, YVES, FR

[72] ZURAWSKI, GERARD, US

[72] CENTLIVRE, MIREILLE, FR

[72] ZURAWSKI, SANDRA, US

[72] GODOT, VERONIQUE, FR

[71] INSERM (INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE), FR

[71] ASSISTANCE PUBLIQUE - HOPITAUX DE PARIS, FR

[71] BAYLOR RESEARCH INSTITUTE, US

[71] UNIVERSITE PARIS EST CRETEIL VAL DE MARNE, FR

[85] 2023-05-04

[86] 2021-11-10 (PCT/EP2021/081303)

[87] (WO2022/101302)

[30] EP (20306370.6) 2020-11-12

[30] EP (21305091.7) 2021-01-26

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[21] **3,200,880**  
[13] A1  
[51] **Int.Cl. H01Q 1/12 (2006.01) H01Q 1/38 (2006.01) H01Q 1/42 (2006.01) H01Q 9/04 (2006.01) H01Q 1/00 (2006.01)**  
[25] EN  
[54] **ANTENNA ARRANGEMENT**  
[54] **AGENCEMENT D'ANTENNE**  
[72] YOUSEFBEIKI, MOHSEN, BE  
[72] ADDACI, RAFIK, BE  
[71] AGC GLASS EUROPE, BE  
[71] AGC INC., JP  
[71] AGC FLAT GLASS NORTH AMERICA, INC., US  
[71] AGC VIDROS DO BRASIL LTDA., BR  
[85] 2023-05-04  
[86] 2021-11-16 (PCT/EP2021/081827)  
[87] (WO2022/101498)  
[30] EP (20207878.8) 2020-11-16

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[21] **3,200,882**  
[13] A1  
[51] **Int.Cl. H01Q 1/12 (2006.01) H01Q 1/38 (2006.01) H01Q 1/42 (2006.01) H01Q 9/04 (2006.01) H01Q 1/00 (2006.01)**  
[25] EN  
[54] **ANTENNA SYSTEM**  
[54] **SYSTEME D'ANTENNE**  
[72] YOUSEFBEIKI, MOHSEN, BE  
[72] ADDACI, RAFIK, BE  
[72] SALME, GUNTHER, BE  
[71] AGC GLASS EUROPE, BE  
[71] AGC INC., JP  
[71] AGC FLAT GLASS NORTH AMERICA, INC., US  
[71] AGC VIDROS DO BRASIL LTDA, BR  
[85] 2023-05-04  
[86] 2021-11-16 (PCT/EP2021/081871)  
[87] (WO2022/101507)  
[30] EP (20207890.3) 2020-11-16

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[21] **3,200,884**  
[13] A1  
[51] **Int.Cl. A61K 39/395 (2006.01) A61K 45/00 (2006.01) A61P 37/00 (2006.01) G01N 33/53 (2006.01)**  
[25] EN  
[54] **STEROID SPARING**  
[54] **EPARGNE DE STEROIDES**  
[72] WHITE, WENDY, US  
[72] GUO, XIANG, US  
[71] ASTRAZENECA AB, SE  
[85] 2023-05-04  
[86] 2021-11-17 (PCT/EP2021/081971)  
[87] (WO2022/106460)  
[30] US (63/115,286) 2020-11-18

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[21] **3,200,885**  
[13] A1  
[51] **Int.Cl. C12Q 1/6811 (2018.01) A61P 31/14 (2006.01) G01N 33/50 (2006.01)**  
[25] EN  
[54] **METHODS FOR MODULATING HOST CELL SURFACE INTERACTIONS WITH SARS-COV-2**  
[54] **METHODES DE MODULATION DES INTERACTIONS DE SURFACES DE CELLULES HOTES AVEC LE SARS-COV-2**  
[72] MARTINEZ-MARTIN, NADIA, US  
[71] GENENTECH, INC., US  
[85] 2023-05-04  
[86] 2021-11-23 (PCT/US2021/060464)  
[87] (WO2022/109441)  
[30] US (63/117,440) 2020-11-23

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[21] **3,200,892**  
[13] A1  
[51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6876 (2018.01) C12Q 1/6895 (2018.01) C07K 14/415 (2006.01) C12N 15/82 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS TO INCREASE RESISTANCE TO PHYTOPHTHORA SOJAE IN SOYBEAN**  
[54] **COMPOSITIONS ET PROCEDES POUR AUGMENTER LA RESISTANCE A PHYTOPHTHORA SOJAE DANS LE SOJA**  
[72] MA, JIANXIN, US  
[72] AGGARWAL, RAJAT, US  
[72] CHEN, LIYANG, US  
[72] WANG, WEIDONG, US  
[72] CRASTA, OSWALD, US  
[72] MYRVOLD, JONATHAN, US  
[71] CORTEVA AGRISCIENCE LLC, US  
[71] PURDUE RESEARCH FOUNDATION, US  
[85] 2023-05-04  
[86] 2021-12-15 (PCT/US2021/063556)  
[87] (WO2022/132927)  
[30] US (63/126,283) 2020-12-16  
[30] US (63/154,913) 2021-03-01

# Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

## Demandes canadiennes apparentées par division et demandes mises à la disponibilité du public non disponibles auparavant

