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ISSN-1712-4034

# The Patent

Office Record

# La Gazette

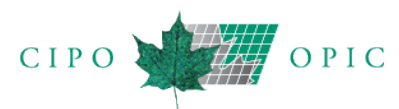
du Bureau des brevets



Vol. 152 No. 4 January 23, 2024

Vol. 152 No. 4 le 23 janvier 2024

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

## Notices

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.

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. Late payment fee

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

### 4. Taxe pour paiement tardif

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

## Preliminary Examination

## Examen préliminaire

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

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

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

6. Taxe d'examen préliminaire (Règle 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).

\* 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. PCT Notices

## 12. Avis PCT

### Patent Cooperation Treaty (PCT)

### Traité de Coopération en matière de brevets (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.

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.

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

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 :

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

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

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)).

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

## Notices

Offices.

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.

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).

## 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

(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.

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*.

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. 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>

Date de publication : 10 mai 2017

Date de modification : 17 juin 2019

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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 January 23, 2024 contains applications open to public inspection from January 7, 2024 to January 13, 2024.

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

La *Gazette du bureau des brevets* du 23 janvier 2024 contient les demandes disponibles au public pour consultation pour la période du 7 janvier 2024 au 13 janvier 2024.

# Canadian Patents Issued

January 23, 2024

## Brevets canadiens délivrés

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[13] C

[51] **Int.Cl. A41G 5/02 (2006.01) A45D 40/30 (2006.01)**

[25] EN

[54] **QUALITY CONTROLLED ARTIFICIAL EYELASHES EXTENSION SYSTEM**

[54] **SYSTEME DE PROLONGATION DES CILS PAR DES CILS ARTIFICIELS A CONTROLE DE QUALITE**

[72] MERSZEI, SOPHY, US

[73] NOVALASH INC., US

[85] 2008-02-26

[86] 2006-05-17 (PCT/IB2006/001293)

[87] (WO2007/026196)

[30] US (60/712,757) 2005-08-30

[30] US (60/743,948) 2006-03-30

[30] US (11/380,277) 2006-04-26

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[11] **2,742,497**  
[13] C

[51] **Int.Cl. C12N 9/50 (2006.01) A61K 38/48 (2006.01) A61P 35/00 (2006.01) C07K 19/00 (2006.01) C12N 15/57 (2006.01) C12N 15/62 (2006.01)**

[25] EN

[54] **COMPOSITIONS OF ENGINEERED HUMAN ARGINASES AND METHODS FOR TREATING CANCER**

[54] **COMPOSITIONS D'ARGINASES HUMAINES GENETIQUEMENT MODIFIEES ET METHODES POUR TRAITER LE CANCER**

[72] GEORGIOU, GEORGE, US

[72] STONE, EVERETT, US

[73] AERASE, INC., US

[85] 2011-04-29

[86] 2009-11-02 (PCT/US2009/062969)

[87] (WO2010/051533)

[30] US (61/110,218) 2008-10-31

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[11] **2,752,510**  
[13] C

[51] **Int.Cl. A61K 51/10 (2006.01) A61P 35/00 (2006.01) G01N 33/60 (2006.01)**

[25] EN

[54] **METHODS AND KITS FOR DIAGNOSIS OF CANCER AND PREDICTION OF THERAPEUTIC VALUE**

[54] **PROCEDES ET KITS POUR LE DIAGNOSTIC D'UN CANCER ET LA PREDICTION D'UNE VALEUR THERAPEUTIQUE**

[72] BANDER, NEIL, US

[72] OSBORNE, JOSEPH, US

[72] GOLDSMITH, STANLEY, US

[72] VALLABHAJOSULA, SHANKAR, US

[73] CORNELL UNIVERSITY, US

[85] 2011-08-12

[86] 2010-02-17 (PCT/US2010/024475)

[87] (WO2010/096486)

[30] US (61/153,132) 2009-02-17

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[11] **2,789,774**  
[13] C

[51] **Int.Cl. C12Q 1/68 (2018.01) C12N 5/0735 (2010.01) C12N 5/074 (2010.01) C12Q 1/6809 (2018.01)**

[25] EN

[54] **METHODS FOR TELOMERE LENGTH AND GENOMIC DNA QUALITY CONTROL ANALYSIS IN PLURIPOTENT STEM CELLS**

[54] **PROCEDES D'ANALYSE DE CONTROLE QUALITE DE LA LONGUEUR DES TELOMERES ET DE L'ADN GENOMIQUE DANS DES CELLULES SOUCHES PLURIPOTENTES**

[72] WEST, MICHAEL D., US

[72] CHAPMAN, KAREN B., US

[72] FUNK, WALTER DAVID, US

[73] BIOTIME INC., US

[85] 2012-08-14

[86] 2011-02-17 (PCT/US2011/025316)

[87] (WO2011/103343)

[30] US (61/305,506) 2010-02-17

[30] US (61/312,580) 2010-03-10

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[11] **2,797,274**  
[13] C

[51] **Int.Cl. C07K 14/78 (2006.01) A61K 38/17 (2006.01) A61K 49/00 (2006.01) C07K 16/00 (2006.01) C12N 15/12 (2006.01) C12N 15/63 (2006.01) C40B 30/04 (2006.01) C40B 40/02 (2006.01) C40B 40/08 (2006.01) C40B 40/10 (2006.01) C40B 50/06 (2006.01)**

[25] EN

[54] **STABILIZED FIBRONECTIN DOMAIN COMPOSITIONS, METHODS AND USES**

[54] **COMPOSITIONS DE DOMAINES DE FIBRONECTINE STABILISES, PROCEDES ET UTILISATIONS**

[72] JACOBS, STEVEN, US

[73] JANSSEN BIOTECH, INC., US

[85] 2012-10-23

[86] 2011-04-29 (PCT/US2011/034512)

[87] (WO2011/137319)

[30] US (61/329,980) 2010-04-30

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[11] **2,811,725**  
[13] C

[51] **Int.Cl. G06Q 30/06 (2023.01) G06Q 20/40 (2012.01) G06Q 50/34 (2012.01)**

[25] EN

[54] **IDENTIFICATION OF POTENTIALLY BANNED TRANSACTIONS**

[54] **DETERMINATION DES TRANSACTIONS POTENTIELLEMENT INTERDITES**

[72] CAMERON, CHRIS, CA

[72] PARROTT, CHRISTOPHER, CA

[72] CICCHELLO, UGO, CA

[73] ONTARIO LOTTERY AND GAMING CORPORATION, CA

[86] (2811725)

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[22] 2013-04-02

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[13] C

[51] **Int.Cl. C07K 14/35 (2006.01) C07K 14/195 (2006.01) C12M 1/34 (2006.01) C12N 9/12 (2006.01) C12N 15/31 (2006.01) C12P 19/34 (2006.01) G01N 33/48 (2006.01)**

[25] EN

[54] **MUTANT PORES**

[54] **PORES MUTANTS**

[72] CLARKE, JAMES, GB

[72] HERON, ANDREW JOHN, GB

[72] JAYASINGHE, LAKMAL, GB

[72] WALLACE, JAYNE, GB

[72] WHITE, JAMES, GB

[73] OXFORD NANOPORE TECHNOLOGIES PLC, GB

[85] 2013-08-01

[86] 2012-02-10 (PCT/GB2012/050301)

[87] (WO2012/107778)

[30] US (61/441,718) 2011-02-11

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[11] **2,832,566**  
[13] C

[51] **Int.Cl. G06Q 40/04 (2012.01)**

[25] EN

[54] **AUTHORIZATION OF A TRADING STRATEGY ALGORITHM**

[54] **AUTORISATION D'UN ALGORITHME DE STRATEGIE D'ECHANGE**

[72] CRIST, JEFFERSON ALE, US

[72] LIDOR, DANIEL, US

[73] TRADING TECHNOLOGIES INTERNATIONAL, INC., US

[85] 2013-10-07

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[30] US (13/083,250) 2011-04-08

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[11] **2,832,670**  
[13] C

[51] **Int.Cl. G06Q 40/08 (2012.01) G07C 5/08 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD TO ADJUST INSURANCE RATE BASED ON REAL-TIME DATA ABOUT POTENTIAL VEHICLE OPERATOR IMPAIRMENT**

[54] **SYSTEME ET METHODE POUR AJUSTER LE TARIF D'ASSURANCE EN FONCTION DE DONNEES EN TEMPS REEL RELATIVES A L'ALTERATION POSSIBLE DES CAPACITES D'UN CONDUCTEUR DE VEHICULE**

[72] HE, JIBO, US

[72] FIELDS, BRIAN M., US

[72] ROBERSON, STEVE, US

[72] CIELOCHA, STEVE, US

[72] PENG, JUFENG, US

[72] COLTEA, JULIAN, US

[73] STATE FARM MUTUAL AUTOMOBILE INSURANCE COMPANY, US

[86] (2832670)

[87] (2832670)

[22] 2013-11-07

[30] US (13/717,514) 2012-12-17

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[11] **2,839,192**  
[13] C

[51] **Int.Cl. G05F 1/66 (2006.01) F24F 11/62 (2018.01) G05F 1/565 (2006.01)**

[25] EN

[54] **CONTROLLING THE SETBACK AND SETBACK RECOVERY OF A POWER-CONSUMING DEVICE**

[54] **COMMANDE DE LA REDUCTION LENTE DE PUISSANCE ET DE LA REPRISE DE REDUCTION LENTE DE PUISSANCE D'UN DISPOSITIF DE CONSOMMATION D'ENERGIE**

[72] DYESS, DANIEL K., US

[72] PRESTON, E. CHANNING, JR., US

[73] GRIDPOINT, INC., US

[85] 2013-12-11

[86] 2012-06-13 (PCT/US2012/042276)

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[30] US (61/496,422) 2011-06-13

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[11] **2,856,282**  
[13] C

[51] **Int.Cl. G06Q 20/38 (2012.01)**

[25] EN

[54] **METHOD FOR CARRYING OUT A TRANSACTION, CORRESPONDING TERMINAL AND COMPUTER PROGRAM.**

[54] **METHODE DE CONDUITE D'UNE TRANSACTION, TERMINAL ET PROGRAMME INFORMATIQUE CORRESPONDANTS.**

[72] LEGER, MICHEL, FR

[73] BANKS AND ACQUIRERS INTERNATIONAL HOLDING, FR

[86] (2856282)

[87] (2856282)

[22] 2014-07-08

[30] FR (1356839) 2013-07-11

[30] FR (1363300) 2013-12-20

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[13] C

[51] **Int.Cl. C12N 5/073 (2010.01) C12N 5/071 (2010.01) A61K 35/545 (2015.01) A61K 35/54 (2015.01) C12Q 1/02 (2006.01) G01N 33/48 (2006.01)**

[25] EN

[54] **PDX1-EXPRESSING DORSAL AND VENTRAL FOREGUT ENDODERM**

[54] **ENDODERME D'INTESTIN ANTERIEUR DORSAL ET VENTRAL EXPRIMANT PDX1**

[72] D'AMOUR, KEVIN ALLEN, US

[72] AGULNICK, ALAN, US

[72] ELIAZER, SUSAN, US

[72] BAETGE, EMMANUEL E., US

[73] VIACYTE, INC., US

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[22] 2006-10-27

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[13] C

[51] **Int.Cl. G06N 3/00 (2023.01)**  
[25] EN  
[54] **METHOD AND COMPUTING SYSTEM FOR MODELLING A PRIMATE BRAIN**  
[54] **PROCEDE ET SYSTEME DE CALCUL POUR MODELISER UN CERVEAU DE PRIMATE**  
[72] MERSMANN, JOCHEN, DE  
[72] JIRSA, VIKTOR, FR  
[72] RITTER, PETRA, DE  
[72] MCINTOSH, ANTHONY RANDAL, CA  
[73] MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN E.V., DE  
[73] BAYCREST CENTRE FOR GERIATRIC CARE, CA  
[73] CODEBOX COMPUTERDIENSTE GMBH, DE  
[73] UNIVERSITE D'AIX-MARSEILLE, FR  
[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[73] INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, FR  
[85] 2015-01-30  
[86] 2013-08-02 (PCT/IB2013/001707)  
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[13] C

[51] **Int.Cl. C07K 16/18 (2006.01) A61K 39/395 (2006.01) G01N 33/577 (2006.01) G01N 33/68 (2006.01)**  
[25] EN  
[54] **HUMAN ISLET AMYLOID POLYPEPTIDE (HIAPP) SPECIFIC ANTIBODIES AND USES THEREOF**  
[54] **ANTICORPS SPECIFIQUES DU POLYPEPTIDE AMYLOIDE DES ILOTS HUMAINS (HIAPP) ET LEURS UTILISATIONS**  
[72] GRIMM, JAN, CH  
[72] HEITZ, FABRICE, FR  
[72] CHEN, FENG, CH  
[72] COMBALUZIER, IOANA, CH  
[73] NEURIMMUNE HOLDING AG, CH  
[85] 2015-03-10  
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[30] EP (12184134.0) 2012-09-12  
[30] US (61/700,110) 2012-09-12

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[13] C

[51] **Int.Cl. A61K 38/26 (2006.01) A61K 39/395 (2006.01) A61P 3/10 (2006.01) C07K 14/605 (2006.01)**  
[25] EN  
[54] **A COMPOSITION FOR TREATING DIABETES OR DIABESITY COMPRISING OXYNTOMODULIN ANALOG**  
[54] **COMPOSITION POUR LE TRAITEMENT DU DIABETE OU DE LA DIABESITE COMPRENANT UN ANALOGUE D'OXYNTOMODULINE**  
[72] KIM, JIN SUN, KR  
[72] KIM, DAE JIN, KR  
[72] LEE, SANG HYUN, KR  
[72] JUNG, SUNG YOUB, KR  
[72] KWON, SE CHANG, KR  
[73] HANMI PHARM. CO., LTD., KR  
[85] 2015-05-05  
[86] 2013-11-06 (PCT/KR2013/009990)  
[87] (WO2014/073845)  
[30] KR (10-2012-0124724) 2012-11-06

[11] **2,895,124**  
[13] C

[51] **Int.Cl. C12N 1/16 (2006.01) C12P 7/6409 (2022.01) C12N 15/52 (2006.01) C12N 15/53 (2006.01) C12P 7/64 (2022.01)**  
[25] EN  
[54] **BIOLOGICAL METHODS FOR PREPARING A FATTY DICARBOXYLIC ACID**  
[54] **PROCEDES BIOLOGIQUES POUR LA PREPARATION D'UN ACIDE DICARBOXYLIQUE GRAS**  
[72] LAPLAZA, JOSE, US  
[72] BEARDSLEE, TOM, US  
[72] EIRICH, DUDLEY, US  
[72] PICATAGGIO, STEPHEN, US  
[73] CORVAY BIOPRODUCTS GMBH, DE  
[85] 2015-06-12  
[86] 2013-12-19 (PCT/US2013/076664)  
[87] (WO2014/100461)  
[30] US (61/739,656) 2012-12-19

[11] **2,896,577**  
[13] C

[51] **Int.Cl. C07D 498/04 (2006.01) A61K 31/5365 (2006.01) A61P 35/00 (2006.01) C07D 487/04 (2006.01)**  
[25] EN  
[54] **INHIBITOR OF APOPTOSIS PROTEIN (IAP) ANTAGONISTS**  
[54] **ANTAGONISTES DES PROTEINES INHIBITRICES DE L'APOPTOSE (IAPS)**  
[72] COSFORD, NICHOLAS DAVID PETER, US  
[72] VAMOS, MITCHELL DENNIS, US  
[73] SANFORD-BURNHAM MEDICAL RESEARCH INSTITUTE, US  
[85] 2015-05-27  
[86] 2013-11-26 (PCT/US2013/072064)  
[87] (WO2014/085489)  
[30] US (61/731,794) 2012-11-30

[11] **2,900,994**  
[13] C

[51] **Int.Cl. G01R 31/58 (2020.01) G01R 31/52 (2020.01) G01R 31/54 (2020.01) G01R 31/11 (2006.01) A01D 41/00 (2006.01)**  
[25] EN  
[54] **DIAGNOSTIC SYSTEM FOR A CONTROLLER**  
[54] **SYSTEME DIAGNOSTIQUE POUR DISPOSITIF DE COMMANDE**  
[72] SCHLIPF, ROBERT, US  
[72] RASSI, JOHNATHAN, US  
[72] VIRKLER, NATHAN, US  
[73] PRECISION PLANTING LLC, US  
[85] 2015-08-11  
[86] 2014-02-12 (PCT/US2014/016108)  
[87] (WO2014/127046)  
[30] US (61/763,907) 2013-02-12

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[11] **2,902,495**  
[13] C

[51] **Int.Cl. A01N 59/00 (2006.01) A01N 25/22 (2006.01) A01N 37/16 (2006.01) A01P 1/00 (2006.01) A61L 2/16 (2006.01) A61L 2/18 (2006.01) C07C 409/24 (2006.01)**

[25] EN

[54] **PEROXYCARBOXYLIC ACID COMPOSITIONS CONTAINING A STABILIZING AGENT AND MINERAL ACIDS FOR STABILIZATION**

[54] **COMPOSITIONS D'ACIDE PEROXYCARBOXYLIQUE CONTENANT UN AGENT DE STABILISATION ET ACIDES MINERAUX AUX FINS DE STABILISATION**

[72] LI, JUNZHONG, US  
[72] MCSHERRY, DAVID D., US  
[72] BREWSTER, ALLISON, US  
[72] STAUB, RICHARD, US  
[73] ECOLAB USA INC., US  
[85] 2015-08-24  
[86] 2014-02-20 (PCT/US2014/017283)  
[87] (WO2014/137605)  
[30] US (13/785,044) 2013-03-05  
[30] US (13/785,047) 2013-03-05  
[30] US (13/785,405) 2013-03-05

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[11] **2,902,854**  
[13] C

[51] **Int.Cl. C07K 1/36 (2006.01)**

[25] EN

[54] **INTEGRATED CONTINUOUS MANUFACTURING OF THERAPEUTIC PROTEIN DRUG SUBSTANCES**

[54] **FABRICATION CONTINUE INTEGREE DE SUBSTANCES DE MEDICAMENT DE PROTEINE THERAPEUTIQUE**

[72] KONSTANTINOV, KONSTANTIN, US  
[72] GODAWAT, RAHUL, US  
[72] WARIKOO, VEENA, US  
[72] JAIN, SUJIT, US  
[73] GENZYME CORPORATION, US  
[85] 2015-08-26  
[86] 2014-03-03 (PCT/US2014/019909)  
[87] (WO2014/137903)  
[30] US (61/775,060) 2013-03-08  
[30] US (61/856,390) 2013-07-19

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[11] **2,903,706**  
[13] C

[51] **Int.Cl. A61K 38/20 (2006.01) A61K 9/00 (2006.01) A61K 47/10 (2017.01) A61K 47/26 (2006.01)**

[25] EN

[54] **CHIMERIC CYTOKINE FORMULATIONS FOR OCULAR DELIVERY**

[54] **FORMULATIONS DE CYTOKINE CHIMERIQUE POUR ADMINISTRATION OCULAIRE**

[72] ZARBIS-PAPASTOITSIS, GREGORY, US  
[72] LOWDEN, PATRICIA, US  
[72] CHANG, BYEONG, US  
[73] BUZZARD PHARMACEUTICALS AB, SE  
[85] 2015-09-01  
[86] 2014-03-13 (PCT/US2014/026416)  
[87] (WO2014/160371)  
[30] US (61/779,974) 2013-03-13

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[11] **2,908,251**  
[13] C

[51] **Int.Cl. A61M 25/00 (2006.01) A61B 17/3203 (2006.01) A61B 18/00 (2006.01)**

[25] EN

[54] **DUAL-FUNCTION CATHETER WITH TWO SLIDING SHEATHS**

[54] **CATHETER A DOUBLE FONCTION AVEC DEUX GAINES COULISSANTES**

[72] GONON, BERTRAND (DECEASED), FR  
[73] BOSTON SCIENTIFIC LIMITED, BM  
[85] 2015-09-28  
[86] 2014-04-01 (PCT/FR2014/050776)  
[87] (WO2014/162093)  
[30] FR (1353033) 2013-04-04

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[11] **2,910,072**  
[13] C

[51] **Int.Cl. A61K 35/74 (2015.01) A61P 13/10 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **SALMONELLA STRAINS FOR USE IN THE TREATMENT AND/OR PREVENTION OF CANCER**

[54] **SOUCHES DE SALMONELLES UTILISEES POUR TRAITER ET/OU PREVENIR LE CANCER**

[72] NARDELLI HAEFLIGER, DENISE, CH  
[72] JICHLINSKI, PATRICE, CH  
[72] DOMINGOS PEREIRA, SONIA, CH  
[73] CENTRE HOSPITALIER UNIVERSITAIRE VAUDOIS (C.H.U.V.), CH  
[85] 2015-10-22  
[86] 2014-05-07 (PCT/EP2014/059392)  
[87] (WO2014/180929)  
[30] EP (13166851.9) 2013-05-07

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[11] **2,913,050**  
[13] C

[51] **Int.Cl. G16H 40/00 (2018.01) G16H 20/10 (2018.01)**

[25] EN

[54] **MANAGING RE-USE OF RETURNED MEDICATIONS**

[54] **GESTION DE LA REUTILISATION DE MEDICAMENTS RENVOYES**

[72] UTECH, THOMAS WILLIAM, US  
[72] JASKELA, MARIA CONSOLACION, US  
[72] WEBSTER, WILLIAM LEE, US  
[73] CAREFUSION 303, INC., US  
[85] 2015-11-19  
[86] 2014-05-22 (PCT/US2014/039226)  
[87] (WO2014/190198)  
[30] US (13/900,493) 2013-05-22

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[11] **2,913,480**  
[13] C

[51] **Int.Cl. A47F 11/10 (2006.01) F21S 4/20 (2016.01) F21S 4/28 (2016.01) F21V 23/00 (2015.01) F25D 27/00 (2006.01) F21V 5/04 (2006.01) F21V 7/00 (2006.01)**

[25] EN

[54] **MODULAR LUMINAIRES FOR APPLIANCE LIGHTING**

[54] **LUMINAIRES MODULAIRES POUR L'ECLAIRAGE D'APPAREIL**

[72] MIEDEMA, GREG, US

[72] BIENICK, CRAIG (DECEASED), US

[73] GEMTRON CORPORATION, US

[85] 2015-11-24

[86] 2014-06-20 (PCT/US2014/043418)

[87] (WO2014/205352)

[30] US (61/837,519) 2013-06-20

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[11] **2,918,042**  
[13] C

[51] **Int.Cl. E04H 17/00 (2006.01) E04H 17/14 (2006.01)**

[25] EN

[54] **APPARATUS AND RELATED METHODS FOR MODIFYING FENCE**

[54] **APPAREIL ET METHODES ASSOCIEES DESTINES A LA MODIFICATION D'UNE CLOTURE**

[72] LARSEN, CHARLES, US

[73] LARSEN, CHARLES, US

[86] (2918042)

[87] (2918042)

[22] 2016-01-15

[30] US (62/104,017) 2015-01-15

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[11] **2,920,681**  
[13] C

[51] **Int.Cl. H01M 10/052 (2010.01) H01M 10/0583 (2010.01)**

[25] EN

[54] **LAMINATED LITHIUM-SULFPHUR CELL**

[54] **BATTERIE LITHIUM/SOUFRE A STRUCTURE STRATIFIEE**

[72] LINDSTROM, OVE, GB

[72] IVANOVA, MARIYA, GB

[73] GELION TECHNOLOGIES PTY LTD, AU

[85] 2016-02-05

[86] 2014-08-13 (PCT/GB2014/052474)

[87] (WO2015/022529)

[30] EP (13180522.8) 2013-08-15

[30] GB (1405957.0) 2014-04-02

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[11] **2,924,370**  
[13] C

[51] **Int.Cl. C12N 15/12 (2006.01) C12N 15/113 (2010.01) C12Q 1/6886 (2018.01) A61K 39/00 (2006.01) A61P 35/00 (2006.01) C07K 14/47 (2006.01) C07K 16/18 (2006.01) C12P 21/02 (2006.01) C12Q 1/68 (2018.01) G01N 33/48 (2006.01)**

[25] EN

[54] **MUTANT CALRETICULIN FOR THE DIAGNOSIS OF MYELOID MALIGNANCIES**

[54] **CALRETICULINE MUTANTE POUR LE DIAGNOSTIC DE MALIGNITES MYELOIDES**

[72] KRALOVICS, ROBERT, AT

[72] KLAMPFL, THORSTEN, GB

[72] GISSLINGER, HEINZ, AT

[73] CEMM - FORSCHUNGSZENTRUM FUR MOLEKULARE MEDIZIN GMBH, AT

[85] 2016-03-15

[86] 2014-09-15 (PCT/EP2014/069638)

[87] (WO2015/036599)

[30] EP (13184632.1) 2013-09-16

[30] EP (13186939.8) 2013-10-01

[30] US (61/909,313) 2013-11-26

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[11] **2,927,862**  
[13] C

[51] **Int.Cl. C12N 15/67 (2006.01) C12N 15/85 (2006.01)**

[25] EN

[54] **ARTIFICIAL NUCLEIC ACID MOLECULES**

[54] **MOLECULES D'ACIDES NUCLEIQUES ARTIFICIELLES**

[72] THESS, ANDREAS, DE

[73] CUREVAC AG, DE

[85] 2016-04-18

[86] 2014-12-30 (PCT/EP2014/003480)

[87] (WO2015/101414)

[30] EP (PCT/EP2013/003946) 2013-12-30

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[11] **2,930,221**  
[13] C

[51] **Int.Cl. B60P 7/02 (2006.01)**

[25] EN

[54] **TONNEAU COVER**

[54] **COUVRE-TONNEAU**

[72] FACCHINELLO, JEROME J., US

[72] FABROS, CHARLES A., US

[73] EXTANG CORPORATION, US

[86] (2930221)

[87] (2930221)

[22] 2016-05-17

[30] US (62/186,703) 2015-06-30

[30] US (14/831,227) 2015-08-20

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[11] **2,930,852**  
[13] C

[51] **Int.Cl. C07K 14/725 (2006.01) A61K 38/17 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **ENGINEERED HIGH-AFFINITY HUMAN T CELL RECEPTORS**

[54] **RECEPTEURS MODIFIES DE HAUTE AFFINITE POUR LES LYMPHOCYTES T HUMAINS**

[72] SMITH, SHEENA N., US

[72] HARRIS, DANIEL T., US

[72] KRANZ, DAVID M., US

[73] THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS, US

[85] 2016-05-16

[86] 2014-11-21 (PCT/US2014/066892)

[87] (WO2015/077607)

[30] US (61/907,887) 2013-11-22

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[11] **2,931,082**  
[13] C

[51] **Int.Cl. C12Q 1/6809 (2018.01) C12N 15/113 (2010.01) C12Q 1/6811 (2018.01) C12Q 1/6813 (2018.01) C12Q 1/6883 (2018.01) A61P 25/16 (2006.01) C40B 30/04 (2006.01) C40B 40/06 (2006.01)**

[25] EN

[54] **METHODS OF USING MIRNAS FROM BODILY FLUIDS FOR DETECTION AND MONITORING OF PARKINSON'S DISEASE (PD)**

[54] **PROCEDES D'UTILISATION DE MICRO-ARN PROVENANT DE LIQUIDES CORPORELS PERMETTANT DE DETECTER ET DE SURVEILLER LA MALADIE DE PARKINSON**

[72] UMANSKY, SAMUIL R., US

[72] SHEINERMAN, KIRA S., US

[72] TSIVINSKY, VLADIMIR G., US

[73] DIAMIR, LLC, US

[85] 2016-05-18

[86] 2014-11-17 (PCT/US2014/065959)

[87] (WO2015/073972)

[30] US (61/905,703) 2013-11-18

[30] US (61/935,806) 2014-02-04



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[11] **2,931,810**  
[13] C

[51] **Int.Cl. H02J 50/12 (2016.01) H02J 3/36 (2006.01) H02J 5/00 (2016.01) H01F 38/14 (2006.01)**

[25] EN

[54] **WIRELESS TRANSMISSION OF LINE-FREQUENCY AND LINE-VOLTAGE AC**

[54] **TRANSMISSION SANS FIL A FREQUENCE DE SECTEUR ET A TENSION DE SECTEUR**

[72] LONG, BRUCE RICHARD, US

[72] DAGA, ANDREW WILLIAM, US

[73] INDUCTEV INC., US

[85] 2016-05-26

[86] 2014-11-25 (PCT/US2014/067300)

[87] (WO2015/081065)

[30] US (61/909,721) 2013-11-27

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[11] **2,931,862**  
[13] C

[51] **Int.Cl. B01J 16/00 (2006.01) C12Q 1/00 (2006.01) G01N 21/77 (2006.01) G01N 33/50 (2006.01) G01N 37/00 (2006.01)**

[25] EN

[54] **METHOD OF STABILIZING MOLECULES WITHOUT REFRIGERATION USING WATER SOLUBLE POLYMERS AND APPLICATIONS THEREOF IN PERFORMING CHEMICAL REACTIONS**

[54] **PROCEDE DE STABILISATION DE MOLECULES SANS REFRIGERATION A L'AIDE DE POLYMERES SOLUBLES DANS L'EAU ET SES APPLICATIONS DANS LA REALISATION DE REACTIONS CHIMIQUES**

[72] FILIPE, CARLOS, CA

[72] BRENNAN, JOHN D., CA

[72] PELTON, ROBERT, CA

[72] JAHANSHAHI-ANBUHI, SANA, CA

[72] LI, YINGFU, CA

[73] MCMASTER UNIVERSITY, CA

[85] 2016-05-27

[86] 2014-11-10 (PCT/CA2014/051081)

[87] (WO2015/066819)

[30] US (61/901,784) 2013-11-08

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[11] **2,933,005**  
[13] C

[51] **Int.Cl. A61K 49/10 (2006.01) C07D 498/08 (2006.01) C07D 519/00 (2006.01)**

[25] EN

[54] **METHODS AND COMPOUNDS FOR ENHANCING CONTRAST IN MAGNETIC RESONANCE IMAGING (MRI)**

[54] **METHODES ET COMPOSES DESTINES A AMELIORER LE CONTRASTE EN IMAGERIE PAR RESONNANCE MAGNETIQUE (IRM)**

[72] PILKINGTON, MELANIE, CA

[72] STARES, EMMA LOUISE, US

[73] BROCK UNIVERSITY, CA

[86] (2933005)

[87] (2933005)

[22] 2016-06-10

[30] US (62/174752) 2015-06-12

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[11] **2,933,363**  
[13] C

[51] **Int.Cl. A61K 38/48 (2006.01) A61K 9/00 (2006.01) A61K 9/19 (2006.01) A61P 21/02 (2006.01)**

[25] EN

[54] **LONG LASTING EFFECT OF NEW BOTULINUM TOXIN FORMULATIONS**

[54] **EFFET LONGUE DUREE DE NOUVELLES FORMULATIONS A BASE DE TOXINE BOTULIQUE**

[72] JUNG, HYUN HO, KR

[72] YANG, GI HYEOK, KR

[72] KIM, HYUN JEE, KR

[72] RHEE, CHANG HOON, KR

[73] MEDY-TOX, INC., KR

[85] 2016-06-09

[86] 2014-12-12 (PCT/US2014/070113)

[87] (WO2015/089452)

[30] US (61/915,476) 2013-12-12

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[11] **2,935,032**  
[13] C

[51] **Int.Cl. C12N 9/22 (2006.01)**

[25] EN

[54] **MULTIPLEX GUIDE RNAS**

[54] **ARN GUIDES MULTIPLEX**

[72] TSAI, SHENG DAR, US

[72] JOUNG, KEITH J., US

[73] THE GENERAL HOSPITAL CORPORATION, US

[85] 2016-06-23

[86] 2014-09-18 (PCT/US2014/056416)

[87] (WO2015/099850)

[30] US (61/921,007) 2013-12-26

[30] US (61/930,782) 2014-01-23

[30] US (14/211,117) 2014-03-14

[30] US (PCT/US2014/029068) 2014-03-14

[30] US (PCT/US2014/029304) 2014-03-14

[30] US (PCT/US2014/028630) 2014-03-14

[30] US (PCT/US2014/035162) 2014-04-23

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[11] **2,935,244**  
[13] C

[51] **Int.Cl. G05D 7/00 (2006.01) E21B 43/24 (2006.01) G01V 9/00 (2006.01)**

[25] EN

[54] **FCD MODELING**

[54] **MODELISATION DE DISPOSITIF DE CONTROLE DE FLUX**

[72] VACHON, GUY, US

[73] CONOCOPHILLIPS COMPANY, US

[86] (2935244)

[87] (2935244)

[22] 2016-06-29

[30] US (62/186,119) 2015-06-29

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[11] **2,935,820**  
[13] C

[51] **Int.Cl. F21V 33/00 (2006.01) F21K 9/00 (2016.01) F21S 10/02 (2006.01) F24D 19/00 (2006.01) G08B 7/00 (2006.01) G08B 19/00 (2006.01) H05B 1/02 (2006.01)**

[25] EN

[54] **HEATING APPLIANCE WITH LIGHT AND SOUND AND CORRESPONDING METHOD**

[54] **APPAREIL MENAGER CHAUFFANT EQUIPE DE LUMIERE ET DE SON ET METHODE CORRESPONDANTE**

[72] BOYD, MICHAEL P., US

[73] MARLEY ENGINEERED PRODUCTS LLC, US

[86] (2935820)

[87] (2935820)

[22] 2016-07-08

[30] US (14/802.117) 2015-07-17

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[11] **2,936,524**  
[13] C

[51] **Int.Cl. E06B 9/13 (2006.01) E06B 9/58 (2006.01)**

[25] EN

[54] **FAST ROLL-UP DOOR COMPRISING A CURTAIN HAVING RESILIENT EDGES**

[54] **PORTE A ENROULEMENT RAPIDE COMPRENANT UN RIDEAU PRESENTANT DES BORDS ELASTIQUES**

[72] LORENZANI, MAURO, IT  
[72] VECCHI, ARMANDO, IT  
[73] ASSA ABLOY ENTRANCE SYSTEMS AB, SE

[85] 2016-07-11  
[86] 2015-02-10 (PCT/EP2015/052763)  
[87] (WO2015/121255)  
[30] SE (1450153-0) 2014-02-12

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[11] **2,937,423**  
[13] C

[51] **Int.Cl. H04B 17/373 (2015.01) H04W 16/18 (2009.01) H04W 52/24 (2009.01) H04W 64/00 (2009.01) H04B 17/391 (2015.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR DYNAMICALLY ADJUSTING COMMUNICATION CHARACTERISTICS OF SATELLITE COMMUNICATION LINKS BASED ON WEATHER NOWCASTING**

[54] **PROCEDE ET SYSTEME DE REGLAGE DYNAMIQUE DES CARACTERISTIQUES DE COMMUNICATION DE LIAISONS DE COMMUNICATION PAR SATELLITE EN SE BASANT SUR DES PREVISIONS METEOROLOGIQUES IMMEDIATES**

[72] LAUFER, SHAUL, IL  
[72] KREISLER, YAAKOV, IL  
[73] ADVANTECH WIRELESS LTD., IL

[85] 2016-07-20  
[86] 2015-01-22 (PCT/IL2015/050073)  
[87] (WO2015/111050)  
[30] IL (230604) 2014-01-22

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[11] **2,938,614**  
[13] C

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/00 (2006.01)**

[25] EN

[54] **DELIVERY DEVICE FOR CONTROLLED DEPLOYMENT OF A REPLACEMENT VALVE**

[54] **DISPOSITIF D'ACHEMINEMENT POUR LE DEPLOIEMENT MAITRISE D'UNE DE VALVULE DE SUBSTITUTION**

[72] RABITO, GLEN, US  
[72] RATZ, J. BRENT, US  
[72] PESCE, LUCA, US  
[72] QUADRI, ARSHAD, US  
[72] LAM, LINDSAY, US  
[72] LIAO, YEN, US  
[72] SANCHEZ, JULIO CESAR, US  
[72] LANDON, DAVID, US  
[72] JOHNSON, GARRETT, US  
[72] COOPER, ALEXANDER, US  
[73] EDWARDS LIFESCIENCES CARDIAQ LLC, US

[85] 2016-08-02  
[86] 2015-02-20 (PCT/US2015/016927)  
[87] (WO2015/127283)  
[30] US (61/943,270) 2014-02-21  
[30] US (61/950,748) 2014-03-10  
[30] US (62/004,637) 2014-05-29

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[11] **2,939,581**  
[13] C

[51] **Int.Cl. A61K 39/00 (2006.01) A61K 9/22 (2006.01) A61K 9/52 (2006.01) A61K 47/32 (2006.01) A61P 37/04 (2006.01)**

[25] EN

[54] **FORMULATIONS FOR SMALL INTESTINAL DELIVERY**

[54] **FORMULATIONS POUR ADMINISTRATION DANS L'INTESTIN GRELE**

[72] TUCKER, SEAN, US  
[72] TRAGER, GEORGE, US  
[73] VAXART, INC., US

[85] 2016-08-11  
[86] 2015-02-20 (PCT/US2015/016921)  
[87] (WO2015/127278)  
[30] US (61/942,386) 2014-02-20

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[11] **2,941,032**  
[13] C

[51] **Int.Cl. C10G 29/00 (2006.01) C10G 29/04 (2006.01) C10G 29/16 (2006.01)**

[25] EN

[54] **PROCESS FOR REDUCING THE HYDROGEN SULPHIDE CONTENT IN NON-GASEOUS SULPHUR COMPOSITIONS USING A ZINC-BASED SCAVENGER**

[54] **PROCEDE DE REDUCTION DE LA TENEUR EN SULFURE D'HYDROGENE DANS DES COMPOSITIONS DE SOUFRE NON GAZEUSES AU MOYEN D'UN ENTRAINEUR A BASE DE ZINC ZINC**

[72] DAVIES, HELEN JAYNE, GB  
[72] D'MELO, DAWID JOHN, IN  
[72] LAMBERT, REGINALD, CA  
[73] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL

[86] (2941032)  
[87] (2941032)  
[22] 2016-09-01  
[30] IN (201641025093) 2016-07-22

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[11] **2,942,384**  
[13] C

[51] **Int.Cl. C12Q 1/6809 (2018.01) C12Q 1/6851 (2018.01) G16B 25/10 (2019.01) A61K 31/4418 (2006.01) A61K 38/13 (2006.01) A61K 38/48 (2006.01) C40B 30/00 (2006.01) C40B 30/04 (2006.01) G01N 33/50 (2006.01)**

[25] EN

[54] **METHOD FOR IDENTIFYING KIDNEY ALLOGRAFT RECIPIENTS AT RISK FOR CHRONIC INJURY**

[54] **PROCEDE D'IDENTIFICATION DE RECEVEURS D'ALLOGREFFE DE REIN A RISQUE DE LESION CHRONIQUE**

[72] MURPHY, BARBARA, US  
[72] ZHANG, WEIJIA, US  
[72] O'CONNELL, PHILIP J., AU  
[73] ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI, US  
[73] WESTERN SYDNEY LOCAL HEALTH DISTRICT, AU

[85] 2016-09-09  
[86] 2015-03-12 (PCT/US2015/020291)  
[87] (WO2015/138803)  
[30] US (61/951,651) 2014-03-12

**Brevets canadiens délivrés  
23 janvier 2024**

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[11] **2,944,163**  
[13] C

[51] **Int.Cl. E21B 47/12 (2012.01) G05B 19/02 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD OF TRIGGERING, ACQUIRING AND COMMUNICATING BOREHOLE DATA FOR A MWD SYSTEM**

[54] **SYSTEME ET PROCEDE DE DECLENCHEMENT, D'ACQUISITION ET DE COMMUNICATION DE DONNEES DE FORAGE POUR UN SYSTEME MWD**

[72] HOLT, AUBREY, US

[72] BROWNLOW, MICHAEL, US

[72] HILL, GREG, US

[73] BENCH TREE GROUP, LLC, US

[85] 2016-09-27

[86] 2015-03-31 (PCT/US2015/023525)

[87] (WO2015/153567)

[30] US (14/242,616) 2014-04-01

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[11] **2,945,432**  
[13] C

[51] **Int.Cl. G06F 40/106 (2020.01) G06F 16/958 (2019.01) G06F 40/186 (2020.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR THE CREATION AND USE OF VISUALLY-DIVERSE HIGH-QUALITY DYNAMIC LAYOUTS**

[54] **SYSTEME ET PROCEDE POUR LA CREATION ET L'UTILISATION DE MISES EN PAGE DYNAMIQUES VISUELLEMENT DIVERSES DE HAUTE QUALITE**

[72] BEN-AHARON, RONI, IL

[72] OFEK, DAPHNA, IL

[72] DROMY, URI, IL

[72] IGAL, BARAK, IL

[73] WIX.COM LTD., IL

[85] 2016-10-11

[86] 2015-04-29 (PCT/IB2015/053126)

[87] (WO2015/166436)

[30] US (61/985,489) 2014-04-29

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[11] **2,947,176**  
[13] C

[51] **Int.Cl. G06Q 10/087 (2023.01) A61B 90/90 (2016.01) G16H 40/20 (2018.01)**

[25] EN

[54] **INSTRUMENT INVENTORY SYSTEM AND METHODS**

[54] **SYSTEMES ET PROCEDES D'INVENTAIRE D'INSTRUMENT**

[72] BAKER, RUSSELL, US

[72] ZELNER, LAWRENCE, US

[72] BERK, DAVID, US

[73] RST AUTOMATION LLC, US

[85] 2016-10-26

[86] 2015-05-08 (PCT/US2015/029924)

[87] (WO2015/172044)

[30] US (61/990,273) 2014-05-08

[30] US (14/620,084) 2015-02-11

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[11] **2,947,678**  
[13] C

[51] **Int.Cl. G01V 1/28 (2006.01)**

[25] EN

[54] **COMPRESSIVE SENSING**

[54] **DETECTION DE COMPRESSION**

[72] LI, CHENGBO, US

[72] KAPLAN, SAM T., US

[72] MOSHER, CHARLES C., US

[72] BREWER, JOEL D., US

[72] KEYS, ROBERT G., US

[73] SHEARWATER GEOSERVICES SOFTWARE INC., US

[85] 2016-11-01

[86] 2014-10-31 (PCT/US2014/063443)