<p>[21] <b>3,176,188</b> [13] A1</p> <p>[25] EN [54] <b>USING CLIENT CERTIFICATES TO COMMUNICATE TRUSTED INFORMATION</b> [54] <b>UTILISATION DE CERTIFICATS DE CLIENT POUR COMMUNIQUER DES INFORMATIONS FIABLES</b> [72] NORTON, DERK, US [72] VAISH, TUSHAR, US [72] WEBB, JEFF, US [71] BLACKHAWK NETWORK, INC., US [22] 2014-03-14 [41] 2014-09-15 [62] 2,847,003 [30] US (61/800,548) 2013-03-15</p>	<p>[21] <b>3,199,430</b> [13] A1</p> <p>[25] EN [54] <b>COMPOUNDS FOR IMPROVING MRNA SPLICING</b> [54] <b>COMPOSES POUR AMELIORER L'EPISSAGE DE L'ARNM</b> [72] ALAUGENHAUPT, SUSAN A., US [72] JOHNSON, GRAHAM, US [72] PAQUETTE, WILLIAM D., US [72] ZHANG, WEI, US [72] MARUGAN, JUAN, US [71] THE GENERAL HOSPITAL CORPORATION, US [71] THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE DEPARTMENT OF HEALTH AND HUMAN SERVICES, US [22] 2016-01-15 [41] 2016-07-21 [62] 2,973,949 [30] US (62/104,547) 2015-01-16 [30] US (62/180,380) 2015-06-16</p>	<p>[21] <b>3,199,504</b> [13] A1</p> <p>[25] EN [54] <b>DRY POWDER INHALER</b> [54] <b>INHALATEUR A POUDRE SECHE</b> [72] KINSEY, P. SPENCER, US [72] LAURENZI, BRENDAN, US [72] SMUTNEY, CHAD C., US [72] ADAMO, BENOIT, US [72] GUARNERI, JOSEPH, US [71] MANNKIND CORPORATION, US [22] 2017-01-27 [41] 2017-08-03 [62] 3,012,679 [30] US (62/289,095) 2016-01-29</p>
<p>[21] <b>3,186,068</b> [13] A1</p> <p>[51] <b>Int.Cl. G06N 5/02 (2023.01) G06N 20/10 (2019.01)</b> [25] EN [54] <b>METHODS AND DEVICES FOR CUSTOMIZING KNOWLEDGE REPRESENTATION SYSTEMS</b> [54] <b>PROCEDES ET DISPOSITIFS DE PERSONNALISATION DE SYSTEMES DE REPRESENTATION DES CONNAISSANCES</b> [72] ILYAS, IHAB, CA [72] SWEENEY, PETER JOSEPH, CA [71] PRIMAL FUSION INC., CA [22] 2013-03-25 [41] 2014-03-13 [62] 3,094,159 [30] US (13/609,218) 2012-09-10 [30] US (13/609,223) 2012-09-10 [30] US (13/609,225) 2012-09-10 [30] US (13/844,009) 2013-03-15 [30] US (13/609,218) 2012-09-10 [30] US (13/609,223) 2012-09-10 [30] US (13/609,225) 2012-09-10 [30] US (13/844,009) 2013-03-15</p>	<p>[21] <b>3,199,468</b> [13] A1</p> <p>[25] EN [54] <b>SYSTEM AND METHOD FOR PROVIDING A BLACKJACK GAME HAVING ADDITIONAL OPTIONS FOR A PLAYER</b> [54] <b>SYSTEME ET PROCEDE POUR OFFRIR A UN JOUEUR UN JEU DE BLACK-JACK PRESENTANT DES OPTIONS SUPPLEMENTAIRES</b> [72] ASHER, JOSEPH M., US [72] FINDLAY, LEWIS C., GB [72] RICHES, GUY IAIN OLIVER, GB [71] CANTOR INDEX LLC, US [22] 2005-10-12 [41] 2006-04-27 [62] 2,956,673 [30] US (10/963,399) 2004-10-12</p>	<p>[21] <b>3,199,520</b> [13] A1</p> <p>[25] EN [54] <b>HEAT TREATMENT MONITORING SYSTEM</b> [54] <b>SYSTEME DE SURVEILLANCE DE TRAITEMENT THERMIQUE</b> [72] STORK GENANNT WERSBORG, INGO, DE [71] STORK GENANNT WERSBORG, INGO, DE [22] 2015-06-03 [41] 2015-12-10 [62] 2,950,369 [30] EP (14001951.4) 2014-06-05 [30] EP (14002866.3) 2014-08-18</p>

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[21] **3,199,525**  
[13] A1

[51] **Int.Cl. A47C 27/08 (2006.01) B29D 22/02 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR INTERNAL AIRBED STRUCTURE**  
[54] **MECANISMES ET METHODES DESTINES A UNE STRUCTURE INTERNE DE LIT GONFLABLE**  
[72] OCEGUEDA GALLAGA, VICTOR HUGO, MX  
[72] LAN, CHAOLONG, CN  
[72] MA, MINGLIAN, CN  
[71] POLYGROUP MACAU LIMITED (BVI), VG  
[22] 2016-05-09  
[41] 2016-11-11  
[62] 3,140,976  
[30] US (62/159,564) 2015-05-11  
[30] US (62/322,560) 2016-04-14  
[30] US (15/147,625) 2016-05-05

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[21] **3,199,533**  
[13] A1

[25] EN  
[54] **METHOD FOR ENCODING/DECODING IMAGE SIGNAL, AND DEVICE FOR SAME**  
[54] **PROCEDE POUR LE CODAGE/DECODAGE D'UN SIGNAL D'IMAGE, ET DISPOSITIF ASSOCIE**  
[72] LEE, BAE KEUN, KR  
[71] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN  
[22] 2019-11-08  
[41] 2020-05-14  
[62] 3,117,479  
[30] KR (10-2018-0136262) 2018-11-08  
[30] KR (10-2018-0167979) 2018-12-21

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[21] **3,199,536**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR SECURE FIRMWARE VALIDATION**  
[54] **SYSTEMES ET PROCEDES POUR UNE VALIDATION DE MICROLOGICIEL SECURISE**  
[72] ZARAKAS, JAMES, US  
[72] WURMFELD, DAVID, US  
[72] YORK, BRENNON, US  
[72] LOCKE, TYLER, US  
[71] CAPITAL ONE SERVICES, LLC, US  
[22] 2016-04-14  
[41] 2016-10-20  
[62] 2,982,785  
[30] US (62/147,568) 2015-04-14  
[30] US (62/270,465) 2015-12-21  
[30] US (62/305,850) 2016-03-09

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[21] **3,199,601**  
[13] A1

[25] EN  
[54] **BENZOIMIDAZOLE DERIVATIVES AS PAD4 INHIBITORS**  
[54] **DERIVES DE BENZOIMIDAZOLE COMME INHIBITEURS PAD4**  
[72] AMANS, DOMINIQUE, US  
[72] ATKINSON, STEPHEN JOHN, US  
[72] BARKER, MICHAEL DAVID, US  
[72] CAMPBELL, MATTHEW, US  
[72] DIALLO, HAWA, US  
[72] DOUAULT, CLEMENT, US  
[72] GARTON, NEIL STUART, US  
[72] LIDDLE, JOHN, US  
[72] RENAUX, JESSICA FANNY, US  
[72] SHEPPARD, ROBERT JOHN, US  
[72] WALKER, ANN LOUISE, US  
[72] WELLAWAY, CHRISTOPHER ROLAND, US  
[72] WILSON, DAVID MATTHEW, US  
[71] GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED, GB  
[22] 2016-05-19  
[41] 2016-11-24  
[62] 2,986,199  
[30] US (62/164,906) 2015-05-21

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[21] **3,199,620**  
[13] A1

[25] EN  
[54] **INJECTION ELECTRICAL CONNECTOR**  
[54] **CONNECTEUR ELECTRIQUE D'INJECTION**  
[72] BERTINI, GLEN J., US  
[72] SONGRAS, DONALD R., US  
[71] NOVINIUM, LLC, US  
[22] 2017-04-28  
[41] 2017-11-02  
[62] 3,018,998  
[30] US (62/329,132) 2016-04-28

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[21] **3,199,622**  
[13] A1

[25] EN  
[54] **COMPOSITION INCLUDING SILICOTITANATE HAVING SITINAKITE STRUCTURE, AND PRODUCTION METHOD FOR SAME**  
[54]  
[72] SHIMIZU, YOJU, JP  
[72] HIRANO, SHIGERU, JP  
[72] FUNAKOSHI, HAJIME, JP  
[72] TOKUNAGA, KEISUKE, JP  
[71] TOSOH CORPORATION, JP  
[22] 2015-07-17  
[41] 2016-01-21  
[62] 2,953,912  
[30] JP (2014-147677) 2014-07-18  
[30] JP (2015-039326) 2015-02-27  
[30] JP (2015-096690) 2015-05-11  
[30] JP (2015-096691) 2015-05-11

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**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,199,639**  
[13] A1

[25] EN  
[54] **DEVICE FOR CREATING AND DISTRIBUTING VAPORIZED SCENT**  
[54] **DISPOSITIF SERVANT A CREER ET DISTRIBUER UN PARFUM VAPORISE**  
[72] WYNALDA, ROBERT M. JR., US  
[71] WYNDSCENT, LLC, US  
[22] 2016-04-25  
[41] 2016-10-23  
[62] 2,928,110  
[30] US (62/151989) 2015-04-23  
[30] US (62/156023) 2015-05-01  
[30] US (62/163603) 2015-05-19  
[30] US (14/941428) 2015-11-13  
[30] US (62/266391) 2015-12-11  
[30] US (62/275559) 2016-01-06  
[30] US (62/276121) 2016-01-07  
[30] US (62/286221) 2016-01-22  
[30] US (62/290743) 2016-02-03  
[30] US (62/298913) 2016-02-23

[21] **3,199,663**  
[13] A1

[51] **Int.Cl. F28F 3/08 (2006.01) F24F 12/00 (2006.01) F28F 3/10 (2006.01) F28F 27/02 (2006.01)**  
[25] EN  
[54] **LIQUID PANEL ASSEMBLY**  
[54] **ENSEMBLE PANNEAU A CIRCULATION DE LIQUIDE**  
[72] LEPOUDRE, PHILLIP PAUL, CA  
[72] COUTU, KENNETH, CA  
[72] HEMINGSON, HOWARD BRIAN, CA  
[71] NORTEK AIR SOLUTIONS CANADA, INC., CA  
[22] 2013-06-26  
[41] 2014-02-27  
[62] 2,880,350  
[30] US (61/692,798) 2012-08-24  
[30] US (61/774,192) 2013-03-07  
[30] US (13/797,152) 2013-03-12

[21] **3,199,697**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) C07K 16/30 (2006.01) C07K 16/40 (2006.01) C07K 16/46 (2006.01)**  
[25] EN  
[54] **PSMA BINDING ANTIBODY AND USES THEREOF**  
[54] **ANTICORPS DE LIAISON PSMA ET SES UTILISATIONS**  
[72] SALIH, HELMUT, DE  
[72] VOGT, FABIAN, DE  
[72] JUNG, GUNDRAM, DE  
[72] ZEKRI-METREF, LATIFA, DE  
[71] DEUTSCHES KREBSFORSCHUNGSZENTRUM STIFTUNG DES OFFENTLICHEN RECHTS, DE  
[71] EBERHARD KARLS UNIVERSITAT TUBINGEN, DE  
[22] 2017-01-16  
[41] 2017-07-20  
[62] 3,011,098  
[30] EP (16151281.9) 2016-01-14

[21] **3,199,701**  
[13] A1

[25] EN  
[54] **METHOD OF OPERATING A CONTINUOUS CATALYST REGENERATION REFORMER**  
[54] **METHODE D'EXPLOITATION D'UN REFORMEUR POUR LA REGENERATION DE CATALYSEUR EN CONTINU**  
[72] ZALEWSKI, DAVID J., US  
[72] DHARMAGADDA, VIDYA, US  
[71] MARATHON PETROLEUM COMPANY LP, US  
[22] 2020-05-08  
[41] 2020-11-09  
[62] 3,080,518  
[30] US (62/845,485) 2019-05-09  
[30] US (16/869,186) 2020-05-07