[87] (WO2015/066481)

[30] US (61/898,960) 2013-11-01

[30] US (14/529,690) 2014-10-31

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[11] **2,948,113**  
[13] C

[51] **Int.Cl. G07F 7/08 (2006.01) F21V 8/00 (2006.01)**

[25] EN

[54] **ELECTRONIC PAYMENT TERMINAL INTEGRATING A SHOCK-RESISTANT CONTACTLESS PAYMENT MODULE, CORRESPONDING LIGHT GUIDE**

[54] **TERMINAL DE PAIEMENT ELECTRONIQUE INTEGRANT UN MODULE DE PAIEMENT SANS CONTACT RESISTANT AUX CHOCS ET GUIDE DE LUMIERE CORRESPONDANT**

[72] COQUELET, DIDIER, FR

[72] ROBERT, FRANCK, FR

[72] CHOWDHARY, FERHAJ, FR

[73] BANKS AND ACQUIRERS INTERNATIONAL HOLDING, FR

[86] (2948113)

[87] (2948113)

[22] 2016-11-09

[30] FR (1561159) 2015-11-19

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[11] **2,948,726**  
[13] C

[51] **Int.Cl. C10L 1/04 (2006.01) C08J 3/20 (2006.01) C08L 95/00 (2006.01) C10C 3/08 (2006.01) C10G 21/14 (2006.01) F02C 3/20 (2006.01)**

[25] EN

[54] **COMPOSITION AND METHOD OF USE OF VTAE**

[54] **COMPOSITION ET METHODE D'UTILISATION DE DILUEUR D'ASPHALTE POUR COLONNE DE DISTILLATION SOUS VIDE**

[72] BOULDIN, MARK G., US

[72] GRZYBOWSKI, KENNETH FRANCIS, US

[72] LEWIS, STEPHEN CAREY, US

[72] MARTIN, JEAN-VALERY, US

[72] PALMER, WILLIAM ALLEN, US

[73] SAFETY-KLEEN SYSTEMS, INC., US

[86] (2948726)

[87] (2948726)

[22] 2016-11-17

[30] US (62/256,549) 2015-11-17

[30] US (62/289,166) 2016-01-29

[30] US (62/407,874) 2016-10-13

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January 23, 2024**

[11] **2,949,021**  
[13] C

[51] **Int.Cl. A01K 61/00 (2017.01) A01K 63/00 (2017.01) G06M 1/10 (2006.01) G06M 7/02 (2006.01)**

[25] EN

[54] **CONCENTRATION CONTROL OF LIVING ORGANISMS IN FLUID**

[54] **REGULATION DE LA CONCENTRATION D'ORGANISMES VIVANTS DANS UN FLUIDE**

[72] HILMARSSON, GUNNAR  
SIGVALDI, IS

[72] HAKONARSON, SVERRIR, IS

[73] VAKI FISKELDISKERFI HF., IS

[85] 2016-11-14

[86] 2015-05-12 (PCT/IS2015/050007)

[87] (WO2015/173837)

[30] IS (9048) 2014-05-12

[11] **2,950,878**  
[13] C

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 31/7088 (2006.01) A61K 31/712 (2006.01) A61K 31/7125 (2006.01) A61P 3/00 (2006.01) C07H 21/00 (2006.01) C12N 15/11 (2006.01)**

[25] EN

[54] **ANTISENSE OLIGONUCLEOTIDES USEFUL IN TREATMENT OF POMPE DISEASE**

[54] **OLIGONUCLEOTIDES ANTISENS UTILISES DANS LE TRAITEMENT DE LA MALADIE DE POMPE**

[72] BERGSMA, ATZE JACOBUS, NL

[72] VAN DER WAL, ERIK, NL

[72] PIJNAPPEL, WILHELMUS WENCESLAUS MATTHIAS, NL

[72] VAN DER PLOEG, ANTJE TJITSKE, NL

[72] REUSER, ARNOLDUS, NL

[73] ERASMUS UNIVERSITY MEDICAL CENTER ROTTERDAM, NL

[85] 2016-11-30

[86] 2015-06-10 (PCT/NL2015/050421)

[87] (WO2015/190922)

[30] NL (PCT/NL2014/050374) 2014-06-10

[30] EP (14177884.5) 2014-07-21

[30] EP (14183589.2) 2014-09-04

[11] **2,952,288**  
[13] C

[51] **Int.Cl. A61K 31/353 (2006.01) A61P 11/06 (2006.01) A61P 11/08 (2006.01)**

[25] EN

[54] **6-HYDROXY-2,5,7,8-TETRAMETHYLCHROMAN-COMPOUNDS FOR THE TREATMENT OF CHRONIC OBSTRUCTIVE AIRWAY DISEASES**

[54] **COMPOSES 6-HYDROXY-2,5,7,8-TETRAMETHYLCHROMAN-POUR LE TRAITEMENT DE MALADIES OBSTRUCTIVES CHRONIQUES DES VOIES RESPIRATOIRES**

[72] VAN DER GRAAF, ADRIANUS CORNELIS, NL

[72] SCHMIDT, MARTINA, NL

[72] EUVERINK, GERRIT JAN WILLEM, NL

[72] MEURS, HERMANUS, NL

[72] HENNING, ROBERT HENK, NL

[73] SULFATEQ B.V., NL

[85] 2016-12-14

[86] 2015-06-17 (PCT/EP2015/063579)

[87] (WO2015/193365)

[30] NL (2013012) 2014-06-17

[11] **2,952,953**  
[13] C

[51] **Int.Cl. A61K 31/7048 (2006.01) A61K 31/352 (2006.01) A61K 31/404 (2006.01) A61K 31/675 (2006.01) A61K 31/704 (2006.01) A61P 35/00 (2006.01) A61P 35/04 (2006.01) G01N 33/50 (2006.01)**

[25] EN

[54] **METHOD FOR TREATING CANCER WITH A COMBINATION OF QUERCETIN AND A CHEMOTHERAPY AGENT**

[54] **METHODE DE TRAITEMENT DU CANCER AVEC UNE COMBINAISON DE QUERCETINE ET D'UN AGENT CHIMIOOTHERAPEUTIQUE**

[72] LINES, THOMAS CHRISTIAN, CH

[73] QUERCIS PHARMA AG, CH

[85] 2016-12-19

[86] 2015-06-19 (PCT/US2015/036618)

[87] (WO2015/196036)

[30] US (62/014,488) 2014-06-19

[11] **2,952,965**  
[13] C

[51] **Int.Cl. A61K 39/395 (2006.01) C12N 15/00 (2006.01)**

[25] EN

[54] **INTERFERON ALPHA AND OMEGA ANTIBODY ANTAGONISTS**

[54] **ANTAGONISTES D'ANTICORPS ANTI-INTERFERONS ALPHA ET OMEGA**

[72] CHI, ELLEN, US

[72] CONNOR, JUDITH, US

[72] HUANG, CHICHI, US

[72] JORDAN, JARRAT, US

[72] LIN-SCHMIDT, XIEFAN, US

[72] LUO, JINQUAN, US

[72] LU, LU, US

[72] MARTINEZ, CHRISTIAN, US

[72] OBMOLOVA, GALINA, US

[72] SWANSON, RONALD, US

[73] JANSSEN BIOTECH, INC., US

[85] 2016-12-19

[86] 2015-06-22 (PCT/US2015/036883)

[87] (WO2015/200165)

[30] US (62/015,765) 2014-06-23

[11] **2,953,352**  
[13] C

[51] **Int.Cl. E21B 43/24 (2006.01)**

[25] EN

[54] **REMOVAL OF NON-CONDENSING GAS FROM STEAM CHAMBER WITH CO-INJECTION OF STEAM AND CONVECTION-ENHANCING AGENT**

[54] **RETRAIT DE GAZ SANS CONDENSATION D'UNE CHAMBRE DE VAPEUR AVEC CO-INJECTION DE VAPEUR ET D'AGENT D'AMELIORATION DE CONVECTION**

[72] KOCHHAR, ISHAN DEEP S., CA

[72] LAMB-FAUQUIER, ERIN, CA

[72] MILLER, RYAN, CA

[72] SEIB, BRENT DONALD, CA

[73] CENOVUS ENERGY INC., CA

[73] FCCL PARTNERSHIP, CA

[86] (2953352)

[87] (2953352)

[22] 2016-12-29

[30] US (62/273,615) 2015-12-31

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23 janvier 2024**

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[11] **2,953,763**  
[13] C

[51] **Int.Cl. C12M 3/00 (2006.01) C12M 1/00 (2006.01)**  
[25] EN  
[54] **AUTOMATIC CULTURING DEVICE**  
[54] **DISPOSITIF DE CULTURE AUTOMATIQUE**  
[72] SAKAMOTO, MASAHIRO, JP  
[72] NISHIMURA, NORIAKI, JP  
[73] SHIBUYA CORPORATION, JP  
[85] 2016-12-28  
[86] 2015-06-12 (PCT/JP2015/067024)  
[87] (WO2016/002478)  
[30] JP (2014-135300) 2014-06-30

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[11] **2,958,143**  
[13] C

[51] **Int.Cl. G06F 17/10 (2006.01) G06N 3/02 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR CONTINUOUS STATE ESTIMATION AND SIGNAL CLASSIFICATION WITH DYNAMIC MOVEMENT PRIMITIVES**  
[54] **PROCEDES ET SYSTEMES POUR UNE ESTIMATION D'ETAT ET UNE CLASSIFICATION DE SIGNAUX CONTINUES AVEC CONSTRUCTION DU MOUVEMENT DYNAMIQUE**  
[72] BEKOLAY, TREVOR, US  
[73] APPLIED BRAIN RESEARCH INC., CA  
[86] (2958143)  
[87] (2958143)  
[22] 2017-02-16

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[11] **2,959,049**  
[13] C

[51] **Int.Cl. G01N 21/47 (2006.01)**  
[25] EN  
[54] **CALIBRATION SUSPENSION UNIT, METHOD FOR THE MANUFACTURE OF A CALIBRATION SUSPENSION UNIT AND USE OF A CALIBRATION SUSPENSION UNIT**  
[54] **MODULE D'EQUILIBRAGE DE MATIERES EN SUSPENSION, METHODE DE FABRICATION D'UN MODULE D'EQUILIBRAGE DE MATIERES EN SUSPENSION ET UTILISATION D'UN MODULE D'EQUILIBRAGE DE MATIERES EN SUSPENSION**  
[72] GRABERT, ELMAR, DE  
[72] LUNDGREEN, ULRICH, DE  
[73] TINTOMETER GMBH, DE  
[86] (2959049)  
[87] (2959049)  
[22] 2017-02-27  
[30] EP (16161317.9) 2016-03-21

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[11] **2,960,487**  
[13] C

[51] **Int.Cl. F03D 13/10 (2016.01) B66C 1/66 (2006.01) B66C 13/08 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR REMOVING AND/OR INSTALLING A ROTOR BLADE OF A WIND TURBINE**  
[54] **SYSTEME ET PROCEDE POUR RETIRER ET/OU INSTALLER UNE PALE DE ROTOR D'UNE EOLIENNE**  
[72] NEUMANN, ULRICH WERNER, US  
[72] HOLLOWAY, BRENT HAMILTON, US  
[72] PFEIFFER, GAYLON MITCHELL, US  
[72] JOHNSON, MICHAEL R., US  
[72] HACH, FORREST CHRISTOPHER, US  
[72] COSTAIN, KEVIN, US  
[72] WILLMAN, STEPHANIE, US  
[73] GENERAL ELECTRIC COMPANY, US  
[85] 2017-03-07  
[86] 2015-09-04 (PCT/US2015/048475)  
[87] (WO2016/040144)  
[30] US (14/480,656) 2014-09-09

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[11] **2,962,053**  
[13] C

[51] **Int.Cl. F16D 3/06 (2006.01) B64C 13/28 (2006.01) F16B 21/10 (2006.01) F16D 3/78 (2006.01)**  
[25] EN  
[54] **SPLINED COUPLINGS**  
[54] **RACCORDS A CLAVETTE**  
[72] DAVIES, STEPHEN, GB  
[72] HUBBERSTEY, MARK, GB  
[72] HOLMAN, DAVID, GB  
[73] GOODRICH ACTUATION SYSTEMS LIMITED, GB  
[86] (2962053)  
[87] (2962053)  
[22] 2017-03-23  
[30] GB (1605057.7) 2016-03-24

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[11] **2,962,776**  
[13] C

[51] **Int.Cl. C04B 24/24 (2006.01) C04B 28/02 (2006.01)**  
[25] EN  
[54] **LOW-TO-MID-RANGE WATER REDUCTION USING POLYCARBOXYLATE COMB POLYMERS**  
[54] **REDUCTION D'EAU FAIBLE A MILIEU DE GAMME A L'AIDE DE POLYMERES DE POLYCARBOXYLATE EN PEIGNE**  
[72] KUO, LAWRENCE L., US  
[72] GOC-MACIEJEWSKA, IZABELA, PL  
[72] JASKULA, NATALIA, PL  
[73] GCP APPLIED TECHNOLOGIES INC., US  
[85] 2017-03-27  
[86] 2015-09-28 (PCT/US2015/052610)  
[87] (WO2016/053854)  
[30] US (62/057,558) 2014-09-30

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January 23, 2024**

[11] **2,963,053**  
[13] C

[51] **Int.Cl. C07K 19/00 (2006.01) B82Y 5/00 (2011.01) A61K 47/66 (2017.01) A61K 47/69 (2017.01) A61K 49/00 (2006.01) C07K 7/06 (2006.01) C07K 7/08 (2006.01) C07K 14/47 (2006.01) C07K 17/00 (2006.01) C12N 15/62 (2006.01)**

[25] EN  
[54] **A FUSION PROTEIN, A NANOPARTICLE COMPOSED BY A PLURALITY OF MONOMERS OF SAID FUSION PROTEIN, AND USES THEREOF**

[54] **PROTEINE DE FUSION, NANOPARTICULE CONSTITUEE PAR UNE PLURALITE DE MONOMERES DE LADITE PROTEINE DE FUSION, ET LEURS UTILISATIONS**

[72] CECI, PIERPAOLO, IT  
[72] FALVO, ELISABETTA, IT  
[73] THENA BIOTECH S.R.L., IT  
[85] 2017-03-29  
[86] 2015-09-29 (PCT/IB2015/057448)  
[87] (WO2016/051340)  
[30] IT (TO2014A000779) 2014-09-30

[11] **2,963,304**  
[13] C

[51] **Int.Cl. A61M 27/00 (2006.01) G16H 10/60 (2018.01) G16H 15/00 (2018.01) G16H 20/10 (2018.01) G16H 40/20 (2018.01) G16H 40/67 (2018.01) A61M 1/00 (2006.01) G16H 20/40 (2018.01) G16H 40/63 (2018.01)**

[25] EN  
[54] **SYSTEM FOR MONITORING COMPLIANT USAGE OF NEGATIVE PRESSURE WOUND THERAPY**

[54] **SYSTEME DE SURVEILLANCE D'UTILISATION OBSERVANTE DE TRAITEMENT DES PLAIES PAR PRESSION NEGATIVE**

[72] PHILLIPS, GREGORY, US  
[72] ROBAY, BRIAN, US  
[73] 3M INNOVATIVE PROPERTIES COMPANY, US  
[85] 2017-03-30  
[86] 2015-10-13 (PCT/US2015/055398)  
[87] (WO2016/061146)  
[30] US (62/063,457) 2014-10-14

[11] **2,963,855**  
[13] C

[51] **Int.Cl. G01T 1/08 (2006.01) A61B 1/31 (2006.01) A61N 5/00 (2006.01) G01T 1/10 (2006.01)**

[25] EN  
[54] **SYSTEM AND METHOD FOR ENDO-RECTAL RETRACTION AND ORGAN IMMOBILIZATION FOR RADIOTHERAPY OF THE PELVIS**

[54] **SYSTEME ET PROCEDE DE RETRACTION ENDORECTALE ET D'IMMOBILISATION D'ORGANE POUR UNE RADIO-THERAPIE DU BASSIN**

[72] RAVI, ANANTH, CA  
[72] EASTON, HARRY, CA  
[73] SUNNYBROOK RESEARCH INSTITUTE, CA  
[85] 2017-04-06  
[86] 2015-10-08 (PCT/CA2015/051018)  
[87] (WO2016/054740)  
[30] US (62/061,399) 2014-10-08

[11] **2,964,633**  
[13] C

[51] **Int.Cl. C07K 16/10 (2006.01)**

[25] EN  
[54] **HUMAN MONOCLONAL ANTIBODY SPECIFIC FOR THE F PROTEIN OF RESPIRATORY SYNCYTIAL VIRUS (RSV)**

[54] **ANTICORPS MONOCLONAL HUMAIN SPECIFIQUE DE LA PROTEINE F DU VIRUS RESPIRATOIRE SYNCYTIAL (VRS)**

[72] KOCH, HOLGER, US  
[72] URWYLER, SIMON, US  
[72] RUDOLF, MICHAEL P., US  
[72] TRUONG, VU L., US  
[73] ARIDIS PHARMACEUTICALS, INC., US  
[85] 2017-04-12  
[86] 2015-10-29 (PCT/US2015/058076)  
[87] (WO2016/069904)  
[30] US (14/527,545) 2014-10-29

[11] **2,964,702**  
[13] C

[51] **Int.Cl. A01H 1/04 (2006.01) A23L 19/00 (2016.01) A01H 6/34 (2018.01) C12Q 1/6895 (2018.01) A01H 1/02 (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] **YIELD QTLS IN CUCUMBER PLANTS**

[54] **LOCUS A CARACTERE QUANTITATIF (QTL) POUR LE RENDEMENT DANS DES PLANTS DE CONCOMBRE**

[72] REULING, GERHARD T.M., NL  
[72] KRAAN, PETER ARNOLD GIJSBERT, NL  
[72] BEENDERS, FRANK, NL  
[72] VAN DE WAL, MARION, NL  
[72] HERMANS, FREDDY, NL  
[72] KOELEWIJN, HANS-PETER, NL  
[72] TANKSLEY, STEVEN D., US  
[72] CASA, ALEXANDRA M., US  
[73] NUNHEMS B.V., NL  
[85] 2017-04-13  
[86] 2015-10-14 (PCT/EP2015/073739)  
[87] (WO2016/059090)  
[30] EP (14189199.4) 2014-10-16

[11] **2,964,783**  
[13] C

[51] **Int.Cl. C07K 19/00 (2006.01) A61K 35/17 (2015.01) A61P 35/00 (2006.01) C07K 14/705 (2006.01) C07K 14/725 (2006.01) C07K 16/28 (2006.01) C07K 16/30 (2006.01) C12N 5/10 (2006.01) C12N 15/62 (2006.01)**

[25] EN  
[54] **CHIMERIC ANTIGEN RECEPTORS (CAR) TO SELECTIVELY TARGET PROTEIN COMPLEXES**

[54] **RECEPTEURS D'ANTIGENES CHIMERIQUES (CAR) POUR CIBLER SELECTIVEMENT DES COMPLEXES PROTEIQUES**

[72] COOPER, LAURENCE J.N., US  
[72] JENA, BIPULENDU, US  
[73] BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, US  
[85] 2017-04-13  
[86] 2015-11-04 (PCT/US2015/059072)  
[87] (WO2016/073629)  
[30] US (62/075,627) 2014-11-05

**Brevets canadiens délivrés  
23 janvier 2024**

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[11] **2,965,196**  
[13] C

[51] **Int.Cl. A61K 51/04 (2006.01) A61K 31/155 (2006.01) A61K 31/80 (2006.01) C07B 59/00 (2006.01) C07C 277/08 (2006.01) C08F 6/10 (2006.01) C08F 30/04 (2006.01)**

[25] EN

[54] **PREPARATIONS OF META-  
IODOBENZYLGUANIDINE AND  
PRECURSORS THEREOF**

[54] **PREPARATIONS DE META-  
IODOBENZYLGUANIDINE ET DE  
SES PRECURSEURS**

[72] MOSS, JASON, US

[72] RAO, MACHINANI, US

[73] MOLECULAR INSIGHT  
PHARMACEUTICALS, INC., US

[85] 2017-04-19

[86] 2015-10-23 (PCT/US2015/057222)

[87] (WO2016/065322)

[30] US (62/068,598) 2014-10-24

[30] US (62/069,029) 2014-10-27

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[11] **2,965,309**  
[13] C

[51] **Int.Cl. B62D 5/04 (2006.01) B60G 17/016 (2006.01) B60W 10/06 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR  
CONTROLLING A VEHICLE**

[54] **SYSTEME ET PROCEDE DE  
COMMANDE D'UN VEHICULE**

[72] NORSTAD, TIM P., US

[72] GILLINGHAM, BRIAN R., US

[72] FIELDS, JASON R., US

[72] BRADY, LOUIS J., US

[72] NELSON, STEPHEN L., US

[73] POLARIS INDUSTRIES INC., US

[85] 2017-04-20

[86] 2015-10-23 (PCT/US2015/057132)

[87] (WO2016/069405)

[30] US (62/073,724) 2014-10-31

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[11] **2,966,137**  
[13] C

[51] **Int.Cl. H01M 4/86 (2006.01) B01J 23/42 (2006.01) H01M 4/88 (2006.01) H01M 4/90 (2006.01) H01M 4/92 (2006.01) H01M 8/02 (2016.01) H01M 8/10 (2016.01)**

[25] EN

[54] **ELECTRODE CATALYST FOR  
FUEL CELL, ELECTRODE  
CATALYST LAYER FOR FUEL  
CELL, METHOD FOR  
PRODUCING THE SAME, AND  
MEMBRANE ELECTRODE  
ASSEMBLY AND FUEL CELL  
USING THE CATALYST LAYER**

[54] **CATALYSEUR D'ELECTRODE  
POUR PILE A COMBUSTIBLE,  
COUCHE DE CATALYSEUR  
D'ELECTRODE POUR PILE A  
COMBUSTIBLE, SON PROCEDE  
DE PRODUCTION ET ENSEMBLE  
MEMBRANE-ELECTRODE ET  
PILE A COMBUS TIBLE  
UTILISANT UNE COUCHE DE  
CATALYSEUR**

[72] TAKAHASHI, SHINICHI, JP

[72] MASHIO, TETSUYA, JP

[72] HORIBE, NORIFUMI, JP

[72] OHMA, ATSUSHI, JP

[73] NISSAN MOTOR CO., LTD., JP

[73] NIPPON STEEL CHEMICAL &  
MATERIAL CO., LTD., JP

[85] 2017-04-27

[86] 2015-10-08 (PCT/JP2015/078611)

[87] (WO2016/067876)

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[13] C

[51] **Int.Cl. C07D 333/52 (2006.01) A61K 31/381 (2006.01) A61K 31/4155 (2006.01) A61K 31/4365 (2006.01) A61K 31/4436 (2006.01) A61K 31/4439 (2006.01) A61P 35/00 (2006.01) C07D 209/04 (2006.01) C07D 409/12 (2006.01) C07D 409/14 (2006.01) C07D 495/04 (2006.01)**

[25] EN

[54] **HETEROCYCLIC DERIVATIVES  
FOR TREATING DISEASES  
ASSOCIATED WITH  
ACTIVATION OF STAT3  
PROTEIN**

[54] **DERIVES HETEROCYCLIQUES  
POUR TRAITER DES MALADIES  
ASSOCIEES A L'ACTIVATION DE  
LA PROTEINE STAT3**

[72] PARK, CHAN HEE, KR

[72] LEE, SANG HWI, KR

[72] IM, JUNHWAN, KR

[72] LEE, SOON OK, KR

[72] KIM, JONGMIN, KR

[72] KO, KWANG SEOK, KR

[72] KIM, BYUNGHO, KR

[72] KONG, MINJUNG, KR

[72] KIM, MI SUN, KR

[72] MOON, HYUNG JO, KR

[73] C&C RESEARCH LABORATORIES,  
KR

[85] 2017-05-03

[86] 2015-11-30 (PCT/KR2015/012920)

[87] (WO2016/089060)

[30] KR (10-2014-0170860) 2014-12-02

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[13] C

[51] **Int.Cl. G01N 21/03 (2006.01) G01N 21/53 (2006.01) G01N 21/85 (2006.01)**

[25] EN

[54] **COMPACT SENSOR FOR  
MEASURING TURBIDITY OR  
FLUORESCENCE IN A FLUID  
SAMPLE**

[54] **CAPTEUR COMPACT POUR  
MESURER LA TURBIDITE OU LA  
FLUORESCENCE DANS UN  
ECHANTILLON DE FLUIDE**

[72] BALTZ, NATHAN T., US

[72] SEWELL, STEVEN COLLIN, US

[73] IN-SITU, INC., US

[85] 2017-05-10

[86] 2015-11-10 (PCT/US2015/059925)

[87] (WO2016/077328)

[30] US (62/077,528) 2014-11-10

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[51] **Int.Cl. H04L 9/08 (2006.01) H04L 9/32 (2006.01)**  
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[54] **A METHOD AND DEVICE FOR AUTHENTICATION**  
[54] **PROCEDE ET DISPOSITIF D'AUTHENTIFICATION**  
[72] PEETERS, ROEL JOHAN CORNEEL, BE  
[72] HERMANS, JENS, BE  
[73] NEXTAUTH NV, BE  
[85] 2017-05-24  
[86] 2015-11-30 (PCT/EP2015/078077)  
[87] (WO2016/083618)  
[30] GB (1421130.4) 2014-11-28  
[30] GB (1501071.3) 2015-01-22

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[51] **Int.Cl. A41B 9/02 (2006.01)**  
[25] EN  
[54] **MALE GARMENT**  
[54] **VETEMENT POUR HOMME**  
[72] FORTIER, NATHALIE, CA  
[73] LES COLLECTIONS HIP INC., CA  
[86] (2969773)  
[87] (2969773)  
[22] 2017-06-05  
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[13] C  
[51] **Int.Cl. B01L 3/00 (2006.01) B03C 5/00 (2006.01)**  
[25] EN  
[54] **MICROFLUIDIC DEVICE COMPRISING LATERAL/VERTICAL TRANSISTOR STRUCTURES AND PROCESS OF MAKING AND USING SAME**  
[54] **DISPOSITIF MICROFLUIDIQUE COMPRENANT DES STRUCTURES DE TRANSISTOR LATERAL/VERTICAL ET PROCEDE DE FABRICATION ET D'UTILISATION ASSOCIES**  
[72] HOBBS, ERIC D., US  
[72] VALLEY, JUSTIN K., US  
[73] BERKELEY LIGHTS, INC., US  
[85] 2017-06-07  
[86] 2015-12-07 (PCT/US2015/064286)  
[87] (WO2016/094308)  
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[13] C  
[51] **Int.Cl. G06Q 20/40 (2012.01) G06Q 20/22 (2012.01)**  
[25] EN  
[54] **REAL-TIME EXECUTION OF DATA EXCHANGES BETWEEN COMPUTING SYSTEMS BASED ON SELECTIVELY ALLOCATED PARAMETERS**  
[54] **EXECUTION EN TEMPS REEL D'ECHANGES DE DONNEES ENTRE DES SYSTEMES INFORMATIQUES FONDES SUR DES PARAMETRES ATTRIBUES SELECTIVEMENT**  
[72] DUNJIC, MILOS, CA  
[72] HALDENBY, PERRY AARON JONES, CA  
[72] LEE, JOHN JONG-SUK, CA  
[73] THE TORONTO-DOMINION BANK, CA  
[86] (2970762)  
[87] (2970762)  
[22] 2017-06-15  
[30] US (15/622,269) 2017-06-14

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[51] **Int.Cl. B04C 9/00 (2006.01) B01D 21/26 (2006.01) B01D 29/11 (2006.01) B01D 36/04 (2006.01)**  
[25] EN  
[54] **CYLINDRICAL FILTER SCREEN WITH TENSIONING MECHANISM**  
[54] **GRILLE FILTRANTE CYLINDRIQUE A MECANISME DE TENSION**  
[72] SHRIVASTAVA, ABHISHEK, US  
[72] CAFFELL, GEORGE D., US  
[72] STROUD, THOMAS W., US  
[72] VOTH, DAVID A., US  
[72] KRUEGER, TANYA K., US  
[72] BURR, SCOTT T., US  
[72] CORCORAN, GERALD DROUIN, US  
[72] MALLARD, JOHN H., US  
[72] VOSBERG, MICHAEL J., US  
[73] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2017-06-15  
[86] 2015-11-24 (PCT/US2015/062367)  
[87] (WO2016/099822)  
[30] US (62/093,447) 2014-12-18

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[51] **Int.Cl. C08G 18/16 (2006.01) C08G 18/30 (2006.01) C08G 18/72 (2006.01) C08J 9/02 (2006.01)**  
[25] FR  
[54] **FABRICATION PROCESS FOR MODIFIED POLYURETHANE FOAM, FOAM THUS OBTAINED AND USES THEREOF**  
[54] **PROCEDE DE FABRICATION D'UNE MOUSSE POLYURETHANE-MODIFIEE, MOUSSE OBTENUE ET UTILISATIONS**  
[72] ARBENZ, ALICE, FR  
[72] LAURICHESSE, STEPHANIE, FR  
[72] PERRIN, REMI, FR  
[72] BINDSCHEDLER, PIERRE ETIENNE, FR  
[72] AVEROUS, LUC, FR  
[73] SOPREMA, FR  
[73] UNIVERSITE DE STRASBOURG, FR  
[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[86] (2971314)  
[87] (2971314)  
[22] 2017-06-19  
[30] FR (16 70413) 2016-07-28

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[11] **2,971,416**  
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[51] **Int.Cl. A01N 37/00 (2006.01) A01N 37/16 (2006.01) A23C 7/02 (2006.01) A61L 2/18 (2006.01) C02F 1/72 (2006.01) C07C 407/00 (2006.01) C07C 409/24 (2006.01) C07C 409/26 (2006.01)**  
[25] EN  
[54] **METHODS FOR FORMING PEROXYFORMIC ACID AND USES THEREOF**  
[54] **PROCEDES DE FORMATION D'ACIDE PEROXYFORMIQUE ET SES UTILISATIONS**  
[72] BALASUBRAMANIAN, RAMAKRISHNAN, US  
[72] LI, JUNZHONG, US  
[72] STAUB, RICHARD, US  
[72] KEASLER, VICTOR, US  
[72] BENNETT, BRIAN, US  
[72] BREWSTER, ALLISON, US  
[73] ECOLAB USA INC., US  
[85] 2017-06-16  
[86] 2015-12-17 (PCT/US2015/066438)  
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[25] EN  
[54] **TAKEOFF PITCH GUIDANCE SYSTEM AND METHOD**  
[54] **SYSTEME ET METHODE D'ORIENTATION D'INCLINAISON AU DECOLLAGE**

[72] CHRETIEN, JEAN-FRANCOIS, CA  
[72] TREMBLAY, LUC, CA  
[72] DELARCHE, MARC-ANTOINE, US  
[73] AIRBUS CANADA LIMITED PARTNERSHIP, CA

[86] (2972498)  
[87] (2972498)  
[22] 2017-06-29  
[30] US (62/525,876) 2017-06-28

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[13] C

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[25] EN  
[54] **INERTIAL SENSING AUGMENTATION FOR NAVIGATION OF SPACECRAFT**  
[54] **AUGMENTATION DE LA DETECTION INERTIELLE DESTINEE A LA NAVIGATION D'ENGINS SPATIAUX**

[72] FABER, DANIEL R., US  
[72] FOULDS, CRAIG, US  
[72] CARROLL, KIERAN, CA  
[73] FABER, DANIEL R., US  
[73] FOULDS, CRAIG, US  
[73] 2241781 ONTARIO INC., CA  
[85] 2017-07-13  
[86] 2016-01-28 (PCT/CA2016/050068)  
[87] (WO2016/119056)  
[30] US (62/108,688) 2015-01-28

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[11] **2,973,951**  
[13] C

[51] **Int.Cl. E21B 19/16 (2006.01) E21B 19/18 (2006.01) E21D 3/00 (2006.01)**

[25] EN  
[54] **DEVICE AND METHOD FOR AUTOMATIZATION OF ROCK BORING**  
[54] **DISPOSITIF ET METHODE D'AUTOMATISATION DE FORAGE ROCHEUX**

[72] STRAHT, ANDREAS, SE  
[72] JORMVIK, FREDRIK, SE  
[72] RIISOM, JORGEN, SE  
[72] NILSSON, ANDERS, SE  
[72] FRANZEN, MIKAEL, SE  
[73] EPIROC ROCK DRILLS AKTIEBOLAG, SE

[85] 2017-07-14  
[86] 2016-03-01 (PCT/SE2016/050159)  
[87] (WO2016/140614)  
[30] SE (1550253-7) 2015-03-04

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[11] **2,974,813**  
[13] C

[51] **Int.Cl. F16J 15/3224 (2016.01)**

[25] EN  
[54] **METHOD AND DEVICE FOR MOUNTING SHAFT SEALS PERMITTING ECCENTRIC MOTION**  
[54] **METHODE ET DISPOSITIF D'INSTALLATION DE JOINTS D'ARBRE PERMETTANT UN MOUVEMENT EXCENTRIQUE**

[72] CHRISTOPHER, KEITH J., CA  
[72] PICIOREANU, BOGDAN A., CA  
[73] CATHEDRAL ENERGY SERVICES LTD., CA

[86] (2974813)  
[87] (2974813)  
[22] 2017-07-31

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[11] **2,976,709**  
[13] C

[51] **Int.Cl. A61F 2/82 (2013.01)**

[25] EN  
[54] **SURGICAL SYSTEM, DEVICE AND METHODS OF USE THEREOF FOR THE PERCUTANEOUS CREATION OF AN ARTERIOVENOUS FISTULA (AVF)**  
[54] **SYSTEME CHIRURGICAL, DISPOSITIF ET PROCEDES D'UTILISATION DE CELUI-CI POUR LA CREATION PERCUTANEE D'UNE FISTULE ARTERIO-VEINEUSE (AVF)**

[72] DICKINSON, ROBERT, GB  
[72] POPA, SORIN, GB  
[73] STENT TEK LIMITED, GB

[85] 2017-08-14  
[86] 2016-03-10 (PCT/US2016/021782)  
[87] (WO2016/145202)  
[30] GB (1504060.3) 2015-03-10  
[30] GB (1511692.4) 2015-07-03  
[30] US (62/209,153) 2015-08-24

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[11] **2,977,123**  
[13] C

[51] **Int.Cl. A61B 5/026 (2006.01) A61B 5/00 (2006.01)**

[25] EN  
[54] **MULTI-SPECTRAL LASER IMAGING (MSLI) METHODS AND SYSTEMS FOR BLOOD FLOW AND PERFUSION IMAGING AND QUANTIFICATION**  
[54] **PROCEDES ET SYSTEMES D'IMAGERIE LASER MULTISPECTRALE (MSLI) PERMETTANT UNE IMAGERIE ET UNE QUANTIFICATION D'UNE PERFUSION SANGUINE ET D'UN FLUX SANGUIN**

[72] CHEN, CHENG, US  
[72] FERGUSON, T. BRUCE, JR., US  
[72] PENG, ZHIYONG, US  
[72] JACOBS, KENNETH MICHAEL, US  
[73] EAST CAROLINA UNIVERSITY, US

[85] 2017-08-17  
[86] 2016-03-01 (PCT/US2016/020201)  
[87] (WO2016/153741)  
[30] US (62/136,010) 2015-03-20  
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[51] **Int.Cl. F01C 1/10 (2006.01) F01C 19/08 (2006.01) F01C 21/08 (2006.01) F02B 53/00 (2006.01) F02B 55/02 (2006.01) F02B 55/06 (2006.01) F02B 55/14 (2006.01)**

[25] EN

[54] **HIGH POWER DENSITY AND EFFICIENCY EPITROCHOIDAL ROTARY ENGINE**

[54] **MOTEUR ROTATIF EPITROCHOIDE A RENDEMENT ET DENSITE DE PUISSANCE ELEVES**

[72] SHKOLNIK, ALEXANDER, US

[72] SHKOLNIK, NIKOLAY, US

[72] NICKERSON, MARK, US

[72] LITTERA, DANIELE, US

[72] KOPACHE, ALEXANDER, US

[72] BECKER, KYLE, US

[73] LIQUIDPISTON, INC., US

[85] 2017-08-22

[86] 2016-03-10 (PCT/US2016/021861)

[87] (WO2016/145247)

[30] US (62/130,956) 2015-03-10

[30] US (62/137,584) 2015-03-24

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[13] C

[51] **Int.Cl. A61K 51/02 (2006.01) A61K 51/04 (2006.01) C07B 59/00 (2006.01)**

[25] EN

[54] **METHODS AND KITS FOR PREPARING RADIONUCLIDE COMPLEXES**

[54] **PROCEDES ET TROUSSES DE PREPARATION DE COMPLEXES DE RADIONUCLEIDES**

[72] BLOWER, PHILIP, GB

[72] MULLEN, GREGORY, GB

[73] THERAGNOSTICS LIMITED, GB

[85] 2017-09-08

[86] 2016-03-09 (PCT/GB2016/050637)

[87] (WO2016/142702)

[30] GB (1504064.5) 2015-03-10

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[13] C

[51] **Int.Cl. A61K 39/00 (2006.01) A61K 9/14 (2006.01) A61P 35/00 (2006.01) A61P 37/04 (2006.01) C07K 14/775 (2006.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **NANOPARTICLE COMPOSITIONS FOR DELIVERY OF BIOMACROMOLECULES**

[54] **COMPOSITIONS NANOPARTICULAIRES SERVANT A DISTRIBUER DES BIOMACROMOLECULES**

[72] NAM, JUTA EK, US

[72] MOON, JAMES J., US

[72] KUAI, RUI, US

[72] SCHWENDEMAN, ANNA A., US

[73] THE REGENTS OF THE UNIVERSITY OF MICHIGAN, US

[85] 2017-09-13

[86] 2016-03-25 (PCT/US2016/024233)

[87] (WO2016/154544)

[30] US (62/138,186) 2015-03-25

[30] US (62/248,908) 2015-10-30

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[13] C

[51] **Int.Cl. A63B 23/12 (2006.01) A61H 1/00 (2006.01)**

[25] EN

[54] **BIMANUAL ARM TRAINER**

[54] **APPAREIL D'ENTRAINEMENT DE BRAS BIMANUEL**

[72] WEISZ, DONALD, J., US

[72] RAGHAVAN, PREETI, US

[72] SPERANZA, FRANK, US

[73] MIRRORED MOTION WORKS, INC., US

[85] 2017-09-14

[86] 2016-03-18 (PCT/US2016/023221)

[87] (WO2016/149652)

[30] US (62/134,683) 2015-03-18

[30] US (62/265,686) 2015-12-10

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[13] C

[51] **Int.Cl. A61K 9/51 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **SELF ASSEMBLING MOLECULES FOR TARGETED DRUG DELIVERY**

[54] **MOLECULES A AUTO-ASSEMBLAGE POUR L'ADMINISTRATION CIBLEE DE MEDICAMENTS**

[72] ELMALEH, DAVID R., US

[72] TAKAHASHI, KAZUE, US

[73] THE GENERAL HOSPITAL CORPORATION, US

[85] 2017-09-19

[86] 2016-03-31 (PCT/US2016/025290)

[87] (WO2016/161129)

[30] US (62/140,696) 2015-03-31

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[13] C

[51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/506 (2006.01) A61P 31/04 (2006.01) A61P 31/12 (2006.01) A61P 35/00 (2006.01) C07D 413/14 (2006.01) C07D 417/14 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR INHIBITING KINASES**

[54] **COMPOSITIONS ET METHODES POUR INHIBER LES KINASES**

[72] WERNER, MILTON, H., US

[72] KELLY, TERENCE, A., US

[73] INHIBIKASE THERAPEUTICS, INC., US

[85] 2017-09-20

[86] 2016-04-22 (PCT/US2016/028914)

[87] (WO2016/172528)

[30] US (62/151,659) 2015-04-23

[30] US (62/182,955) 2015-06-22

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23 janvier 2024**

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[13] C

[51] **Int.Cl. G01N 33/52 (2006.01)**  
[25] EN  
[54] **IMPROVED ASSAYS FOR POTENCY OF HUMAN RETINAL PIGMENT EPITHELIUM (RPE) CELLS AND PHOTORECEPTOR PROGENITORS**

[54] **ESSAIS AMELIORES POUR EVALUER LA PUISSANCE DE CELLULES DE L'EPITHELIUM PIGMENTAIRE RETINIEN (RPE) ET DE CELLULES PROGENITRICES DE PHOTORECEPTEURS HUMAINES**

[72] KLIMANSKAYA, IRINA V., US  
[72] CARSON, JULIE KATHRYN, US  
[72] GAY, ROGER, US  
[72] IVANOVA, YORDANKA GIKOVA, US

[73] **ASTELLAS INSTITUTE FOR REGENERATIVE MEDICINE, US**

[85] 2017-09-21  
[86] 2016-03-23 (PCT/US2016/023839)  
[87] (WO2016/154357)  
[30] US (62/136,660) 2015-03-23

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[13] C

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 17/00 (2006.01) A61P 17/04 (2006.01) C07K 16/24 (2006.01) C07K 16/28 (2006.01)**

[25] EN  
[54] **PHARMACEUTICAL COMPOSITION FOR PREVENTION AND/OR TREATMENT OF ATOPIC DERMATITIS CONTAINING IL-31 ANTAGONIST AS ACTIVE INGREDIENT**

[54] **COMPOSITION PHARMACEUTIQUE POUR LA PREVENTION ET/OU LE TRAITEMENT DE LA DERMATITE ATOPIQUE CONTENANT COMME PRINCIPE ACTIF UN ANTAGONISTE DE L'IL-31**

[72] KANEKO, AKIHISA, JP  
[72] IWAYANAGI, YUKI, JP  
[72] KITAMURA, HIDETOMO, JP  
[72] HIGUCHI, YOSHINOBU, JP  
[72] MATSUSHITA, HIROAKI, JP  
[72] MIHARA, RYOSUKE, JP  
[72] YAMAMOTO, YUMI, JP  
[72] SAITO, TOMOHISA, JP  
[72] HIROKAWA, KEIKO, JP  
[73] **CHUGAI SEIYAKU KABUSHIKI KAISHA, JP**