[21] **3,199,703**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR PERFORMING FINGERPRINT BASED USER AUTHENTICATION USING IMAGERY CAPTURED USING MOBILE DEVICES**  
[54] **SYSTEMES ET PROCEDES D'EXECUTION D'UNE AUTHENTIFICATION D'UTILISATEUR BASEE SUR DES EMPREINTES DIGITALES AU MOYEN D'IMAGES CAPTUREES AU MOYEN DE DISPOSITIFS MOBILES**  
[72] MATHER, JONATHAN FRANCIS, GB  
[72] OTHMAN, ASEM, US  
[72] TYSON, RICHARD, GB  
[72] SIMPSON, ANDREW, GB  
[71] VERIDIUM IP LIMITED, GB  
[22] 2016-01-29  
[41] 2016-08-11  
[62] 2,976,049  
[30] US (62/112,961) 2015-02-06  
[30] US (14/819,639) 2015-08-06  
[30] US (14/988,833) 2016-01-06

[21] **3,199,709**  
[13] A1

[25] EN  
[54] **HANGING SYSTEM AND BRACKET THEREOF**  
[54] **SYSTEME DE SUSPENSION ET SUPPORT ASSOCIE**  
[72] MCGOWAN, STEVEN PATRICK, US  
[72] COYLE, ROBERT TERRY, JR., US  
[72] EHRHARDT, RICHARD JOSEPH, US  
[71] MCS INDUSTRIES, INC., US  
[22] 2019-01-30  
[41] 2019-08-15  
[62] 3,090,663  
[30] US (62/626,816) 2018-02-06  
[30] US (62/665,595) 2018-05-02

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

[21] **3,199,712**  
[13] A1

[51] **Int.Cl. A61K 35/28 (2015.01) C12N 5/077 (2010.01) C12N 5/078 (2010.01) A61K 35/35 (2015.01) A61K 35/16 (2015.01) A61K 47/36 (2006.01) A61K 47/42 (2017.01) A61L 33/00 (2006.01) C12M 3/00 (2006.01)**

[25] EN

[54] **NEW STANDARDIZATIONS & MEDICAL DEVICES FOR THE PREPARATION OF PLATELET RICH PLASMA (PRP) OR BONE MARROW CENTRATE (BMC) ALONE OR IN COMBINATION WITH HYALURONIC ACID**

[54] **NOUVELLES NORMALISATIONS ET NOUVEAUX DISPOSITIFS MEDICAUX POUR LA PREPARATION DE PLASMA RICHE EN PLAQUETTES (PRP) OU DE CENTRIFUGAT DE MOELLE OSSEUSE (BMC) SEUL OU EN ASSOCIATION AVEC DE L'ACIDE HYALURONIQUE**

[72] TURZI, ANTOINE, CH  
[71] REGEN LAB SA, CH  
[22] 2015-11-26  
[41] 2016-06-02  
[62] 2,968,731  
[30] GB (1421013.2) 2014-11-26

[21] **3,199,796**  
[13] A1

[25] EN

[54] **LAYERED CODING FOR COMPRESSED SOUND OR SOUND FIELD REPRESENTATIONS**

[54] **CODAGE HIERARCHIQUE POUR REPRESENTATIONS COMPRESSEES DE SONS OU DE CHAMPS ACOUSTIQUES**

[72] KORDON, SVEN, DE  
[72] KRUEGER, ALEXANDER, DE  
[71] DOLBY INTERNATIONAL AB, NL  
[22] 2016-10-07  
[41] 2017-04-13  
[62] 3,000,910  
[30] EP (15306590.9) 2015-10-08  
[30] US (62/361,809) 2016-07-13

[21] **3,199,798**  
[13] A1

[25] EN

[54] **NEW STANDARDIZATIONS & MEDICAL DEVICES FOR THE PREPARATION OF PLATELET RICH PLASMA (PRP) OR BONE MARROW CENTRATE (BMC) ALONE OR IN COMBINATION WITH HYALURONIC ACID**

[54] **NOUVELLES NORMALISATIONS ET NOUVEAUX DISPOSITIFS MEDICAUX POUR LA PREPARATION DE PLASMA RICHE EN PLAQUETTES (PRP) OU DE CENTRIFUGAT DE MOELLE OSSEUSE (BMC) SEUL OU EN ASSOCIATION AVEC DE L'ACIDE HYALURONIQUE**

[72] TURZI, ANTOINE, CH  
[71] REGEN LAB SA, CH  
[22] 2015-11-26  
[41] 2016-06-02  
[62] 2,968,731  
[30] GB (1421013.2) 2014-11-26

[21] **3,199,812**  
[13] A1

[51] **Int.Cl. C04B 35/565 (2006.01) C01B 32/956 (2017.01) C01B 32/984 (2017.01) C04B 35/571 (2006.01) C04B 35/622 (2006.01)**

[25] EN

[54] **POLYSILOCARB BASED SILICON CARBIDE MATERIALS, APPLICATIONS AND DEVICES**

[54] **MATERIAUX, APPLICATIONS ET DISPOSITIFS DE CARBURE DE SILICIUM A BASE DE POLYSILOCARB**

[72] DIWANJI, ASHISH P., US  
[72] HOPKINS, ANDREW R., US  
[72] SHERWOOD, WALTER J., US  
[72] DUKES, DOUGLAS M., US  
[72] SANDGREN, GLENN, US  
[72] LAND, MARK S., US  
[72] BENAC, BRIAN L., US  
[71] PALLIDUS, INC., US  
[22] 2015-09-24  
[41] 2016-03-31  
[62] 2,962,602  
[30] US (62/055,397) 2014-09-25  
[30] US (62/055,497) 2014-09-25  
[30] US (62/055,461) 2014-09-25  
[30] US (62/112,025) 2015-02-04

[21] **3,199,815**  
[13] A1

[51] **Int.Cl. F03D 13/25 (2016.01) F03D 9/30 (2016.01) B63B 77/10 (2020.01) B63B 35/44 (2006.01)**

[25] EN

[54] **METHOD OF ASSEMBLING A FLOATING WIND TURBINE PLATFORM**

[54] **PROCEDE D'ASSEMBLAGE D'UNE PLATE-FORME D'EOLIENNE FLOTTANTE**

[72] DAGHER, HABIB J., US  
[72] VISELLI, ANTHONY M., US  
[71] UNIVERSITY OF MAINE SYSTEM BOARD OF TRUSTEES, US  
[22] 2015-02-06  
[41] 2015-08-13  
[62] 2,938,975  
[30] US (61/936,596) 2014-02-06

[21] **3,199,825**  
[13] A1

[25] EN

[54] **PORTABLE ELECTROCHEMICAL-SENSOR SYSTEM FOR ANALYZING USER HEALTH CONDITIONS AND METHOD THEREOF**

[54] **SYSTEME DE CAPTEUR ELECTROCHIMIQUE PORTATIF PERMETTANT D'ANALYSER LES PROBLEMES DE SANTE DES UTILISATEURS ET SON PROCEDE**

[72] KOUL, RAMAN, CA  
[72] SALAHANDISH, RAZIEH, CA  
[72] WANG, GANG (A.K.A. JOSEPH), CA  
[72] BHAT, SUMRITA, CA  
[72] VASTAREY, NIKHIL SURESH, CA  
[72] KAPOOR, ANMOL SINGH, CA  
[71] CARDIAI TECHNOLOGIES LTD., CA  
[22] 2019-11-04  
[41] 2020-02-07  
[62] 3,155,751  
[30] US (62/755,148) 2018-11-02  
[30] US (62/786,180) 2018-12-28  
[30] US (62/875,131) 2019-07-17

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

<p align="right">[21] <b>3,199,845</b> [13] A1</p> <p>[25] EN [54] <b>PROCESS FOR PREPARING A PUMPABLE BROTH COMPOSITION</b> [54] <b>PROCEDE DE PREPARATION D'UNE COMPOSITION DE MILIEU DE CULTURE POMPABLE</b> [72] DAKE, ROGER LYNN, US [72] LEWIS, NANCY, US [71] INTERNATIONAL DEHYDRATED FOODS, INC., US [22] 2015-09-10 [41] 2016-03-17 [62] 2,960,402 [30] US (62/048,648) 2014-09-10</p>	<p align="right">[21] <b>3,199,868</b> [13] A1</p> <p>[25] EN [54] <b>CAR SEAT WITH BELT GUIDE</b> [54] <b>SIEGE D'AUTO EQUIPE D'UN GUIDE-CEINTURE</b> [72] SELLERS, GREGORY, US [72] HARTENSTINE, CURTIS M., US [71] WONDERLAND SWITZERLAND AG, CH [22] 2019-04-17 [41] 2019-10-18 [62] 3,040,510 [30] US (62/659355) 2018-04-18</p>	<p align="right">[21] <b>3,199,971</b> [13] A1</p> <p>[25] EN [54] <b>MULTI-PROCESS COMMUNICATION REGARDING GAMING INFORMATION</b> [54] <b>COMMUNICATION MULTI-PROCESSUS RELATIVE A DES INFORMATIONS DE JEU</b> [72] AMAITIS, LEE, US [72] WILLIAMS, PAUL, US [72] TARA, SUNNY, US [71] CFPH, LLC, US [22] 2011-08-12 [41] 2012-02-16 [62] 3,010,962 [30] US (61/373,435) 2010-08-13 [30] US (61/405,439) 2010-10-21 [30] US (61/413,089) 2010-11-12 [30] US (61/413,098) 2010-11-12 [30] US (13/070,893) 2011-03-24 [30] US (13/080,098) 2011-04-05</p>
<p align="right">[21] <b>3,199,859</b> [13] A1</p> <p>[25] EN [54] <b>APPARATUS AND METHODS FOR IMPLANTING A REPLACEMENT HEART VALVE</b> [54] <b>APPAREIL ET PROCEDES POUR IMPLANTER UNE VALVULE PROTHETIQUE</b> [72] SPENCE, PAUL A., US [72] TOMPKINS, LANDON H., US [71] MITRAL VALVE TECHNOLOGIES SARL, CH [22] 2014-08-11 [41] 2015-02-19 [62] 2,920,724 [30] US (61/864,860) 2013-08-12 [30] US (61/867,287) 2013-08-19 [30] US (61/878,280) 2013-09-16</p>	<p align="right">[21] <b>3,199,898</b> [13] A1</p> <p>[25] EN [54] <b>STORE OF THE FUTURE</b> [54] [72] MACLAURIN, MATTHEW BRET, US [72] GEISINGER, DAVID, US [72] CHIEN, HSIN-YI, US [72] JOFFRAY, FLYNN, US [72] SKORUPSKI, JAMES ROSS, US [72] CYPHER, HEALEY, US [71] EBAY INC., US [22] 2014-06-04 [41] 2014-12-11 [62] 3,141,115 [30] US (61/831,607) 2013-06-05 [30] US (14/109,737) 2013-12-17</p>	<p align="right">[21] <b>3,199,973</b> [13] A1</p> <p>[25] EN [54] <b>MULTILINGUAL CONVERSATIONAL SEMANTIC PROCESSOR</b> [54] <b>PROCESSEUR SEMANTIQUE CONVERSATIONNEL MULTILINGUE</b> [72] HINES, VAUGHAN, CA [71] GENERAL SOFTWARE CORPORATION, CA [22] 2021-11-10 [41] 2022-01-10 [62] 3,138,451</p>
<p align="right">[21] <b>3,199,862</b> [13] A1</p> <p>[25] EN [54] <b>METHODS AND SYSTEMS FOR INTELLIGENT UTILIZATION OF OFF-PEAK NETWORK BANDWIDTH</b> [54] <b>METHODS ET SYSTEMES D'UTILISATION INTELLIGENTE DE LARGEUR DE BANDE RESEAU HORS POINTE</b> [72] DOSHI, NISHANT, US [72] AUGER, SCOTT, US [72] SHARMA, AMBUD, US [71] COMCAST CABLE COMMUNICATIONS, LLC, US [22] 2016-11-23 [41] 2017-05-24 [62] 2,949,314 [30] US (14/950,962) 2015-11-24</p>	<p align="right">[21] <b>3,199,936</b> [13] A1</p> <p>[25] EN [54] <b>PRINTED TAGS FOR HEATED FOOD ITEMS</b> [54] <b>ETIQUETTES IMPRIMEES POUR DES ARTICLES ALIMENTAIRES CHAUFFES</b> [72] DUCKETT, JEANNE F., US [72] WALKER, STEPHEN JOHN, AU [72] EUSE, KAREN L., US [72] BLAIR, JAYNE, US [71] AVERY DENNISON RETAIL INFORMATION SERVICES, LLC, US [22] 2015-10-06 [41] 2017-04-13 [62] 2,999,249</p>	<p align="right">[21] <b>3,199,979</b> [13] A1</p> <p>[25] EN [54] <b>MULTILINGUAL CONVERSATIONAL SEMANTIC PROCESSOR</b> [54] <b>PROCESSEUR SEMANTIQUE CONVERSATIONNEL MULTILINGUE</b> [72] HINES, VAUGHAN, CA [71] GENERAL SOFTWARE CORPORATION, CA [22] 2021-11-10 [41] 2022-01-10 [62] 3,138,451</p>