[85] 2017-09-26  
[86] 2016-04-13 (PCT/JP2016/061859)  
[87] (WO2016/167263)  
[30] JP (2015-082699) 2015-04-14  
[30] JP (2016-041641) 2016-03-04

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[11] **2,981,219**  
[13] C

[51] **Int.Cl. A61N 7/00 (2006.01) A61B 34/20 (2016.01) A61B 90/00 (2016.01) A61B 8/12 (2006.01) A61B 8/14 (2006.01) A61B 34/30 (2016.01)**

[25] EN  
[54] **METHOD AND APPARATUS FOR TREATING VALVULAR DISEASE**

[54] **PROCEDE ET APPAREIL POUR LE TRAITEMENT D'UNE VALVULOPATHIE**

[72] MESSAS, EMMANUEL, FR  
[72] PERNOT, MATHIEU, FR  
[72] TANTER, MICKAEL, FR  
[72] VILLEMMAIN, OLIVIER, FR  
[73] **CARDIAWAVE, FR**

[85] 2017-09-28  
[86] 2016-04-01 (PCT/IB2016/000523)  
[87] (WO2016/156989)  
[30] US (62/142,096) 2015-04-02

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[13] C

[51] **Int.Cl. B08B 17/02 (2006.01) A01N 25/34 (2006.01) A01N 37/12 (2006.01) A01N 61/00 (2006.01) B01D 65/08 (2006.01) B01D 69/02 (2006.01) C09D 5/00 (2006.01)**

[25] EN  
[54] **PROCESSES FOR REDUCING THE FOULING OF SURFACES**

[54] **PROCEDES POUR REDUIRE L'ENCRASSEMENT DE SURFACES**

[72] KONRADI, RUPERT, DE  
[72] CEPRAGA, CHRISTINA, DE  
[72] STAUDT, CLAUDIA, DE  
[72] VON VACANO, BERNHARD ULRICH, DE

[72] KELLERMEIER, MATTHIAS, DE  
[72] STENGEL, PETER, DE  
[72] BAUMANN, PETER, DE  
[72] MARTY, LAURENT, DE  
[72] KUHN, JELAN, DE  
[72] SCHAUKSDAT, SARAH-JANE, DE  
[72] WEGMANN, LUDGER, DE  
[72] BOHRER, ERIK, DE

[73] **SOLENI TECHNOLOGIES CAYMAN, L.P., KY**

[85] 2017-09-29  
[86] 2016-04-12 (PCT/EP2016/057976)  
[87] (WO2016/166084)  
[30] EP (15163306.2) 2015-04-13

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[11] **2,982,244**  
[13] C

[51] **Int.Cl. G06F 21/55 (2013.01) G06F 21/53 (2013.01) G06F 9/455 (2018.01) H04L 9/14 (2006.01) H04L 9/30 (2006.01) H04L 9/32 (2006.01) H04L 12/22 (2006.01)**

[25] EN  
[54] **PARAVIRTUALIZED SECURITY THREAT PROTECTION OF A COMPUTER-DRIVEN SYSTEM WITH NETWORKED DEVICES**

[54] **PROTECTION CONTRE DES MENACES DE SECURITE PARAVIRTUALISEES D'UN SYSTEME COMMANDE PAR ORDINATEUR AVEC DES DISPOSITIFS EN RESEAU**

[72] SRIVASTAVA, GITA, US  
[72] SRIVASTAVA, PIYUSH B., US  
[73] **GIGAVATION, INC., US**

[85] 2017-10-06  
[86] 2016-04-14 (PCT/US2016/027575)  
[87] (WO2016/168487)  
[30] US (62/147,429) 2015-04-14

**Canadian Patents Issued  
January 23, 2024**

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[11] **2,982,883**  
[13] C

[51] **Int.Cl. B66F 11/04 (2006.01) B60S 9/02 (2006.01) B66C 23/80 (2006.01) B66F 7/28 (2006.01) B66F 17/00 (2006.01)**

[25] FR

[54] **ANTI-POTHOLE AERIAL WORK PLATFORM**

[54] **NACELLE ELEVATRICE A PROTECTION CONTRE LES NIDS DE POULE**

[72] PITHOUD, EMMANUEL, FR

[73] HAULOTTE GROUP, FR

[85] 2017-10-16

[86] 2016-04-15 (PCT/FR2016/050893)

[87] (WO2016/170255)

[30] FR (1553476) 2015-04-18

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[11] **2,983,260**  
[13] C

[51] **Int.Cl. C07D 317/48 (2006.01) A61K 31/36 (2006.01)**

[25] EN

[54] **SULFONAMIDE COMPOUNDS, COMPOSITIONS AND METHODS FOR INHIBITING CNKSR1**

[54] **COMPOSES DE SULFONAMIDE, COMPOSITIONS ET METHODES SERVANT A INHIBER L'AMPLIFICATEUR DE CONNECTEUR DU SUPPRESSEUR DE KINASE DE RAS-1 (CNKSR1)**

[72] KIRKPATRICK, D. LYNN, US

[72] INDARTE, MARTIN, US

[73] PHUSIS THERAPEUTICS, INC., US

[85] 2017-10-18

[86] 2016-04-20 (PCT/US2016/028414)

[87] (WO2016/172191)

[30] US (62/150,219) 2015-04-20

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[11] **2,984,075**  
[13] C

[51] **Int.Cl. A01N 63/00 (2020.01) A01N 63/20 (2020.01) A01N 63/30 (2020.01) C05G 3/60 (2020.01) A01N 3/00 (2006.01) A01P 5/00 (2006.01) C12N 1/16 (2006.01) C12N 1/20 (2006.01) C12P 1/02 (2006.01) C12P 1/04 (2006.01)**

[25] EN

[54] **MICROBIAL COMPOSITIONS AND METHODS FOR BIOPROTECTION**

[54] **COMPOSITIONS MICROBIENNES ET PROCEDES DE BIOPROTECTION**

[72] BYWATER-EKEGARD, MARGARET, CA

[73] CONCENTRIC AG CORPORATION, US

[85] 2017-10-26

[86] 2016-05-02 (PCT/IB2016/000675)

[87] (WO2016/178086)

[30] US (62/155,955) 2015-05-01

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[11] **2,984,405**  
[13] C

[51] **Int.Cl. A61K 31/194 (2006.01) A61K 31/355 (2006.01) A61K 31/375 (2006.01) A61K 33/30 (2006.01) A61K 36/185 (2006.01) A61P 27/02 (2006.01)**

[25] FR

[54] **COMPOSITION CONTAINING NORBIXIN FOR PROTECTING CELLS OF THE RETINAL PIGMENT EPITHELIUM**

[54] **COMPOSITION CONTENANT DE LA NORBIXINE POUR LA PROTECTION DES CELLULES DE L'EPITHELIUM PIGMENTAIRE RETINIEN**

[72] LAFONT, RENE, FR

[72] VEILLET, STANISLAS, FR

[72] SAHEL, JOSE-ALAIN, FR

[72] FONTAINE, VALERIE, FR

[72] ELENA, PIERRE-PAUL, FR

[73] BIOPHYTIS, FR

[73] SORBONNE UNIVERSITE, FR

[85] 2017-10-30

[86] 2016-04-28 (PCT/FR2016/051001)

[87] (WO2016/174360)

[30] FR (1553957) 2015-04-30

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[11] **2,984,470**  
[13] C

[51] **Int.Cl. H04W 4/029 (2018.01) H04W 4/30 (2018.01) H04W 4/80 (2018.01) G01S 19/48 (2010.01)**

[25] EN

[54] **SYSTEM AND METHOD TO FACILITATE MONITORING AND TRACKING OF PERSONNEL IN A CLOSED OPERATIONAL NETWORK**

[54] **SYSTEME ET PROCEDE PERMETTANT DE FACILITER LA SURVEILLANCE ET LE SUIVI DE PERSONNEL DANS UN RESEAU OPERATIONNEL FERME**

[72] ANAND, AMIT, CA

[73] ANAND, AMIT, CA

[85] 2017-10-31

[86] 2016-04-29 (PCT/IB2016/052428)

[87] (WO2016/178122)

[30] US (62/155,786) 2015-05-01

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[11] **2,984,484**  
[13] C

[51] **Int.Cl. A61K 48/00 (2006.01) C07K 14/47 (2006.01) C07K 19/00 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS OF CHIMERIC AUTOANTIBODY RECEPTOR T CELLS**

[54] **COMPOSITIONS DE RECEPTES D'AUTO-ANTICORPS CHIMERIQUES ET PROCEDES AFFERENTS**

[72] PAYNE, AIMEE S., US

[72] ELLEBRECHT, CHRISTOPH T., US

[72] BHOJ, VIJAY, US

[72] MILONE, MICHAEL C., US

[73] THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, US

[85] 2017-10-31

[86] 2015-05-01 (PCT/US2015/028872)

[87] (WO2015/168613)

[30] US (61/987,989) 2014-05-02

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23 janvier 2024**

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[11] **2,986,299**  
[13] C

[51] **Int.Cl. A61B 6/10 (2006.01)**  
[25] FR  
[54] **DEVICE FOR SIGNALLING INTO THE ENVIRONMENT THE STATUS OF A RADIO TRANSMISSION APPARATUS, AND IN PARTICULAR OF AN APPARATUS PROVIDED WITH AN X-RAY TUBE**

[54] **DISPOSITIF DE SIGNALISATION DU STATUT D'UN APPAREIL A EMISSION RADIOELECTRIQUE EN EXTERIEUR, ET NOTAMMENT D'UN APPAREIL MUNI D'UN TUBE A RAYON X**

[72] MAALOUL, FOUAD, FR  
[72] GUERIN, LAURA, FR  
[73] BIOMEDIQA, FR  
[85] 2017-11-16  
[86] 2016-05-09 (PCT/FR2016/051081)  
[87] (WO2016/185112)  
[30] FR (FR1554474) 2015-05-19

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[11] **2,986,840**  
[13] C

[51] **Int.Cl. A01D 57/02 (2006.01) A01D 41/14 (2006.01) A01D 80/02 (2006.01)**  
[25] EN  
[54] **TELESCOPIC REEL**

[54] **RABATTEUR TELESCOPIQUE**

[72] BONGIOVANNI, LIVIO, IT  
[72] ARMANDO, LODOVICO, IT  
[73] CAPELLO S.R.L., IT  
[85] 2017-11-22  
[86] 2016-06-09 (PCT/IB2016/053409)  
[87] (WO2016/199068)  
[30] IT (102015000022912) 2015-06-11

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[11] **2,986,894**  
[13] C

[51] **Int.Cl. C12Q 1/68 (2018.01) A01H 6/54 (2018.01) C12Q 1/6895 (2018.01) A01H 1/00 (2006.01) A01H 1/04 (2006.01)**  
[25] EN  
[54] **LOCI ASSOCIATED WITH CHARCOAL ROT DROUGHT COMPLEX TOLERANCE IN SOYBEAN**

[54] **LOCI ASSOCIES A LA RESISTANCE AU COMPLEXE DE LA POURRITURE CHARBONNEUSE LIEE A LA SECHERESSE CHEZ LE SOJA**

[72] HYTEN, DAVID L., JR., US  
[72] KALVIG, ANDREA BETH, US  
[72] KUHLMAN, LESLIE CHARLES, US  
[72] KYLE, DONALD, US  
[72] LIU, JEAN, US  
[72] SHENDELMAN, JOSHUA MICHAEL, US  
[72] THOMPSON, JEFFREY A., US  
[72] WOODWARD, JOHN BRYAN, US  
[72] YANG, MING, US  
[73] PIONEER HI-BRED INTERNATIONAL, INC., US  
[85] 2017-11-22  
[86] 2015-10-14 (PCT/US2015/055484)  
[87] (WO2017/023343)  
[30] US (PCT/US2015/043179) 2015-07-31  
[30] US (14/815,236) 2015-07-31

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[11] **2,987,243**  
[13] C

[51] **Int.Cl. A47L 11/18 (2006.01) A47L 1/05 (2006.01) A47L 11/282 (2006.01) A47L 11/34 (2006.01) A47L 13/22 (2006.01)**  
[25] EN  
[54] **FLOOR TREATMENT APPARATUS**

[54] **APPAREIL DE TRAITEMENT DES SOLS**

[72] BROWN, ANDRE DAVID, GB  
[72] THORNE, JASON, US  
[72] SVEC, SABRINA CHANG, US  
[72] NIEDZWECKI, SCOTT, US  
[72] BONE, ROBERT J., US  
[73] SHARKNINJA OPERATING LLC, US  
[85] 2017-11-24  
[86] 2016-05-26 (PCT/US2016/034494)  
[87] (WO2016/191624)  
[30] US (62/166,632) 2015-05-26  
[30] US (62/290,225) 2016-02-02

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[11] **2,987,769**  
[13] C

[51] **Int.Cl. G02B 17/00 (2006.01)**  
[25] EN  
[54] **OPTICAL COMPONENT FOR TRANSFORMING A GAUSSIAN LIGHT BEAM INTO A LIGHT SHEET**

[54] **COMPOSANTE OPTIQUE SERVANT A TRANSFORMER UN FAISCEAU DE LUMIERE GAUSSIEN EN FEUILLET DE LUMIERE**

[72] DOUCET, MICHEL, CA  
[73] INSTITUT NATIONAL D'OPTIQUE, CA  
[86] (2987769)  
[87] (2987769)  
[22] 2017-12-06

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[11] **2,988,114**  
[13] C

[51] **Int.Cl. F16L 11/115 (2006.01) F16L 1/15 (2006.01) F16L 9/06 (2006.01) F16L 9/14 (2006.01)**  
[25] EN  
[54] **PIPE WITH AN OUTER WRAP**

[54] **TUYAU A ENVELOPPE EXTERIEURE**

[72] VANHOOSE, BILL RUSSELL, US  
[72] PIAZZA, NICHOLAS JAMES, US  
[72] VITARELLI, RONALD ROBERT, US  
[72] ATCHISON, OWEN MICHAEL, US  
[72] FROST, TYLER JAMES, US  
[73] ADVANCED DRAINAGE SYSTEMS INC., US  
[85] 2017-12-01  
[86] 2016-06-02 (PCT/US2016/035498)  
[87] (WO2016/196780)  
[30] US (14/732,146) 2015-06-05

**Canadian Patents Issued  
January 23, 2024**

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[11] **2,988,584**  
[13] C

[51] **Int.Cl. C07D 417/06 (2006.01) A61K 31/133 (2006.01) A61K 31/14 (2006.01) A61K 31/427 (2006.01) A61P 25/00 (2006.01) C07C 215/08 (2006.01) C07C 215/10 (2006.01)**

[25] EN

[54] **SOLID FORMS OF (Z)-4-(5-((3-BENZYL-4-OXO-2-THIOXOTHIAZOLIDIN-5-YLIDENE)METHYL)FURAN-2-YL)BENZOIC ACID**

[54] **FORMES SOLIDES D'ACIDE (Z)-4-(5-((3-BENZYL-4-OXO-2-THIOXOTHIAZOLIDIN-5-YLIDENE) METHYL)FURANNE-2-YL) BENZOIQUE**

[72] BARBOSA, ANTONIO J., US  
[73] ATEGRIN, INC., US  
[85] 2017-12-06  
[86] 2016-06-10 (PCT/US2016/037067)  
[87] (WO2016/201356)  
[30] US (62/175,066) 2015-06-12  
[30] US (62/275,655) 2016-01-06

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[11] **2,988,677**  
[13] C

[51] **Int.Cl. G01N 21/892 (2006.01) G01B 11/30 (2006.01)**

[25] EN

[54] **REAL-TIME INSPECTION OF AUTOMATED RIBBON PLACEMENT**

[54] **INSPECTION EN TEMPS REEL D'UNE MISE EN PLACE AUTOMATISEE D'UN RUBAN**

[72] MONCHALIN, JEAN-PIERRE, CA  
[72] YOUSEFPOUR, ALI, CA  
[72] LAMOUCHE, GUY, CA  
[72] GAUTHIER, BRUNO, CA  
[72] ROY, STEVEN, CA  
[72] PADIOLEAU, CHRISTIAN, CA  
[73] NATIONAL RESEARCH COUNCIL OF CANADA, CA

[85] 2017-12-07  
[86] 2016-06-08 (PCT/IB2016/053368)  
[87] (WO2016/199038)  
[30] US (62/172,559) 2015-06-08

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[11] **2,988,735**  
[13] C

[51] **Int.Cl. H04N 21/236 (2011.01) H04N 21/234 (2011.01) H04N 21/235 (2011.01) H04N 21/2381 (2011.01)**

[25] EN

[54] **CONTENT MANAGEMENT AND PROVISIONING SYSTEM**

[54] **SYSTEME DE GESTION ET DE FOURNITURE DE CONTENU**

[72] GREEN, ROBERT D., US  
[72] MORRIS, JOHN W., US  
[72] KOTT, JAMES M., US  
[72] BOSWORTH, BRIAN S., US  
[73] WIDEORBIT LLC, US  
[85] 2017-12-07  
[86] 2016-06-07 (PCT/US2016/036190)  
[87] (WO2016/200793)  
[30] US (62/172,693) 2015-06-08

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[11] **2,989,727**  
[13] C

[51] **Int.Cl. C30B 29/60 (2006.01) B82Y 10/00 (2011.01) B82Y 40/00 (2011.01) C30B 11/12 (2006.01) C30B 29/10 (2006.01) C30B 29/40 (2006.01)**

[25] EN

[54] **NETWORK OF NANOSTRUCTURES AS GROWN ON A SUBSTRATE**

[54] **RESEAU DE NANOSTRUCTURES TEL QUE PRODUIT PAR CROISSANCE SUR UN SUBSTRAT**

[72] KROGSTRUP, PETER, DK  
[72] MARCUS, CHARLES, DK  
[72] JESPERSEN, THOMAS SAND, DK  
[72] NYGARD, JESPER, DK  
[73] UNIVERSITY OF COPENHAGEN, DK

[85] 2017-12-15  
[86] 2016-06-27 (PCT/EP2016/064787)  
[87] (WO2016/207415)  
[30] EP (15174142.8) 2015-06-26

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[11] **2,989,943**  
[13] C

[51] **Int.Cl. B61K 9/10 (2006.01)**

[25] EN

[54] **AN ADAPTIVE RAIL INSPECTION CARRIAGE**

[54] **CHARIOT D'INSPECTION DE RAILS ADAPTATIF**

[72] KOCUR, JAN, US  
[72] MOREHOUSE, DANIEL, US  
[73] SPERRY RAIL, INC., US  
[85] 2017-12-15  
[86] 2017-01-13 (PCT/US2017/013350)  
[87] (WO2017/123879)  
[30] US (62/279,312) 2016-01-15

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[11] **2,990,404**  
[13] C

[51] **Int.Cl. C08L 79/00 (2006.01) C08L 79/02 (2006.01) C09D 179/00 (2006.01) C09D 179/02 (2006.01)**

[25] EN

[54] **LATEX PRODUCTS HAVING POLYMERS AND POLYMERIC ADDUCTS AS QUICK-SETTING ADDITIVES**

[54] **PRODUITS DE LATEX AYANT DES POLYMERES ET DES ADDUITS POLYMERES COMME ADDITIFS A PRISE RAPIDE**

[72] KIM, KYU-JUN, US  
[72] HU, RONG, US  
[72] KAUFMAN, MICHAEL C., US  
[73] ARKEMA INC., US  
[85] 2017-12-20  
[86] 2016-06-16 (PCT/US2016/037750)  
[87] (WO2016/209691)  
[30] US (62/183,324) 2015-06-23  
[30] US (62/319,465) 2016-04-07

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[11] **2,991,897**  
[13] C

[51] **Int.Cl. H04L 9/32 (2006.01) G06F 21/44 (2013.01) H04L 9/30 (2006.01)**

[25] EN

[54] **CONSTRAINED DEVICE ENROLLMENT**

[54] **ENROLEMENT DE DISPOSITIF CONTRAINT**

[72] MOSES, TIMOTHY EDWARD, US  
[73] ENTRUST, INC., US  
[85] 2018-01-09  
[86] 2016-07-08 (PCT/US2016/041451)  
[87] (WO2017/011290)  
[30] US (62/190,996) 2015-07-10  
[30] US (15/204,234) 2016-07-07

**Brevets canadiens délivrés  
23 janvier 2024**

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[11] **2,992,456**  
[13] C

[51] **Int.Cl. G01R 31/385 (2019.01) G01R 31/389 (2019.01) H03L 5/00 (2006.01) G01N 27/416 (2006.01)**

[25] EN

[54] **REDUCED STACK VOLTAGE CIRCUITRY FOR ENERGY STORAGE SYSTEM DIAGNOSTICS**

[54] **CIRCUIT A TENSION D'EMPILEMENT REDUITE POUR LE DIAGNOSTIC D'UN SYSTEME D'ACCUMULATION D'ENERGIE**

[72] DEVAAL, JACOB W., CA

[72] HOMAYOUNI, HOOMAN, CA

[72] GOLNARAGHI, FARID, CA

[73] BALLARD POWER SYSTEMS INC., CA

[73] SIMON FRASER UNIVERSITY, CA

[85] 2018-01-12

[86] 2016-07-13 (PCT/US2016/042149)

[87] (WO2017/015038)

[30] US (62/194,073) 2015-07-17

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[11] **2,993,000**  
[13] C

[51] **Int.Cl. C07D 233/38 (2006.01) A01N 43/36 (2006.01) A01N 43/50 (2006.01) A01N 43/76 (2006.01) C07D 207/26 (2006.01) C07D 207/27 (2006.01) C07D 263/26 (2006.01)**

[25] EN

[54] **CYCLIC N-CARBOXAMIDE COMPOUNDS USEFUL AS HERBICIDES**

[54] **COMPOSES CYCLIQUES N-CARBOXAMIDE UTILES EN TANT QU'HERBICIDES**

[72] SATTERFIELD, ANDREW DUNCAN, US

[72] STEVENSON, THOMAS MARTIN, US

[73] FMC CORPORATION, US

[85] 2018-01-18

[86] 2016-07-15 (PCT/US2016/042448)

[87] (WO2017/023515)

[30] US (62/199,341) 2015-07-31

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[11] **2,994,047**  
[13] C

[51] **Int.Cl. A01N 31/06 (2006.01) A01N 65/22 (2009.01) A01N 25/04 (2006.01) A01N 25/28 (2006.01) A01P 17/00 (2006.01)**

[25] FR

[54] **COMPOSITION TO REPEL INSECTS THAT ARE VECTORS FOR TROPICAL DISEASES IN SPRAY FORM**

[54] **COMPOSITION REPULSIVE CONTRE LES INSECTES VECTEURS DE MALADIES TROPICALES SOUS FORME DE SPRAY**

[72] TORTILLARD, DAVID, FR

[73] TORTILLARD, DAVID, FR

[85] 2018-01-29

[86] 2016-08-11 (PCT/FR2016/052065)

[87] (WO2017/032941)

[30] FR (15/57908) 2015-08-25

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[11] **2,994,280**  
[13] C

[51] **Int.Cl. A61K 38/22 (2006.01) A61K 38/17 (2006.01) A61P 19/08 (2006.01)**

[25] EN

[54] **USE OF C-TYPE NATRIURETIC PEPTIDE VARIANTS TO TREAT SKELETAL DYSPLASIA**

[54] **UTILISATION DE VARIANTS DU PEPTIDE NATRIURETIQUE DE TYPE C POUR TRAITER LES DYSPLASIES DU SQUELETTE**

[72] BULLENS, SHERRY, US

[72] BUNTING, STUART, US

[72] CHOU, TIANWEI, US

[72] OKHAMAFE, AUGUSTUS O., US

[72] PRICE, CHRISTOPHER P., DE

[72] WENDT, DANIEL J., US

[72] YAP, CLARENCE, US

[73] BIOMARIN PHARMACEUTICAL INC., US

[85] 2018-01-30

[86] 2016-08-01 (PCT/US2016/044968)

[87] (WO2017/020034)

[30] US (62/199,081) 2015-07-30

[30] US (62/320,704) 2016-04-11

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[11] **2,994,290**  
[13] C

[51] **Int.Cl. E21B 33/124 (2006.01) E21B 34/14 (2006.01)**

[25] EN

[54] **METHOD AND STIMULATION SLEEVE FOR WELL COMPLETION IN A SUBTERRANEAN WELLBORE**

[54] **METHODE ET MANCHON DE STIMULATION DESTINES A LA COMPLETION DE PUIITS DANS UN PUIITS DE FORAGE SOUTERRAIN**

[72] KENT, ANTHONY, US

[73] SUPERSTAGE AS, NO

[86] (2994290)

[87] (2994290)

[22] 2018-02-06

[30] NO (20171752) 2017-11-06

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[11] **2,994,856**  
[13] C

[51] **Int.Cl. H04W 12/062 (2021.01) G06Q 20/40 (2012.01) H04W 4/021 (2018.01)**

[25] EN

[54] **REAL-TIME AUTHORIZATION OF INITIATED DATA EXCHANGES BASED ON TOKENIZED DATA HAVING LIMITED TEMPORAL OR GEOGRAPHIC VALIDITY**

[54] **AUTORISATION EN TEMPS REEL D'ECHANGES DE DONNEES INITIES FONDEE SUR LES DONNEES A JETON AYANT UNE VALIDITE TEMPORAIRE OU GEOGRAPHIQUE LIMITEE**

[72] D'AGOSTINO, DINO PAUL, CA

[72] HALDENBY, PERRY AARON JONES, CA

[72] TSERETOPOULOS, DEAN C.N., CA

[72] ECKER, JEFFREY AARON, CA

[72] MCPHEE, ADAM DOUGLAS, CA

[72] DUNJIC, MILOS, CA

[72] LEE, JOHN JONG-SUK, CA

[72] JAGGA, ARUN VICTOR, CA

[73] THE TORONTO-DOMINION BANK, CA

[86] (2994856)

[87] (2994856)

[22] 2018-02-12

[30] US (15/892,844) 2018-02-09

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January 23, 2024

[11] **2,994,858**  
[13] C  
[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/00 (2006.01)**  
[25] EN  
[54] **ANTI-TIGIT ANTIBODIES AND METHODS OF USE**  
[54] **ANTICORPS ANTI-TIGIT ET METHODES D'UTILISATION**  
[72] GROGAN, JANE L., US  
[72] JOHNSTON, ROBERT J., US  
[72] WU, YAN, US  
[72] LIANG, WEI-CHING, US  
[72] LUPARDUS, PATRICK, US  
[72] YADAV, MAHESH, US  
[72] SESHASAYEE, DHAYA, US  
[72] HAZEN, MEREDITH, US  
[73] GENENTECH, INC., US  
[85] 2018-02-05  
[86] 2016-09-23 (PCT/US2016/053368)  
[87] (WO2017/053748)  
[30] US (62/233,230) 2015-09-25  
[30] US (62/369,299) 2016-08-01

[11] **2,994,936**  
[13] C  
[51] **Int.Cl. G01J 4/04 (2006.01) G01N 21/21 (2006.01) G02B 5/30 (2006.01)**  
[25] EN  
[54] **POLARIZED PIXELATED FILTER ARRAY WITH REDUCED SENSITIVITY TO MISALIGNMENT FOR POLARIMETRIC IMAGING**  
[54] **RESEAU DE FILTRES PIXELISES POLARISES AVEC SENSIBILITE REDUITE AU DEFAUT D'ALIGNEMENT POUR IMAGERIE POLARIMETRIQUE**  
[72] FEST, ERIC C., US  
[72] LEIGH, JON E., US  
[73] RAYTHEON COMPANY, US  
[85] 2018-02-06  
[86] 2016-06-12 (PCT/US2016/037116)  
[87] (WO2017/034651)  
[30] US (14/836,305) 2015-08-26

[11] **2,995,491**  
[13] C  
[51] **Int.Cl. C04B 35/443 (2006.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING MAGNESIUM ALUMINATE SPINELS**  
[54] **PROCEDE DE PRODUCTION DE SPINELLES (ALUMINATE DE MAGNESIUM)**  
[72] PEOPLES, BRIAN, US  
[72] HANN, ALLISON, US  
[73] SASOL (USA) CORPORATION, US  
[85] 2018-02-12  
[86] 2016-09-06 (PCT/US2016/050402)  
[87] (WO2017/044423)  
[30] US (62/215,798) 2015-09-09

[11] **2,995,833**  
[13] C  
[51] **Int.Cl. H04R 7/04 (2006.01) H04R 3/14 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR CONTROLLING PLATE LOUDSPEAKERS USING MODAL CROSSOVER NETWORKS**  
[54] **SYSTEMES ET PROCEDES DE COMMANDE DE HAUT-PARLEURS MONTES SUR PLAQUE AU MOYEN DE FILTRES PASSIFS MODAUX**  
[72] ANDERSON, DAVID ALLAN, US  
[72] BOCKO, MARK F., US  
[73] UNIVERSITY OF ROCHESTER, US  
[85] 2018-02-15  
[86] 2016-08-19 (PCT/US2016/047768)  
[87] (WO2017/031422)  
[30] US (62/207,690) 2015-08-20

[11] **2,996,056**  
[13] C  
[51] **Int.Cl. B01L 9/00 (2006.01)**  
[25] EN  
[54] **PIPETTE-TIP-ACCOMMODATING CONTAINER AND METHOD FOR PROVIDING THE SAME**  
[54] **RECIPIENT DE RECEPTION DE POINTES DE PIPETTES ET PROCEDE DE FOURNITURE CORRESPONDANT**  
[72] KOFLER, GEORG, AT  
[73] GREINER BIO-ONE GMBH, AT  
[85] 2018-02-20  
[86] 2016-08-18 (PCT/AT2016/060031)  
[87] (WO2017/031514)  
[30] AT (A 50732/2015) 2015-08-21

[11] **2,996,821**  
[13] C  
[51] **Int.Cl. F16H 57/04 (2010.01) F16H 57/027 (2012.01) F16H 57/035 (2012.01) F16H 9/12 (2006.01)**  
[25] EN  
[54] **CONTINUOUSLY VARIABLE TRANSMISSION COOLING**  
[54] **REFROIDISSEMENT DE TRANSMISSION A VARIATION CONTINUE**  
[72] DAVIS, HUNTER SCOTT, US  
[73] TEXTRON INC., US  
[86] (2996821)  
[87] (2996821)  
[22] 2018-02-27  
[30] US (15/444,470) 2017-02-28

[11] **2,997,796**  
[13] C  
[51] **Int.Cl. C04B 35/528 (2006.01) B28B 19/00 (2006.01)**  
[25] EN  
[54] **PROCESS FOR COATING A SUBSTRATE WITH A CARBON-BASED MATERIAL**  
[54] **PROCEDE POUR LE REVETEMENT D'UN SUBSTRAT PAR UN MATERIAU A BASE DE CARBONE**  
[72] TRUCA-MARASESCU, FLORINA, CA  
[72] GALLERNAULT, MARY F.M., CA  
[72] LEMAY, REJEAN JOSEPH ROGER, CA  
[72] WARD, JOHN A., CA  
[73] GRAFOID INC., CA  
[85] 2018-03-07  
[86] 2016-09-08 (PCT/CA2016/051056)  
[87] (WO2017/041171)  
[30] US (62/215,544) 2015-09-08

[11] **2,998,471**  
[13] C  
[51] **Int.Cl. G01N 30/86 (2006.01)**  
[25] EN  
[54] **PHASE PREDICTIONS USING GEOCHEMICAL DATA**  
[54] **PREVISIONS DE PHASE A L'AIDE DE DONNEES GEOCHIMIQUES**  
[72] BANG, VISHAL, US  
[72] JOKANOLA, OLUFEMI A. (DECEASED), US  
[73] CONOCOPHILLIPS COMPANY, US  
[85] 2018-03-12  
[86] 2016-09-13 (PCT/US2016/051529)  
[87] (WO2017/048715)  
[30] US (62/218,738) 2015-09-15  
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[13] C

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[54] **IMPROVED ADJUVANTS FOR AGRICULTURAL CHEMICALS**

[54] **ADJUVANTS AMELIORES POUR PRODUITS CHIMIQUES AGRICOLES**

[72] FLEMMENS, MICHAEL S., US

[72] LOTZ, CLAIRE, US

[72] GRAY, VICTORIA, US

[72] AKINS, MAUREEN, US

[72] NIETO, MARCELIANO, US

[73] ATTUNE AGRICULTURE, LLC, US

[85] 2018-03-15

[86] 2016-09-16 (PCT/US2016/052220)

[87] (WO2017/049141)

[30] US (62/219,574) 2015-09-16

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[13] C

[51] **Int.Cl. C10L 1/04 (2006.01) C08L 101/12 (2006.01) C10L 1/06 (2006.01) C10L 1/192 (2006.01)**

[25] EN

[54] **ASSOCIATIVE POLYMERS FOR USE IN A FLOW AND RELATED COMPOSITIONS, METHODS AND SYSTEMS**

[54] **POLYMERES ASSOCIATIFS DESTINES A ETRE UTILISES DANS UN FLUX ET COMPOSITIONS, PROCEDES ET SYSTEMES ASSOCIES**

[72] KORNFIELD, JULIA A., US

[72] WEI, MING-HSIN, US

[73] CALIFORNIA INSTITUTE OF TECHNOLOGY, US

[85] 2018-03-16

[86] 2016-09-19 (PCT/US2016/052554)

[87] (WO2017/049319)

[30] US (62/220,922) 2015-09-18

[30] US (62/236,099) 2015-10-01

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[11] **2,999,505**  
[13] C

[51] **Int.Cl. B65D 41/04 (2006.01) A45F 3/16 (2006.01) B65D 41/26 (2006.01) B65D 47/06 (2006.01)**

[25] EN

[54] **GRAVITY-FLOW FILTER ASSEMBLY**

[54] **ENSEMBLE FILTRE A ECOULEMENT PAR GRAVITE**

[72] PEHAR, DAVID MICHAEL, US

[72] JACKSON, TREVOR L., US

[72] ALLEN, ROBERT CRAIG, US

[72] VITANTONIO, MARC LOUIS, US

[72] CARLSON, JESS PAUL, US

[72] IBRAHIM, WINSTON, US

[72] HOLLAND, JON, US

[73] HYDROS BOTTLE, LLC, US

[85] 2018-03-21

[86] 2016-09-22 (PCT/US2016/053147)

[87] (WO2017/053588)

[30] US (62/232,334) 2015-09-24

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[13] C

[51] **Int.Cl. A61K 38/16 (2006.01) A61K 38/18 (2006.01) C07K 14/00 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR PREVENTION AND TREATMENT OF CORNEAL HAZE AND SCARRING**

[54] **COMPOSITIONS ET METHODES POUR PREVENIR ET TRAITER L'OPACITE ET LA CICATRISATION CORNEENNES**

[72] CHAUHAN, SUNIL, US

[72] DANA, REZA, US

[73] THE SCHEPENS EYE RESEARCH INSTITUTE, INC., US

[85] 2018-03-09

[86] 2016-09-09 (PCT/US2016/050945)

[87] (WO2017/044743)

[30] US (62/217,611) 2015-09-11

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[13] C

[51] **Int.Cl. F27B 1/14 (2006.01) B01J 8/00 (2006.01) C01B 3/38 (2006.01) E04B 2/14 (2006.01) F23M 5/02 (2006.01) F23M 5/06 (2006.01) F28F 9/26 (2006.01)**

[25] EN

[54] **FURNACE TUNNELS AND ASSEMBLY SYSTEM**

[54] **TUNNELS DE FOUR ET SYSTEME D'ASSEMBLAGE**

[72] BARNETT, DANIEL JOSEPH, US

[73] BD ENERGY SYSTEMS, LLC, US

[85] 2018-03-27

[86] 2016-09-27 (PCT/US2016/053876)

[87] (WO2017/058744)

[30] US (62/233,931) 2015-09-28

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[13] C

[51] **Int.Cl. B01L 3/00 (2006.01) C12M 1/00 (2006.01)**

[25] EN

[54] **WELL-PLATE INCUBATOR**

[54] **INCUBATEUR A PLAQUE A CAVITES**

[72] NEWSTROM, RUSSELL, US

[72] MCFARLAND, ANDREW, US

[72] KELLY-GREENE, DARCY, US

[72] NEVILL, J. TANNER, US

[72] WANG, GANG F., US

[73] BERKELEY LIGHTS, INC., US

[85] 2018-03-27

[86] 2016-09-30 (PCT/US2016/054829)

[87] (WO2017/059273)

[30] US (62/235,863) 2015-10-01

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[11] **3,000,615**  
[13] C

[51] **Int.Cl. B42D 25/30 (2014.01) B42D 25/324 (2014.01) B42D 25/342 (2014.01) B42D 25/351 (2014.01) B42D 25/355 (2014.01) B42D 25/425 (2014.01) B42D 25/45 (2014.01)**

[25] EN

[54] **SECURITY DEVICE**

[54] **DISPOSITIF DE SECURITE**

[72] GODFREY, JOHN, GB

[73] DE LA RUE INTERNATIONAL LIMITED, GB

[85] 2018-03-29

[86] 2016-09-27 (PCT/GB2016/053000)

[87] (WO2017/055827)

[30] GB (1517401.4) 2015-10-02

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[13] C

[51] **Int.Cl. A61B 5/055 (2006.01) G01R 33/385 (2006.01) G01R 33/48 (2006.01) G01R 33/54 (2006.01)**

[25] EN

[54] **SELECTIVE SAMPLING FOR ASSESSING STRUCTURAL SPATIAL FREQUENCIES WITH SPECIFIC CONTRAST MECHANISMS**

[54] **ECHANTILLONNAGE SELECTIF POUR EVALUER DES FREQUENCES SPATIALES STRUCTURALES AVEC DES MECANISMES DE CONTRASTE SPECIFIQUES**

[72] CHASE, DAVID R., US  
[72] JAMES, TIMOTHY W., US  
[72] JAMES, KRISTIN E., US  
[73] BIOPROTONICS, INC., US  
[85] 2018-03-29  
[86] 2016-10-07 (PCT/US2016/056147)  
[87] (WO2017/062882)  
[30] US (62/238,121) 2015-10-07  
[30] US (62/302,577) 2016-03-02  
[30] US (15/167,828) 2016-05-27  
[30] US (62/382,695) 2016-09-01

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[11] **3,000,970**  
[13] C

[51] **Int.Cl. A61F 13/12 (2006.01) A61F 9/00 (2006.01)**

[25] EN

[54] **STATIC AND DYNAMIC COMPRESSION THERAPY SYSTEM**

[54] **SYSTEME DE THERAPIE PAR COMPRESSION STATIQUE ET DYNAMIQUE**

[72] WENNEN, DARREN JAY, US  
[72] ZANDER, WADE ANDREW, US  
[72] CHASE, DANIEL G., US  
[72] GAMBLE, KRISTIAN DIOR, US  
[72] RILEY, MARK R., US  
[72] GOLLA, ALISON HUMBLE, US  
[72] HOY, SUNDAY JO, US  
[72] GREEN, JULIE LOUISE, US  
[72] TILK, JASON GRANT, US  
[72] ERTEL, JASON R., US  
[72] COLOSIMO, RACHEL NOTTINGHAM, US  
[72] MCNEELEY, CAROLYN MARIE, US  
[72] BLICE, REBECCA L., US  
[73] TACTILE SYSTEMS TECHNOLOGY, INC., US  
[85] 2018-04-04  
[86] 2016-10-04 (PCT/US2016/055275)  
[87] (WO2017/062339)  
[30] US (62/237,200) 2015-10-05  
[30] US (62/237,209) 2015-10-05  
[30] US (62/237,192) 2015-10-05

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[11] **3,001,123**  
[13] C

[51] **Int.Cl. C07K 4/04 (2006.01) C07K 14/21 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **AXMI554 DELTA-ENDOTOXIN GENE AND METHODS FOR ITS USE**

[54] **GENE AXMI554 DE L'ENDOTOXINE DELTA ET SES PROCEDES D'UTILISATION**

[72] RODGERS-VIEIRA, ELYSE, US  
[72] SAMPSON, KIMBERLY, US  
[72] LEHTINEN, DUANE, US  
[72] LOESEL, PETER, DE  
[72] PORTZ, DANIELA, DE  
[72] CHOUGULE, NANASAHEB, US  
[73] BASF AGRICULTURAL SOLUTIONS SEED US LLC, US  
[85] 2018-04-05  
[86] 2016-10-13 (PCT/US2016/056898)  
[87] (WO2017/066479)  
[30] US (62/241,220) 2015-10-14

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[11] **3,002,144**  
[13] C

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/4188 (2006.01) A61P 35/00 (2006.01) C07D 519/00 (2006.01)**

[25] EN

[54] **EP4 ANTAGONISTS**

[54] **ANTAGONISTES D'EP4**

[72] ZHENG, WANJUN, US  
[72] ZHU, XIAOJIE, US  
[72] DU, HONG, US  
[72] POSTEMA, MAARTEN, US  
[72] JIANG, YIMIN, US  
[72] LI, JING, US  
[72] YU, ROBERT, US  
[72] CHOI, HYEONG-WOOK, US  
[72] LEE, JAEMOON, US  
[72] FANG, FRANK, US  
[72] CUSTAR, DANIEL, US  
[73] EISAI R&D MANAGEMENT CO., LTD., JP  
[85] 2018-04-16  
[86] 2016-10-14 (PCT/US2016/057135)  
[87] (WO2017/066633)  
[30] US (62/242,734) 2015-10-16  
[30] US (62/242,748) 2015-10-16  
[30] BD (252/2016) 2016-10-13

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[13] C

[51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/437 (2006.01) A61K 31/537 (2006.01) A61P 25/06 (2006.01) C07D 498/10 (2006.01)**

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[54] **CGRP RECEPTOR ANTAGONISTS**

[54] **ANTAGONISTES DU RECEPTEUR CGRP**

[72] CHRISTOPHER, JOHN ANDREW, GB  
[72] CONGREVE, MILES STUART, GB  
[72] BUCKNELL, SARAH JOANNE, GB  
[72] DEFLORIAN, FRANCESCA, GB  
[72] PICKWORTH, MARK, GB  
[72] MASON, JONATHAN STEPHEN, GB  
[73] HEPTARES THERAPEUTICS LIMITED, GB  
[85] 2018-04-19  
[86] 2016-10-28 (PCT/IB2016/056517)  
[87] (WO2017/072721)  
[30] GB (1519196.8) 2015-10-30