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

[21] **3,200,015**  
[13] A1

[25] EN  
[54] **SNOWMOBILE CONTROL SYSTEM**  
[54] **SYSTEME DE COMMANDE DE MOTONEIGE**  
[72] RHODES, TREVOR F., US  
[72] EDWARDS, BENJAMIN T., US  
[72] HEDLUND, MICHAEL A., US  
[72] THARALDSON, JOSEPH D., US  
[71] POLARIS INDUSTRIES INC., US  
[22] 2020-12-16  
[41] 2021-06-20  
[62] 3,103,012  
[30] US (16/723,806) 2019-12-20

[21] **3,200,022**  
[13] A1

[25] EN  
[54] **WIRELESS NETWORK SERVICE TYPE**  
[54] **TYPES DE SERVICES DE RESEAU SANS FIL**  
[72] MCCANN, STEPHEN, GB  
[72] MONTEMURRO, MICHAEL PETER, CA  
[71] BLACKBERRY LIMITED, CA  
[22] 2014-12-19  
[41] 2015-07-23  
[62] 2,930,087  
[30] US (14/158,466) 2014-01-17

[21] **3,200,133**  
[13] A1

[51] **Int.Cl. G06T 11/00 (2006.01) G06T 15/04 (2011.01) G09G 5/02 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR GENERATING PROCEDURAL TEXTURES USING PARTICLES**  
[54] **SYSTEME DE GENERATION DE TEXTURES PROCEDURALES A PARTIR DE PARTICULES**  
[72] DEGUY, SEBASTIEN, FR  
[72] SOUM, CHRISTOPHE, FR  
[72] DAMEZ, CYRILLE, FR  
[72] BATUT, ERIC, FR  
[71] ALLEGORITHMIC, FR  
[22] 2014-07-15  
[41] 2015-01-22  
[62] 2,917,383  
[30] FR (13/01709) 2013-07-18

[21] **3,200,142**  
[13] A1

[51] **Int.Cl. G10L 19/022 (2013.01)**  
[25] EN  
[54] **IMPROVED SUBBAND BLOCK BASED HARMONIC TRANSPOSITION**  
[54] **TRANSPPOSITION AMELIOREE D'HARMONIQUE FONDEE SUR UN BLOC DE SOUS-BANDE**  
[72] VILLEMOES, LARS, SE  
[71] DOLBY INTERNATIONAL AB, IE  
[22] 2011-01-05  
[41] 2011-07-28  
[62] 3,166,284  
[30] US (61/296241) 2010-01-19  
[30] US (61/331545) 2010-05-05

[21] **3,200,172**  
[13] A1

[25] EN  
[54] **SYSTEM AND METHOD FOR ADAPTIVE CONTROL OF A HYDRAULIC CONTROL SYSTEM OF A TRANSMISSION**  
[54] **SYSTEME ET PROCEDE POUR LA COMMANDE ADAPTATIVE D'UN SYSTEME DE COMMANDE HYDRAULIQUE D'UNE TRANSMISSION**  
[72] LONG, CHARLES F., US  
[72] TAYLOR, CHARLES T., US  
[71] ALLISON TRANSMISSION, INC., US  
[22] 2014-03-04  
[41] 2014-10-02  
[62] 3,122,952  
[30] US (13/826,527) 2013-03-14

[21] **3,200,180**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **PROSTHETIC HEART VALVE AND DELIVERY APPARATUS**  
[54] **VALVULE CARDIAQUE PROTHETIQUE ET APPAREIL DE MISE EN PLACE**  
[72] ALON, DAVID, US  
[72] BENICHO, NETANEL, US  
[72] MEIRI, ODED, US  
[71] EDWARDS LIFSCIENCES CORPORATION, US  
[22] 2009-08-19  
[41] 2010-02-25  
[62] 3,095,820  
[30] US (61/091,293) 2008-08-22  
[30] US (12/429,040) 2009-04-23