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[11] **3,002,686**  
[13] C

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[25] EN  
[54] **APPARATUS, SYSTEM AND METHOD FOR A PRESSURE-BASED DETECTION OF A CLOT**  
[54] **DISPOSITIF, SYSTEME ET PROCEDE POUR LA DETECTION BASEE SUR LA PRESSION D'UN CAILLOT**  
[72] THYS, MARTIN, DE  
[72] NOACK, JOACHIM, DE  
[73] FRESENIUS MEDICAL CARE DEUTSCHLAND GMBH, DE  
[85] 2018-04-20  
[86] 2016-10-21 (PCT/EP2016/001762)  
[87] (WO2017/067668)  
[30] DE (10 2015 013 610.0) 2015-10-21

[11] **3,003,191**  
[13] C

- [51] **Int.Cl. C01B 39/04 (2006.01) B01J 29/70 (2006.01)**  
[25] EN  
[54] **HIGHLY HOMOGENOUS ZEOLITE PRECURSORS**  
[54] **PRECURSEURS DE ZEOLITES HAUTEMENT HOMOGENES**  
[72] BATLLO, FRANCOIS, US  
[72] LIN, WENYONG, US  
[72] TATAUROVA, YULIA, US  
[72] SALOMON, GEORGE, US  
[72] JOHN, SHIBY, US  
[73] ECOLAB USA INC., US  
[85] 2018-04-24  
[86] 2016-10-26 (PCT/US2016/058839)  
[87] (WO2017/075035)  
[30] US (62/246,486) 2015-10-26

[11] **3,003,232**  
[13] C

- [51] **Int.Cl. A61B 17/22 (2006.01)**  
[25] EN  
[54] **SYSTEMS FOR THROMBECTOMY**  
[54] **SYSTEMES POUR THROMBECTOMIE**  
[72] SHAMAY, NOAM, IL  
[72] PLIS, RONEN ARIEL, IL  
[72] COHEN, SHAHAR, IL  
[73] AMNIS THERAPEUTICS LTD., IL  
[85] 2018-04-25  
[86] 2016-10-26 (PCT/IL2016/051153)  
[87] (WO2017/072761)  
[30] US (62/246,139) 2015-10-26  
[30] US (62/257,346) 2015-11-19

[11] **3,003,472**  
[13] C

- [51] **Int.Cl. E21B 17/06 (2006.01) E21B 33/10 (2006.01) E21B 43/10 (2006.01) F16L 15/08 (2006.01)**  
[25] EN  
[54] **DOWNHOLE EXPANDABLE TUBULAR MEMBERS WITH SEALED RELEASABLE CONNECTION**  
[54] **ELEMENTS TUBULAIRES EXTENSIBLES EN FOND DE TROU AVEC RACCORD REFERMABLE HERMETIQUEMENT**  
[72] BENNETT, FREDERICK CORNELL, US  
[73] ENVENTURE GLOBAL TECHNOLOGY, INC., US  
[85] 2018-04-26  
[86] 2016-12-14 (PCT/US2016/066478)  
[87] (WO2017/106241)  
[30] US (62/268,024) 2015-12-16

[11] **3,003,643**  
[13] C

- [51] **Int.Cl. B01D 67/00 (2006.01) B01D 71/52 (2006.01)**  
[25] EN  
[54] **METHOD OF PREPARING MEMBRANES**  
[54] **PROCEDE DE PREPARATION DE MEMBRANES**  
[72] GRZELAKOWSKI, MARIUSZ PIOTR, US  
[72] ZHANG, YAN, US  
[73] APPLIED BIOMIMETIC A/S, DK  
[85] 2018-04-30  
[86] 2016-11-21 (PCT/EP2016/078338)  
[87] (WO2017/085322)  
[30] GB (1520466.2) 2015-11-20

[11] **3,004,056**  
[13] C

- [51] **Int.Cl. C12N 15/82 (2006.01)**  
[25] EN  
[54] **TISSUE-PREFERRED PROMOTERS AND METHODS OF USE**  
[54] **PROMOTEURS PREFERES PAR UN TISSU ET PROCEDES D'UTILISATION**  
[72] DA SILVA CONCEICAO, ALEXANDRE, US  
[72] GORDON-KAMM, WILLIAM JAMES, US  
[72] KLEIN, THEODORE MITCHELL, US  
[72] LA ROTA, CARLOS M., US  
[72] LOWE, KEITH S., US  
[73] PIONEER HI-BRED INTERNATIONAL, INC., US  
[85] 2018-05-02  
[86] 2016-08-26 (PCT/US2016/049128)  
[87] (WO2017/112006)  
[30] US (62/271,230) 2015-12-22

[11] **3,004,462**  
[13] C

- [51] **Int.Cl. A47J 31/40 (2006.01) A47J 31/44 (2006.01) B65D 85/804 (2006.01) B67D 1/14 (2006.01)**  
[25] EN  
[54] **BEVERAGE DISPENSER SYSTEMS AND METHODS**  
[54] **SYSTEMES DE DISTRIBUTEUR DE BOISSON ET PROCEDES**  
[72] NACHAWATI, MAHER, US  
[73] PEPSICO, INC., US  
[85] 2018-05-04  
[86] 2016-11-18 (PCT/US2016/062891)  
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[30] US (14/947,636) 2015-11-20

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[13] C

[51] **Int.Cl. A61M 16/12 (2006.01) A61B 5/083 (2006.01) A61B 5/1455 (2006.01)**

[25] EN

[54] **METHOD, APPARATUS AND SYSTEM FOR AUTOMATICALLY CONTROLLING INSPIRED OXYGEN DELIVERY**

[54] **PROCEDE, APPAREIL ET SYSTEME POUR COMMANDER AUTOMATIQUEMENT LA DISTRIBUTION D'OXYGENE INSPIRE**

[72] GALE, TIMOTHY JOHN, AU

[72] DARGAVILLE, PETER ANDERSON, AU

[73] UNIVERSITY OF TASMANIA, AU

[85] 2018-05-08

[86] 2016-11-10 (PCT/AU2016/051077)

[87] (WO2017/079798)

[30] AU (2015904621) 2015-11-10

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[13] C

[51] **Int.Cl. A01D 43/10 (2006.01) A01D 82/00 (2006.01)**

[25] EN

[54] **ROLL GAP ADJUST MECHANISM**

[54] **MECANISME D'AJUSTEMENT DE DEGAGEMENT DE ROULEAU**

[72] ROTOLE, DAVID V., US

[72] CONRAD, ETHAN C., US

[73] DEERE & COMPANY, US

[86] (3004648)

[87] (3004648)

[22] 2018-05-11

[30] US (62/505,602) 2017-05-12

[30] US (62/597,239) 2017-12-11

[30] US (15/963,611) 2018-04-26

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[11] **3,004,920**  
[13] C

[51] **Int.Cl. H01J 37/34 (2006.01) C23C 14/34 (2006.01)**

[25] EN

[54] **SPUTTERING ARRANGEMENT AND SPUTTERING METHOD FOR OPTIMIZED DISTRIBUTION OF THE ENERGY FLOW**

[54] **SYSTEME DE PULVERISATION CATHODIQUE ET PROCEDE PERMETTANT UNE REPARTITION OPTIMISEE DU FLUX ENERGETIQUE**

[72] KRASSNITZER, SIEGFRIED, AT

[72] LENDI, DANIEL, CH

[72] KURAPOV, DENIS, CH

[73] OERLIKON SURFACE SOLUTIONS AG, PFAFFIKON, CH

[85] 2018-05-10

[86] 2016-11-14 (PCT/EP2016/001891)

[87] (WO2017/080672)

[30] US (62/254,451) 2015-11-12

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[11] **3,005,212**  
[13] C

[51] **Int.Cl. C07D 307/81 (2006.01) A61K 31/343 (2006.01) A61K 31/443 (2006.01) C07D 307/79 (2006.01) C07D 405/12 (2006.01)**

[25] EN

[54] **BENZOFURAN DERIVATIVES FOR THE TREATMENT OF CNS AND OTHER DISORDERS**

[54] **DERIVES DE BENZOFURANNE A UTILISER DANS LE TRAITEMENT DE TROUBLES DU SNC ET D'AUTRES TROUBLES**

[72] WARNER, JOHN C., US

[72] CHERUKU, SRINIVASA R., US

[72] GLADDING, JEFFERY A., US

[73] WARNER BABCOCK INSTITUTE FOR GREEN CHEMISTRY, US

[85] 2018-05-11

[86] 2016-11-10 (PCT/US2016/061281)

[87] (WO2017/083488)

[30] US (62/253,903) 2015-11-11

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[11] **3,005,392**  
[13] C

[51] **Int.Cl. B63B 21/50 (2006.01) A62C 4/00 (2006.01) F16C 33/58 (2006.01) F16C 41/00 (2006.01) F16L 27/08 (2006.01) H01R 39/64 (2006.01)**

[25] EN

[54] **BEARING ARRANGEMENT FOR AN ELECTRIC SWIVEL**

[54] **AGENCEMENT DE PALIERS POUR JOINT TOURNANT ELECTRIQUE**

[72] DIXNEUF, GEORGES, MC

[72] BARHOUMI, SAMI, MC

[72] SAGOT, FREDERIC, MC

[72] BOUTAHAR, SAMIR, MC

[72] LALLOUETTE, TERRENCE, MA

[73] SINGLE BUOY MOORINGS INC., CH

[85] 2018-05-15

[86] 2016-11-18 (PCT/EP2016/078175)

[87] (WO2017/085277)

[30] EP (15195405.4) 2015-11-19

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[11] **3,005,456**  
[13] C

[51] **Int.Cl. A47C 7/72 (2006.01) A47C 1/12 (2006.01) F21V 33/00 (2006.01) G08C 17/02 (2006.01) H02J 4/00 (2006.01) H02J 7/00 (2006.01) H04R 5/02 (2006.01)**

[25] EN

[54] **ELECTRONIC FURNITURE SYSTEMS WITH INTEGRATED INTERNAL SPEAKERS**

[54] **SYSTEMES DE MEUBLES ELECTRONIQUES AVEC HAUT-PARLEURS INTERNES INTEGRES**

[72] NELSON, SHAWN D., US

[72] UNDERWOOD, DAVID M., US

[72] KUCHLER, BRIAN, US

[72] COWAN, DAVID M., US

[72] GALLO, ANTHONY, US

[73] THE LOVESAC COMPANY, US

[85] 2018-05-15

[86] 2016-11-11 (PCT/US2016/061491)

[87] (WO2017/087266)

[30] US (62/257,623) 2015-11-19

[30] US (15/270,339) 2016-09-20

[30] US (62/417,091) 2016-11-03

[30] US (15/348,068) 2016-11-10

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[13] C

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[25] EN  
[54] **A MULTI-FUEL ENGINE AND METHOD OF CONTROLLING THE SAME**  
[54] **MOTEUR POLYCARBURANT ET SON PROCEDE DE COMMANDE**  
[72] FINN, PAUL, GB  
[72] WADE, PAM, GB  
[72] BOWER, PETER, GB  
[72] CURRY, NEIL, GB  
[73] FINN ASSOCIATES (BUSINESSCARE) LIMITED, GB  
[73] MERLIN FUEL TECHNOLOGY LIMITED, GB  
[85] 2018-05-16  
[86] 2016-10-10 (PCT/GB2016/053144)  
[87] (WO2017/093706)  
[30] GB (1521071.9) 2015-11-30

[11] **3,005,592**  
[13] C

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[25] EN  
[54] **ANTI-C5 ANTIBODIES AND METHODS OF USE**  
[54] **ANTICORPS ANTI-C5 ET LEURS PROCEDES D'UTILISATION**  
[72] SAMPEI, ZENJIRO, SG  
[73] CHUGAI SEIYAKU KABUSHIKI KAISHA, JP  
[85] 2018-05-16  
[86] 2016-12-16 (PCT/JP2016/087481)  
[87] (WO2017/104779)  
[30] JP (2015-247069) 2015-12-18

[11] **3,005,752**  
[13] C

- [51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **SUTURE DEPLOYMENT OF PROSTHETIC HEART VALVE**  
[54] **DEPLOIEMENT DE SUTURE DE VALVULE CARDIAQUE PROTHETIQUE**  
[72] CHANG, ARVIN T., US  
[72] NEUMANN, YAIR A., US  
[72] SENESH, GIL, US  
[72] ALTMAN, HERNAN, IL  
[72] POOL, SCOTT LOUIS, US  
[72] GIBSON, HANNAH, US  
[72] ANDERSON, AMANDA K., US  
[72] TRAN, PETER PHONG, US  
[72] PHAN, LY TH, US  
[73] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2018-05-17  
[86] 2016-12-02 (PCT/US2016/064802)  
[87] (WO2017/096289)  
[30] US (62/262,307) 2015-12-02  
[30] US (15/366,959) 2016-12-01

[11] **3,006,053**  
[13] C

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[25] EN  
[54] **UNI-PORT HYBRID GAUGE SURGICAL APPARATUSES AND METHODS**  
[54] **APPAREILS ET PROCEDES CHIRURGICAUX A JAUGE HYBRIDE A ORIFICE UNIQUE**  
[72] HALLEN, PAUL R., US  
[72] WALTER J. STARK, III, US  
[73] ALCON INC., US  
[85] 2018-05-23  
[86] 2016-12-13 (PCT/IB2016/057568)  
[87] (WO2017/103778)  
[30] US (62/266,903) 2015-12-14

[11] **3,006,561**  
[13] C

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[25] EN  
[54] **MEMBRANE**  
[54] **MEMBRANE**  
[72] CROWTHER, JON, GB  
[73] SENSOR (UK) LTD, GB  
[85] 2018-05-28  
[86] 2016-11-08 (PCT/GB2016/053487)  
[87] (WO2017/081451)  
[30] GB (1519889.8) 2015-11-11  
[30] GB (1604323.4) 2016-03-14

[11] **3,006,625**  
[13] C

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[25] EN  
[54] **POLYDEXTROSE FOR THE PREVENTION AND/OR TREATMENT OF HEART FAILURE**  
[54] **POLYDEXTROSE POUR LA PREVENTION ET/OU LE TRAITEMENT DE L'INSUFFISANCE CARDIAQUE**  
[72] HEYMES, CHRISTOPHE, FR  
[72] BURCELIN, REMY, FR  
[72] LELOUVIER, BENJAMIN, FR  
[72] AMAR, JACQUES, FR  
[73] VAIOMER, FR  
[73] INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM), FR  
[85] 2018-05-28  
[86] 2016-11-29 (PCT/EP2016/079091)  
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[30] EP (15306893.7) 2015-11-30

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[13] C

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[25] EN

[54] **METHOD FOR PRODUCING COLOR CHARACTERISTIC-CONTROLLED OXIDE PARTICLES, OXIDE PARTICLES, AND COATING OR FILM COMPOSITION CONTAINING SAID OXIDE PARTICLES**

[54] **PROCEDE DE PRODUCTION DE PARTICULES D'OXYDE A CARACTERISTIQUES DE COULEUR CONTROLEES, PARTICULES D'OXYDE, ET COMPOSITION DE REVETEMENT OU COMPOSITION DE FILM COMPORTANT LESDITES PARTICULES D'OXYDE**

[72] ENOMURA, MASAKAZU, JP

[72] HONDA, DAISUKE, JP

[73] M. TECHNIQUE CO., LTD., JP

[85] 2018-05-30

[86] 2017-02-02 (PCT/JP2017/003876)

[87] (WO2017/135393)

[30] JP (2016-018434) 2016-02-02

[30] JP (2016-018435) 2016-02-02

[30] JP (2016-111346) 2016-06-02

[30] JP (PCT/JP2016/066542) 2016-06-03

[30] JP (2016-123800) 2016-06-22

[30] JP (PCT/JP2016/079709) 2016-10-05

[30] JP (PCT/JP2016/079710) 2016-10-05

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[30] JP (PCT/JP2016/083001) 2016-11-07

[30] JP (PCT/JP2016/085460) 2016-11-29

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[13] C

[51] **Int.Cl. H01J 49/10 (2006.01) H05H 1/24 (2006.01)**

[25] EN

[54] **USE OF AN IONIZING DEVICE, DEVICE AND METHOD FOR IONIZING A GASEOUS SUBSTANCE AND DEVICE AND METHOD FOR ANALYZING A GASEOUS IONIZED SUBSTANCE**

[54] **UTILISATION D'UN DISPOSITIF D'IONISATION, DISPOSITIF ET PROCEDE D'IONISATION D'UNE SUBSTANCE GAZEIFORME AINSI QUE DISPOSITIF ET PROCEDE D'ANALYSE D'UNE SUBSTANCE IONISEE GAZEIFORME**

[72] WOLF, JAN-CHRISTOPH, DE

[73] PLASMION GMBH, DE

[85] 2018-06-05

[86] 2016-12-14 (PCT/IB2016/057626)

[87] (WO2017/103819)

[30] DE (10 2015 122 155.1) 2015-12-17

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[13] C

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[25] EN

[54] **EFFICIENT INTERNAL MULTIPLE PREDICTION METHODS**

[54] **PROCEDES DE PREDICTION EFFICACE DE MULTIPLES INTERNES**

[72] ZHANG, YU, US

[72] ZHANG, HAIYAN, US

[73] CONOCOPHILLIPS COMPANY, US

[85] 2018-06-08

[86] 2016-12-06 (PCT/US2016/065139)

[87] (WO2017/100187)

[30] US (62/266,139) 2015-12-11

[30] US (15/370,412) 2016-12-06

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[11] **3,008,062**  
[13] C

[51] **Int.Cl. C21D 9/46 (2006.01) C22C 38/00 (2006.01)**

[25] EN

[54] **METHOD FOR PRODUCING A HIGH STRENGTH STEEL SHEET HAVING IMPROVED DUCTILITY AND FORMABILITY, AND OBTAINED STEEL SHEET**

[54] **PROCEDE POUR LA PRODUCTION D'UNE TOLE D'ACIER A HAUTE RESISTANCE AYANT UNE DUCTILITE ET UNE APTITUDE AU FORMAGE AMELIOREES ET TOLE D'ACIER AINSI OBTENUE**

[72] GOSPODINOVA, MAYA, FR

[72] HEBERT, VERONIQUE, FR

[72] VENKATASURYA, PAVAN, US

[73] ARCELORMITTAL, LU

[85] 2018-06-11

[86] 2016-12-20 (PCT/EP2016/082037)

[87] (WO2017/108866)

[30] IB (PCT/IB2015/059839) 2015-12-21

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[13] C

[51] **Int.Cl. E05B 67/00 (2006.01)**

[25] EN

[54] **PADLOCK ASSEMBLY**

[54] **ENSEMBLE DE CADENAS**

[72] RODAER, MARK D., US

[72] HARVEY, DANIEL D., US

[72] KULKARNI, ROHIT DILIP, US

[73] MASTER LOCK COMPANY LLC, US

[86] (3008424)

[87] (3008424)

[22] 2018-06-14

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[13] C

[51] **Int.Cl. A61N 5/06 (2006.01)**  
[25] FR  
[54] **IMPLANTABLE DEVICE FOR OPTICAL STIMULATION OF THE BRAIN**  
[54] **DISPOSITIF IMPLANTABLE POUR LA STIMULATION OPTIQUE DU CERVEAU**  
[72] CHABROL, CLAUDE, FR  
[72] BENABID, ALIM-LOUIS, FR  
[73] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, FR  
[85] 2018-06-14  
[86] 2016-12-07 (PCT/FR2016/053248)  
[87] (WO2017/103380)  
[30] FR (1562698) 2015-12-17

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[11] **3,008,589**  
[13] C

[51] **Int.Cl. A61K 38/00 (2006.01) A61K 9/12 (2006.01) A61L 26/00 (2006.01) A61P 7/04 (2006.01) A61P 17/02 (2006.01) A61P 43/00 (2006.01) C07K 7/00 (2006.01)**  
[25] EN  
[54] **COMPOSITION FOR HEMOSTASIS AND METHOD FOR HEMOSTASIS USING COMPOSITION FOR HEMOSTASIS**  
[54] **COMPOSITION POUR HEMOSTASE ET PROCEDE POUR HEMOSTASE UTILISANT UNE COMPOSITION POUR HEMOSTASE**  
[72] NAGANO, KEIJI, JP  
[72] KOBAYASHI, SATORU, JP  
[73] 3-D MATRIX, LTD., JP  
[85] 2018-06-14  
[86] 2016-12-14 (PCT/JP2016/087298)  
[87] (WO2017/104723)  
[30] JP (2015-247334) 2015-12-18

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[13] C

[51] **Int.Cl. E21B 21/00 (2006.01) E21B 7/20 (2006.01) E21B 10/18 (2006.01) E21B 10/08 (2006.01)**  
[25] EN  
[54] **CUTTING ASSEMBLY FOR A BORING DEVICE**  
[54] **DISPOSITIF DE COUPE DESTINE A UN APPAREIL DE FORAGE**  
[72] BARBERA, ANTHONY R., US  
[73] BARBCO, INC., US  
[86] (3009327)  
[87] (3009327)  
[22] 2018-06-26  
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[13] C

[51] **Int.Cl. H04W 4/00 (2018.01) G01S 19/16 (2010.01) G01D 21/02 (2006.01)**  
[25] EN  
[54] **METHOD AND MOBILE TRANSCEIVER FOR ASSET TRACKING**  
[54] **PROCEDE ET EMETTEUR-RECEPTEUR MOBILE POUR UN SUIVI D'ACTIF**  
[72] KORNELUK, JOSE EDUARDO, US  
[72] BERRIZ, SERGIO JAVIER, US  
[73] BLACKBERRY LIMITED, CA  
[85] 2018-06-21  
[86] 2016-12-22 (PCT/CA2016/051527)  
[87] (WO2017/117654)  
[30] US (14/987,331) 2016-01-04

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[13] C

[51] **Int.Cl. A61L 2/00 (2006.01) A61M 39/00 (2006.01) A61M 39/16 (2006.01) A61M 39/20 (2006.01)**  
[25] EN  
[54] **DISINFECTION CAP FOR IV NEEDLELESS CONNECTORS**  
[54] **BOUCHON DE DESINFECTION POUR RACCORDS IV SANS AIGUILLE**  
[72] RYAN, KEVIN M., US  
[72] CHARLES, NICHOLA, US  
[73] BECTON, DICKINSON AND COMPANY, US  
[85] 2018-07-03  
[86] 2017-01-17 (PCT/US2017/013787)  
[87] (WO2017/127364)  
[30] US (62/279,986) 2016-01-18  
[30] US (62/300,247) 2016-02-26

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[13] C

[51] **Int.Cl. A01N 59/00 (2006.01) A01P 1/00 (2006.01) C09K 8/524 (2006.01) C09K 8/54 (2006.01) E21B 37/06 (2006.01) E21B 41/02 (2006.01)**  
[25] EN  
[54] **BIOCIDE COMPOSITION AND USE THEREOF**  
[54] **COMPOSITION BIOCIDES ET SON UTILISATION**  
[72] SHIM, SANG HEA, US  
[72] KIM, CHUNG SOO, KR  
[73] JUSTEQ, LLC, US  
[73] ACCULAB CO., LTD., KR  
[85] 2018-07-03  
[86] 2017-01-06 (PCT/US2017/012475)  
[87] (WO2017/120433)  
[30] US (62/275,272) 2016-01-06

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[11] **3,010,670**  
[13] C

[51] **Int.Cl. H02J 3/00 (2006.01) H02J 13/00 (2006.01)**  
[25] FR  
[54] **SYSTEM AND METHOD FOR DYNAMICALLY DETERMINING MAXIMUM ELECTRIC CURRENT CARRYING CAPACITIES**  
[54] **SYSTEME ET PROCEDE DE DETERMINATION DYNAMIQUE DE CAPACITES MAXIMALES DE TRANSPORT DE COURANT ELECTRIQUE**  
[72] BUHAGIAR, THIERRY, FR  
[73] RTE RESEAU DE TRANSPORT D'ELECTRICITE, FR  
[85] 2018-07-05  
[86] 2017-01-19 (PCT/FR2017/050109)  
[87] (WO2017/125683)  
[30] FR (1650466) 2016-01-21

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[13] C

[51] **Int.Cl. H02G 1/12 (2006.01) H01R 43/042 (2006.01) H02G 1/00 (2006.01)**  
[25] EN  
[54] **WIRE STRIPPING DIE FOR CRIMPING TOOL**  
[54] **MATRICE DE DENUDAGE DE FIL POUR UN OUTIL DE SERTISSAGE**  
[72] TROMBLEY, LOGAN, US  
[73] HUBBELL INCORPORATED, US  
[85] 2018-07-05  
[86] 2017-01-06 (PCT/US2017/012522)  
[87] (WO2017/120462)  
[30] US (62/276,008) 2016-01-07

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[13] C

[51] **Int.Cl. E21B 3/02 (2006.01)**  
[25] EN  
[54] **COMPENSATED TOP DRIVE UNIT  
AND ELEVATOR LINKS**  
[54] **UNITE D'ENTRAINEMENT  
SUPERIEURE ET BRAS  
D'ELEVATEUR**  
[72] THIEMANN, BJOERN, DE  
[73] WEATHERFORD TECHNOLOGY  
HOLDINGS, LLC, US  
[85] 2018-07-13  
[86] 2017-01-24 (PCT/US2017/014646)  
[87] (WO2017/132105)  
[30] US (15/005,809) 2016-01-25

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[13] C

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A23C 11/08 (2006.01) A23C 13/14  
(2006.01)**  
[25] EN  
[54] **CREAMER COMPOSITION**  
[54] **COMPOSITION DE COLORANT A  
CAFE**  
[72] LESER, MARTIN, CH  
[72] STUDER, MARIANNE, CH  
[72] PIPE, CHRISTOPHER JAMES, CH  
[72] LORET, CHRYSTEL, CH  
[72] REH, CHRISTOPH, CH  
[72] WAKSMAN, LUCILE, CH  
[72] HEINE, MANUEL, CH  
[72] FRIES, LENNART, CH  
[73] SOCIETE DES PRODUITS NESTLE  
S.A., CH  
[85] 2018-07-16  
[86] 2017-02-03 (PCT/EP2017/052438)  
[87] (WO2017/134253)  
[30] EP (16154267.5) 2016-02-04

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[13] C

[51] **Int.Cl. C05C 3/00 (2006.01) C05C  
5/04 (2006.01) C05F 7/00 (2006.01)  
C05F 9/04 (2006.01)**  
[25] EN  
[54] **METHOD OF PRODUCING A  
FERTILISER COMPOSITION  
FROM ONE OR MORE WASTE  
PRODUCTS AND FERTILISER  
COMPOSITION PRODUCED  
THEREBY**  
[54] **METHODE DE PRODUCTION  
D'UNE COMPOSITION  
D'ENGRAIS A PARTIR D'UN OU  
PLUSIEURS DECHETS, ET  
COMPOSITION D'ENGRAIS AINSI  
PRODUITE**  
[72] HAMMOND, PETER, GB  
[73] CCM TECHNOLOGIES LIMITED, GB  
[85] 2018-07-18  
[86] 2017-01-05 (PCT/GB2017/050015)  
[87] (WO2017/129941)  
[30] GB (1601470.6) 2016-01-26

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[13] C

[51] **Int.Cl. B23B 27/04 (2006.01)**  
[25] EN  
[54] **SWISS TURNING INSERT WITH  
CHIP FORMER ARRANGEMENT  
COMPRISING UPWARDLY  
EXTENDING RIDGE**  
[54] **INSERT DE TOURNAGE SUISSE  
AVEC DISPOSITIF DE  
FORMATION DE COPEAUX  
COMPRENANT UNE ARETE  
VERTICALE**  
[72] MAKHLIN, DIMA, IL  
[72] CHISTYAKOV, SERGEY, IL  
[73] ISCAR LTD., IL  
[85] 2018-07-23  
[86] 2017-02-05 (PCT/IL2017/050133)  
[87] (WO2017/141231)  
[30] US (15/043,685) 2016-02-15

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[13] C

[51] **Int.Cl. C12Q 1/22 (2006.01) A61L  
2/28 (2006.01) C12M 1/34 (2006.01)**  
[25] EN  
[54] **CAPACITOR FOR DETECTING  
VIABLE MICROORGANISMS**  
[54] **CONDENSATEUR SERVANT A  
DETECTER DES MICRO-  
ORGANISMES VIABLES**  
[72] CENTANNI, MICHAEL A., US  
[72] FRANCISKOVICH, PHILLIP P., US  
[72] FIX, KATHLEEN A., US  
[73] AMERICAN STERILIZER  
COMPANY, US  
[85] 2018-07-24  
[86] 2016-12-12 (PCT/US2016/066104)  
[87] (WO2017/131872)  
[30] US (62/286,621) 2016-01-25  
[30] US (62/425,745) 2016-11-23  
[30] US (15/375,256) 2016-12-12

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[11] **3,012,791**  
[13] C

[51] **Int.Cl. A61K 31/437 (2006.01) A61K  
31/5025 (2006.01) A61K 31/519  
(2006.01) A61K 31/5513 (2006.01)  
A61K 31/5517 (2006.01) A61P 17/04  
(2006.01)**  
[25] EN  
[54] **USE OF GABAA RECEPTOR  
MODULATORS FOR  
TREATMENT OF ITCH**  
[54] **UTILISATION DE  
MODULATEURS DES  
RECEPTEURS GABAA POUR LE  
TRAITEMENT DES  
DEMANGEAISONS**  
[72] ZEILHOFER, HANNS ULRICH, CH  
[72] RALVENIUS, WILLIAM, CH  
[73] UNIVERSITAT ZURICH, CH  
[85] 2018-07-26  
[86] 2017-01-27 (PCT/EP2017/051866)  
[87] (WO2017/129801)  
[30] EP (16153035.7) 2016-01-27  
[30] EP (16178824.5) 2016-07-11



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[11] **3,013,415**

[13] C

- [51] **Int.Cl. C01B 3/38 (2006.01)**  
[25] EN  
[54] **CARBON MONOXIDE PRODUCTION PROCESS OPTIMIZED BY SOEC**  
[54] **PROCEDE DE PRODUCTION DE MONOXYDE DE CARBONE OPTIMISE PAR SOEC (CELLULE D'ELECTROLYSE A OXYDE SOLIDE)**  
[72] WENE, HENRIK C.O., SE  
[73] TOPSOE A/S, DK  
[85] 2018-08-01  
[86] 2017-02-20 (PCT/EP2017/053765)  
[87] (WO2017/144403)  
[30] DK (PA 2016 00122) 2016-02-26

[11] **3,013,755**

[13] C

- [51] **Int.Cl. B65D 83/20 (2006.01) B65D 83/30 (2006.01) B65D 83/34 (2006.01) B65D 83/46 (2006.01)**  
[25] EN  
[54] **SINGLE ACTION DISPENSING DEVICE WITH SLIDING SLEEVE HAVING A PLUG**  
[54] **DISPOSITIF DE DISTRIBUTION A ACTION UNIQUE AVEC MANCHON COULISSANT AYANT UN BOUTON**  
[72] SCHROER, DANIEL R., US  
[72] BLACK, MARC S., US  
[72] SCHUETTE, CHAD V., US  
[72] SILER, CHRISTOPHER J., US  
[73] DDP SPECIALTY ELECTRONIC MATERIALS US, LLC, US  
[85] 2018-08-03  
[86] 2017-01-31 (PCT/US2017/015758)  
[87] (WO2017/139131)  
[30] US (62/292,883) 2016-02-09  
[30] US (62/410,412) 2016-10-20

[11] **3,014,261**

[13] C

- [51] **Int.Cl. C09D 175/00 (2006.01)**  
[25] EN  
[54] **AQUEOUS DISPERSIONS COMPRISING MULTISTAGE-PREPARED POLYMERS AND COATING MATERIAL COMPOSITIONS COMPRISING THEM**  
[54] **DISPERSIONS AQUEUSES COMPRENANT DES POLYMERES PREPARES EN PLUSIEURS ETAPES ET COMPOSITIONS DE MATERIAU DE REVETEMENT LES CONTENANT**  
[72] CORTEN, CATHRIN, DE  
[72] EIERHOFF, DIRK, DE  
[72] SCHNIEDERS, BRITTA, DE  
[72] FREITAG, NICOLE, DE  
[72] GRUMPE, HEINZ-ULRICH, DE  
[72] VIENENKOETTER, MECHTHILD, DE  
[72] NICKOLAUS, RALF, DE  
[73] BASF COATINGS GMBH, DE  
[85] 2018-08-10  
[86] 2017-02-23 (PCT/EP2017/054203)  
[87] (WO2017/148796)  
[30] EP (16157995.8) 2016-03-01

[11] **3,015,148**

[13] C

- [51] **Int.Cl. C10G 31/08 (2006.01) C10G 33/08 (2006.01)**  
[25] EN  
[54] **INTERFACE AND MUD CONTROL SYSTEM AND METHOD FOR REFINERY DESALTERS**  
[54] **INTERFACE ET SYSTEME DE REGULATION DE BOUES ET PROCEDE POUR DESSALEURS DE RAFFINERIE**  
[72] KHAN, RAFIQU, US  
[72] SAMS, GARY W., US  
[72] LEE, JOSEPH MIN-HSIUN, US  
[73] CAMERON TECHNOLOGIES LIMITED, NL  
[85] 2018-08-17  
[86] 2017-02-09 (PCT/US2017/017119)  
[87] (WO2017/142779)  
[30] US (15/047,361) 2016-02-18

[11] **3,015,704**

[13] C

- [51] **Int.Cl. F16D 59/02 (2006.01) B60T 17/08 (2006.01)**  
[25] FR  
[54] **RAILROAD BRAKE SYSTEM FOR RAILROAD VEHICLE**  
[54] **SYSTEME DE FREINAGE FERROVIAIRE POUR VEHICULE FERROVIAIRE**  
[72] GONCALVES, CLAUDINO, FR  
[72] BEAUVOIS, DAMIEN, FR  
[73] FAIVELEY TRANSPORT AMIENS, FR  
[85] 2018-08-23  
[86] 2017-03-21 (PCT/FR2017/050658)  
[87] (WO2017/162978)  
[30] FR (1652420) 2016-03-21

[11] **3,016,169**

[13] C

- [51] **Int.Cl. G06F 16/435 (2019.01) H04H 60/46 (2009.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS OF RECOMMENDING MEDIA ASSETS TO USERS BASED ON CONTENT OF OTHER MEDIA ASSETS**  
[54] **PROCEDES ET SYSTEMES DE RECOMMANDATION D'ELEMENTS MULTIMEDIA A DES UTILISATEURS SUR LA BASE DE CONTENUS D'ELEMENTS MULTIMEDIAS**  
[72] KLAPPERT, WALTER R., US  
[72] SHAW, DUSTIN, US  
[72] NICHOLS, MICHAEL R., US  
[72] GARCIA, CHRISTY, US  
[72] NELSON, TRICIA, US  
[72] MARTIN, DEREK, US  
[73] ROVI GUIDES, INC., US  
[85] 2018-08-29  
[86] 2017-02-23 (PCT/US2017/019114)  
[87] (WO2017/151382)  
[30] US (15/056,578) 2016-02-29

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[11] **3,016,808**  
[13] C

[51] **Int.Cl. F24F 12/00 (2006.01) F24F 11/00 (2018.01) F24F 13/30 (2006.01) F28F 3/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR PROVIDING COOLING TO A HEAT LOAD**

[54] **SYSTEMES ET PROCEDES DESTINES A ASSURER LE REFROIDISSEMENT D'UNE CHARGE CALORIFIQUE**

[72] LEPOUDRE, PHILIP PAUL, CA

[72] GERBER, MANFRED, CA

[72] MOGHADDAM, DAVOOD GHADIRI, CA

[73] NORTEK AIR SOLUTIONS CANADA, INC., CA

[85] 2018-09-06

[86] 2017-02-14 (PCT/CA2017/050180)

[87] (WO2017/152268)

[30] CA (PCT/CA2016/050252) 2016-03-08

[30] CA (PCT/CA2016/050507) 2016-05-02

[30] US (62/382,176) 2016-08-31

[11] **3,017,212**  
[13] C

[51] **Int.Cl. C05D 9/00 (2006.01) C05C 9/00 (2006.01) C05C 9/02 (2006.01) C05C 11/00 (2006.01) C05D 9/02 (2006.01)**

[25] EN

[54] **LIQUID FERTILIZER COMPOSITION WITH IRON CHELATED TO AN AMINOPOLYCARBOXYLIC ACID**

[54] **COMPOSITION D'ENGRAIS LIQUIDE COMPOSEE DE FER CHELATE A UN ACIDE AMINOPOLYCARBOXYLIQUE**

[72] CHIA, JAMES LIANG-HIONG, US

[72] KOENIG, JOHN, US

[73] OMS INVESTMENTS, INC., US

[85] 2018-09-07

[86] 2017-03-10 (PCT/US2017/021920)

[87] (WO2017/156464)

[30] US (62/306,721) 2016-03-11

[11] **3,017,525**  
[13] C

[51] **Int.Cl. A61F 5/445 (2006.01) A61F 5/44 (2006.01)**

[25] EN

[54] **SANITARY STOMA SYSTEM AND METHOD**

[54] **APPAREILLAGE ET SYSTEME POUR STOMIE SANITAIRES**

[72] HRUSHKA, GARRY A., CA

[72] HARMAN HRUSHKA, ELIZABETH A., CA

[73] HRUSHKA, GARRY A., CA

[73] HARMAN HRUSHKA, ELIZABETH A., CA

[86] (3017525)

[87] (3017525)

[22] 2018-09-17

[30] US (16132261) 2018-09-14

[11] **3,017,872**  
[13] C

[51] **Int.Cl. F23L 1/00 (2006.01) F23D 14/70 (2006.01) F24D 5/02 (2006.01)**

[25] EN

[54] **FRESH AIR INTAKE FOR LOW NOX EMISSION FURNACE**

[54] **ADMISSION D'AIR FRAIS POUR FOUR A FAIBLE EMISSION DE NOX**

[72] PEREZ, ERIC, US

[72] POIRIER, RANDAL, US

[72] CHANTHALANGSY, ERIC, US

[72] SCHNEIDER, STEVEN, US

[73] LENNOX INDUSTRIES INC., US

[86] (3017872)

[87] (3017872)

[22] 2018-09-19

[30] US (15/723,340) 2017-10-03

[11] **3,017,912**  
[13] C

[51] **Int.Cl. H04H 20/30 (2009.01) H04H 60/11 (2009.01) H04H 60/12 (2009.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR BLENDING AN AUDIO SIGNAL IN AN IN-BAND ON-CHANNEL RADIO SYSTEM**

[54] **PROCEDE ET APPAREIL DE MELANGE D'UN SIGNAL AUDIO DANS UN SYSTEME RADIO INTRABANDE SUR CANAL**

[72] KROEGER, BRIAN W., US

[72] PEYLA, PAUL J., US

[72] BAIRD, JEFFREY S., US

[73] IBIQUITY DIGITAL CORPORATION, US

[85] 2018-09-14

[86] 2017-03-13 (PCT/US2017/022016)

[87] (WO2017/160677)

[30] US (15/071,389) 2016-03-16

[11] **3,018,596**  
[13] C

[51] **Int.Cl. F24F 1/0328 (2019.01) F24F 11/56 (2018.01) F24F 8/108 (2021.01) B01D 46/42 (2006.01)**

[25] EN

[54] **ROOM AIR PURIFIER WITH RFID READER**

[54] **PURIFICATEUR D'AIR DE PIECE A LECTEUR RFID**

[72] LIU, DENG, CN

[72] FOX, ANDREW R., US

[72] CHENG, LIANG, CN

[72] JIANG, WEILAI, CN

[72] YANG, YINGHUA, CN

[72] YANG, ZHIJUN, CN

[72] ZHOU, JIE, CN

[72] CHEN, YIXIONG, CN

[72] CHEN, DANIEL, CN

[72] LIU, PAN, CN

[72] CHEN, LING, CN

[72] TANG, WENQIAN, CN

[73] 3M INNOVATIVE PROPERTIES COMPANY, US

[85] 2018-09-21

[86] 2016-03-24 (PCT/CN2016/077210)

[87] (WO2017/161530)

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[11] **3,018,763**

[13] C

[51] **Int.Cl. H04W 84/20 (2009.01) H04W 56/00 (2009.01) H04W 4/38 (2018.01) H04W 4/029 (2018.01)**

[25] EN

[54] **WORKER SAFETY SYSTEM**

[54] **SYSTEME DE SECURITE DE TRAVAILLEUR**

[72] CROUTHAMEL, L. ROBERT, US

[72] ARUNACHALAM, RAGHU, US

[72] HAAS, BENJAMIN, US

[72] XIN, HENRY, US

[72] MCCrackEN, LISA, US

[72] JUBECK, SCOTT, US

[72] TIMCO, DANIEL JAMES, US

[73] INDUSTRIAL SCIENTIFIC CORPORATION, US

[85] 2018-09-21

[86] 2017-04-19 (PCT/US2017/028320)

[87] (WO2017/184702)

[30] US (62/324,573) 2016-04-19

[30] US (62/364,935) 2016-07-21

[30] US (62/385,688) 2016-09-09

[11] **3,020,311**

[13] C

[51] **Int.Cl. H04B 10/516 (2013.01) H01S 5/026 (2006.01) H01S 5/04 (2006.01) H01S 5/06 (2006.01) H04J 14/00 (2006.01)**

[25] EN

[54] **FIBER COMMUNICATION SYSTEMS AND METHODS**

[54] **SYSTEMES ET PROCEDES DE COMMUNICATION PAR FIBRE**

[72] JIA, ZHENSHENG, US

[72] CAMPOS, LUIS ALBERTO, US

[72] KNITTLE, CURTIS DEAN, US

[73] CABLE TELEVISION

LABORATORIES, INC., US

[85] 2018-10-05

[86] 2017-03-21 (PCT/US2017/023355)

[87] (WO2017/213729)