[21] **3,200,275**  
[13] A1

[51] **Int.Cl. C12N 15/62 (2006.01) C07K 14/54 (2006.01) C07K 16/18 (2006.01) C07K 16/28 (2006.01) C07K 19/00 (2006.01)**  
[25] EN  
[54] **MULTIMERIC IL-15-BASED MOLECULES**  
[54] **MOLECULES MULTIMERIQUES A BASE D'IL-15**  
[72] WONG, HING C., US  
[72] MARCUS, WARREN, US  
[72] LIU, BAI, US  
[72] XU, WENXIN, US  
[72] NEWMAN, ROBBY, US  
[72] KAGE, KAREN, US  
[72] YOU, LIJING, US  
[72] RHODE, PETER, US  
[72] SOON-SHIONG, PATRICK, US  
[71] NANTCELL, INC., US  
[71] ALTOR BIOSCIENCE CORPORATION, US  
[22] 2017-10-21  
[41] 2018-04-26  
[62] 3,041,310  
[30] US (62/411,216) 2016-10-21  
[30] US (62/513,964) 2017-06-01

[21] **3,200,323**  
[13] A1

[25] EN  
[54] **CONVERSION OF MEDIA FILTER INTO MEMBRANE GRAVITY FILTER**  
[54] **CONVERSION D'UN MILIEU FILTRANT EN FILTRE A MEMBRANE A GRAVITE**  
[72] COTE, PIERRE LUCIEN, CA  
[72] CADERA, JASON, CA  
[72] PEDERSEN, STEVEN KRISTIAN, CA  
[72] ADAMS, NICHOLAS WILLIAM H., CA  
[71] BL TECHNOLOGIES, INC., US  
[22] 2016-03-04  
[41] 2016-10-20  
[62] 2,976,542  
[30] US (62/149,070) 2015-04-17  
[30] US (14/711,060) 2015-05-13  
[30] US (14/721,549) 2015-05-26  
[30] US (62/210,915) 2015-08-27  
[30] US (62/233,812) 2015-09-28



**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,200,340**  
[13] A1

[25] EN  
[54] **METHOD AND APPARATUS FOR RENDERING COLOR IMAGES**  
[54] **PROCEDE PERMETTANT DE RESTITUER DES IMAGES EN COULEURS**  
[72] BUCKLEY, EDWARD, US  
[72] CROUNSE, KENNETH R., US  
[72] TELFER, STEPHEN J., US  
[72] SAINIS, SUNIL KRISHNA, US  
[71] E INK CORPORATION, US  
[22] 2018-03-02  
[41] 2018-09-13  
[62] 3,066,397  
[30] US (62/467,291) 2017-03-06  
[30] US (62/509,031) 2017-05-19  
[30] US (62/509,087) 2017-05-20  
[30] US (62/585,614) 2017-11-14  
[30] US (62/585,761) 2017-11-14  
[30] US (62/585,692) 2017-11-14  
[30] US (62/591,188) 2017-11-27

[21] **3,200,410**  
[13] A1

[25] EN  
[54] **METHODS AND DEVICES FOR REDUCING MYOPIA IN CHILDREN**  
[54] **METHODES ET DISPOSITIFS POUR REDUIRE LA MYOPIE CHEZ LES ENFANTS**  
[72] RAPPON, JOSEPH MICHAEL, US  
[72] CHALBERG, JR., THOMAS W., US  
[72] TASSO-PINAS, VANESSA ANN, US  
[72] CHUNG, YUFEN, US  
[72] HONES, PETER, US  
[71] SIGHTGLASS VISION, INC., US  
[22] 2019-07-12  
[41] 2020-01-16  
[62] 3,106,356  
[30] US (62/697,348) 2018-07-12  
[30] US (62/808,214) 2019-02-20

[21] **3,200,535**  
[13] A1

[25] EN  
[54] **INTEGRATED HUMIDIFIER FOR CHAMBER AND LID**  
[54] **CHAMBRE ET COUVERCLE D'HUMIDIFICATEUR INTEGRES**  
[72] SALMON, ANDREW, NZ  
[72] WORTHINGTON, STEVEN JOHAN, NZ  
[72] DICKINSON, PHILIP, NZ  
[72] SUN, YI-CHENG, NZ  
[72] HAXTON, CAMERON JON, NZ  
[72] POTHARAJU, VENKATA SUBBARAO, NZ  
[72] STANTON, CHRISTIE JAYNE, NZ  
[72] BRISCOE, HAYDEN, NZ  
[72] FREW, SAMUEL, NZ  
[71] FISHER & PAYKEL HEALTHCARE LIMITED, NZ  
[22] 2007-10-31  
[41] 2008-05-15  
[62] 3,077,925  
[30] US (60/864,501) 2006-11-06  
[30] NZ (560235) 2007-07-30

[21] **3,200,543**  
[13] A1

[51] **Int.Cl. F28D 7/04 (2006.01) B33Y 80/00 (2015.01) F28F 1/00 (2006.01)**  
[25] EN  
[54] **FLUID ROUTING METHODS FOR A SPIRAL HEAT EXCHANGER WITH LATTICE CROSS SECTION MADE VIA ADDITIVE MANUFACTURING**  
[54] **PROCEDES D'ACHEMINEMENT DE FLUIDE POUR ECHANGEUR DE CHALEUR EN SPIRALE A SECTION TRANSVERSALE EN TREILLIS FABRIQUE PAR FABRICATION ADDITIVE**  
[72] LOPES, JEFFREY D., US  
[71] FLUID HANDLING LLC, US  
[22] 2018-07-30  
[41] 2019-01-31  
[62] 3,071,392  
[30] US (62/538,214) 2017-07-28

[21] **3,200,701**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR SIGNAL COMMUNICATION WITH SCALABLE, MODULAR NETWORK NODES**  
[54] **SYSTEMES ET PROCEDES DE COMMUNICATION DE SIGNAL AVEC DES NOEUDS DE RESEAU MODULAIRES EXTENSIBLES**  
[72] WELSH, RAPHAEL JOSEPH, US  
[72] THORNTON, DOUGLAS A., US  
[72] PERKINS, DANIEL A., US  
[72] BLUE, MICAH, US  
[72] HEINTZ, AMY M., US  
[72] LOESCH, DANIEL G., US  
[71] BATTELLE MEMORIAL INSTITUTE, US  
[22] 2020-04-24  
[41] 2020-10-29  
[62] 3,137,281  
[30] US (62/839,131) 2019-04-26  
[30] US (62/839,125) 2019-04-26  
[30] US (62/842,816) 2019-05-03