[30] US (62/321,211) 2016-04-12

[30] US (15/283,632) 2016-10-03

[11] **3,020,820**

[13] C

[51] **Int.Cl. D01D 1/02 (2006.01) C08B 1/00 (2006.01) C08J 3/05 (2006.01) D01F 2/02 (2006.01)**

[25] EN

[54] **A METHOD AND SYSTEM FOR THE PRODUCTION OF A SPINNING DOPE COMPOSITION**

[54] **PROCEDE ET SYSTEME POUR LA PRODUCTION D'UNE COMPOSITION DE SOLUTION DE FILAGE**

[72] OLSSON, CARINA, SE

[72] HAGSTROM, BENGT, SE

[72] KOHNKE, TOBIAS, SE

[73] TREETOTEXTILE AB, SE

[85] 2018-10-12

[86] 2017-04-12 (PCT/EP2017/058785)

[87] (WO2017/178531)

[30] EP (16165374.6) 2016-04-14

[11] **3,021,567**

[13] C

[51] **Int.Cl. B01D 53/14 (2006.01)**

[25] EN

[54] **USE OF MORPHOLINE-BASED HINDERED AMINE COMPOUNDS FOR SELECTIVE REMOVAL OF HYDROGEN SULFIDE**

[54] **UTILISATION DE COMPOSES D'AMINE ENCOMBREE A BASE DE MORPHOLINE POUR L'ELIMINATION SELECTIVE DE SULFURE D'HYDROGENE**

[72] INGRAM, THOMAS, DE

[72] VORBERG, GERALD, DE

[72] ERNST, MARTIN, DE

[72] PEREIRA, CARLA, US

[72] SISKIN, MICHAEL, US

[73] BASF SE, DE

[73] EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY, US

[85] 2018-10-18

[86] 2017-04-05 (PCT/EP2017/058122)

[87] (WO2017/186466)

[30] EP (16166787.8) 2016-04-25

[11] **3,020,209**

[13] C

[51] **Int.Cl. B64D 27/02 (2006.01) B64C 15/14 (2006.01) B64C 27/20 (2023.01) B64C 29/00 (2006.01)**

[25] FR

[54] **DEVICE FOR PROPELLING A PASSENGER**

[54] **DISPOSITIF DE PROPULSION D'UN PASSAGER**

[72] ZAPATA, FRANKIE, FR

[73] ZIPAIR, FR

[85] 2018-10-05

[86] 2017-04-06 (PCT/FR2017/050829)

[87] (WO2017/174944)

[30] FR (1653136) 2016-04-08

[30] FR (1654171) 2016-05-10

[11] **3,022,679**

[13] C

[51] **Int.Cl. C01B 33/04 (2006.01) C08J 3/20 (2006.01) C08K 3/34 (2006.01) C08K 5/19 (2006.01) C08K 9/04 (2006.01)**

[25] EN

[54] **A PROCESS OF MANUFACTURING THICKENERS AND THE USE OF THUS PRODUCED THICKENERS IN HIGH-VISCOSITY UNSATURATED POLYESTER CONTAINING FORMULATIONS**

[54] **PROCEDE DE FABRICATION D'EPAISSISSANTS ET LEURS UTILISATIONS DANS DES FORMULATIONS CONTENANT DU POLYESTER INSATURE A VISCOSITE ELEVEE.**

[72] DZIWOK, KLAUS, DE

[72] COUTELLE, HELMUT, DE

[72] BRIELL, ROBERT, DE

[73] BYK-CHEMIE GMBH, DE

[85] 2018-10-30

[86] 2017-06-19 (PCT/EP2017/064958)

[87] (WO2017/220502)

[30] EP (16175825.5) 2016-06-22

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[11] **3,024,013**  
[13] C

[51] **Int.Cl. C01B 33/44 (2006.01) C08K 3/34 (2006.01) C08L 63/00 (2006.01) C08L 67/06 (2006.01)**

[25] EN

[54] **A PROCESS OF MANUFACTURING THICKENERS AND THE USE OF THUS PRODUCED THICKENERS IN HIGH-VISCOSITY NON AQUEOUS FORMULATIONS**

[54] **PROCEDE DE FABRICATION D'EPAISSISSANTS ET UTILISATION DES EPAISSISSANTS AINSI OBTENUS DANS DES FORMULATIONS NON AQUEUSES A HAUTE VISCOSITE**

[72] DZIWOK, KLAUS, DE  
[72] COUELLE, HELMUT, DE  
[72] BRIELL, ROBERT, DE  
[72] NASH, TYLER, DE  
[73] BYK-CHEMIE GMBH, DE  
[85] 2018-11-13  
[86] 2017-06-19 (PCT/EP2017/064967)  
[87] (WO2017/220507)  
[30] US (15/189,624) 2016-06-22

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[11] **3,024,110**  
[13] C

[51] **Int.Cl. B65D 51/18 (2006.01) B65D 43/00 (2006.01) B65D 43/02 (2006.01)**

[25] EN

[54] **LIQUID CONTAINER LID ASSEMBLY FOR CONTROLLED LIQUID DELIVERY**

[54] **ENSEMBLE DE COUVERCLE DE RECIPIENT DE LIQUIDE POUR DISTRIBUTION CONTROLEE DE LIQUIDE**

[72] SAVENOK, PAVEL, US  
[73] SAVENOK, PAVEL, US  
[85] 2018-11-13  
[86] 2017-05-18 (PCT/US2017/033389)  
[87] (WO2017/201321)  
[30] US (62/338,503) 2016-05-18

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[11] **3,024,284**  
[13] C

[51] **Int.Cl. A61K 31/41 (2006.01) A61K 9/00 (2006.01) A61K 31/16 (2006.01)**

[25] EN

[54] **USE OF CARBAMATE COMPOUND FOR PREVENTING OR TREATING TRIGEMINAL NEURALGIA**

[54] **UTILISATION D'UN COMPOSE CARBAMATE POUR LA PREVENTION OU LE TRAITEMENT DE LA NEURALGIE DU TRIJUMEAU**

[72] JO, MIN JAE, KR  
[72] HWANG, SUN GWAN, KR  
[72] YI, HAN JU, KR  
[73] SK BIOPHARMACEUTICALS CO., LTD., KR  
[85] 2018-11-14  
[86] 2017-05-18 (PCT/KR2017/005172)  
[87] (WO2017/200317)  
[30] KR (10-2016-0061386) 2016-05-19

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[11] **3,024,916**  
[13] C

[51] **Int.Cl. A61K 8/46 (2006.01) A61K 8/24 (2006.01) A61K 8/43 (2006.01) A61Q 11/00 (2006.01)**

[25] EN

[54] **ORAL CARE COMPOSITIONS COMPRISING CHLORHEXIDINE DIGLUCONATE, AN ANIONIC SURFACTANT, AND SHORT CHAIN POLYPHOSPHATE SALT**

[54] **COMPOSITIONS DE SOINS BUCCAUX COMPRENANT UN GLUCONATE DE CHLORHEXIDINE, UN AGENT DE SURFACE ANIONIQUE ET UN SEL DE POLYPHOSPHATE A CHAINE COURTE**

[72] MYERS, CARL, US  
[72] BEGUM-GAFUR, REHANA, US  
[72] DUCHEMIN, KATELYN, US  
[72] MUIR, MELISSA, US  
[73] COLGATE-PALMOLIVE COMPANY, US  
[85] 2018-11-19  
[86] 2017-08-03 (PCT/US2017/045214)  
[87] (WO2018/031357)  
[30] US (62/373,567) 2016-08-11

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[11] **3,026,005**  
[13] C

[51] **Int.Cl. B23K 26/03 (2006.01) B23K 26/21 (2014.01) G01B 5/00 (2006.01) G01B 11/22 (2006.01)**

[25] EN

[54] **DEVICE FOR PROCESS MONITORING DURING LASER MACHINING**

[54] **DISPOSITIF DE SURVEILLANCE DE PROCESSUS DURANT L'USINAGE LASER**

[72] MOSER, RUDIGER, DE  
[73] PRECITEC GMBH & CO. KG, DE  
[85] 2018-11-29  
[86] 2017-05-16 (PCT/EP2017/061673)  
[87] (WO2017/207261)  
[30] DE (10 2016 109 909.0) 2016-05-30

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[11] **3,028,047**  
[13] C

[51] **Int.Cl. B60D 1/155 (2006.01) B60D 1/167 (2006.01)**

[25] FR

[54] **LOCKING DEVICE FOR TELESCOPIC TOW BAR FOR VEHICLE AND TELESCOPIC TOW BAR COMPRISING SUCH A DEVICE**

[54] **DISPOSITIF DE VERROUILLAGE POUR BARRE DE REMORQUAGE TELESCOPIQUE POUR VEHICULE ET BARRE DE REMORQUAGE TELESCOPIQUE COMPRENANT UN TEL DISPOSITIF**

[72] LARUE, THOMAS, FR  
[73] NEXTER SYSTEMS, FR  
[86] (3028047)  
[87] (3028047)  
[22] 2018-12-18

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[11] **3,029,516**  
[13] C

[51] **Int.Cl. H04L 9/32 (2006.01) G06F 21/44 (2013.01) H04L 9/08 (2006.01)**

[25] EN

[54] **TWO-CHANNEL AUTHENTICATION PROXY SYSTEM CAPABLE OF DETECTING APPLICATION TAMPERING AND METHOD THEREFOR**

[54] **SYSTEME MANDATAIRE D'AUTHENTIFICATION A DEUX CANAUX PERMETTANT DE DETECTER L'ALTERATION FRAUDULEUSE D'UNE APPLICATION ET PROCEDE ASSOCIE**

[72] KIM, JUHAN, KR  
[73] KIM, JUHAN, KR  
[85] 2018-12-28  
[86] 2017-06-19 (PCT/KR2017/006406)  
[87] (WO2018/012747)  
[30] KR (10-2016-0088062) 2016-07-12

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[11] **3,029,580**  
[13] C

[51] **Int.Cl. C22B 5/04 (2006.01) B22F 9/20 (2006.01)**

[25] EN

[54] **THERMOCHEMICAL PROCESSING OF EXOTHERMIC METALLIC SYSTEMS**

[54] **TRAITEMENT THERMOCHIMIQUE DE SYSTEMES METALLIQUES EXOTHERMIQUES**

[72] HAIDAR, JAWAD, AU  
[73] KINALTEK PTY. LTD., AU  
[85] 2018-12-31  
[86] 2017-07-06 (PCT/AU2017/050701)  
[87] (WO2018/006133)  
[30] AU (2016902659) 2016-07-06  
[30] AU (2017900864) 2017-03-13

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[11] **3,030,426**  
[13] C

[51] **Int.Cl. B03D 3/06 (2006.01) C02F 1/56 (2006.01)**

[25] EN

[54] **METHOD FOR IMPROVING OVERFLOW CLARITY IN PRODUCTION OF COAL**

[54] **PROCEDE PERMETTANT AMELIORER LA CLARTE DE REFUS DANS UNE PRODUCTION DE CHARBON**

[72] GREULICH, CHRISTOPHER RYAN, US  
[72] MCDONALD, KEVIN, US  
[72] CHENG, WEIGUO, US  
[73] ECOLAB USA INC., US  
[85] 2019-01-09  
[86] 2017-07-13 (PCT/US2017/041900)  
[87] (WO2018/013790)  
[30] US (62/362,924) 2016-07-15

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[11] **3,030,531**  
[13] C

[51] **Int.Cl. B60N 2/07 (2006.01) B60N 2/02 (2006.01) B60N 2/04 (2006.01) B60N 2/06 (2006.01) B60N 2/08 (2006.01)**

[25] EN

[54] **SEAT ADJUSTMENT ASSEMBLY AND VEHICLE WITH ADJUSTABLE SEATS**

[54] **ENSEMBLE DE REGLAGE DE SIEGE ET VEHICULE A SIEGES REGLABLES**

[72] BEAUCHEMIN, ROBIN, CA  
[72] PROVOST, GABRIEL, CA  
[72] GUILLEMETTE, JEAN, CA  
[73] BOMBARDIER RECREATIONAL PRODUCTS INC., CA  
[85] 2019-01-10  
[86] 2017-07-21 (PCT/IB2017/054444)  
[87] (WO2018/020384)  
[30] US (62/367,779) 2016-07-28  
[30] US (62/371,441) 2016-08-05

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[11] **3,030,639**  
[13] C

[51] **Int.Cl. B60F 5/00 (2006.01) B60J 7/10 (2006.01) B60J 7/11 (2006.01) B60J 7/16 (2006.01) B60P 1/64 (2006.01)**

[25] EN

[54] **VEHICLE HAVING A REMOVABLE PANEL ASSEMBLY**

[54] **VEHICULE MUNI D'UN ENSEMBLE PANNEAU AMOVIBLE**

[72] ST-PIERRE, DANY, CA  
[72] NADEAU, DANIEL, CA  
[72] DENIS, ANDRE, CA  
[73] BOMBARDIER RECREATIONAL PRODUCTS INC., CA  
[85] 2019-01-11  
[86] 2017-06-15 (PCT/IB2017/053574)  
[87] (WO2018/025099)  
[30] US (62/369,885) 2016-08-02

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[11] **3,031,178**  
[13] C

[51] **Int.Cl. A61M 5/178 (2006.01) A61B 17/00 (2006.01) A61B 17/12 (2006.01)**

[25] EN

[54] **SYRINGE FOR ADMINISTERING FOAM**

[54] **SERINGUE POUR L'ADMINISTRATION DE MOUSSE**

[72] FAULKNER, DAVID, GB  
[72] ISLER, DANIEL, GB  
[73] PROVENSIS LIMITED, GB  
[85] 2019-01-16  
[86] 2017-07-20 (PCT/IB2017/054404)  
[87] (WO2018/020367)  
[30] GB (1612948.8) 2016-07-26

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[11] **3,031,342**  
[13] C

[51] **Int.Cl. E02F 9/28 (2006.01)**

[25] EN

[54] **LIP SHROUD FOR CAST LIP ON A WORK IMPLEMENT**

[54] **ENVELOPPE DE LEVRE POUR LEVRE DE COULEE SUR UN OUTIL DE TRAVAIL**

[72] KUNZ, PHILLIP JOHN, US  
[73] CATERPILLAR INC., US  
[85] 2019-01-18  
[86] 2017-06-14 (PCT/US2017/037377)  
[87] (WO2018/017207)  
[30] US (15/215,622) 2016-07-21

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[11] **3,032,775**  
[13] C

[51] **Int.Cl. C07K 7/06 (2006.01) A61K 38/03 (2006.01) A61K 45/00 (2006.01) A61K 49/04 (2006.01) A61K 49/06 (2006.01) A61K 49/14 (2006.01) A61P 35/00 (2006.01) C07K 14/00 (2006.01) C07K 19/00 (2006.01) C12N 15/09 (2006.01)**

[25] EN  
[54] **MALIGNANT TUMOR TARGET PEPTIDE**  
[54] **PEPTIDE CIBLE DE TUMEUR MALIGNNE**  
[72] FUKUDA, MICHIKO, JP  
[72] NONAKA, MOTOHIRO, JP  
[73] NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY, JP  
[85] 2019-02-01  
[86] 2017-08-16 (PCT/JP2017/030003)  
[87] (WO2018/034356)  
[30] JP (2016-159743) 2016-08-16

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[11] **3,033,173**  
[13] C

[51] **Int.Cl. G06F 16/22 (2019.01) G06F 16/24 (2019.01)**

[25] EN  
[54] **SYSTEMS, METHODS, AND DATA STRUCTURES FOR HIGH-SPEED SEARCHING OR FILTERING OF LARGE DATASETS**  
[54] **SYSTEMES, PROCEDES, ET STRUCTURES DE DONNEES, POUR LA RECHERCHE OU LE FILTRAGE A VITESSE ELEVEE DE GRANDS ENSEMBLES DE DONNEES**  
[72] WARD, ROY W., US  
[73] MOONSHADOW MOBILE, INC., US  
[85] 2019-02-06  
[86] 2017-07-18 (PCT/US2017/042471)  
[87] (WO2018/031199)  
[30] US (15/233,047) 2016-08-10

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[11] **3,034,415**  
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[51] **Int.Cl. G01S 13/10 (2006.01) G01S 17/10 (2020.01)**

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[54] **METHOD AND DEVICE FOR OPTICAL DISTANCE MEASUREMENT**  
[54] **METHODE ET APPAREIL DE MESURE DE DISTANCE OPTIQUE**  
[72] BIRNBACHER, WOLFGANG, DE  
[73] MICROVISION, INC., US  
[86] (3034415)  
[87] (3034415)  
[22] 2019-02-20  
[30] EP (18157749.5) 2018-02-21

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[11] **3,034,655**  
[13] C

[51] **Int.Cl. B04C 5/10 (2006.01) B03D 1/14 (2006.01)**

[25] EN  
[54] **A HYDROCYCLONE**  
[54] **HYDROCYCLONE**  
[72] RADEMACHER, MARCELO, AU  
[72] CINOTTI, NESTOR, AU  
[73] VULCO S.A., CL  
[85] 2019-02-22  
[86] 2017-09-02 (PCT/AU2017/050950)  
[87] (WO2018/039742)  
[30] AU (2016903534) 2016-09-02

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[11] **3,035,107**  
[13] C

[51] **Int.Cl. C08F 255/02 (2006.01) C08L 51/06 (2006.01)**

[25] EN  
[54] **MODIFIED POLYETHYLENES**  
[54] **POLYETHYLENES MODIFIES**  
[72] YANG, YUNFENG, CN  
[72] CHEN, HONGYU, CN  
[72] WILLIAMSON, ALEXANDER, US  
[72] SEHANOBISH, KALYAN, US  
[72] GOMES, JORGE CAMINERO, BR  
[72] CAI, YU, CN  
[73] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2019-02-26  
[86] 2016-08-31 (PCT/CN2016/097518)  
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[11] **3,035,913**  
[13] C

[51] **Int.Cl. A61B 18/02 (2006.01) A61B 18/00 (2006.01)**

[25] EN  
[54] **COLD ATMOSPHERIC PLASMA TREATMENT OF ACTINIC KERATOSIS AND NON-MELANOMA SKIN CANCER**  
[54] **TRAITEMENT PAR PLASMA FROID ATMOSPHERIQUE DE LA KERATOSE ACTINIQUE ET DU CANCER CUTANE NON MELANOCYTAIRE**  
[72] WIRTZ, MICHELLE, DE  
[73] WIRTZ, MICHELLE, CH  
[85] 2019-03-05  
[86] 2017-10-16 (PCT/EP2017/076354)  
[87] (WO2018/069549)  
[30] US (62/408,765) 2016-10-15  
[30] US (15/640,862) 2017-07-03

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[11] **3,038,036**  
[13] C

[51] **Int.Cl. C07D 257/02 (2006.01) A61K 49/10 (2006.01)**

[25] EN  
[54] **METHOD FOR PRODUCING THE CRYSTALLINE FORM OF MODIFICATION A OF CALCOBUTROL**  
[54] **PROCEDE DE PRODUCTION DE LA FORME CRISTALLINE DE MODIFICATION A DE CALCOBUTROL**  
[72] PLATZEK, JOHANNES, DE  
[72] TRENTMANN, WILHELM, DE  
[73] BAYER PHARMA AKTIENGESELLSCHAFT, DE  
[85] 2019-03-22  
[86] 2017-09-11 (PCT/EP2017/072683)  
[87] (WO2018/059914)  
[30] EP (16190812.4) 2016-09-27

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[51] **Int.Cl. C12C 7/00 (2006.01) C12C 7/06 (2006.01) C12C 7/20 (2006.01) C12C 13/02 (2006.01) B01B 1/02 (2006.01) C12C 7/22 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR WORT GENERATION**

[54] **SYSTEME ET PROCEDE DE GENERATION DE MOUT**

[72] O'REAR, SEAN, US

[72] ZAISER, JAMES C., US

[73] HYDRO-THERMAL CORPORATION, US

[85] 2019-04-03

[86] 2017-10-03 (PCT/US2017/054866)

[87] (WO2018/067513)

[30] US (62/403,407) 2016-10-03

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[11] **3,039,554**  
[13] C

[51] **Int.Cl. B29D 99/00 (2010.01) D01D 1/10 (2006.01)**

[25] EN

[54] **POLYETHYLENE TEREPHTHALATE COLORING SYSTEMS AND RELATED METHODS**

[54] **SYSTEMES DE COLORATION DE POLY(TEREPHTHALATE D'ETHYLENE) ET PROCEDES ASSOCIES**

[72] CLARK, THOMAS R., US

[73] ALADDIN MANUFACTURING CORPORATION, US

[85] 2019-04-03

[86] 2017-11-07 (PCT/US2017/060359)

[87] (WO2018/089346)

[30] US (15/348,591) 2016-11-10

[30] US (15/804,501) 2017-11-06

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[11] **3,040,480**  
[13] C

[51] **Int.Cl. A61M 5/145 (2006.01) A61M 5/24 (2006.01) A61M 5/315 (2006.01)**

[25] EN

[54] **FLUID INJECTOR WITH SYRINGE ENGAGEMENT MECHANISM**

[54] **INJECTEUR DE FLUIDE AVEC MECANISME DE MISE EN PRISE DE SERINGUE**

[72] COWAN, KEVIN, US

[72] SPOHN, MICHAEL, US

[72] TUCKER, BARRY, US

[72] DEDIG, JAMES, US

[72] JOHNSTON, GREGORY, US

[72] MCDERMOTT, MICHAEL, US

[72] BERRY, DAVID, US

[72] STEEGE, ADAM, US

[72] LIPFORD, KEITH, US

[72] LARROW, CHET, US

[72] MUMPOWER, MARIANO, US

[72] GORDON, DANICA, US

[73] BAYER HEALTHCARE LLC, US

[85] 2019-04-12

[86] 2017-10-16 (PCT/US2017/056731)

[87] (WO2018/075379)

[30] US (62/409,044) 2016-10-17

[30] US (62/545,693) 2017-08-15

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[11] **3,040,958**  
[13] C

[51] **Int.Cl. E21B 33/12 (2006.01) E21B 23/06 (2006.01) E21B 33/134 (2006.01)**

[25] EN

[54] **DOWNHOLE PLUG**

[54] **BOUCHON DE FOND DE TROU**

[72] KENNEDY, BRIAN, US

[73] SHALE OIL TOOLS, LLC, US

[86] (3040958)

[87] (3040958)

[22] 2019-04-24

[30] US (15/961,359) 2018-04-24

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[11] **3,042,415**  
[13] C

[51] **Int.Cl. F16S 1/12 (2006.01) A47B 13/08 (2006.01) A47B 96/20 (2006.01) B29C 49/00 (2006.01) E04C 2/22 (2006.01)**

[25] EN

[54] **BLOW-MOLDED RIB STRUCTURE**

[54] **STRUCTURE DE CANNELURE MOULEE PAR SOUFFLAGE**

[72] LIN, CHEN-KANG, CN

[73] DONGGUAN SHICHANG METALS FACTORY LTD., CN

[86] (3042415)

[87] (3042415)

[22] 2019-05-06

[30] US (15/972,375) 2018-05-07

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[11] **3,044,497**  
[13] C

[51] **Int.Cl. C08F 26/02 (2006.01) A61K 6/887 (2020.01) C07C 233/09 (2006.01) C07C 233/20 (2006.01) C07C 233/49 (2006.01)**

[25] EN

[54] **DENTAL COMPOSITION**

[54] **COMPOSITION DENTAIRE**

[72] FIK, CHRISTOPH P., CH

[72] KLEE, JOACHIM E., DE

[72] SCHEUFLER, CHRISTIAN, DE

[72] WEBER, CHRISTOPH, DE

[73] DENTSPLY DETREY GMBH, DE

[85] 2019-05-21

[86] 2017-12-12 (PCT/EP2017/082485)

[87] (WO2018/108948)

[30] EP (16204000.0) 2016-12-14

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[11] **3,044,901**  
[13] C

[51] **Int.Cl. H04W 4/00 (2018.01) H04W 52/02 (2009.01) H04L 67/141 (2022.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR AFFIRMATION OF A BLUETOOTH(R) PAIRING**

[54] **PROCEDES ET SYSTEMES D'AFFIRMATION D'UN APPARIEMENT BLUETOOTH(R)**

[72] CARLSON, CRAIG L., US

[73] F. HOFFMANN-LA ROCHE AG, CH

[85] 2019-05-23

[86] 2017-12-15 (PCT/US2017/066832)

[87] (WO2018/112417)

[30] US (62/435,458) 2016-12-16

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[11] **3,045,755**  
[13] C

[51] **Int.Cl. E21B 47/13 (2012.01) H04B 13/02 (2006.01) G01S 5/00 (2006.01) G01S 11/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR DATA TELEMETRY AMONG ADJACENT BOREHOLES**

[54] **SYSTEME ET PROCEDE DE TELEMETRIE DE DONNEES ENTRE DES TROUS DE FORAGE ADJACENTS**

[72] LOGAN, AARON W., CA  
[72] WEST, KURTIS K. L., CA  
[72] WACKETT, JASON B., CA  
[72] MARTIN, VINCENT RAYMOND, CA  
[72] YOUSEFI KOOPAEL, MAHDI, CA  
[73] EVOLUTION ENGINEERING INC., CA

[85] 2019-05-31  
[86] 2017-12-22 (PCT/CA2017/051606)  
[87] (WO2018/119520)  
[30] US (62/440,618) 2016-12-30

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[11] **3,048,934**  
[13] C

[51] **Int.Cl. H04W 52/14 (2009.01)**

[25] EN

[54] **PATH LOSS ESTIMATION METHODS AND DEVICES**

[54] **PROCEDES ET DISPOSITIFS D'ESTIMATION DE PERTE DE TRAJET**

[72] GONG, ZHENGWEI, CA  
[72] ABDOLI, JAVAD, CA  
[72] BALIGH, MOHAMMADHADI, CA  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN

[85] 2019-06-28  
[86] 2017-12-25 (PCT/CN2017/118368)  
[87] (WO2018/121482)  
[30] US (62/440,464) 2016-12-30

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[11] **3,048,999**  
[13] C

[51] **Int.Cl. A61B 34/10 (2016.01)**

[25] EN

[54] **VIRTUAL OPERATING ROOM LAYOUT PLANNING AND ANALYSIS TOOL**

[54] **OUTIL DE PLANIFICATION ET D'ANALYSE DE LA CONFIGURATION D'UNE SALLE VIRTUELLE D'OPERATION**

[72] ROTENBERG, MICHAEL JONATHAN, CA

[72] DYER, KELLY NOEL, CA  
[72] SRIMOHANARAJAH, KIRUSHA, CA  
[73] SYNAPTIVE MEDICAL INC., CA

[85] 2018-12-11  
[86] 2016-06-13 (PCT/CA2016/050674)  
[87] (WO2017/214696)

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[11] **3,050,506**  
[13] C

[51] **Int.Cl. E04F 17/08 (2006.01) E04B 5/48 (2006.01) E04F 19/08 (2006.01) E04G 15/06 (2006.01) F16L 3/00 (2006.01) F16L 5/00 (2006.01) H02G 3/38 (2006.01)**

[25] EN

[54] **BRACKET FOR POSITIONING AND PROTECTING PIPES IN CONCRETE**

[54] **SUPPORT POUR POSITIONNER ET PROTEGER LES TUYAUX DANS LE BETON**

[72] COSLEY, JAMES W., US  
[72] HART, DENNIS L., US  
[72] O'NEIL, VIRGIL, US  
[73] RELIANCE WORLDWIDE CORPORATION, US

[86] (3050506)  
[87] (3050506)  
[22] 2019-07-24  
[30] US (16/518,787) 2019-07-22  
[30] US (62/703,376) 2018-07-25

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[11] **3,050,764**  
[13] C

[51] **Int.Cl. C12N 5/0783 (2010.01) A61K 35/17 (2015.01) A61K 31/7076 (2006.01) A61P 1/00 (2006.01) A61P 35/00 (2006.01) C07H 19/20 (2006.01) C07K 14/525 (2006.01) C07K 14/54 (2006.01) C07K 16/22 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **ANTI-CANCER T CELLS AND THEIR PREPARATION USING COENZYME A**

[54] **LYMPHOCYTES T ANTICANCEREUX ET LEUR PREPARATION A L'AIDE DE COENZYME A**

[72] ST. PAUL, MICHAEL, CA  
[72] OHASHI, PAM, CA  
[72] SAIBIL, SAM, CA  
[73] UNIVERSITY HEALTH NETWORK, CA

[85] 2019-07-18  
[86] 2017-12-21 (PCT/CA2017/000274)  
[87] (WO2018/132890)  
[30] US (62/447,491) 2017-01-18

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[11] **3,051,151**  
[13] C

[51] **Int.Cl. E21B 19/16 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD OF CONNECTING TUBULARS**

[54] **APPAREIL ET PROCEDE DE RACCORDEMENT D'ELEMENTS TUBULAIRES**

[72] RUEHMANN, RAINER, DE  
[72] HEBEBRAND, CHRISTINA KARIN, DE

[73] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US

[85] 2019-07-19  
[86] 2018-02-01 (PCT/US2018/016480)  
[87] (WO2018/144752)  
[30] US (62/454,382) 2017-02-03  
[30] US (15/455,515) 2017-03-10



**Brevets canadiens délivrés  
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[11] **3,053,228**

[13] C

[51] **Int.Cl. H01F 6/00 (2006.01) H01F 6/04 (2006.01) H01F 6/06 (2006.01)**

[25] EN

[54] **CRYOGENIC MAGNET POWER SUPPLY**

[54] **ALIMENTATION ELECTRIQUE A AIMANT CRYOGENIQUE**

[72] SLADE, ROBERT, GB

[73] TOKAMAK ENERGY LTD, GB

[85] 2019-08-09

[86] 2018-02-07 (PCT/GB2018/050337)

[87] (WO2018/146464)

[30] GB (1702134.6) 2017-02-09

[11] **3,054,650**

[13] C

[51] **Int.Cl. H04B 1/3805 (2015.01) H04B 4/80 (2018.01) G06F 9/445 (2018.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR PROGRAMMING PLUGGABLE TRANSCEIVERS**

[54] **SYSTEME ET PROCEDE DE PROGRAMMATION D'EMETTEURS-RECEPTEURS ENFICHABLES**

[72] HARNEY, GORDON, CA

[73] FONEX DATA SYSTEMS INC., CA

[85] 2019-08-21

[86] 2018-01-11 (PCT/CA2018/050021)

[87] (WO2018/152620)

[30] US (62/463,296) 2017-02-24

[11] **3,055,732**

[13] C

[51] **Int.Cl. B60K 15/063 (2006.01) B60K 15/067 (2006.01) B60K 15/07 (2006.01) B62D 33/023 (2006.01)**

[25] EN

[54] **TAILGATE FUEL STORAGE SYSTEM**

[54] **SYSTEME DE STOCKAGE DE COMBUSTIBLE A HAYON**

[72] SLOAN, TODD, CA

[72] FORSBERG, CHRIS, CA

[73] AGILITY FUEL SYSTEMS LLC, US

[85] 2019-09-06

[86] 2018-02-01 (PCT/US2018/016520)

[87] (WO2018/144780)

[30] US (62/453,442) 2017-02-01

[30] US (62/492,798) 2017-05-01

[11] **3,056,046**

[13] C

[51] **Int.Cl. H04W 24/02 (2009.01) H04W 40/18 (2009.01) H04W 64/00 (2009.01)**

[25] EN

[54] **DYNAMIC PATHLOSS MITIGATION**

[54] **MESURES D'ATTENUATION DE PERTE DE TRAJET DYNAMIQUE**

[72] JOHNSTON, MATTHEW, US

[72] JAHNE, SETH, US

[72] GRISWOLD, ADAM LEE, US

[73] THE BOEING COMPANY, US

[86] (3056046)

[87] (3056046)

[22] 2019-09-19

[30] US (16/212340) 2018-12-06

[11] **3,056,759**

[13] C

[51] **Int.Cl. A61K 9/00 (2006.01)**

[25] EN

[54] **HYDROLYZED COLLAGEN COMPOSITIONS AND METHODS OF MAKING THEREOF**

[54] **COMPOSITIONS DE COLLAGENE HYDROLYSE ET LEURS PROCEDES DE FABRICATION**

[72] ELNAJJAR, ALI, US

[72] MOURAD, ALI, US

[72] BRANT, MARK ERNST, US

[72] LIPPELT, CHRISTOPHER, US

[73] AVICENNA NUTRACEUTICAL, LLC, US

[73] ELNAJJAR, ALI, US

[73] MOURAD, ALI, US

[85] 2019-09-16

[86] 2017-03-20 (PCT/US2017/023181)

[87] (WO2017/165281)

[30] US (62/311,575) 2016-03-22

[11] **3,057,763**

[13] C

[51] **Int.Cl. B60H 1/22 (2006.01) G05D 23/19 (2006.01)**

[25] EN

[54] **TEMPERATURE SENSING AND CONTROL SYSTEM AND METHOD**

[54] **SYSTEME ET METHODE DE DETECTION ET DE REGULATION DE LA TEMPERATURE**

[72] RHODES, TREVOR F., US

[73] POLARIS INDUSTRIES INC., US

[86] (3057763)

[87] (3057763)

[22] 2019-10-07

[30] US (16/156548) 2018-10-10

[11] **3,057,828**

[13] C

[51] **Int.Cl. B60R 11/02 (2006.01) B60R 11/00 (2006.01) B64D 11/00 (2006.01)**

[25] EN

[54] **PIVOTING INTERNAL DISPLAY UNIT WITH FIXED SCREEN**

[54] **UNITE D'AFFICHAGE INTERNE PIVOTANTE A ECRAN FIXE**

[72] LECOMTE, ROMAIN CLAUDE

ANDRE, US

[72] SIMONE, BRIAN ANDREW, US

[72] CARSWELL, SAMUEL A., US

[72] SARGEANT, STEVE B., US

[73] SAFRAN PASSENGER

INNOVATIONS, LLC, US

[85] 2019-09-24

[86] 2018-03-23 (PCT/US2018/024094)

[87] (WO2018/175931)

[30] US (62/476,088) 2017-03-24

[11] **3,058,145**

[13] C

[51] **Int.Cl. H04L 5/00 (2006.01) H04W 28/26 (2009.01) H04W 84/12 (2009.01) H04W 88/08 (2009.01)**

[25] EN

[54] **ALLOCATION OF WIRELESS CHANNELS FOR PREFERRED STATIONS**

[54] **ATTRIBUTION DE CANAUX SANS FIL A DES STATIONS PREFEREES**

[72] ANSLEY, CAROL J., US

[73] ARRIS ENTERPRISES LLC, US

[85] 2019-09-26

[86] 2018-03-02 (PCT/US2018/020688)

[87] (WO2018/182924)

[30] US (15/471,353) 2017-03-28

**Canadian Patents Issued  
January 23, 2024**

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[13] C

[51] **Int.Cl. B61L 29/24 (2006.01) B61L 29/22 (2006.01) B61L 29/32 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR PROVIDING RAILROAD GRADE CROSSING STATUS INFORMATION TO AUTONOMOUS VEHICLES**  
[54] **SYSTEME ET PROCEDE POUR FOURNIR DES INFORMATIONS D'ETAT D'UN PASSAGE A NIVEAU A DES VEHICULES AUTONOMES**  
[72] WYDOTIS, LEONARD, US  
[72] TONDI RESTA, JOSE, US  
[73] SIEMENS MOBILITY, INC., US  
[85] 2019-09-27  
[86] 2017-03-31 (PCT/US2017/025340)  
[87] (WO2018/182679)

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[11] **3,059,119**  
[13] C

[51] **Int.Cl. C12Q 1/6851 (2018.01) C12Q 1/6886 (2018.01)**  
[25] EN  
[54] **MULTIPLEX PCR DETECTION OF ALK, RET, AND ROS FUSIONS**  
[54] **DETECTION PAR PCR MULTIPLEX DE FUSIONS D'ALK, RET ET ROS**  
[72] BEGOVICH, ANN, US  
[72] CHEUNG, CINDY, US  
[72] CHI, JAVELIN, US  
[72] HILLMAN, GRANTLAND, US  
[72] KUO, DWIGHT, US  
[72] LEE, MICHAEL, US  
[72] MA, XIAOJU MAX, US  
[72] MANOHAR, CHITRA, US  
[72] ORDINARIO, ELLEN, US  
[72] RAJAMANI, JAYA, US  
[72] TRUONG, HUAN, US  
[73] F. HOFFMAN-LA ROCHE AG, CH  
[85] 2019-10-04  
[86] 2018-05-30 (PCT/EP2018/064172)  
[87] (WO2018/220004)  
[30] US (62/513,226) 2017-05-31

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[11] **3,060,064**  
[13] C

[51] **Int.Cl. C02F 1/50 (2006.01) A01N 59/00 (2006.01) A01P 1/00 (2006.01) C09K 8/524 (2006.01) C09K 8/54 (2006.01) C09K 8/60 (2006.01) C12Q 1/68 (2018.01)**  
[25] EN  
[54] **ENHANCED KILL OF SULFATE REDUCING BACTERIA USING TIMED SEQUENTIAL ADDITION OF OXYANION AND BIOCIDES**  
[54] **DESTRUCTION AMELIOREE DES BACTERIES SULFATO-REDUCTRICES PAR AJOUT SEQUENTIEL ECHELONNE D'UN OXYANION ET D'UN BIOCIDES**  
[72] JENNEMAN, GARY, US  
[73] CONOCOPHILLIPS COMPANY, US  
[85] 2019-10-15  
[86] 2018-04-12 (PCT/US2018/027277)  
[87] (WO2018/191483)  
[30] US (62/485,176) 2017-04-13  
[30] US (15/951,584) 2018-04-12

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[11] **3,060,080**  
[13] C

[51] **Int.Cl. C12N 15/113 (2010.01) C12N 15/115 (2010.01) A61K 31/4545 (2006.01) A61P 11/00 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR TREATING PULMONARY FIBROSIS**  
[54] **COMPOSITIONS ET PROCEDES DE TRAITEMENT DE LA FIBROSE PULMONAIRE**  
[72] GARCIA, JOE G.N., US  
[72] HECKER, LOUISE, US  
[73] THE UNITED STATES OF AMERICA AS REPRESENTED BY THE DEPARTMENT OF VETERANS AFFAIRS, US  
[73] ARIZONA BOARD OF REGENTS ON BEHALF OF THE UNIVERSITY OF ARIZONA, US  
[85] 2019-10-11  
[86] 2018-04-16 (PCT/US2018/027799)  
[87] (WO2018/191751)  
[30] US (62/485,863) 2017-04-14

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[11] **3,061,168**  
[13] C

[51] **Int.Cl. E21B 29/00 (2006.01) E21B 7/18 (2006.01)**  
[25] EN  
[54] **ABRASIVE SUSPENSION ERODING SYSTEM**  
[54] **SYSTEME D'EROSION PAR SUSPENSION ABRASIVE**  
[72] LINDE, MARCO, DE  
[72] SOLVERSEN, SVEIN H., NO  
[73] ANT APPLIED NEW TECHNOLOGIES AG, DE  
[85] 2019-10-23  
[86] 2017-05-26 (PCT/EP2017/062751)  
[87] (WO2018/215074)

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[11] **3,061,342**  
[13] C

[51] **Int.Cl. C09D 5/18 (2006.01) C08K 5/00 (2006.01) C08L 75/02 (2006.01) C09D 175/00 (2006.01) C09D 175/02 (2006.01)**  
[25] EN  
[54] **QUICK CURING EXTERIOR FLAME RETARDANT COATING COMPOSITIONS FOR WOOD TREATMENT**  
[54] **COMPOSITIONS DE REVETEMENT ININFLAMMABLE EXTERIEUR A DURCISSEMENT RAPIDE POUR LE TRAITEMENT DU BOIS**  
[72] KUANG, MIN, US  
[72] ZHANG, JUN, US  
[73] KOPPERS PERFORMANCE CHEMICALS INC., US  
[85] 2019-10-23  
[86] 2018-04-27 (PCT/US2018/029891)  
[87] (WO2018/204195)  
[30] US (62/492,607) 2017-05-01

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[11] **3,061,704**  
[13] C

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/00 (2006.01) G01N 33/574 (2006.01)**

[25] EN

[54] **ANTI-C-MET ANTIBODY AND USE THEREOF**

[54] **ANTICORPS ANTI-C-MET ET UTILISATION CONNEXE**

[72] MOON, SEUNG KEE, KR

[72] LEE, KYUNG WOO, KR

[72] JEON, EUN JU, KR

[72] AN, KI YOUNG, KR

[72] CHOI, EUN SU, KR

[73] CHONG KUN DANG PHARMACEUTICAL CORP., KR

[85] 2019-10-28

[86] 2018-05-30 (PCT/KR2018/006182)

[87] (WO2018/221969)

[30] KR (10-2017-0067106) 2017-05-30

[30] KR (10-2018-0061888) 2018-05-30

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[11] **3,061,715**  
[13] C

[51] **Int.Cl. E04C 2/292 (2006.01) B32B 5/18 (2006.01) E04C 2/284 (2006.01) E04C 2/296 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR PANELS HAVING AN EMBEDMENT BRACKET**

[54] **PROCEDE ET APPAREIL POUR PANNEAUX AYANT UN SUPPORT D'ENCASTREMENT**

[72] MOFFETT, ANTHONY RYAN, US

[73] WELBILT FSG OPERATIONS, LLC, US

[85] 2019-10-28

[86] 2018-04-24 (PCT/US2018/029078)

[87] (WO2019/005275)

[30] US (15/637,128) 2017-06-29

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[11] **3,062,176**  
[13] C

[51] **Int.Cl. H01M 8/0258 (2016.01) H01M 8/0273 (2016.01) H01M 8/04007 (2016.01) H01M 8/04089 (2016.01) H01M 8/124 (2016.01) H01M 8/2425 (2016.01) H01M 8/2475 (2016.01) H01M 8/248 (2016.01) H01M 8/2483 (2016.01) H01M 8/2485 (2016.01)**

[25] EN

[54] **COMPACT HIGH TEMPERATURE ELECTROCHEMICAL CELL STACK ARCHITECTURE**

[54] **ARCHITECTURE D'EMPILEMENT COMPACT DE PILES ELECTROCHIMIQUES A HAUTE TEMPERATURE**

[72] BROWN, CASY CLOUDLESS, CA

[72] LUC, KHUN BONG, CA

[72] RANKIN, CAMERON JAMES, CA

[73] VERSA POWER SYSTEMS LTD., US

[85] 2019-10-31

[86] 2018-05-04 (PCT/IB2018/053099)

[87] (WO2018/203285)

[30] US (62/501,633) 2017-05-04

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[11] **3,062,901**  
[13] C

[51] **Int.Cl. A61B 5/366 (2021.01) A61B 5/318 (2021.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR QRS COMPLEX DETECTION IN COMPRESSIVELY SENSED ELECTROCARDIOGRAM DATA**

[54] **SYSTEME ET PROCEDE DE DETECTION D'UN COMPLEXE QRS DANS DES DONNEES D'ELECTROCARDIOGRAMME DETECTEES PAR COMPRESSION**

[72] KRISHNAN, SRIDHAR (SRI), CA

[72] PANT, JEEVAN KUMAR, CA

[73] KRISHNAN, SRIDHAR (SRI), CA

[73] PANT, JEEVAN KUMAR, CA

[85] 2019-11-08

[86] 2017-05-11 (PCT/CA2017/050567)

[87] (WO2018/205007)

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[11] **3,063,865**  
[13] C

[51] **Int.Cl. E21B 23/06 (2006.01)**

[25] EN

[54] **PACKER SETTING DEVICE**

[54] **DISPOSITIF DE REGLAGE POUR GARNITURE D'ETANCHEITE**

[72] KENT, ANTHONY, US

[73] SBS TECHNOLOGY AS, NO

[86] (3063865)

[87] (3063865)

[22] 2019-12-05

[30] NO (20181561) 2018-12-05

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[11] **3,065,479**  
[13] C

[51] **Int.Cl. H04L 9/32 (2006.01) H04L 9/14 (2006.01) H04L 9/30 (2006.01)**

[25] EN

[54] **SECURE MANAGEMENT OF TRANSFERS OF DIGITAL ASSETS BETWEEN COMPUTING DEVICES USING PERMISSIONED DISTRIBUTED LEDGERS**

[54] **GESTION SECURISEE DES TRANSFERTS DES BIENS NUMERIQUES ENTRE LES APPAREILS INFORMATIQUES AU MOYEN DE REGISTRES DISTRIBUES AVEC PERMISSION**

[72] SHPUROV, ALEXEY, CA

[72] ROTHENSTEIN, ALBERT LOUIS, CA

[72] MA, ADRIAN CHUNG-HEY, CA

[72] RIZVI, BUTURAB, CA

[72] TSOURKIS, ALEXANDRA, CA

[72] GUTTRIDGE, FRANCIS JAMES ALEXANDER, CA

[73] THE TORONTO-DOMINION BANK, CA

[86] (3065479)

[87] (3065479)

[22] 2019-12-17

[30] US (16/715,076) 2019-12-16

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[11] **3,066,000**  
[13] C

[51] **Int.Cl. H02K 1/2793 (2022.01) H02K 15/03 (2006.01)**  
[25] EN  
[54] **PRE-WARPED ROTORS FOR CONTROL OF MAGNET-STATOR GAP IN AXIAL FLUX MACHINES**  
[54] **ROTORS PREDEFORMES PERMETTANT LA COMMANDE D'UN ESPACE ENTRE UN AIMANT ET UN STATOR DANS DES MACHINES A FLUX AXIAL**  
[72] MILHEIM, GEORGE HARDER, US  
[73] E-CIRCUIT MOTORS, INC., US  
[85] 2019-12-02  
[86] 2018-05-25 (PCT/US2018/034569)  
[87] (WO2018/226434)  
[30] US (62/515,251) 2017-06-05  
[30] US (62/515,256) 2017-06-05  
[30] US (15/983,985) 2018-05-18

[11] **3,066,208**  
[13] C

[51] **Int.Cl. H04W 8/00 (2009.01) H04W 28/06 (2009.01) H04W 84/12 (2009.01)**  
[25] EN  
[54] **WIRELESS COMMUNICATION APPARATUS AND WIRELESS COMMUNICATION METHOD**  
[54] **DISPOSITIF DE COMMUNICATION SANS FIL ET PROCEDE DE COMMUNICATION SANS FIL**  
[72] MOTOZUKA, HIROYUKI, JP  
[72] WEE, YAO HUANG GAIUS, SG  
[72] IRIE, MASATAKA, JP  
[73] PANASONIC INTELLECTUAL PROPERTY CORPORATION OF AMERICA, US  
[85] 2019-12-04  
[86] 2018-05-17 (PCT/JP2018/019003)  
[87] (WO2018/230240)  
[30] US (62/521,107) 2017-06-16  
[30] JP (2018-086877) 2018-04-27

[11] **3,066,788**  
[13] C

[51] **Int.Cl. B04B 11/00 (2006.01)**  
[25] EN  
[54] **FEED BOX FOR DECANTER CENTRIFUGE**  
[54] **BOITE DES AVANCES POUR DECANTEUR CENTRIFUGE**  
[72] LAGACE, DENIS R., CA  
[73] 2460257 ONTARIO INC., CA  
[86] (3066788)  
[87] (3066788)  
[22] 2020-01-07  
[30] US (62/789,691) 2019-01-08

[11] **3,067,087**  
[13] C

[51] **Int.Cl. H04N 21/4405 (2011.01) H04N 21/443 (2011.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR SECURE VIDEO PROCESSING**  
[54] **PROCEDE ET DISPOSITIF DE TRAITEMENT VIDEO SECURISE**  
[72] SLIPKO, ROMAN, NL  
[72] LAZARSKI, WOJCIECH, NL  
[73] LIBERTY GLOBAL EUROPE HOLDING B.V., NL  
[85] 2019-12-12  
[86] 2018-06-12 (PCT/EP2018/065536)  
[87] (WO2018/229066)  
[30] EP (17175764.4) 2017-06-13

[11] **3,067,253**  
[13] C

[51] **Int.Cl. E02D 5/56 (2006.01) E02D 7/22 (2006.01)**  
[25] EN  
[54] **A PILE**  
[54] **PIEU**  
[72] WILLIAMSON, JUSTIN, AU  
[73] PATENTED FOUNDATIONS PTY LTD, AU  
[85] 2019-12-13  
[86] 2018-09-06 (PCT/AU2018/050964)  
[87] (WO2019/051537)  
[30] AU (2017903696) 2017-09-12

[11] **3,068,088**  
[13] C

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 31/352 (2006.01)**  
[25] EN  
[54] **CANNABINOID POUCH**  
[54] **SACHET DE CANNABINOIDES**  
[72] BRUUN, HEIDI ZIEGLER, DK  
[73] NORDICCAN A/S, DK  
[85] 2019-12-20  
[86] 2017-06-23 (PCT/DK2017/050209)  
[87] (WO2018/233781)

[11] **3,069,161**  
[13] C

[51] **Int.Cl. B29C 45/76 (2006.01) B29C 45/17 (2006.01)**  
[25] EN  
[54] **PROGRAMMING A PROTECTION DEVICE FOR A MOLDING MACHINE**  
[54] **PROGRAMMATION D'UN DISPOSITIF DE PROTECTION POUR UNE MACHINE DE MOULAGE**  
[72] WANG, ZHIMING, CA  
[72] DEUTSH, MENNY, CA  
[72] KARNER, RICHARD, CA  
[73] HUSKY INJECTION MOLDING SYSTEMS LTD., CA  
[85] 2020-01-07  
[86] 2018-06-11 (PCT/CA2018/050694)  
[87] (WO2019/014749)  
[30] US (62/535,358) 2017-07-21

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[11] **3,069,246**  
[13] C

[51] **Int.Cl. C01B 32/184 (2017.01) C01B 32/182 (2017.01) C01B 32/19 (2017.01) C01B 32/192 (2017.01) C01B 32/194 (2017.01)**

[25] EN

[54] **SCALABLE FABRICATION OF PRISTINE HOLEY GRAPHENE NANOPATELETS VIA DRY MICROWAVE IRRADIATION**

[54] **FABRICATION EVOLUTIVE DE NANOPLAQUETTES DE GRAPHENE PUR TROUEES PAR IRRADIATION PAR MICRO-ONDES SECHE**

[72] HE, HUIXIN, US

[72] SAVARAM, KEERTHI, US

[72] LI, QINGDONG, US

[73] RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY, US

[85] 2020-01-07

[86] 2018-06-14 (PCT/US2018/037524)

[87] (WO2018/232109)

[30] US (62/519,500) 2017-06-14

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[11] **3,069,743**  
[13] C

[51] **Int.Cl. B01D 29/62 (2006.01) B01D 46/04 (2006.01)**

[25] EN

[54] **SELF-CLEANING AIR FILTER AND CONTROL SYSTEM THEREOF**

[54] **FILTRE A AIR AUTONETTOYANT ET SYSTEME DE CONTROLE CONNEXE**

[72] XU, ZHICHENG, CN

[72] TANG, XIAOLI, CN

[72] CHEN, LIN, CN

[73] ZHEJIANG HAANYO INTELLIGENCE TECHNOLOGY CO., LTD., CN

[86] (3069743)

[87] (3069743)

[22] 2020-01-24

[30] CN (CN 201910078054.2) 2019-01-28

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[11] **3,070,033**  
[13] C

[51] **Int.Cl. G01N 33/18 (2006.01) A01K 61/10 (2017.01) A01K 63/04 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR CENTRALIZED WATER MONITORING IN A FISH FARM**

[54] **SYSTEME ET PROCEDE DE SURVEILLANCE CENTRALISEE DE L'EAU DANS UN PARC DE PISCICULTURE**

[72] OWEN, DAVID ALEXANDER, DK

[73] BLUE UNIT A/S, DK

[85] 2020-01-15

[86] 2017-07-24 (PCT/DK2017/050248)

[87] (WO2018/024305)

[30] DK (PA 2016 70584) 2016-08-05

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[11] **3,070,622**  
[13] C

[51] **Int.Cl. A61B 8/00 (2006.01)**

[25] EN

[54] **METHOD AND DEVICE FOR QUANTIFYING VISCOELASTICITY OF A MEDIUM**

[54] **PROCEDE ET DISPOSITIF DE QUANTIFICATION DE LA VISCOELASTICITE D'UN MILIEU**

[72] HE, QIONG, CN

[72] SHAO, JINHUA, CN

[72] SUN, JIN, CN

[72] DUAN, HOULI, CN

[72] WANG, QIANG, CN

[73] WUXI HISKY MEDICAL TECHNOLOGIES CO., LTD., CN

[85] 2020-01-21

[86] 2018-05-25 (PCT/CN2018/088405)

[87] (WO2019/015397)

[30] CN (201710649552.9) 2017-07-21

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[11] **3,070,695**  
[13] C

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 38/27 (2006.01) A61K 38/28 (2006.01) A61P 3/08 (2006.01) A61P 3/10 (2006.01)**

[25] EN

[54] **THERAPEUTIC AGENT PREPARATIONS FOR DELIVERY INTO A LUMEN OF THE INTESTINAL TRACT USING A SWALLOWABLE DRUG DELIVERY DEVICE**

[54] **PREPARATIONS D'AGENT THERAPEUTIQUE A ADMINISTRER DANS UNE LUMIERE DU TRACTUS INTESTINAL AU MOYEN D'UN DISPOSITIF D'ADMINISTRATION DE MEDICAMENT AVAILABLE**

[72] IMRAN, MIR, US

[73] RANI THERAPEUTICS, LLC, US

[86] (3070695)

[87] (3070695)

[22] 2012-06-29

[62] 2,840,617

[30] US (61/571,679) 2011-06-29

[30] US (61/571,632) 2011-06-29

[30] US (61/571,643) 2011-06-29

[30] US (61/571,686) 2011-06-29

[30] US (61/571,634) 2011-06-29

[30] US (61/571,641) 2011-06-29

[30] US (61/571,687) 2011-06-29

[30] US (61/571,633) 2011-06-29

[30] US (61/571,652) 2011-06-30

[30] US (61/571,642) 2011-06-30

[30] US (61/571,650) 2011-06-30

[30] US (61/571,619) 2011-06-30

[30] US (61/571,631) 2011-06-30

[30] US (61/571,649) 2011-06-30

[30] US (61/571,648) 2011-06-30

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[11] **3,070,721**  
[13] C

[51] **Int.Cl. C12N 15/11 (2006.01) C12Q 1/6869 (2018.01) A01H 1/00 (2006.01) A01H 1/02 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01)**

[25] EN

[54] **POWDERY MILDEW RESISTANCE LOCUS AND MARKERS FOR WINTER SQUASH AND USES THEREOF**

[54] **LOCUS DE RESISTANCE A L'OIDIUM DE LA VIGNE, MARQUEURS POUR LA COURGE D'HIVER ET UTILISATIONS CONNEXES**

[72] SHIN, HISANORI, JP  
[72] SAKAGUCHI, KEITARO, JP  
[72] ASAMI, HIROSHI, JP  
[72] MATSUI, SHINTARO, JP  
[72] KANO, AKIHITO, JP  
[72] KODANI, SAYAKA, JP  
[73] TAKII & COMPANY LIMITED, JP  
[85] 2020-01-21  
[86] 2018-07-31 (PCT/JP2018/028710)  
[87] (WO2019/026924)  
[30] JP (2017-147647) 2017-07-31

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[11] **3,071,560**  
[13] C

[51] **Int.Cl. H04N 21/235 (2011.01) H04H 60/37 (2009.01) H04H 60/58 (2009.01) H04H 60/59 (2009.01) H04N 21/435 (2011.01) H04N 19/467 (2014.01) H04N 19/70 (2014.01)**

[25] EN

[54] **TRANSMISSION APPARATUS, TRANSMISSION METHOD, RECEPTION APPARATUS, AND RECEPTION METHOD**

[54] **DISPOSITIF D'EMISSION, PROCEDE D'EMISSION, DISPOSITIF DE RECEPTION ET PROCEDE DE RECEPTION**

[72] TAKAHASHI, KAZUYUKI, JP  
[72] OHNO, TAKESHI, JP  
[73] SONY CORPORATION, JP  
[85] 2020-01-29  
[86] 2018-07-27 (PCT/JP2018/028202)  
[87] (WO2019/031269)  
[30] JP (2017-156160) 2017-08-10

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[11] **3,072,313**  
[13] C

[51] **Int.Cl. A01D 34/18 (2006.01)**

[25] EN

[54] **SICKLE GUARD COUNTERKNIFE INSERT**

[54] **INSERT DE CONTRE-LAME DE PROTECTION DE FAUCILLE**

[72] SOLIMAR WALTER, AIRTON, BR  
[73] AGCO DO BRAZIL COMERCIO E INDUSTRIA LTDA, BR  
[85] 2020-02-06  
[86] 2018-08-24 (PCT/IB2018/056428)  
[87] (WO2019/048973)  
[30] GB (1714192.0) 2017-09-05

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[11] **3,073,299**  
[13] C

[51] **Int.Cl. A61K 6/898 (2020.01) A61K 6/889 (2020.01)**

[25] EN

[54] **HYDROPHOBICALLY MODIFIED NANOCRYSTALLINE CELLULOSE CONTAINING DENTAL MATERIAL**

[54] **PRODUIT DENTAIRE CONTENANT DE LA CELLULOSE NANOCRYSTALLINE MODIFIEE HYDROPHOBIQUEMENT**

[72] SAILYNOJA, EIJA, FI  
[73] STICK TECH OY, FI  
[85] 2020-02-18  
[86] 2018-08-13 (PCT/FI2018/050583)  
[87] (WO2019/058019)  
[30] FI (20175829) 2017-09-19

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[11] **3,073,896**  
[13] C

[51] **Int.Cl. B01L 3/00 (2006.01) A61J 1/20 (2006.01) G01N 35/10 (2006.01)**

[25] EN

[54] **LIQUID HANDLING SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE DE MANIPULATION DE LIQUIDE**

[72] PETERS, WOLFRAM JULIUS PAUL, NL  
[72] DE HAAN, MICHIEL, NL  
[72] DE JONG, CORNELIA MARIA, NL  
[72] VAN OUDHEUSDEN, FREERK, NL  
[72] MAURICE, INGMAR CHRISTIAAN, NL  
[72] VAN DULLEMEN, MARLIES, NL  
[72] SMETSERS, ANTONIUS FRANCISCUS CORNELIA MARIA, NL  
[72] GARRITSEN, ANJA, NL  
[73] INNATOSS LABORATORIES B.V., NL  
[85] 2020-02-24  
[86] 2018-08-24 (PCT/EP2018/072917)  
[87] (WO2019/038437)  
[30] EP (17187807.7) 2017-08-24

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[11] **3,073,999**  
[13] C

[51] **Int.Cl. H01F 27/04 (2006.01) H01F 27/29 (2006.01)**

[25] EN

[54] **HIGH-VOLTAGE DEVICE HAVING CERAMIC SPACER ELEMENTS, AND USE THEREOF**

[54] **APPAREIL HAUTE TENSION POURVU D'ELEMENTS ESPACEURS CERAMIQUES ET SON UTILISATION**

[72] GOPFERT, ROBERT, DE  
[72] MULLER, SEBASTIAN, DE  
[73] SIEMENS AKTIENGESELLSCHAFT, DE  
[85] 2020-02-26  
[86] 2018-09-13 (PCT/EP2018/074683)  
[87] (WO2019/063300)  
[30] DE (10 2017 217 150.2) 2017-09-27

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[11] **3,074,123**  
[13] C

[51] **Int.Cl. H04W 48/04 (2009.01) H04W 4/02 (2018.01) H04W 88/02 (2009.01) H04W 4/80 (2018.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR PREVENTING USE OF A MOBILE DEVICE WHILE OPERATING A VEHICLE**

[54] **APPAREIL ET PROCÉDE POUR EMPECHER L'UTILISATION D'UN DISPOSITIF MOBILE PENDANT LE FONCTIONNEMENT D'UN VEHICULE**

[72] POULAIN, ANGUS, CA  
[72] POULAIN, JOSH, CA  
[73] DRIVECARE INTERNATIONAL B.V., NL  
[85] 2020-02-27  
[86] 2017-09-08 (PCT/CA2017/051057)  
[87] (WO2018/045468)  
[30] CA (2,941,368) 2016-09-08

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[11] **3,075,130**  
[13] C

[51] **Int.Cl. F16B 5/07 (2006.01) E04B 1/38 (2006.01) F16B 1/00 (2006.01)**

[25] EN

[54] **FRICION PLATE FOR A TIMBER JOINT**

[54] **PLAQUE DE FRICTION POUR UN ASSEMBLAGE DE BOIS**

[72] CERA, UDO, DE  
[73] WURTH INTERNATIONAL AG, CH  
[86] (3075130)  
[87] (3075130)  
[22] 2020-03-11  
[30] DE (DE 10 2019 106 602.6) 2019-03-15

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[11] **3,075,892**  
[13] C

[51] **Int.Cl. C07D 249/08 (2006.01) A61K 31/4196 (2006.01) A61K 31/4439 (2006.01) A61K 31/454 (2006.01) A61K 31/5377 (2006.01) A61P 1/00 (2006.01) A61P 1/02 (2006.01) A61P 1/04 (2006.01) A61P 1/16 (2006.01) A61P 1/18 (2006.01) A61P 3/00 (2006.01) A61P 3/10 (2006.01) A61P 9/04 (2006.01) A61P 9/10 (2006.01) A61P 11/00 (2006.01) A61P 11/06 (2006.01) A61P 11/08 (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 19/02 (2006.01) A61P 21/02 (2006.01) A61P 25/00 (2006.01) A61P 25/02 (2006.01) A61P 25/08 (2006.01) A61P**

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[25] EN

[54] **HETEROCYCLIC COMPOUNDS FOR THE TREATMENT AND/OR PREVENTION OF INFLAMMATORY DISEASES**

[54] **COMPOSES HETEROCYCLIQUES POUR LE TRAITEMENT ET/OU LA PREVENTION DES MALADIES INFLAMMATOIRES**

[72] TANIGUCHI, TORU, JP  
[72] IWAMOTO, OSAMU, JP  
[72] SAITO, KEIJI, JP  
[72] NAKAJIMA, KATSUYOSHI, JP  
[72] OGAWA, YASUYUKI, JP  
[72] KURIKAWA, NOBUYA, JP  
[72] NAGATA, SEIKO, JP  
[72] ITO, KAORI, JP  
[72] KIOI, ERIKO, JP  
[73] DAIICHI SANKYO COMPANY, LIMITED, JP  
[85] 2020-03-13  
[86] 2018-09-13 (PCT/JP2018/033909)  
[87] (WO2019/054427)  
[30] JP (2017-176891) 2017-09-14

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[11] **3,077,037**  
[13] C

[51] **Int.Cl. C08G 63/664 (2006.01) C08G 63/91 (2006.01) C08G 65/332 (2006.01) D06M 15/00 (2006.01)**

[25] EN

[54] **ESTERS OF POLYLACTIC ACID AND COMPOSITIONS THEREOF**

[54] **ESTERS D'ACIDE POLYLACTIQUE ET COMPOSITIONS CONNEXES**

[72] LANGLEY, JEFFREY T., US  
[72] MCCOY, KAY M., US  
[72] MEREDITH, PAUL C., US  
[73] FASHION CHEMICALS GMBH & CO. KG, DE  
[73] LANGLEY, JEFFREY T., US  
[73] MCCOY, KAY M., US  
[73] MEREDITH, PAUL C., US  
[85] 2020-03-25  
[86] 2018-10-04 (PCT/US2018/054327)  
[87] (WO2019/070950)  
[30] US (62/568,246) 2017-10-04

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[11] **3,077,192**  
[13] C

[51] **Int.Cl. F21V 21/088 (2006.01) F21L 4/00 (2006.01)**

[25] EN

[54] **CLAMPING WORK LIGHT**

[54] **LAMPE DE TRAVAIL AVEC FIXATION**

[72] CACCIABEVE, ROBERT, US  
[73] WALTER R. TUCKER ENTERPRISES, LTD., D/B/A E-Z RED COMPANY, US  
[86] (3077192)  
[87] (3077192)  
[22] 2020-03-26  
[30] US (62/826,032) 2019-03-29  
[30] US (16/829,922) 2020-03-25

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[13] C

[51] **Int.Cl. H01R 13/10 (2006.01) H01R 13/05 (2006.01) H01R 13/62 (2006.01) H01R 13/627 (2006.01) H01R 13/652 (2006.01) H01R 25/00 (2006.01)**

[25] EN

[54] **APPARATUS FOR PROVIDING POWER FOR MULTIPLE TYPES OF PLUGS VIA A SINGLE RECEPTACLE**

[54] **APPAREIL POUR FOURNIR DE L'ENERGIE POUR DE MULTIPLES TYPES DE FICHES PAR L'INTERMEDIAIRE D'UNE PRISE UNIQUE**

[72] HUTCHISON, GORDON, GB

[72] RILEY, SAM, GB

[72] CASE, ANDREW, GB

[72] LEWIS, SIMON, GB

[72] WILSON, BRAD, US

[73] VERTIV CORPORATION, US

[85] 2020-03-31

[86] 2018-11-02 (PCT/US2018/059031)

[87] (WO2019/090129)

[30] US (62/580,876) 2017-11-02

[30] US (16/179,266) 2018-11-02

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[11] **3,081,928**  
[13] C

[51] **Int.Cl. F16L 21/06 (2006.01) F16L 23/08 (2006.01)**

[25] EN

[54] **PIPE ELEMENT HAVING WEDGING GROOVE**

[54] **ELEMENT DE TUYAU AYANT UNE RAINURE DE SOUDAGE**

[72] MADARA, SCOTT D., US

[72] SHAH, AMIT R., US

[72] DOLE, DOUGLAS R., US

[73] VICTAULIC COMPANY, US

[86] (3081928)

[87] (3081928)

[22] 2017-01-19

[62] 3,012,045

[30] US (62/287,015) 2016-01-26

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[11] **3,082,457**  
[13] C

[51] **Int.Cl. H01B 1/22 (2006.01) C09D 11/52 (2014.01) H01B 1/02 (2006.01) H01B 5/14 (2006.01) H01B 13/00 (2006.01) H05K 1/09 (2006.01) H05K 3/10 (2006.01)**

[25] EN

[54] **A COPPER COMPOSITION, ITS USE AS A CONDUCTOR AND THE METHOD OF MANUFACTURE**

[54] **COMPOSITION DE CUIVRE, UTILISATION COMME CONDUCTEUR ET METHODE DE FABRICATION**

[72] URASHIMA, KOHSUKE, JP

[72] EJIRI, YOSHINORI, JP

[72] NOHDOH, TAKAAKI, JP

[72] YONEKURA, MOTOKI, JP

[72] AKEBI, RYUJI, JP

[73] RESONAC CORPORATION, JP

[85] 2020-05-12

[86] 2018-11-13 (PCT/JP2018/042000)

[87] (WO2019/098196)

[30] JP (2017-219061) 2017-11-14

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[11] **3,083,769**  
[13] C

[51] **Int.Cl. A61K 8/9789 (2017.01) A61Q 19/00 (2006.01)**

[25] EN

[54] **COMPOSITION FOR SEBUM CONTROL AND PORE MINIMIZING**

[54] **COMPOSITION DE REGULATION DU SEBUM MINIMALISANT LES PORES**

[72] KIM, JEONG HWAN, KR

[73] AMOREPACIFIC CORPORATION, KR

[85] 2020-05-27

[86] 2018-09-21 (PCT/KR2018/011291)

[87] (WO2019/107723)

[30] KR (10-2017-0160504) 2017-11-28

[30] KR (10-2018-0113116) 2018-09-20

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[11] **3,084,719**  
[13] C

[51] **Int.Cl. H04W 88/18 (2009.01) H04L 67/14 (2022.01) H04L 67/51 (2022.01)**

[25] EN

[54] **SERVICE REGISTRATION IN A COMMUNICATIONS NETWORK**

[54] **ENREGISTREMENT DE SERVICE DANS UN RESEAU DE COMMUNICATION**

[72] PUENTE PESTANA, MIGUEL ANGEL, ES

[72] BARTOLOME RODRIGO, MARIA CRUZ, ES

[73] TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE

[85] 2020-04-16

[86] 2018-10-03 (PCT/EP2018/076936)

[87] (WO2019/076634)

[30] EP (17382692.6) 2017-10-17

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[11] **3,085,304**  
[13] C

[51] **Int.Cl. F03G 7/00 (2006.01) H10N 15/20 (2023.01) H02K 35/00 (2006.01)**

[25] EN

[54] **GENERATOR**

[54] **GENERATEUR**

[72] KOMKOMMER, DANIEL, NL

[73] HELIOS NOVA B.V., NL

[85] 2020-06-09

[86] 2018-12-12 (PCT/NL2018/050836)

[87] (WO2019/117719)

[30] NL (2020065) 2017-12-12

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[11] **3,085,859**  
[13] C

[51] **Int.Cl. E02D 1/00 (2006.01) E02D 3/02 (2006.01)**

[25] EN

[54] **SOIL COMPACTION METHOD USING A LASER SCANNER**

[54] **METHODE DE COMPACTAGE DU SOL A L'AIDE D'UN LECTEUR LASER**

[72] QUANDALLE, BENOIT, FR

[72] BUNIESKI, SIMON, FR

[73] SOLETANCHE FREYSSINET, FR

[85] 2020-06-16

[86] 2018-12-18 (PCT/FR2018/053359)

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[30] FR (17 62737) 2017-12-21



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[13] C

- [51] **Int.Cl. H04W 72/40 (2023.01)**  
[25] EN  
[54] **METHOD FOR TRANSMITTING DATA IN INTERNET OF VEHICLES, TERMINAL DEVICE AND NETWORK DEVICE**  
[54] **PROCEDE DE TRANSMISSION DE DONNEES DANS L'INTERNET DES VEHICULES, DISPOSITIF TERMINAL ET DISPOSITIF RESEAU**  
[72] TANG, HAI, CN  
[72] LIN, HUEI-MING, AU  
[73] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN  
[85] 2020-07-03  
[86] 2018-08-16 (PCT/CN2018/100790)  
[87] (WO2019/134370)  
[30] CN (PCT/CN2018/071371) 2018-01-04

[11] **3,089,608**  
[13] C

- [51] **Int.Cl. C12Q 1/6874 (2018.01) C12Q 1/6888 (2018.01) C12Q 1/689 (2018.01)**  
[25] EN  
[54] **SOIL HEALTH INDICATORS USING MICROBIAL COMPOSITION**  
[54] **INDICATEURS DE LA SANTE DU SOL UTILISANT UNE COMPOSITION MICROBIENNE**  
[72] PARAMESWARAN, POORNIMA, US  
[72] PLACELLA, SARAH, US  
[72] WU, DI, US  
[72] WEAVER, DANIEL S., US  
[72] LANG, JENNA MORGAN, US  
[73] TRACE GENOMICS, INC., US  
[85] 2020-07-24  
[86] 2019-01-25 (PCT/US2019/015264)  
[87] (WO2019/148017)  
[30] US (62/622,067) 2018-01-25  
[30] US (62/622,061) 2018-01-25  
[30] US (62/622,059) 2018-01-25  
[30] US (62/622,071) 2018-01-25  
[30] US (62/622,060) 2018-01-25  
[30] US (62/622,062) 2018-01-25  
[30] US (62/622,063) 2018-01-25  
[30] US (62/622,064) 2018-01-25  
[30] US (62/622,070) 2018-01-25  
[30] US (62/657,590) 2018-04-13

[11] **3,089,957**  
[13] C

- [51] **Int.Cl. A61B 5/00 (2006.01) G16H 50/20 (2018.01) G16H 50/30 (2018.01)**  
[25] EN  
[54] **SYSTEM AND METHODS FOR PREDICTING DRUG-INDUCED INOTROPIC AND PRO-ARRHYTHMIA RISK**  
[54] **SYSTEME ET PROCEDES POUR PREDIRE UN RISQUE INOTROPE INDUIT PAR UN MEDICAMENT ET UN RISQUE DE PRO-ARRHYTHMIE**  
[72] ABI GEORGES, NAJAH ELIAS, US  
[72] GHETTI, ANDREA PIERO, US  
[72] MILLER, PAUL EDWARD, US  
[73] ANABIOS CORPORATION, US  
[85] 2020-07-29  
[86] 2018-02-01 (PCT/US2018/016504)  
[87] (WO2018/144770)  
[30] US (62/454,786) 2017-02-04

[11] **3,090,531**  
[13] C

- [51] **Int.Cl. A01C 1/02 (2006.01) G06T 7/50 (2017.01) A01C 1/04 (2006.01) B07B 13/04 (2006.01) B07B 13/08 (2006.01) B07C 5/342 (2006.01) G01N 23/083 (2018.01) G06T 7/60 (2017.01)**  
[25] EN  
[54] **SEED ANALYSIS**  
[54] **ANALYSE DE GRAINES**  
[72] CHEN, HSIN-CHEN, US  
[72] KOTYK, JOHNNY J., US  
[73] MONSANTO TECHNOLOGY LLC, US  
[85] 2020-08-05  
[86] 2019-02-08 (PCT/US2019/017171)  
[87] (WO2019/157254)  
[30] US (62/628,114) 2018-02-08

[11] **3,091,035**  
[13] C

- [51] **Int.Cl. G06V 10/82 (2022.01) G06V 10/44 (2022.01) G06V 20/58 (2022.01) G06N 3/044 (2023.01) G06N 3/0455 (2023.01) G06N 3/092 (2023.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR POLYGON OBJECT ANNOTATION AND A METHOD OF TRAINING AN OBJECT ANNOTATION SYSTEM**  
[54] **SYSTEMES ET PROCEDES D'ANNOTATION POLYGONALE D'OBJETS ET PROCEDE D'APPRENTISSAGE D'UN SYSTEME D'ANNOTATION D'OBJETS**  
[72] FIDLER, SANJA, CA  
[72] KAR, AMLAN, CA  
[72] LING, HUAN, CA  
[72] GAO, JUN, CA  
[72] CHEN, WENZHENG, CA  
[72] ACUNA MARRERO, DAVID, CA  
[73] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA  
[85] 2020-08-12  
[86] 2019-03-25 (PCT/CA2019/050362)  
[87] (WO2019/178702)  
[30] US (62/646,934) 2018-03-23  
[30] US (62/783,251) 2018-12-21

[11] **3,092,622**  
[13] C

- [51] **Int.Cl. C10G 3/00 (2006.01) C07C 1/00 (2006.01) C10G 25/00 (2006.01) C10G 67/06 (2006.01) C10L 1/02 (2006.01) C10L 8/00 (2006.01) C11C 3/12 (2006.01)**  
[25] EN  
[54] **METHOD OF PROCESSING A BIO-BASED MATERIAL AND APPARATUS FOR PROCESSING THE SAME**  
[54] **PROCEDE ET APPAREIL DE TRAITEMENT DE BIOMATERIAU**  
[72] LAOHAKUNAKORN, WINAI, TH  
[72] SIRIMITRTRAKUL, SUPAKORN, TH  
[72] BOONSIT, NOPPORN, TH  
[73] GREEN TECHNOLOGY RESEARCH CO., LTD, TH  
[85] 2020-08-31  
[86] 2019-04-30 (PCT/TH2019/000010)  
[87] (WO2019/212421)  
[30] SG (10201803633U) 2018-04-30  
[30] SG (10201805293X) 2018-06-20

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[13] C

[51] **Int.Cl. C11D 17/00 (2006.01) B08B 3/08 (2006.01) C11D 1/66 (2006.01) C11D 1/88 (2006.01) C11D 1/94 (2006.01) C11D 3/10 (2006.01) C11D 3/20 (2006.01) C11D 3/386 (2006.01)**

[25] EN

[54] **SOLID ENZYMATIC DETERGENT COMPOSITIONS AND METHODS OF USE AND MANUFACTURE**

[54] **COMPOSITIONS DETERGENTES ENZYMATIQUES SOLIDES ET PROCEDES D'UTILISATION ET DE FABRICATION**

[72] OLSON, ERIK C., US

[72] RIEHM, DAVID, US

[72] SILVERNAIL, CARTER M., US

[72] FINSTER, OLIVIA N.L., US

[72] RISCHMILLER, MICHAEL S., US

[72] MEIER, TIMOTHY, US

[73] ECOLAB USA INC., US

[85] 2020-09-04

[86] 2019-03-08 (PCT/US2019/021307)

[87] (WO2019/173688)

[30] US (62/640,324) 2018-03-08

[30] US (62/807,070) 2019-02-18

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[11] **3,093,476**  
[13] C

[51] **Int.Cl. B63G 8/00 (2006.01) B63B 17/00 (2006.01) B63B 35/00 (2020.01) B63H 1/00 (2006.01)**

[25] EN

[54] **SUBSURFACE MULTI-MISSION DIVER TRANSPORT VEHICLE**

[54] **VEHICULE DE TRANSPORT DE PLONGEUR MULTI-MISSION SOUS-MARIN**

[72] FUQUA, CHARLES LOUIS, US

[72] KAHRE, STEVEN SCOTT, US

[73] PATRIOT3, INC., US

[85] 2020-09-09

[86] 2019-03-11 (PCT/US2019/021626)

[87] (WO2019/173825)

[30] US (62/640,905) 2018-03-09

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[11] **3,094,001**  
[13] C

[51] **Int.Cl. C07D 241/38 (2006.01) A61K 31/498 (2006.01) A61P 9/00 (2006.01) A61P 25/00 (2006.01)**

[25] EN

[54] **RECEPTOR INHIBITOR, PHARMACEUTICAL COMPOSITION COMPRISING SAME, AND USE THEREOF**

[54] **INHIBITEUR DE RECEPTEUR, COMPOSITION PHARMACEUTIQUE LE COMPRENANT ET SON UTILISATION**

[72] ZHAO, YANPING, CN

[72] WANG, HONGJUN, CN

[72] WANG, YEMING, CN

[72] LI, XIANG, CN

[72] JIANG, YUANYUAN, CN

[72] HUANG, HUALI, CN

[72] LI, FAJIE, CN

[72] ZHOU, LIYING, CN

[72] SHAO, NING, CN

[72] XIAO, FENGPING, CN

[72] ZOU, ZHENGUANG, CN

[73] BEIJING TIDE PHARMACEUTICAL CO., LTD., CN

[85] 2020-09-15

[86] 2019-03-22 (PCT/CN2019/079226)

[87] (WO2019/179515)

[30] CN (201810244703.7) 2018-03-23

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[11] **3,095,370**  
[13] C

[51] **Int.Cl. A61M 16/06 (2006.01) A61M 16/08 (2006.01)**

[25] EN

[54] **NASAL CANNULA**

[54] **CANULE NASALE**

[72] URIE, ROBERT GRAHAM, GB

[73] MEDIPLUS LTD, GB

[85] 2020-09-28

[86] 2019-03-27 (PCT/GB2019/050874)

[87] (WO2019/186155)

[30] GB (1805214.2) 2018-03-29

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[11] **3,095,407**  
[13] C

[51] **Int.Cl. A01N 1/02 (2006.01) A45C 11/24 (2006.01) A61J 1/16 (2006.01)**

[25] EN

[54] **CARRIER FOR FREEZING, STORING, TRANSPORTING, AND THAWING BIOLOGICAL PRODUCTS STORAGE BAGS**

[54] **SUPPORT POUR CONGELER, STOCKER, TRANSPORTER ET DECONGELER DES SACS DE STOCKAGE DE PRODUITS BIOLOGIQUES**

[72] ALFORD, JOSEPH T., US

[72] MYRICK, LAUREN, US

[73] W. L. GORE & ASSOCIATES, INC., US

[85] 2020-09-28

[86] 2018-03-29 (PCT/US2018/025272)

[87] (WO2019/190535)

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[11] **3,095,696**  
[13] C

[51] **Int.Cl. A23C 3/00 (2006.01) A23C 9/12 (2006.01) A23C 9/123 (2006.01) A23C 9/146 (2006.01) A23C 19/097 (2006.01) A23L 3/00 (2006.01) A23L 3/3508 (2006.01) A23L 3/3517 (2006.01) A23L 3/3571 (2006.01)**

[25] EN

[54] **INHIBITION OF FUNGAL GROWTH BY MANGANESE DEPLETION**

[54] **INHIBITION DE LA CROISSANCE FONGIQUE PAR APPAUVRISSEMENT EN MANGANESE**

[72] SIEDLER, SOLVEJ, DK

[72] RAU, MARTIN HOLM, DK

[72] NIELSEN, STINA DISSING AUNSBJERG, DK

[73] CHR. HANSEN A/S, DK

[85] 2020-09-30

[86] 2019-04-17 (PCT/EP2019/059942)

[87] (WO2019/202003)

[30] EP (18168109.9) 2018-04-19

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[13] C

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[25] EN  
[54] **OPTICAL FIBER ASSEMBLY**  
[54] **ENSEMBLE FIBRE OPTIQUE**

[72] DANKERS, ARNE, CA  
[72] JALILIAN, SEYED EHSAN, CA  
[73] HIFI ENGINEERING INC., CA  
[85] 2020-10-16  
[86] 2019-05-07 (PCT/CA2019/050606)  
[87] (WO2019/213759)  
[30] US (62/668,717) 2018-05-08

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[11] **3,099,063**  
[13] C

[51] **Int.Cl. E21B 47/12 (2012.01) E21B 47/13 (2012.01) E21B 47/26 (2012.01) E21B 44/00 (2006.01) E21B 47/18 (2012.01)**

[25] EN  
[54] **INTEGRATED DOWNHOLE SYSTEM WITH PLURAL TELEMETRY SUBSYSTEMS**  
[54] **SYSTEME INTEGRE DE FOND DE Puits A PLUSIEURS SOUS-SYSTEMES DE TELEMETRIE**

[72] LOGAN, AARON W., CA  
[72] SWITZER, DAVID A., CA  
[72] LIU, JILI, CA  
[72] LOGAN, JUSTIN C., CA  
[72] XU, MINGDONG, CA  
[73] EVOLUTION ENGINEERING INC., CA

[86] (3099063)  
[87] (3099063)  
[22] 2014-02-25  
[62] 2,908,978  
[30] US (61/769033) 2013-02-25  
[30] US (61/768936) 2013-02-25

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[13] C

[51] **Int.Cl. G01N 31/22 (2006.01) A61K 31/167 (2006.01) C12Q 1/34 (2006.01) G01N 1/28 (2006.01) G01N 33/52 (2006.01) G01N 21/59 (2006.01)**

[25] EN  
[54] **ACETAMINOPHEN ASSAY**  
[54] **DOSAGE D'ACETAMINOPHENE**

[72] ACORN, ROBERT, CA  
[72] COADY, HELEN, CA  
[72] COLL, GRAHAM, CA  
[73] SEKISUI DIAGNOSTICS, LLC, US

[85] 2020-11-03  
[86] 2019-05-03 (PCT/US2019/030558)  
[87] (WO2019/213489)  
[30] US (62/666,282) 2018-05-03

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[11] **3,099,767**  
[13] C

[51] **Int.Cl. F24C 15/20 (2006.01)**

[25] EN  
[54] **A RANGE HOOD**  
[54] **HOTTE DE CUISINE**

[72] XU, ZHINENG, CN  
[72] YU, TING, CN  
[73] NINGBO FOTILE KITCHEN WARE CO., LTD., CN

[85] 2020-11-09  
[86] 2019-03-13 (PCT/CN2019/077987)  
[87] (WO2019/223404)  
[30] CN (201820787997.3) 2018-05-24

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[11] **3,099,821**  
[13] C

[51] **Int.Cl. A61M 16/00 (2006.01) A61B 5/087 (2006.01) A61B 5/091 (2006.01) A61M 16/10 (2006.01) A61M 16/12 (2006.01)**

[25] EN  
[54] **METHOD AND APPARATUS FOR PULSATILE DELIVERY OF NITRIC OXIDE**  
[54] **PROCEDE ET APPAREIL D'ADMINISTRATION PULSEE D'OXYDE NITRIQUE**

[72] SHAH, PARAG, US  
[72] DEKKER, MARTIN, US  
[72] LEONARD, WILLIAM, US  
[72] ZUZEVICIUS, DONATAS, US  
[73] BELLEROPHON THERAPEUTICS, US