[21] **3,200,775**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR SIGNAL COMMUNICATION WITH SCALABLE, MODULAR NETWORK NODES**  
[54] **SYSTEMES ET PROCEDES DE COMMUNICATION DE SIGNAL AVEC DES NOEUDS DE RESEAU MODULAIRES EXTENSIBLES**  
[72] WELSH, RAPHAEL JOSEPH, US  
[72] THORNTON, DOUGLAS A., US  
[72] PERKINS, DANIEL A., US  
[72] BLUE, MICAH, US  
[72] HEINTZ, AMY M., US  
[72] LOESCH, DANIEL G., US  
[71] BATELLE MEMORIAL INSTITUTE, US  
[22] 2020-04-24  
[41] 2020-10-29  
[62] 3,137,281  
[30] US (62/839,131) 2019-04-26  
[30] US (62/839,125) 2019-04-26  
[30] US (62/842,816) 2019-05-03

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ACCENTURE GLOBAL SERVICES LIMITED	2,932,644	ALLERGAN, INC.	2,966,424	ASHRAF, ARMAN	3,109,830
ACCETTA, ALESSANDRO	2,934,135	ALLIN, PATRICK J.	2,939,666	ASHWEEK, NEIL J.	2,975,474
ACCURSI, GIOVANNI	2,967,210	ALLISON, JOSHUA C.	3,058,473	ASSOCIATION INSTITUT DE MYOLOGIE	2,975,750
ACKERMAN, RYAN S.	3,060,937	ALVARADO JIMENEZ, ALBERTO	3,017,085	ASSOUS, SAID	2,853,108
ACTINIUM PHARMACEUTICALS, INC.	3,016,901	AMARI, GABRIELE	2,953,198	ATAMANOVA, NATAL'YA ANDREEVNA	3,016,008
ACUNA, GERMAN	2,901,073	AMEND, JOHN RICHARD, JR.	3,056,922	ATERICA INC.	2,952,167
ADAMI, ROGER	2,992,849	AMEND, JR., JOHN RICHARD	3,107,825	ATERICA INC.	2,983,806
ADRIAENS, JAN	2,967,743	AMGEN INC.	2,951,046	ATKINS, ARIEL	2,969,728
ADS SERVICES, LLC	3,061,739	AMGEN INC.	2,954,071	ATKINS, JEFFERY M.	2,987,043
ADVANCED FUEL DYNAMICS, INC.	3,140,634	AMGEN RESEARCH (MUNICH) GMBH	2,625,440	ATKINSON, ROBERT E.	3,103,252
AEBI, MATTHIAS	2,900,425	AMI INDUSTRIES, INC.	2,913,453	ATMOSPHERIC & SPACE TECHNOLOGY	
AENITIS TECHNOLOGIES	2,985,151	AMIN, BASHAR	3,131,683	RESEARCH ASSOCIATES LLC	2,920,103
AERIE PHARMACEUTICALS, INC.	2,905,089	AMIN, MOHAMMAD	3,077,980	AUERBACH, SHMUEL	2,880,214
AFFAGARD, HERVE	3,079,627	AMIR, JACK	2,915,694	AULT, STANLEY K.	2,969,711
AFINITI, LTD.	3,159,738	AMTMANN, TILL	2,971,762	AUSTIN, ROBERT H., JR.	2,994,116
AGCO INTERNATIONAL GMBH	2,981,871	ANABIO TECHNOLOGIES LIMITED	2,981,938	AUSTIN, ROBERT H., JR.	2,994,539
AGHABARATI, HOSSEIN	3,113,483	ANANT, PIYUSH	2,987,043	AZEEM, SYED MOHAMMED IRFAN	2,920,103
AHEARN, KEVIN	3,009,102	ANANTH, SHARATH	3,087,814	BABILON, ROBERT	2,803,339
AHEARN, KEVIN	3,056,922	ANASTASI, CAROLE	3,060,885	BADIE, LAURENT	2,978,027
AHMED, KAZI KASED L.	3,158,886	ANDERSON, ANA C.	2,802,344	BAE SYSTEMS AUSTRALIA LIMITED	2,976,960
AIPPERSPACH, WOLFGANG	2,992,644	ANDERSON, JONATHAN I.	3,076,049	BAEK, GYE-RIM	3,073,011
AIRBUS DEFENCE AND SPACE SAS	3,162,035	ANDOU, KEI	3,098,558	BAGNELL, JON	2,951,106
AIRBUS HELICOPTERS	3,112,147	ANEAS, ANTOINE	2,989,706	BAHM, VALYN S.	2,803,339
AIREAU QUALITE CONTROLE INC.	3,128,898	ANELLOTECH, INC.	2,953,398	BAI, ZHAOFENG	3,113,748
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AKIREDDY, SRINIVASA RAO	3,090,738	ANSELMO VIEGAS GARCIA, MARIA HELENA	2,970,026	BAKER HUGHES OILFIELD OPERATIONS LLC	3,132,382
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		ARCONIC TECHNOLOGIES LLC	2,982,482	BALIGA, RAMESH	2,999,284
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AND TECHNOLOGY CO.,		BOEREFIJN, RENEE	3,092,501	BWXT MPOWER, INC.	2,936,118
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STREAMLIGHT, INC.	3,172,054	TERRY, ANDREW J.	3,097,170	PTY LTD	2,980,476
STROMMER, GERA	2,915,694	TERRY, WARREN MARC	2,965,712	TOLEDO, MO MUI	3,091,118
STUBHUB, INC.	2,876,932	TEXTURA CORPORATION	2,939,666	TOLEDO, ROMEO	3,091,118
STUDIENGESELLSCHAFT		TGOMA NZ LIMITED	2,971,170	TOPSOE A/S	3,044,910
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