[85] 2020-11-09  
[86] 2019-05-17 (PCT/US2019/032887)  
[87] (WO2019/222640)  
[30] US (62/672,867) 2018-05-17

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[13] C

[51] **Int.Cl. B65D 50/02 (2006.01) B65D 47/12 (2006.01) B65D 47/18 (2006.01)**

[25] EN  
[54] **CHILD RESISTANT SENIOR FRIENDLY BOTTLE PACKAGING FOR LIQUIDS**  
[54] **EMBALLAGE DE BOUTEILLES POUR LIQUIDES, A L'EPREUVE DES ENFANTS ET CONVIVIAL POUR LES PERSONNES AGEES**

[72] HAWRY, LIAM, US  
[72] GARFIELD, ALEX, US  
[73] BERLIN PACKAGING, LLC, US

[86] (3100226)  
[87] (3100226)  
[22] 2020-11-20  
[30] US (16/693,839) 2019-11-25  
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[11] **3,100,621**  
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[51] **Int.Cl. E21B 31/107 (2006.01)**

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[54] **SYSTEMS AND METHODS FOR STUCK DRILL STRING MITIGATION**  
[54] **SYSTEMES ET PROCEDES D'ATTENUATION DU BLOCAGE D'UN TRAIN DE TIGES DE FORAGE**

[72] MACHOCKI, KRZYSZTOF KAROL, GB  
[72] AFFLECK, MICHAEL ANTHONY, GB  
[73] SAUDI ARABIAN OIL COMPANY, SA

[85] 2020-11-16  
[86] 2019-05-30 (PCT/US2019/034681)  
[87] (WO2019/232228)  
[30] US (62/678,040) 2018-05-30  
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[54] **FLOOR JACK LIFT ARM**  
[54] **BRAS DE LEVAGE DE CRIC**

[72] EGGERT, DANIEL M., US  
[72] THOMPSON, CHRISTOPHER D., US  
[72] ANDERSEN, JONATHAN I., US  
[73] SNAP-ON INCORPORATED, US

[86] (3101917)  
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[30] US (16/720,945) 2019-12-19

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[25] EN  
[54] **MITER FENCE POSITIONER**  
[54] **POSITIONNEUR DE GUIDE DE SCIE A ONGLET**  
[72] OWENS, TIMOTHY, US  
[73] OWENS, TIMOTHY, US  
[86] (3102020)  
[87] (3102020)  
[22] 2020-12-09  
[30] US (62/945,307) 2019-12-09

[11] **3,102,175**  
[13] C

[51] **Int.Cl. A63G 21/00 (2006.01) A63G 21/18 (2006.01) A63G 25/00 (2006.01) A63G 31/00 (2006.01)**  
[25] EN  
[54] **ACCELERATION SECTION FOR A WATER SLIDE**  
[54] **SECTION D'ACCELERATION POUR AQUA-TOBOGGAN**  
[72] HEIMES, FRANK, DE  
[73] WIEGAND.WATERRIDES GMBH, DE  
[85] 2020-12-01  
[86] 2018-11-12 (PCT/EP2018/080955)  
[87] (WO2020/098905)

[11] **3,102,242**  
[13] C

[51] **Int.Cl. B65D 90/54 (2006.01) B65G 15/30 (2006.01)**  
[25] EN  
[54] **TRANSFER SYSTEMS FOR RECEIVING AND CONVEYING MATERIAL**  
[54] **SYSTEMES DE TRANSFERT DESTINES A LA RECEPTION ET AU TRANSPORT D'UN MATERIAU**  
[72] STORM, BRANDON, US  
[72] MEYER, NATHAN, US  
[72] ANDERSON, GREGORY, US  
[72] TERRY, MARKUS, US  
[72] SEIBERT, JOSHUA, US  
[73] VERMEER MANUFACTURING COMPANY, US  
[86] (3102242)  
[87] (3102242)  
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[13] C

[51] **Int.Cl. B05B 1/18 (2006.01) E03C 1/02 (2006.01)**  
[25] EN  
[54] **LOCKING SIDE SPRAYER**  
[54] **PULVERISATEUR LATERAL A VERROUILLAGE**  
[72] TANG, YILIN, CN  
[73] DELTA FAUCET COMPANY, US  
[86] (3102440)  
[87] (3102440)  
[22] 2020-12-11  
[30] US (16/746,059) 2020-01-17

[11] **3,104,377**  
[13] C

[51] **Int.Cl. C07D 498/22 (2006.01) A61K 31/529 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **HETEROCYCLIC COMPOUNDS AS TRK INHIBITORS**  
[54] **COMPOSE HETEROCYCLIQUE UTILISE EN TANT QU'INHIBITEUR DE TRK**  
[72] KONG, NORMAN XIANGLONG, CN  
[72] ZHOU, CHAO, CN  
[72] ZHENG, ZHIXIANG, CN  
[73] BEIJING INNOCARE PHARMA TECH CO., LTD., CN  
[85] 2020-12-18  
[86] 2019-06-25 (PCT/CN2019/092653)  
[87] (WO2020/001415)  
[30] CN (201810660162.6) 2018-06-25

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[13] C

[51] **Int.Cl. A61L 31/04 (2006.01) A61M 5/31 (2006.01) A61M 5/315 (2006.01)**  
[25] EN  
[54] **MEDICAL DELIVERY DEVICE WITH LAMINATED STOPPER**  
[54] **DISPOSITIF D'ADMINISTRATION MEDICAL AVEC BUTEE FEUILLETEE**  
[72] RUSCH, GREG, US  
[72] BASHAM, ROBERT C., US  
[73] W. L. GORE & ASSOCIATES, INC., US  
[86] (3105781)  
[87] (3105781)  
[22] 2017-01-13  
[62] 3,081,370  
[30] US (62/279,553) 2016-01-15  
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[11] **3,106,125**  
[13] C

[51] **Int.Cl. H04N 19/86 (2014.01) H04N 19/174 (2014.01)**  
[25] EN  
[54] **INTER PREDICTION METHOD AND APPARATUS**  
[54] **PROCEDE ET APPAREIL DE PREDICTION INTER-IMAGES**  
[72] XU, WEIWEI, CN  
[72] YANG, HAITAO, CN  
[72] ZHAO, YIN, CN  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2021-01-11  
[86] 2019-09-20 (PCT/CN2019/107060)  
[87] (WO2020/057648)  
[30] CN (201811109950.2) 2018-09-21  
[30] CN (PCT/CN2018/109233) 2018-10-01  
[30] CN (201811303754.9) 2018-11-02

[11] **3,106,414**  
[13] C

[51] **Int.Cl. C10G 3/00 (2006.01) C10G 65/12 (2006.01) C11B 13/00 (2006.01)**  
[25] EN  
[54] **PURIFICATION OF RECYCLED AND RENEWABLE ORGANIC MATERIAL**  
[54] **PURIFICATION D'UNE MATIERE ORGANIQUE RECYCLEE ET RENOUVELABLE**  
[72] TOURONEN, JOUNI, FI  
[72] HOVI, MERI, FI  
[72] PASANEN, ANTTI, FI  
[72] LIKANDER, SALLA, FI  
[72] TOPPINEN, SAMI, FI  
[72] AALTO, PEKKA, FI  
[72] JANSSON, KARI, FI  
[72] LINDBLAD, MARINA, FI  
[72] KALDSTROM, MATS, FI  
[72] LAMMINPAA, KAISA, FI  
[72] PEREZ NEBREDAS, ANDREA, FI  
[73] NESTE OYJ, FI  
[85] 2021-01-13  
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[54] **AN ASSEMBLY OF AT LEAST 2 METALLIC SUBSTRATES**  
[54] **ENSEMBLE D'AU MOINS 2 SUBSTRATS METALLIQUES**  
[72] MACHADO AMORIM, TIAGO, FR  
[72] MICHAUT, STEPHANIE, FR  
[72] HELMER, JEAN-MARIE, FR  
[72] BERTHO, PASCAL, FR  
[73] ARCELORMITTAL, LU  
[85] 2021-01-22  
[86] 2019-09-09 (PCT/IB2019/057575)  
[87] (WO2020/053734)  
[30] IB (PCT/IB2018/056999) 2018-09-13

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[25] EN  
[54] **SWITCH GEAR TRANSPORT THAT DISTRIBUTES POWER FOR FRACTURING OPERATIONS**  
[54] **TRANSPORT D'APPAREILLAGE DE COMMUTATION QUI DISTRIBUE DE L'ENERGIE ELECTRIQUE POUR DES OPERATIONS DE FRACTURATION**  
[72] MORRIS, JEFFREY G., US  
[72] BODISHBAUGH, ADRIAN BENJAMIN, US  
[73] TYPHON TECHNOLOGY SOLUTIONS, LLC, US  
[85] 2021-01-27  
[86] 2019-07-24 (PCT/US2019/043303)  
[87] (WO2020/028121)  
[30] US (62/713,393) 2018-08-01

[11] **3,108,060**

[13] C

- [51] **Int.Cl. G02B 27/30 (2006.01)**  
[25] EN  
[54] **GRATING COLLIMATOR, BACKLIGHT SYSTEM, AND METHOD EMPLOYING A LIGHT-RECYCLING LIGHT SOURCE**  
[54] **COLLIMATEUR DE RESEAU, SYSTEME DE RETROECLAIRAGE ET PROCEDE UTILISANT UNE SOURCE DE LUMIERE DE RECYCLAGE DE LUMIERE**  
[72] LI, XUEJIAN, US  
[72] MA, MING, US  
[72] FATTAL, DAVID A., US  
[73] LEIA INC., US  
[85] 2021-01-28  
[86] 2018-08-13 (PCT/US2018/046562)  
[87] (WO2020/036587)

[11] **3,109,340**

[13] C

- [51] **Int.Cl. B44C 5/04 (2006.01) B41M 3/00 (2006.01) B44C 3/02 (2006.01)**  
[25] EN  
[54] **DIGITAL-PRINTING-STRUCTURED ANTI-WEAR FILM**  
[54] **FEUILLE DE PROTECTION CONTRE L'USURE STRUCTUREE PAR IMPRESSION NUMERIQUE**  
[72] HANNIG, HANS-JURGEN, DE  
[73] AKZENTA PANELEE + PROFILE GMBH, DE  
[85] 2021-02-10  
[86] 2019-06-18 (PCT/EP2019/066017)  
[87] (WO2020/069779)  
[30] EP (18198350.3) 2018-10-02

[11] **3,111,127**

[13] C

- [51] **Int.Cl. G01K 1/14 (2021.01) G01K 1/024 (2021.01)**  
[25] EN  
[54] **BRACKET FOR TEMPERATURE SENSOR**  
[54] **SUPPORT POUR CAPTEUR DE TEMPERATURE**  
[72] HOLT, NICK, US  
[72] BENGSTON, ERIC, US  
[72] YEAGER, JEFFREY, US  
[73] COPELAND COLD CHAIN LP, US  
[86] (3111127)  
[87] (3111127)  
[22] 2021-03-05  
[30] AU (2021201316) 2021-03-01

[11] **3,112,119**

[13] C

- [51] **Int.Cl. F15B 13/02 (2006.01)**  
[25] EN  
[54] **DIGITAL PROPORTIONAL PRESSURE CONTROLLER**  
[54] **PRESSOSTAT PROPORTIONNEL NUMERIQUE**  
[72] WILLIAMS, KEVIN C., US  
[72] JONES, THOMAS, US  
[72] RAETS, GILLES, BE  
[72] DELVAUX, THIERRY, BE  
[73] MAC VALVES, INC., US  
[86] (3112119)  
[87] (3112119)  
[22] 2021-03-17  
[30] US (16/847.029) 2020-04-13

[11] **3,113,950**

[13] C

- [51] **Int.Cl. A61M 5/162 (2006.01) A61M 5/158 (2006.01)**  
[25] EN  
[54] **INFUSION SET WITH A LOCKING STRUCTURE**  
[54] **ENSEMBLE DE PERFUSION AVEC UNE STRUCTURE DE VERROUILLAGE**  
[72] COLE, RUSSELL, US  
[72] KLOTZ, ARTHUR, US  
[72] ROSEN, MELISSA, US  
[72] WALISH, JUDY LIN, US  
[72] BENE, ERIC, US  
[72] BRUEHWILER, MICHEL, US  
[72] CREIGHTON, MICHAEL, US  
[73] BECTON, DICKINSON AND COMPANY, US  
[86] (3113950)  
[87] (3113950)  
[22] 2013-09-23  
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[51] **Int.Cl. B32B 27/08 (2006.01) B32B 27/18 (2006.01) B32B 27/32 (2006.01) C08K 5/00 (2006.01) C08K 5/098 (2006.01) C08L 23/08 (2006.01)**

[25] EN

[54] **POLYETHYLENE FILM STRUCTURES AND RELATED METHODS**

[54] **STRUCTURES DE FILM EN POLYETHYLENE ET PROCEDES ASSOCIES**

[72] CORCORAN, LINDSAY E., US

[72] SCHWAB, THOMAS J., US

[73] EQUICSTAR CHEMICALS, LP, US

[85] 2021-04-14

[86] 2019-10-22 (PCT/US2019/057401)

[87] (WO2020/086553)

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[13] C

[51] **Int.Cl. A61B 3/12 (2006.01) A61B 3/14 (2006.01)**

[25] EN

[54] **DYNAMIC EYE FIXATION FOR RETINAL IMAGING**

[54] **FIXATION DYNAMIQUE DE L'OEIL POUR IMAGERIE RETINIENNE**

[72] GLIK, ELIEZER, US

[72] KAVUSI, SAM, US

[73] VERILY LIFE SCIENCES LLC, US

[85] 2021-04-15

[86] 2019-10-23 (PCT/US2019/057647)

[87] (WO2020/092089)

[30] US (62/753,570) 2018-10-31

[30] US (16/584,606) 2019-09-26

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[13] C

[51] **Int.Cl. C22C 23/06 (2006.01) C22C 23/00 (2006.01) C22F 1/06 (2006.01)**

[25] EN

[54] **NICKEL-CONTAINING HIGH-TOUGHNESS CONTROLLABLY DEGRADABLE MAGNESIUM ALLOY MATERIAL, PREPARATION METHOD THEREFOR AND USE THEREOF**

[54] **MATERIAU D'ALLIAGE DE MAGNESIUM CONTENANT DU NICKEL, A HAUTE TENACITE, DEGRADABLE DE MANIERE CONTROLLEE, SON PROCEDE DE PREPARATION ET SON UTILISATION**

[72] WANG, JINGFENG, CN

[72] GAO, SHIQING, CN

[72] LIU, SHIJIE, CN

[72] WANG, KUI, CN

[72] PAN, FUSHENG, CN

[73] CHONGQING UNIVERSITY, CN

[85] 2021-04-20

[86] 2019-07-01 (PCT/CN2019/094183)

[87] (WO2020/082781)

[30] CN (201811237934.1) 2018-10-23

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[13] C

[51] **Int.Cl. C04B 35/573 (2006.01) B33Y 10/00 (2015.01) B33Y 70/00 (2020.01) B33Y 80/00 (2015.01) B22F 3/00 (2021.01) C04B 35/52 (2006.01) C04B 35/56 (2006.01) F01D 5/12 (2006.01) G21C 3/28 (2006.01)**

[25] EN

[54] **ADDITIVE MANUFACTURING OF COMPLEX OBJECTS USING REFRACTORY MATRIX MATERIALS**

[54] **FABRICATION ADDITIVE D'OBJETS COMPLEXES UTILISANT DES MATERIAUX DE MATRICE REFRACTAIRE**

[72] TERRANI, KURT A., US

[72] TRAMMELL, MICHAEL P., US

[72] JOLLY, BRIAN C., US

[73] UT-BATTELLE, LLC, US

[85] 2021-05-17

[86] 2019-07-31 (PCT/US2019/044276)

[87] (WO2020/106334)

[30] US (62/769,588) 2018-11-20

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[13] C

[51] **Int.Cl. C22B 3/10 (2006.01) C22B 15/00 (2006.01)**

[25] EN

[54] **SOLID-LIQUID-SOLID HYDROMETALLURGICAL METHOD FOR THE SOLUBILIZATION OF METALS FROM SULFIDE COPPER MINERALS AND/OR CONCENTRATES**

[54] **PROCEDE HYDRO-METALLURGIQUE SOLIDE-LIQUIDE-SOLIDE POUR LA SOLUBILISATION DE METAUX A PARTIR DE MINERAUX ET/OU DE CONCENTRES SULFURES DE CUIVRE**

[72] CORTES CORTES, RODRIGO ANDRES, CL

[73] NOVA MINERALIS S.A., CL

[85] 2021-05-13

[86] 2019-10-29 (PCT/IB2019/059258)

[87] (WO2020/099966)

[30] IB (PCT/IB2018/058969) 2018-11-14

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[13] C

[51] **Int.Cl. A23K 10/00 (2016.01) C07C 49/84 (2006.01) C07C 51/367 (2006.01) C07C 65/40 (2006.01)**

[25] EN

[54] **APPLICATIONS OF DIPHENYLPROPENONE COMPOUND IN PREPARING ANIMAL FEED ADDITIVE OR ANIMAL FEED**

[54] **APPLICATIONS DE COMPOSE DE DIPHENYLPROPENONE DANS LA PREPARATION D'UN ADDITIF ALIMENTAIRE POUR ANIMAUX OU D'UN ALIMENT POUR ANIMAUX**

[72] PENG, XIANFENG, CN

[72] HUANG, HUACHENG, CN

[73] ANIPHA TECHNOLOGIES PTY LTD, AU

[85] 2021-05-18

[86] 2018-11-19 (PCT/CN2018/116274)

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[25] EN

[54] **LATERAL FLOW ASSAY WITH CONTROLLED CONJUGATE AND CONTROLLED FLOW TIME DOSAGE A ECOULEMENT LATERAL AVEC UN CONJUGUE REGULE ET UN TEMPS D'ECOULEMENT REGULE**

[72] HATAMIAN, MEHDI, US

[73] 2PI-SIGMA CORP., US

[85] 2021-05-25

[86] 2019-11-27 (PCT/US2019/063785)

[87] (WO2020/113127)

[30] US (62/772,525) 2018-11-28

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[13] C

[51] **Int.Cl. B05B 5/00 (2006.01)**

[25] EN

[54] **SPRAY EJECTOR DEVICE AND METHODS OF USE PULVERISATEUR ET METHODES D'UTILISATION**

[72] HUNTER, CHARLES ERIC, US

[72] GERMINARIO, LOUIS THOMAS, US

[72] CLEMENTS, J. SID, US

[72] WILKERSON, JONATHAN RYAN, US

[72] LYNCH, IYAM, US

[72] BROWN, JOSHUA RICHARD, US

[72] LEATH, JAMES THORNHILL, US

[72] FAULKES, NATHAN R., US

[72] GRUBE, KRIS, US

[72] DITROLIO, MATTHEW, US

[73] EYENOVIA, INC., US

[86] (3121535)

[87] (3121535)

[22] 2013-04-19

[62] 2,870,966

[30] US (61/636,559) 2012-04-20

[30] US (61/636,565) 2012-04-20

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[30] US (61/722,616) 2012-11-05

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[13] C

[51] **Int.Cl. B23K 7/00 (2006.01) E21B 29/02 (2006.01)**

[25] EN

[54] **DOWNHOLE CIRCULAR CUTTING TORCH**

[54] **CHALUMEAU COUPEUR CIRCULAIRE EN FOND DE TROU**

[72] WATKINS, TODD JOSEPH, US

[72] ZHANG, JIAN, US

[73] CHAMMAS PLASMA CUTTERS LLC, US

[86] (3121970)

[87] (3121970)

[22] 2021-06-10

[30] US (63/057,596) 2020-07-28

[30] US (17/341,923) 2021-06-08

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[11] **3,122,807**  
[13] C

[51] **Int.Cl. E02F 3/43 (2006.01)**

[25] EN

[54] **AUTOMATED CONTROL OF DIPPER SWING FOR A SHOVEL**

[54] **COMMANDE AUTOMATISEE DE L'OSCILLATION DU BALANCIER D'UNE PELLE**

[72] LINSTROTH, MICHAEL, US

[72] COLWELL, JOSEPH, US

[72] EMERSON, MARK, US

[73] JOY GLOBAL SURFACE MINING INC, US

[86] (3122807)

[87] (3122807)

[22] 2013-03-18

[62] 2,867,354

[30] US (61/611,682) 2012-03-16

[30] US (13/843,532) 2013-03-15

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[51] **Int.Cl. A23L 33/105 (2016.01) A61K 31/164 (2006.01) A61K 36/73 (2006.01) A61P 25/02 (2006.01)**

[25] EN

[54] **SYNERGISTIC NUTRITIONAL COMPOSITIONS FOR PAIN MANAGEMENT**

[54] **COMPOSITIONS NUTRITIONNELLES SYNERGIQUES POUR LA GESTION DE LA DOULEUR**

[72] DHAMANE, DHIRAJ, IN

[72] T., RAJENDRA PRASAD, IN

[73] CELAGENEX RESEARCH (INDIA) PVT. LTD., IN

[85] 2021-06-15

[86] 2019-12-30 (PCT/IN2019/050963)

[87] (WO2020/141546)

[30] IN (201921000092) 2019-01-02

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[11] **3,123,848**  
[13] C

[51] **Int.Cl. B22D 47/00 (2006.01) B22D 33/00 (2006.01) B65G 25/04 (2006.01) B65G 47/64 (2006.01) B65G 47/68 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR CONVEYING SAND MOLDS**

[54] **PROCEDE ET APPAREIL DE TRANSPORT DE MOULES EN SABLE**

[72] HUNTER, WILLIAM GARY, US

[73] HUNTER FOUNDRY MACHINERY CORPORATION, US

[85] 2021-06-16

[86] 2019-12-20 (PCT/US2019/067760)

[87] (WO2020/132398)

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[30] US (16/720,307) 2019-12-19

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[13] C

[51] **Int.Cl. B65D 47/08 (2006.01) A45F 3/16 (2006.01) A47G 19/26 (2006.01) B65D 43/02 (2006.01)**

[25] EN  
[54] **LID FOR A CONTAINER**  
[54] **COUVERCLE POUR CONTENANT**

[72] SORENSEN, STEVEN M., US  
[72] MEYERS, DAVID O., US  
[73] RUNWAY BLUE, LLC, US  
[86] (3125455)  
[87] (3125455)  
[22] 2015-01-16  
[62] 2,931,104  
[30] US (61/929,081) 2014-01-19  
[30] US (61/944,536) 2014-02-25  
[30] US (62/004,673) 2014-05-29  
[30] US (14/598,087) 2015-01-15

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[54] **BLOOD COLLECTION SYSTEM INCLUDING A BAFFLE**  
[54] **SYSTEME DE COLLECTE DE SANG COMPRENANT UN DEFLECTEUR**

[72] MA, YIPING, US  
[72] SPATARO, JOSEPH, US  
[72] TRAN, HUY, US  
[72] WILLYBIRO, KATHRYN, US  
[72] BURKHOLZ, JONATHAN KARL, US  
[72] PETERSON, BART D., US  
[73] BECTON, DICKINSON AND COMPANY, US  
[85] 2021-07-07  
[86] 2020-01-16 (PCT/US2020/013902)  
[87] (WO2020/150486)  
[30] US (62/794,436) 2019-01-18  
[30] US (16/741,923) 2020-01-14

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[54] **NEEDLE PACKAGING**  
[54] **EMBALLAGE D'AIGUILLE**

[72] FRAITES, THOMAS, US  
[72] BRAKONIECKI, ADAM KRISTOPHER, US  
[73] BECTON, DICKINSON AND COMPANY, US  
[85] 2021-07-09  
[86] 2020-01-27 (PCT/US2020/015142)  
[87] (WO2020/159841)  
[30] US (16/258,941) 2019-01-28

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[13] C

[51] **Int.Cl. E04D 13/147 (2006.01)**

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[54] **FLASHING ASSEMBLY FOR A ROOF PENETRATING STRUCTURE AND A METHOD FOR MANUFACTURING A FLASHING ASSEMBLY**  
[54] **ENSEMBLE SOLIN DESTINE A UNE STRUCTURE DE PENETRATION DE TOIT ET PROCEDE DE FABRICATION D'UN ENSEMBLE SOLIN**

[72] HENRIKSEN, JENS-ULRIK HOLST, DK  
[72] FREDERIKSEN, SOREN, DK  
[73] VKR HOLDING A/S, DK  
[85] 2021-07-14  
[86] 2020-09-25 (PCT/DK2020/050263)  
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[30] DK (PA 2019 70589) 2019-09-25

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[25] EN  
[54] **NOZZLE FOR WATER CHOKING**  
[54] **BUSE POUR ETRANGLEMENT D'EAU**

[72] ZHU, DA, CA  
[73] VARIPERM ENERGY SERVICES INC., CA  
[85] 2021-07-16  
[86] 2020-02-24 (PCT/CA2020/050233)  
[87] (WO2020/168438)  
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[13] C

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[25] EN  
[54] **ELECTRIC VEHICLE (EV) FAST RECHARGE STATION AND SYSTEM**  
[54] **POSTE DE RECHARGE RAPIDE DE VEHICULES ELECTRIQUES ET SYSTEME**

[72] STANFIELD, JAMES RICHARD, US  
[73] THE NOCO COMPANY, US  
[86] (3127239)  
[87] (3127239)  
[22] 2018-03-23  
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[13] C

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[25] EN  
[54] **CONVEYOR DEVICE FOR THE DISTANCELESS AND PRESSURELESS, OR LOW-PRESSURE, ACCUMULATION OF OBJECTS, AND OPERATING METHOD THEREFOR**  
[54] **DISPOSITIF DE TRANSPORT POUR LE RANGEMENT D'OBJETS SANS ESPACEMENT ET SANS PRESSION OU AVEC FAIBLE PRESSION, ET SON PROCEDE DE FONCTIONNEMENT**

[72] SCHONBAUER, MANUEL, AT  
[72] KARER, FLORIAN GEORG, AT  
[72] GRIMMINGER, RICHARD, AT  
[72] KALTSEIS, SIMON, AT  
[72] RAUSCH, MARTIN, AT  
[73] TGW MECHANICS GMBH, AT  
[85] 2021-07-23  
[86] 2020-02-13 (PCT/AT2020/060045)  
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[30] AT (A50117/2019) 2019-02-15



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[25] EN  
[54] **SEMICONDUCTOR MACH-ZEHNDER OPTICAL MODULATOR AND IQ MODULATOR**  
[54] **MODULATEUR OPTIQUE DE MACH-ZEHNDER A SEMI-CONDUCTEUR ET MODULATEUR OPTIQUE IQ**  
[72] OZAKI, JOSUKE, JP  
[72] KANAZAWA, SHIGERU, JP  
[72] OGISO, YOSHIHIRO, JP  
[72] TANOBE, HIROMASA, JP  
[73] NIPPON TELEGRAPH AND TELEPHONE CORPORATION, JP  
[85] 2021-07-29  
[86] 2019-02-14 (PCT/JP2019/005235)  
[87] (WO2020/165986)

[11] **3,130,239**  
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[25] EN  
[54] **DEVICE AND METHOD FOR SHARING A PAYLOAD BETWEEN TWO VEHICLES**  
[54] **DISPOSITIF ET PROCEDE DE PARTAGE D'UNE CHARGE UTILE ENTRE DEUX VEHICULES**  
[72] SHABAH, ABDO, CA  
[72] LIAUW, YUHANES DEDY SETIAWAN, CA  
[73] HUMANITAS SOLUTIONS INC., CA  
[85] 2021-08-13  
[86] 2020-02-14 (PCT/IB2020/051279)  
[87] (WO2020/165867)  
[30] US (62/806,241) 2019-02-15

[11] **3,131,418**  
[13] C

- [51] **Int.Cl. H04M 3/38 (2006.01) H04M 3/42 (2006.01)**  
[25] EN  
[54] **VALIDATING TELEPHONE CALLS BY VERIFYING ENTITY IDENTITIES USING BLOCKCHAINS**  
[54] **VALIDATION D'APPELS TELEPHONIQUE PAR VERIFICATION D'IDENTITES D'ENTITE A L'AIDE DE CHAINES DE BLOCS**  
[72] JOHNSON, REBEKAH, US  
[72] JAFFER, MOHAMED S. A., US  
[73] NUMERACLE, INC., US  
[85] 2021-08-24  
[86] 2020-03-17 (PCT/US2020/023083)  
[87] (WO2020/190906)  
[30] US (62/819,977) 2019-03-18

[11] **3,130,177**  
[13] C

- [51] **Int.Cl. G01N 33/543 (2006.01)**  
[25] EN  
[54] **METHOD FOR FUNCTIONALIZING A SURFACE, PRODUCT WITH A SURFACE FUNCTIONALIZED ACCORDING TO THE METHOD, AND USES OF SAME**  
[54] **PROCEDE DE FONCTIONNALISATION D'UNE SURFACE, PRODUIT AYANT UNE SURFACE FONCTIONNALISEE SELON LE PROCEDE ET LEURS UTILISATIONS**  
[72] GAJOVIC-EICHELMANN, NENAD, DE  
[72] NEUMANN, MARINA, DE  
[72] BIER, FRANK, DE  
[73] FRAUNHOFER-GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG E. V., DE  
[85] 2021-08-16  
[86] 2020-02-27 (PCT/EP2020/055101)  
[87] (WO2020/174032)  
[30] DE (10 2019 105 192.4) 2019-02-28

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[13] C

- [51] **Int.Cl. G08G 1/0955 (2006.01)**  
[25] EN  
[54] **VEHICLE MOUNTED TRAFFIC CONTROL APPARATUS**  
[54] **APPAREIL DE CONTROLE DE LA CIRCULATION MONTE SUR UN VEHICULE**  
[72] KREUTZER, KIMBERLIN KIRK, CA  
[72] KREUTZER, DONNA FAYE MARIE, CA  
[73] KREUTZER, KIMBERLIN KIRK, CA  
[73] KREUTZER, DONNA FAYE MARIE, CA  
[86] (3131102)  
[87] (3131102)  
[22] 2021-09-16

[11] **3,132,262**  
[13] C

- [51] **Int.Cl. B32B 15/08 (2006.01) B32B 1/08 (2006.01) B32B 3/02 (2006.01) B32B 7/12 (2006.01) B32B 15/20 (2006.01) B32B 27/08 (2006.01) B32B 27/30 (2006.01) B32B 27/32 (2006.01) C08L 27/12 (2006.01) C22C 21/00 (2006.01) F16C 17/00 (2006.01) F16C 43/02 (2006.01)**  
[25] EN  
[54] **BEARING, ASSEMBLY, AND METHOD OF MAKING AND USING THE SAME**  
[54] **PALIER, ENSEMBLE ET PROCEDE DE FABRICATION ET D'UTILISATION DE CELUI-CI**  
[72] JAEGER, HANS-JUERGEN, DE  
[72] OEZTUERK, ALI, DE  
[72] KUEMMEL, BENJAMIN, NL  
[73] SAINT-GOBAIN PERFORMANCE PLASTICS PAMPUS GMBH, DE  
[85] 2021-09-01  
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[13] C

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[25] EN

[54] **REUSABLE CLOSURE SYSTEM**

[54] **SYSTEME DE FERMETURE REUTILISABLE**

[72] BURKHART-DAY, ERIC, US

[72] SUNKARA, NAVARATAN, US

[72] SUNKARA, SIVAKETAN, US

[73] RE-U-ZIP, LLC, US

[85] 2021-09-01

[86] 2020-03-02 (PCT/US2020/020614)

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[13] C

[51] **Int.Cl. B01F 35/71 (2022.01) A47F 1/04 (2006.01)**

[25] EN

[54] **BEAD ASSEMBLY FOR CUSTOM FORMULATION SYSTEMS**

[54] **ENSEMBLE DE BILLES POUR SYSTEMES DE FORMULATION PERSONNALISES**

[72] BELKHIR, YAZID, FR

[72] CARLIER, FREDERIC, FR

[72] SAVOYEN, LAURIE, FR

[72] CHAUFFIER, THIBAUT, FR

[72] BOURDELAIN, LAURENT (DECEASED), FR

[73] L'OREAL, FR

[85] 2021-10-05

[86] 2020-04-03 (PCT/EP2020/059533)

[87] (WO2020/201496)

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[13] C

[51] **Int.Cl. H05B 6/06 (2006.01) A24F 40/53 (2020.01) A24F 47/00 (2020.01)**

[25] EN

[54] **APPARATUS FOR AEROSOL GENERATING DEVICE**

[54] **APPAREIL POUR DISPOSITIF GENERATEUR D'AEROSOL**

[72] BEIDELMAN, KEITH GEORGE, US

[73] NICOVENTURES TRADING LIMITED, GB

[85] 2021-09-09

[86] 2020-03-09 (PCT/EP2020/056223)

[87] (WO2020/182733)

[30] US (62/816,287) 2019-03-11

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[13] C

[51] **Int.Cl. A61B 5/15 (2006.01) A61B 5/153 (2006.01)**

[25] EN

[54] **SYRINGE APPARATUS AND METHODS**

[54] **APPAREIL DE SERINGUE ET PROCEDES**

[72] SAMPRONI, JENNIFER, US

[73] SIEMENS HEALTHCARE DIAGNOSTICS INC., US

[85] 2021-09-09

[86] 2020-02-25 (PCT/US2020/019644)

[87] (WO2020/185393)

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[13] C

[51] **Int.Cl. F04B 49/06 (2006.01)**

[25] EN

[54] **METHOD TO DELIVER REMAINING LIQUID IN AN ENTERAL OR OTHER INFUSION DEVICE**

[54] **PROCEDE POUR DELIVRER UN LIQUIDE RESTANT DANS UN DISPOSITIF D'INJECTION ENTERALE OU AUTRE**

[72] JURETICH, JEFFERY T., US

[72] GEISLER, JEFFREY D., US

[72] BACON, JOHN, US

[72] THORNE, DAVID, US

[73] ZEVEX, INC., US

[85] 2021-09-10

[86] 2020-03-18 (PCT/US2020/023240)

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[30] US (62/822,458) 2019-03-22

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[13] C

[51] **Int.Cl. G02F 1/1333 (2006.01) G02F 1/13357 (2006.01)**

[25] EN

[54] **MULTIVIEW DISPLAY ALIGNMENT METHOD AND SYSTEM**

[54] **SYSTEME ET PROCEDE D'ALIGNEMENT D'AFFICHAGE MULTIVUES**

[72] HOEKMAN, THOMAS, US

[72] FATTAL, DAVID A., US

[73] LEIA INC., US

[85] 2021-09-03

[86] 2020-04-02 (PCT/US2020/026430)

[87] (WO2020/206151)

[30] US (62/828,398) 2019-04-02

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[25] EN

[54] **DRIED FRUIT PRODUCTS**

[54] **PRODUITS DE FRUITS SECHES**

[72] ROY, SOUMYA, US

[72] KHAN, NOMAN, US

[72] DEL MERCADO, BARBARA VAZQUEZ, US

[72] DENSON, KELLIE, US

[73] OCEAN SPRAY CRANBERRIES, INC., US

[86] (3133520)

[87] (3133520)

[22] 2017-03-02

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[30] US (62/303,334) 2016-03-03

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[13] C

[51] **Int.Cl. G02B 30/00 (2020.01)**

[25] EN

[54] **STATIC MULTIVIEW DISPLAY AND METHOD HAVING DIAGONAL PARALLAX**

[54] **AFFICHAGE MULTIVUE STATIQUE ET PROCEDE AYANT PARALLAXE DIAGONALE**

[72] FATTAL, DAVID A., US

[73] LEIA INC., US

[85] 2021-09-15

[86] 2019-04-15 (PCT/US2019/027563)

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[13] C

[51] **Int.Cl. C25B 13/02 (2006.01) C25B 9/00 (2021.01)**

[25] EN

[54] **ELASTIC MATTRESS AND ELECTROLYZER**

[54] **MAT ELASTIQUE ET RESERVOIR ELECTROLYTIQUE**

[72] MATSUOKA, MAMORU, JP

[72] TSUCHIDA, KAZUYUKI, JP

[73] ASAHI KASEI KABUSHIKI KAISHA, JP

[85] 2021-09-15

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[25] EN  
[54] **AUTOMATIC BILL HANDLING SYSTEM**  
[54] **SYSTEME AUTOMATIQUE DE MANIPULATION DE FACTURES**  
[72] UEMIZO, YOSHIKI, JP  
[72] UEDA, TAKASHI, JP  
[73] JAPAN CASH MACHINE CO., LTD., JP  
[85] 2021-09-17  
[86] 2020-06-16 (PCT/JP2020/023509)  
[87] (WO2021/014824)  
[30] JP (2019-135155) 2019-07-23

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[25] EN  
[54] **RADIO FREQUENCY FRONT-END CIRCUIT AND MOBILE TERMINAL**  
[54] **CIRCUIT FRONTAL RADIOFREQUENCE ET TERMINAL MOBILE**  
[72] HSIEH, CHENG-NAN, CN  
[72] SHENG, XUEFENG, CN  
[73] VIVO MOBILE COMMUNICATION CO., LTD., CN  
[85] 2021-09-21  
[86] 2020-03-11 (PCT/CN2020/078865)  
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[30] CN (201910222451.2) 2019-03-22

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[25] EN  
[54] **PLASTIC MICROFLUIDIC SEPARATION AND DETECTION PLATFORMS**  
[54] **PLATE-FORMES MICROFLUIDIQUES EN PLASTIQUE DE DETECTION ET DE SEPARATION**  
[72] TAN, EUGENE, US  
[72] LAM, HEUNG CHUAN, US  
[72] KAN, CHUEK WAI, US  
[73] ANDE CORPORATION, US  
[86] (3135182)  
[87] (3135182)  
[22] 2008-04-04  
[62] 2,984,820  
[30] US (60/921,802) 2007-04-04  
[30] US (60/964,502) 2007-08-13  
[30] US (61/028,073) 2008-02-12

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[13] C

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[25] EN  
[54] **SKIN THERAPY SYSTEMS**  
[54] **SYSTEMES DE TRAITEMENT CUTANE**  
[72] MONTROSE, DEANNA, US  
[73] PARAFFINUSA, LLC, US  
[85] 2021-10-01  
[86] 2020-04-05 (PCT/US2020/026788)  
[87] (WO2020/206404)  
[30] US (62/830,196) 2019-04-05

[11] **3,136,713**

[13] C

- [51] **Int.Cl. G08B 21/04 (2006.01) G08B 25/10 (2006.01) G08B 25/14 (2006.01)**  
[25] EN  
[54] **EMERGENCY EVENT DETECTION AND RESPONSE SYSTEM**  
[54] **SYSTEME DE DETECTION ET DE REPONSE A UN EVENEMENT D'URGENCE**  
[72] HAMRE, LASSE, US  
[72] SPOLJARIC, RAYMOND EUGENE, US  
[72] SCHWARTZ, EVAN SAMUEL, US  
[72] HAIGH, RYAN CHRISTOPHER, US  
[72] SASSOON, ALEXANDER NEVILLE, US  
[72] BAKKEN, SVEINUNG KVAL, US  
[73] ALOE CARE HEALTH, INC., US  
[85] 2021-10-12  
[86] 2020-04-12 (PCT/US2020/027864)  
[87] (WO2020/210773)  
[30] US (62/833,522) 2019-04-12

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[13] C

- [51] **Int.Cl. G02B 27/00 (2006.01)**  
[25] EN  
[54] **MULTIVIEW DISPLAY AND METHOD HAVING SHIFTED COLOR SUB-PIXELS**  
[54] **AFFICHAGE A VUES MULTIPLES ET PROCEDE COMPRENANT DES SOUS-PIXELS DE COULEUR DECALES**  
[72] FATTAL, DAVID A., US  
[73] LEIA INC., US  
[85] 2021-10-14  
[86] 2019-04-29 (PCT/US2019/029730)  
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[25] EN  
[54] **ENHANCING IMMUNITY TO TUBERCULOSIS**  
[54] **RENFORCEMENT DE L'IMMUNITE CONTRE LA TUBERCULOSE**  
[72] FISCHER, GERALD W., US  
[72] DAUM, LUKE T., US  
[72] SEI, CLARA JABET, US  
[73] LONGHORN VACCINES AND DIAGNOSTICS, LLC, US  
[86] (3136981)  
[87] (3136981)  
[22] 2014-08-29  
[62] 2,922,431  
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[25] EN  
[54] **USE OF VEGF INHIBITOR TO TREAT MACULAR DEGENERATION IN A PATIENT POPULATION**  
[54] **UTILISATION DE L'INHIBITEUR DE VEGF POUR TRAITER LA DEGENERESCENCE MACULAIRE DANS UNE POPULATION DE PATIENTS**  
[72] PERLEE, LORAH, US  
[72] HAMON, SARA, US  
[72] PAULDING, CHARLES, US  
[73] REGENERON PHARMACEUTICALS, INC., US  
[86] (3137326)  
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[25] EN  
[54] **PIPE REPLACEMENT SYSTEM**  
[54] **SYSTEME DE REMPLACEMENT DE TUYAU**  
[72] HILL, PAUL SPENCER, US  
[72] GIBSON, THOMAS BLYDE, US  
[73] TEAM INDUSTRIAL SERVICES, INC., US  
[85] 2021-10-21  
[86] 2020-04-21 (PCT/US2020/029082)  
[87] (WO2020/219424)  
[30] US (62/836,971) 2019-04-22

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[13] C

[51] **Int.Cl. B24B 23/02 (2006.01) F16H 1/28 (2006.01)**  
[25] EN  
[54] **PNEUMATIC TOOL WITH GEAR TRAIN**  
[54] **OUTIL PNEUMATIQUE POUR TRAIN D'ENGRENAGES**  
[72] PATTERSON, MATTHEW D., US  
[73] SNAP-ON INCORPORATED, US  
[86] (3138106)  
[87] (3138106)  
[22] 2021-11-08  
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[13] C

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[25] EN  
[54] **ANTIGEN DETECTION USING PHOTOCLEAVABLE LABELS**  
[54] **DETECTION D'ANTIGENES AU MOYEN D'ETIQUETTES PHOTOCLEAVABLES**  
[72] HEALY, MIMI, US  
[72] CHEN, XIYI, US  
[72] WANG, JINCHUN, US  
[72] WU, WEIDONG, US  
[72] PETRICHENKO, SOPHIA, US  
[72] ZHANG, SU, US  
[72] FRYE, STACIE, US  
[73] AGILENT TECHNOLOGIES, INC., US  
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[87] (3138794)  
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[30] US (62/201,978) 2015-08-06

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[11] **3,138,896**  
[13] C

[51] **Int.Cl. A61B 18/02 (2006.01)**  
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[54] **APPARATUS AND METHODS FOR REGULATING CRYOGENIC TREATMENT**  
[54] **APPAREIL ET METHODES DE REGULATION DE TRAITEMENT CRYOGENIQUE**  
[72] BURNETT, DANIEL, R., US  
[72] COTE, RIC, US  
[72] MALECKI, WILLIAM, W., US  
[72] NEIL, BRIAN, M., US  
[72] BEAULIEU, DAVID, US  
[72] VOILES, BENJAMIN, D., US  
[72] LOPRESTI, VINCENT, US  
[73] CHANNEL MEDSYSTEMS, INC., US  
[86] (3138896)  
[87] (3138896)  
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[30] US (14/265,799) 2014-04-30

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[11] **3,139,141**  
[13] C

- [51] **Int.Cl. B65D 47/28 (2006.01)**  
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[54] **LID FOR BEVERAGE CONTAINER  
COUVERCLE POUR RECIPIENTS  
A BREUVAGE**  
[72] LEWANDOWSKI, DARIUSZ, PL  
[72] SOBECKI, ROMAN, PL  
[73] REEND SPOLKA Z OGRANICZONA  
ODPOWIEDZIALNOSCIA, PL  
[85] 2021-10-07  
[86] 2019-08-01 (PCT/PL2019/000057)  
[87] (WO2020/209733)  
[30] PL (P.429610) 2019-04-11

[11] **3,139,231**  
[13] C

- [51] **Int.Cl. F27B 7/24 (2006.01) F16J  
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[25] EN  
[54] **ROTARY KILN SEALING SYSTEM  
AND ROTARY KILN EQUIPMENT  
SYSTEME D'ETANCHEITE DE  
FOUR ROTATIF ET  
EQUIPEMENT DE FOUR  
ROTATIF**  
[72] ZHU, SHUCHENG, CN  
[72] WANG, XIBIN, CN  
[72] LV, YANWU, CN  
[72] LI, JINFENG, CN  
[72] LI, FANG, CN  
[72] WANG, YONGXING, CN  
[73] HENAN LONGCHENG COAL HIGH  
EFFICIENCY TECHNOLOGY  
APPLICATION CO., LTD., CN  
[85] 2021-11-23  
[86] 2020-08-06 (PCT/CN2020/107522)  
[87] (WO2021/196484)  
[30] CN (202010253033.2) 2020-04-01

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[13] C

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A61L 27/38 (2006.01) A61L 27/50  
(2006.01)**  
[25] EN  
[54] **A BIOCOMPATIBLE MEMBRANE  
COMPOSITE**  
[54] **COMPOSITE A MEMBRANE  
BIOCOMPATIBLE**  
[72] RITROVATO, SCOTT A., US  
[72] ZHANG, QIANG (JOHN), US  
[72] FOLK, CHRISTOPHER, US  
[72] MCGREEVY, CRAIG, US  
[72] AGHDASI, BAHMAN, US  
[72] BRUHN, TIMOTHY M., US  
[72] D'AMOUR, KEVIN, US  
[72] GUNZEL, EDWARD, US  
[72] MARTINSON, LAURA, US  
[72] RUSCH, GREG, US  
[72] SCOTT, MICHAEL, US  
[72] ZAMBOTTI, LAUREN R., US  
[72] KAKKASSERY, JOSEPH, US  
[73] W. L. GORE & ASSOCIATES, INC.,  
US  
[73] VIACYTE, INC., US  
[85] 2021-11-25  
[86] 2020-05-30 (PCT/US2020/035450)  
[87] (WO2020/243666)  
[30] US (62/855,707) 2019-05-31

[11] **3,139,590**  
[13] C

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(2006.01)**  
[25] EN  
[54] **A BIOCOMPATIBLE MEMBRANE  
COMPOSITE**  
[54] **COMPOSITE A MEMBRANE  
BIOCOMPATIBLE**  
[72] BRUHN, TIMOTHY M., US  
[72] D'AMOUR, KEVIN, US  
[72] FOLK, CHRISTOPHER, US  
[72] MCGREEVY, CRAIG, US  
[72] MARTINSON, LAURA, US  
[72] RITROVATO, SCOTT A., US  
[72] RUSCH, GREG, US  
[72] SCOTT, MICHAEL, US  
[72] ZAMBOTTI, LAUREN R., US  
[72] ZHANG, QIANG (JOHN), US  
[72] KAKKASSERY, JOSEPH, US  
[73] W. L. GORE & ASSOCIATES, INC.,  
US  
[73] VIACYTE, INC., US  
[85] 2021-11-25  
[86] 2020-05-30 (PCT/US2020/035449)  
[87] (WO2020/243665)  
[30] US (62/855,540) 2019-05-31  
[30] US (62/897,636) 2019-09-09

[11] **3,140,558**  
[13] C

- [51] **Int.Cl. H05B 47/00 (2020.01) H05B  
45/10 (2020.01) H05B 45/20 (2020.01)  
H05B 45/40 (2020.01)**  
[25] EN  
[54] **FILAMENT DEVICE FOR  
ILLUMINATION DEVICE,  
ILLUMINATION DEVICE, AND  
DIMMING METHOD FOR  
ILLUMINATION DEVICE**  
[54] **DISPOSITIF DE FILAMENT POUR  
UN DISPOSITIF D'ECLAIRAGE,  
DISPOSITIF D'ECLAIRAGE ET  
METHODE DE GRADATEUR  
POUR LE DISPOSITIF  
D'ECLAIRAGE**  
[72] ZHU, YIMIN, CN  
[72] YAO, PAN, CN  
[72] GAO, JIE, CN  
[72] MO, XIANGJIN, CN  
[72] YANG, JIACHEN, CN  
[72] XIAO, KUN, CN  
[73] SAVANT TECHNOLOGIES LLC, US  
[86] (3140558)  
[87] (3140558)  
[22] 2021-11-26  
[30] CN (202011374931X) 2020-11-30  
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[13] C

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/95 (2013.01)**  
[25] EN  
[54] **PERCUTANEOUS VALVE REPAIR BY RESHAPING AND RESIZING RIGHT VENTRICLE**  
[54] **REPARATION PERCUTANEE DE VALVULE PAR LA MODIFICATION DE FORME ET DE DIMENSION DU VENTRICULE DROIT**  
[72] SUTHERLAND, MICHAEL, US  
[72] LEE, CHRISTOPHER, US  
[72] MORRILL, RICHARD, US  
[72] CAHALANE, STEVEN, US  
[73] EDWARDS LIFESCIENCES CORPORATION, US  
[86] (3140570)  
[87] (3140570)  
[22] 2014-06-25  
[62] 2,902,169  
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[11] **3,140,958**  
[13] C

[51] **Int.Cl. H04N 19/593 (2014.01)**  
[25] EN  
[54] **INTRA-PREDICTION METHOD, AND VIDEO ENCODER AND DECODER USING SAME**  
[54] **METHODE INTRAPREDICTION, ET CODEUR ET DECODEUR VIDEO EMPLOYANT LADITE METHODE**  
[72] PARK, JOONYOUNG, KR  
[72] PARK, SEUNGWOOK, KR  
[72] LIM, JAEHYUN, KR  
[72] KIM, JUNGSUN, KR  
[72] CHOI, YOUNGHEE, KR  
[72] JEON, BYEONGMOON, KR  
[72] JEON, YONGJOON, KR  
[73] LG ELECTRONICS INC., KR  
[86] (3140958)  
[87] (3140958)  
[22] 2012-04-20  
[62] 3,082,413  
[30] US (61/478,912) 2011-04-25

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[13] C

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[25] EN  
[54] **ROBOTIC CLEANER**  
[54] **APPAREIL DE NETTOYAGE ROBOTIQUE**  
[72] SUTTER, CATRIONA C. A., US  
[72] HARTING, DAVID, US  
[72] MATHIEU, MARGARET, US  
[72] HEMAN-ACKAH, MARIAN, US  
[72] PETRO, DOUGLAS, US  
[72] HOFFMAN, TREVOR, US  
[72] WOODROW, CHAD, US  
[73] SHARKNINJA OPERATING LLC, US  
[85] 2021-12-03  
[86] 2020-06-05 (PCT/US2020/036294)  
[87] (WO2020/247732)  
[30] US (62/857,535) 2019-06-05

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[13] C

[51] **Int.Cl. A23G 3/02 (2006.01) A23G 4/02 (2006.01) B65B 3/02 (2006.01)**  
[25] EN  
[54] **PACKAGING A COMESTIBLE WITHOUT CONDITIONING**  
[54] **EMBALLAGE D'UN PRODUIT COMESTIBLE SANS CONDITIONNEMENT**  
[72] BUSINELLI, CARLO, US  
[72] JANI, BHARAT, US  
[72] LYZENGA, DEBORAH, US  
[72] MODAK, BHAIRAVI, US  
[73] INTERCONTINENTAL GREAT BRANDS LLC, US  
[86] (3140799)  
[87] (3140799)  
[22] 2019-01-04  
[62] 3,085,479  
[30] US (62/614,053) 2018-01-05

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[11] **3,141,784**  
[13] C

[51] **Int.Cl. F16S 5/00 (2006.01) B32B 7/05 (2019.01) B32B 3/08 (2006.01) B32B 7/08 (2019.01) B64C 1/40 (2006.01) B64C 7/02 (2006.01) B64D 29/00 (2006.01) B64D 33/04 (2006.01) F01D 25/26 (2006.01) F01D 25/30 (2006.01) F16S 1/10 (2006.01)**  
[25] EN  
[54] **SANDWICH STRUCTURE WITH SHEAR STIFFNESS BETWEEN SKINS AND COMPLIANCE IN THE THICKNESS DIRECTION**  
[54] **STRUCTURE SANDWICH AFFICHANT RIGIDITE AU CISAILLEMENT ENTRE LES COUCHES ET SOUPLESSE DANS LA DIRECTION DE L'EPAISSEUR**  
[72] GRIP, ROBERT E., US  
[72] BROWN, JOHN J., US  
[73] THE BOEING COMPANY, US  
[86] (3141784)  
[87] (3141784)  
[22] 2013-01-02  
[62] 3,077,733  
[30] US (13/412,593) 2012-03-05

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[11] **3,143,033**  
[13] C

[51] **Int.Cl. G06T 11/00 (2006.01) G06T 19/00 (2011.01)**  
[25] EN  
[54] **DATA SERIALIZATION EXTRUSION FOR CONVERTING TWO-DIMENSIONAL IMAGES TO THREE-DIMENSIONAL GEOMETRY**  
[54] **EXTRUSION DE SERIALISATION DE DONNEES POUR CONVERTIR DES IMAGES BIDIMENSIONNELLES EN GEOMETRIE TRIDIMENSIONNELLE**  
[72] BARKER, JEREMIAH TIMBERLINE, US  
[73] BOOM INTERACTIVE INC., US  
[85] 2021-12-08  
[86] 2020-06-12 (PCT/US2020/037548)  
[87] (WO2020/252352)  
[30] US (62/860,461) 2019-06-12

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[13] C

[51] **Int.Cl. H02B 7/00 (2006.01) H02B 1/38 (2006.01) H02B 1/56 (2006.01)**

[25] EN

[54] **SWITCH CABINET ARRANGEMENT**

[54] **CONFIGURATION D'ARMOIRE DE COMMUTATION**

[72] DUPPRE, THEO, DE

[72] HAGER, STEFFEN, DE

[73] WIPOTEC SCIENCE & INNOVATION GMBH, DE

[86] (3143063)

[87] (3143063)

[22] 2021-12-16

[30] DE (10 2020 134 288.8) 2020-12-18

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[11] **3,143,371**  
[13] C

[51] **Int.Cl. H04W 12/122 (2021.01)**

[25] EN

[54] **SIGNALING STORM BLOCKING METHOD, APPARATUS, AND DEVICE, AND STORAGE MEDIUM**

[54] **METHODE, APPAREIL ET DISPOSITIF DE BLOCAGE DE TEMPETE DE SIGNAUX ET SUPPORT DE STOCKAGE**

[72] CAI, YUDONG, CN

[73] HUAWEI TECHNOLOGIES CO., LTD., CN

[85] 2021-12-14

[86] 2020-08-22 (PCT/CN2020/110662)

[87] (WO2021/043012)

[30] CN (201910829015.1) 2019-09-03

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[11] **3,143,551**  
[13] C

[51] **Int.Cl. B05B 1/30 (2006.01) B05B 15/58 (2018.01) A01M 7/00 (2006.01) B05B 12/08 (2006.01) F16K 21/00 (2006.01) F16K 47/04 (2006.01)**

[25] EN

[54] **HYDRAULIC SPRAY NOZZLE**

[54] **BUSE DE PULVERISATION HYDRAULIQUE**

[72] MAURER, GARRETT, US

[72] WOOD, JR., DANIEL R., US

[73] INTELLIGENT AGRICULTURAL SOLUTIONS LLC, US

[85] 2021-12-14

[86] 2020-06-12 (PCT/US2020/037401)

[87] (WO2020/252239)

[30] US (62/861,816) 2019-06-14

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[11] **3,144,088**  
[13] C

[51] **Int.Cl. C23C 4/134 (2016.01) H05H 1/24 (2006.01)**

[25] EN

[54] **METHODS FOR PRODUCING INCREASED CRYSTALLINE AND DENSE IMPROVED COATINGS**

[54] **PROCEDES DE PRODUCTION DE REVETEMENTS AMELIORES A CRISTALLINITE ET DENSITE ACCRUES**

[72] SWEET, MARSHALL L., US

[72] OCONNOR, MOLLY M., US

[73] PRAXAIR S. T. TECHNOLOGY, INC., US

[85] 2021-12-16

[86] 2020-09-10 (PCT/US2020/050168)

[87] (WO2021/118664)

[30] US (62/899,871) 2019-09-13

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[11] **3,144,222**  
[13] C

[51] **Int.Cl. C07C 51/41 (2006.01) C07C 51/43 (2006.01)**

[25] EN

[54] **PRODUCTION OF MALIC ACID**

[54] **PRODUCTION D'ACIDE MALIQUE**

[72] RANGASWAMY, PARTHASARATHY, IN

[73] THIRUMALAI CHEMICALS LIMITED, IN

[85] 2021-12-17

[86] 2020-07-15 (PCT/IN2020/050608)

[87] (WO2021/009774)

[30] IN (201921028680) 2019-07-16

[30] IN (202021009475) 2020-03-05

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[11] **3,144,511**  
[13] C

[51] **Int.Cl. A61F 5/01 (2006.01) A41D 13/00 (2006.01) A61H 1/00 (2006.01) B25J 9/14 (2006.01) B25J 9/18 (2006.01) B25J 19/02 (2006.01) F15B 21/00 (2006.01) F15B 21/08 (2006.01) F15B 21/10 (2006.01)**

[25] EN

[54] **AIR MICROFLUIDICS AND AIR MINIFLUIDICS ENABLED ACTIVE COMPRESSION DEVICE, APPAREL, AND METHOD**

[54] **MICROFLUIDES A AIR ET MINIFLUIDES A AIR PERMETTANT UN DISPOSITIF, UN VETEMENT, ET UNE METHODE DE COMPRESSION ACTIVE**

[72] GAO, RUN ZE, CA

[72] REN, CAROLYN LIQING, CA

[73] GAO, RUN ZE, CA

[73] REN, CAROLYN LIQING, CA

[85] 2021-12-21

[86] 2020-06-24 (PCT/CA2020/050874)

[87] (WO2020/257925)

[30] US (62/865,565) 2019-06-24

[30] CA (3047880) 2019-06-25

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[11] **3,147,054**  
[13] C

[51] **Int.Cl. C05F 11/08 (2006.01) A01N 63/00 (2020.01) A01P 21/00 (2006.01) C05F 11/00 (2006.01) C05G 3/00 (2020.01) C12P 1/00 (2006.01)**

[25] EN

[54] **BIO-STIMULANT AND METHOD OF PRODUCING SAME**

[54] **BIOSTIMULANT ET METHODE DE PRODUCTION**

[72] LETT, RALPH JEFFREY, CA

[73] FARMENT BIO SOLUTIONS LTD., CA

[86] (3147054)

[87] (3147054)

[22] 2022-01-28

[30] US (17/585,952) 2022-01-27

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[11] **3,147,427**  
[13] C

[51] **Int.Cl. C12Q 1/6883 (2018.01) C12Q 1/6876 (2018.01) C12Q 1/6886 (2018.01) G16B 20/20 (2019.01)**

[25] EN

[54] **MARKER FOR HOMOLOGOUS RECOMBINATION DEFICIENCY, METHOD AND SYSTEM FOR DETECTION THEREOF**

[54] **MARQUEUR DE CARENCE DE RECOMBINSAION HOMOLOGUE, METHODE ET SYSTEME DE DETECTION**

[72] NA, CHENGLONG, CN

[72] SHAO, YANG, CN

[72] BAO, HUA, CN

[72] LIU, RUI, CN

[72] WU, SHUYU, CN

[72] SHEN, YI, CN

[72] WANG, XIAONAN, CN

[72] WU, XUE, CN

[73] NANJING SHIHE GENE BIOTECHNOLOGY CO., LTD., CN

[85] 2022-01-31

[86] 2021-01-19 (PCT/CN2021/072605)

[87] (WO2022/095280)

[30] CN (202011208296.8) 2020-11-03

[11] **3,148,224**  
[13] C

[51] **Int.Cl. E21B 21/12 (2006.01)**

[25] EN

[54] **DRILL HEAD AND METHOD FOR PRODUCING A VERTICAL BOREHOLE IN THE GROUND**

[54] **TETE DE FORAGE ET PROCEDE POUR LA REALISATION D'UN FORAGE VERTICAL DANS LE SOL**

[72] RENNKAMP, PATRICK, DE

[73] HERRENKNECHT AG, DE

[85] 2022-01-21

[86] 2020-07-21 (PCT/EP2020/070579)

[87] (WO2021/013846)

[30] US (62/878,264) 2019-07-24

[11] **3,148,289**  
[13] C

[51] **Int.Cl. B01D 53/14 (2006.01) B01D 53/48 (2006.01) B01D 53/64 (2006.01)**

[25] EN

[54] **REDUCING MERCURY EMISSIONS FROM THE BURNING OF COAL**

[54] **REDUCTION DES EMISSIONS DE MERCURE DE LA COMBUSTION DE CHARBON**

[72] COMRIE, DOUGLAS C., US

[73] NOX II, LTD., US

[86] (3148289)

[87] (3148289)

[22] 2005-04-21

[62] 3,059,168

[30] US (60/662,911) 2005-03-17

[11] **3,148,463**  
[13] C

[51] **Int.Cl. H04R 1/02 (2006.01)**

[25] EN

[54] **TEXTILE ASSEMBLIES FOR SPEAKERS, INCLUDING TEXTILE ASSEMBLIES WITH INLAID TENSIONING YARNS, AND ASSOCIATED APPARATUSES AND METHODS**

[54] **ENSEMBLES TEXTILES POUR HAUT-PARLEURS, COMPRENANT DES ENSEMBLES TEXTILES AVEC DES FILS DE TENSION INCRUSTES, ET APPAREILS ET PROCEDES ASSOCIES**

[72] SHUMAKER, LAURA CHARLOTTE, US

[72] HEGDE, SIDDHARTHA, US

[72] BAGUL, ANUJA, US

[72] TORRIE, DARREN, US

[72] RESNECK, MYRRHIA R., US

[72] MITTLEMAN, ADAM DUCKWORTH, US

[72] NARAYANAN, ADITYA, US

[73] GOOGLE LLC, US

[85] 2022-02-17

[86] 2021-03-15 (PCT/US2021/022334)

[87] (WO2021/211242)

[30] US (63/011,754) 2020-04-17

[11] **3,151,003**  
[13] C

[51] **Int.Cl. C11B 3/10 (2006.01)**

[25] EN

[54] **METHODS OF MAKING PURIFIED FATTY ACID COMPOSITIONS**

[54] **PROCEDES DE FABRICATION DE COMPOSITIONS D'ACIDES GRAS PURIFIES**

[72] BALASUBRAMANIAN, RAJESH KUMAR, SG

[72] MADADI, MOHAMMAD RASOUL, SG

[72] TAN, JOVINA ZHI QI, SG

[73] THE PROCTER & GAMBLE COMPANY, US

[85] 2022-03-11

[86] 2020-10-14 (PCT/US2020/070666)

[87] (WO2021/077134)

[30] EP (19203722.4) 2019-10-17

[11] **3,152,711**  
[13] C

[51] **Int.Cl. C22C 23/00 (2006.01) C22C 23/02 (2006.01) C22C 23/04 (2006.01)**

[25] EN

[54] **MAGNESIUM ALLOYS AND METHODS OF MAKING AND USE THEREOF**

[54] **ALLIAGES DE MAGNESIUM ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION**

[72] LUO, AIHUA, US

[72] SHI, RENHAI, US

[73] OHIO STATE INNOVATION FOUNDATION, US

[85] 2022-03-28

[86] 2020-09-28 (PCT/US2020/053065)

[87] (WO2021/067182)

[30] US (62/908,077) 2019-09-30



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[13] C

[51] **Int.Cl. B32B 5/32 (2006.01) A61K 8/02 (2006.01) A61K 8/46 (2006.01) A61K 8/72 (2006.01) B32B 27/00 (2006.01) B32B 33/00 (2006.01) C08J 7/04 (2020.01) C08J 9/00 (2006.01) C11D 17/06 (2006.01)**

[25] EN

[54] **MULTILAYER DISSOLVABLE SOLID ARTICLE CONTAINING COATING COMPOSITION AND PROCESS FOR MAKING THE SAME**

[54] **ARTICLE SOLIDE SOLUBLE MULTICOUCHE CONTENANT UNE COMPOSITION DE REVETEMENT ET SON PROCEDE DE FABRICATION**

[72] TAN, HONGSING, CN  
[72] MAC NAMARA, CARL DAVID, CN  
[72] JIANG, MIN, CN  
[72] FAN, ZHAOQI, CN  
[72] GLENN, ROBERT WAYNE, JR., SG  
[72] XU, DAN, CN  
[72] HUANG, ZEYING, US  
[73] THE PROCTER & GAMBLE COMPANY, US  
[85] 2022-03-31  
[86] 2019-10-24 (PCT/CN2019/113065)  
[87] (WO2021/077367)

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[11] **3,153,375**  
[13] C

[51] **Int.Cl. A23L 7/113 (2016.01) A23L 7/109 (2016.01) A23P 30/20 (2016.01) A23P 30/30 (2016.01)**

[25] EN

[54] **METHOD OF MANUFACTURING INSTANT NOODLES**

[54] **METHODE DE FABRICATION DE NOUILLES INSTANTANÉES**

[72] LO, TA-WEI, TW  
[73] A-SHA REPUBLIC INC., TW  
[86] (3153375)  
[87] (3153375)  
[22] 2022-03-25

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[11] **3,153,474**  
[13] C

[51] **Int.Cl. B65D 51/28 (2006.01) B65D 81/32 (2006.01)**

[25] EN

[54] **RECONFIGURABLE CONTAINER-CLOSURE SYSTEM**

[54] **SYSTEME DE FERMETURE DE RECIPIENT RECONFIGURABLE**

[72] CHEN, YUN, CN  
[72] QUE, CHUZHEN, CN  
[73] ELC MANAGEMENT LLC, US  
[85] 2021-09-29  
[86] 2019-04-12 (PCT/CN2019/080365)  
[87] (WO2020/206571)

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[11] **3,154,207**  
[13] C

[51] **Int.Cl. F04B 49/00 (2006.01) E21B 33/03 (2006.01) E21B 43/12 (2006.01) F04B 17/03 (2006.01) F04B 47/02 (2006.01) F04B 47/14 (2006.01) F04B 49/06 (2006.01)**

[25] EN

[54] **LONG STROKE PUMPING UNIT**

[54] **UNITE DE POMPAGE A LONGUE COURSE**

[72] ROBISON, CLARK E., US  
[72] THOMAS, BENSON, US  
[72] HALL, KEVIN, US  
[72] CHRISTIAN, SEAN M., US  
[72] LEMBCKE, JEFFREY JOHN, US  
[73] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US  
[86] (3154207)  
[87] (3154207)  
[22] 2016-01-29  
[62] 2,975,272  
[30] US (62/109,144) 2015-01-29  
[30] US (62/112,250) 2015-02-05  
[30] US (62/114,892) 2015-02-11  
[30] US (62/121,821) 2015-02-27

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[11] **3,154,360**  
[13] C

[51] **Int.Cl. A61K 31/737 (2006.01) A61K 31/727 (2006.01) A61K 31/733 (2006.01) A61K 31/736 (2006.01) A61P 11/02 (2006.01)**

[25] EN

[54] **POLYSACCHARIDES FOR NASAL POLYP REDUCTION**

[54] **POLYSACCHARIDES POUR LA REDUCTION DES POLYPES NASAUX**

[72] FUJIEDA, SHIGEHARU, JP  
[72] TAKABAYASHI, TETSUJI, JP  
[72] YOSHIDA, KANAKO, JP  
[72] WATANABE, HIDEKI, JP  
[72] FUJIKAWA, KOKI, JP  
[73] UNIVERSITY OF FUKUI, JP  
[73] MARUHO CO., LTD, JP  
[85] 2022-03-11  
[86] 2020-09-18 (PCT/JP2020/035438)  
[87] (WO2021/054440)  
[30] JP (2019-170955) 2019-09-20

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[11] **3,155,463**  
[13] C

[51] **Int.Cl. C01B 32/19 (2017.01) C01B 32/198 (2017.01) C01B 32/205 (2017.01) C30B 29/68 (2006.01) C30B 33/04 (2006.01)**

[25] EN

[54] **PROCESSES FOR THE PREPARATION OF EXPANDED GRAPHITE AND EXFOLIATED GRAPHENE OXIDE**

[54] **PROCEDES DE PREPARATION DE GRAPHITE EXPANSE ET D'OXYDE DE GRAPHENE EXFOLIE**

[72] CHEN, AICHENG, CA  
[72] SALVERDA, MICHAEL, CA  
[72] THIRUPPATHI, ANTONY RAJ, CA  
[72] SIDHUREDDY, BOOPATHI, CA  
[72] RAHMATI, FARNOOD, CA  
[73] UNIVERSITY OF GUELPH, CA  
[73] ZEN GRAPHENE SOLUTIONS LTD., CA  
[85] 2022-04-21  
[86] 2021-09-20 (PCT/CA2021/051305)  
[87] (WO2022/056643)  
[30] US (63/080,239) 2020-09-18

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[13] C

[51] **Int.Cl. G06Q 10/0635 (2023.01) G06Q 10/0637 (2023.01)**  
[25] EN  
[54] **APPARATUS AND METHODS FOR FILTERING AND DISPLAYING DIFFERENT SCENARIOS**  
[54] **APPAREIL ET METHODES SERVANT A FILTRER ET AFFICHER DIFFERENTS SCENARIOS**  
[72] COLEMAN, STANLEY THOMAS, CA  
[72] HORNER, SIMON NESBITT, CA  
[72] GNOCATO, GIUSEPPE, CA  
[73] COPPERLEAF TECHNOLOGIES INC., CA  
[86] (3155733)  
[87] (3155733)  
[22] 2014-11-06  
[62] 2,870,372

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[13] C

[51] **Int.Cl. A61K 31/194 (2006.01) A23L 29/00 (2016.01) A61K 31/4188 (2006.01) A61K 33/32 (2006.01) A61P 3/04 (2006.01) A61P 3/10 (2006.01) A61P 9/00 (2006.01) A61P 13/12 (2006.01) A61P 15/12 (2006.01) A61P 19/08 (2006.01) A61P 25/28 (2006.01)**  
[25] EN  
[54] **SYNERGISTIC NUTRITIONAL COMPOSITIONS FOR ENHANCING ATP EFFICIENCY**  
[54] **COMPOSITIONS NUTRITIONNELLES SYNERGIQUES POUR AMELIORER L'EFFICACITE DE L'ATP CELLULAIRE**  
[72] PALKAR, JOTIRAM, IN  
[72] T., RAJENDRA PRASAD, IN  
[73] CELAGENEX RESEARCH (INDIA) PVT. LTD., IN  
[85] 2022-05-09  
[86] 2021-01-01 (PCT/IN2021/050002)  
[87] (WO2021/137257)  
[30] IN (201921044295) 2020-01-01

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[13] C

[51] **Int.Cl. C23F 11/12 (2006.01)**  
[25] EN  
[54] **NOVEL ALKYL SULFONIC ACID COMPOSITIONS**  
[54] **NOUVELLES COMPOSITIONS D'ACIDE ALKYL SULFONIQUE**  
[72] PURDY, CLAY, CA  
[72] WEISSENBERGER, MARKUS, CA  
[73] DORF KETAL CHEMICALS FZE, AE  
[86] (3159487)  
[87] (3159487)  
[22] 2019-12-13  
[62] 3,065,043  
[30] CA (3,028,226) 2018-12-20

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[11] **3,159,950**  
[13] C

[51] **Int.Cl. H04N 19/154 (2014.01) H04N 19/137 (2014.01) H04N 19/172 (2014.01) H04N 19/51 (2014.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR RENDERING & PRE-ENCODED LOAD ESTIMATION BASED ENCODER HINTING**  
[54] **SYSTEMES ET PROCEDES DE RENDU ET D'OPTIMISATION D'UN CODEUR BASEE SUR UNE ESTIMATION DE CHARGE PRE-CODEE**  
[72] KOPIETZ, MICHAEL, DE  
[73] ZENIMAX MEDIA INC., US  
[86] (3159950)  
[87] (3159950)  
[22] 2018-04-20  
[62] 3,106,617  
[30] US (62/488,526) 2017-04-21  
[30] US (62/647,180) 2018-03-23  
[30] US (62/655,901) 2018-04-11

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[13] C

[51] **Int.Cl. F02D 41/00 (2006.01) F02M 25/08 (2006.01) F02M 33/02 (2006.01)**  
[25] EN  
[54] **CERTIFIED VAPOR RECOVERY**  
[54] **RECUPERATION DE VAPEUR CERTIFIEE**  
[72] MUNDING, PAUL, US  
[72] BAKER, AARON, US  
[72] KIM, SOOBIN, US  
[72] TALTON, BROOKS MIMS, III, US  
[73] FLOGISTIX, LP, US  
[85] 2022-07-12  
[86] 2021-11-19 (PCT/US2021/060154)  
[87] (WO2022/109308)  
[30] US (63/115,646) 2020-11-19

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[11] **3,166,149**  
[13] C

[51] **Int.Cl. B01D 33/067 (2006.01) B01D 33/073 (2006.01)**  
[25] EN  
[54] **ROTARY DRUM FILTER DECK ASSEMBLY COMPRISING A CLIP**  
[54] **ENSEMBLE PLATEAU DE FILTRE A TAMBOUR ROTATIF COMPRENANT UNE PINCE**  
[72] TOWNSON, JACOB, US  
[72] STUBBLEFIELD, KENT, US  
[72] HARRINGTON, ANTHONY, US  
[72] GRACE, TODD, US  
[73] ANDRITZ INC., US  
[85] 2022-07-26  
[86] 2021-02-26 (PCT/US2021/019836)  
[87] (WO2021/173945)  
[30] US (62/982,837) 2020-02-28

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[11] **3,167,387**  
[13] C

[51] **Int.Cl. H01M 8/0247 (2016.01) H01M 8/0276 (2016.01) H01M 8/0286 (2016.01) H01M 8/2483 (2016.01) C25B 9/65 (2021.01) C25B 9/70 (2021.01) H01M 8/1246 (2016.01) C25B 13/07 (2021.01)**  
[25] EN  
[54] **SOC STACK COMPRISING INTEGRATED INTERCONNECT AND SPACER**  
[54] **EMPILEMENT DE PILES A OXYDE SOLIDE COMPRENANT UNE INTERCONNEXION ET UNE ENTRETOISE INTEGREES**  
[72] HEIREDAL-CLAUSEN, THOMAS, DK  
[72] RASS-HANSEN, JEPPE, DK  
[72] NORBY, TOBIAS HOLT, DK  
[72] BLENNOW, BENGT PETER GUSTAV, DK  
[72] KUNGAS, RAINER, DK  
[72] NIELSEN, MARTIN REFLUND, DK  
[73] TOPSOE A/S, DK  
[85] 2022-07-11  
[86] 2021-02-15 (PCT/EP2021/053590)  
[87] (WO2021/165180)  
[30] EP (20157590.9) 2020-02-17

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[13] C

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[25] EN  
[54] **PET TOY**  
[54] **JOUET POUR ANIMAL DE COMPAGNIE**  
[72] LEE, BARTHOLOMEW MICHAEL, AU  
[72] REILLY, CLAIRE JEMIMAH, AU  
[73] MONCHBALL IP PTY LTD, AU  
[85] 2022-07-20  
[86] 2021-02-24 (PCT/AU2021/050157)  
[87] (WO2021/168508)  
[30] AU (2020900524) 2020-02-24

[11] **3,169,013**  
[13] C

- [51] **Int.Cl. B60G 7/00 (2006.01) F16J 15/16 (2006.01)**  
[25] EN  
[54] **SEAL HAVING UNDULATING SEAL COMPONENT AND SYSTEMS, ASSEMBLIES, AND METHODS THEREOF**  
[54] **JOINT D'ETANCHEITE POUR VU D'UN COMPOSANT D'ETANCHEITE ONDULE ET SYSTEMES, ENSEMBLES ET PROCEDES ASSOCIES**  
[72] MATHUR, ANISH, US  
[72] MORGE, RYAN P., US  
[72] FERREIRA, GABRIEL S., US  
[72] HOLTHAUS, DAVID W., US  
[72] KIESEL, MARK J., US  
[72] MONROE, CHRISTOPHER A., US  
[73] CATERPILLAR INC., US  
[85] 2022-08-22  
[86] 2021-02-22 (PCT/US2021/018961)  
[87] (WO2021/173456)  
[30] US (16/803,681) 2020-02-27

[11] **3,170,157**  
[13] C

- [51] **Int.Cl. H04L 7/00 (2006.01)**  
[25] EN  
[54] **TIME SYNCHRONIZATION DEVICE, TIME SYNCHRONIZATION SYSTEM, AND TIME SYNCHRONIZATION METHOD**  
[54] **DISPOSITIF DE SYNCHRONISATION TEMPORELLE, SYSTEME DE SYNCHRONISATION TEMPORELLE ET PROCEDE DE SYNCHRONISATION TEMPORELLE**  
[72] TAKAHASHI, MASAYUKI, JP  
[73] NEC PLATFORMS, LTD., JP  
[85] 2022-08-04  
[86] 2021-01-13 (PCT/JP2021/000903)  
[87] (WO2021/157308)  
[30] JP (2020-018117) 2020-02-05

[11] **3,171,684**  
[13] C

- [51] **Int.Cl. B01D 21/24 (2006.01) B05B 1/02 (2006.01) C02F 1/00 (2006.01) C02F 1/52 (2006.01) E03F 5/14 (2006.01)**  
[25] EN  
[54] **NOZZLE FOR A CLOG-RESISTANT INLET IN A CONDUIT OF A WATER TREATMENT SYSTEM**  
[54] **BUSE POUR UNE ENTREE RESISTANTE AU BOUCHAGE DANS UN CONDUIT DE SYSTEME DE TRAITEMENT DES EAUX**  
[72] BRAUCH, JOSEPH K., US  
[72] HANSON, CHRISTOPHER D., US  
[73] MEURER RESEARCH, INC., US  
[86] (3171684)  
[87] (3171684)  
[22] 2019-09-24  
[62] 3,056,528  
[30] US (16/144,645) 2018-09-27

[11] **3,172,062**  
[13] C

- [51] **Int.Cl. G01N 23/203 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR INSPECTING A STRUCTURE ACROSS A COVER LAYER COVERING THE STRUCTURE**  
[54] **PROCEDE ET SYSTEME D'INSPECTION D'UNE STRUCTURE SUR L'ENSEMBLE D'UNE COUCHE DE COUVERTURE RECOUVRANT LA STRUCTURE**  
[72] CABOT, PATER MARC, CA  
[73] INVERSA SYSTEMS LTD., CA  
[85] 2022-08-19  
[86] 2021-04-13 (PCT/CA2021/050491)  
[87] (WO2021/232142)  
[30] US (63/026,833) 2020-05-19

[11] **3,172,705**  
[13] C

- [51] **Int.Cl. B60L 53/30 (2019.01) B60L 53/18 (2019.01) B60L 53/31 (2019.01) H01R 13/60 (2006.01)**  
[25] EN  
[54] **ELECTRIC VEHICLE CHARGING STATION WITH SAFETY FEATURES**  
[54] **STATION DE RECHARGE DE VEHICULES ELECTRIQUES COMPRENANT DES CARACTERISTIQUES DE SECURITE**  
[72] PIRIE, CHRISTOPHER IAN, US  
[72] INKPEN, KEVIN BRYANT, CA  
[73] PIRIE, CHRISTOPHER IAN, US  
[73] INKPEN, KEVIN BRYANT, CA  
[85] 2022-08-30  
[86] 2022-03-16 (PCT/CA2022/050401)  
[87] (3172705)  
[30] US (63/161814) 2021-03-16

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[11] **3,184,321**  
[13] C

[51] **Int.Cl. F21V 29/70 (2015.01) F21V 29/508 (2015.01) F21V 29/73 (2015.01) F21K 9/00 (2016.01) F21S 45/47 (2018.01) H05B 45/10 (2020.01) H05B 45/30 (2020.01) H05B 45/40 (2020.01) B60Q 1/52 (2006.01) H05K 1/02 (2006.01) H05K 1/16 (2006.01) H05K 7/20 (2006.01)**

[25] EN

[54] **LIGHT SYSTEM USING FLEXIBLE PRINTED CIRCUIT BOARDS**

[54] **SYSTEME D'ECLAIRAGE UTILISANT DES CARTES A CIRCUITS IMPRIMES SOUPLES**

[72] CHUA, RAINIER, CA

[73] SWS WARNING LIGHTS INC., CA

[86] (3184321)

[87] (3184321)

[22] 2022-12-16

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[11] **3,189,494**  
[13] C

[51] **Int.Cl. C10G 1/10 (2006.01) C10G 11/18 (2006.01) C10G 65/12 (2006.01)**

[25] EN

[54] **COMMERCIAL GRADE ULTRA-LOW SULPHUR DIESEL PRODUCTION PROCESS FROM MIXED WASTE PLASTICS PYROLYSIS OIL**

[54] **PROCEDE DE PRODUCTION DE DIESEL A TRES FAIBLE TENEUR EN SOUFRE DE QUALITE COMMERCIALE A PARTIR D'HUILE DE PYROLYSE DE DECHETS PLASTIQUES MIXTES**

[72] ODJO, ANDREW, GB

[72] STEPHENS, BERTIE, GB

[73] CLEAN PLANET ENERGY, A TRADING NAME OF PYROPLAST ENERGY LTD, GB

[85] 2023-02-14

[86] 2021-07-27 (PCT/GB2021/051924)

[87] (WO2022/034287)

[30] GB (2012708.0) 2020-08-14

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[11] **3,190,393**  
[13] C

[51] **Int.Cl. B32B 27/00 (2006.01)**

[25] EN

[54] **RECYCLABLE PACKAGING MATERIAL AND PROCESS OF PREPARATION THEREOF**

[54] **MATERIAU DE CONDITIONNEMENT RECYCLABLE ET SON PROCEDE DE PREPARATION**

[72] NAIR, HARIHARAN KRISHNAN, IN

[73] NAIR, HARIHARAN KRISHNAN, IN

[85] 2023-02-21

[86] 2021-09-09 (PCT/IN2021/050884)

[87] (WO2022/054091)

[30] IN (202021039242) 2020-09-10

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[11] **3,192,872**  
[13] C

[51] **Int.Cl. B62D 25/14 (2006.01)**

[25] EN

[54] **SUPPORT STRUCTURE FOR AN INSTRUMENT PANEL SUPPORT AND INSTRUMENT PANEL SUPPORT HAVING SUCH A SUPPORT STRUCTURE**

[54] **STRUCTURE DE SUPPORT POUR UN SUPPORT DE TABLEAU DE BORD ET TABLEAU DE BORD COMPRENANT UNE TELLE STRUCTURE**

[72] GUNTHER, ALEXANDER, DE

[72] GRUSSING, PHIL, DE

[72] TENTSCHER, DOMINIK, DE

[73] KIRCHHOFF AUTOMOTIVE DEUTSCHLAND GMBH, DE

[85] 2023-03-15

[86] 2021-09-30 (PCT/EP2021/076982)

[87] (WO2022/069655)

[30] DE (10 2020 125 791.0) 2020-10-02

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[11] **3,195,917**  
[13] C

[51] **Int.Cl. B65D 5/50 (2006.01) B65D 81/113 (2006.01) B65D 85/30 (2006.01)**

[25] EN

[54] **MULTI-USE BOTTLE SHIPPING ASSEMBLY WITH RESILIENT ELEMENTS**

[54] **ESEMBLE D'EXPEDITION DE BOUTEILLES A USAGES MULTIPLES A ELEMENTS ELASTIQUES**

[72] RONNING, JAMES, US

[72] BURROUGHS, JEFF, US

[73] TEKNI-PLEX, INC., US

[85] 2023-03-20

[86] 2021-10-22 (PCT/US2021/056171)

[87] (WO2022/087352)

[30] US (63/105,081) 2020-10-23

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[11] **3,196,056**  
[13] C

[51] **Int.Cl. E21B 7/24 (2006.01) E21B 7/30 (2006.01)**

[25] EN

[54] **SONIC-POWERED METHODS FOR HORIZONTAL DIRECTIONAL DRILLING**

[54] **PROCEDES A ENERGIE SONIQUE POUR FORAGE DIRECTIONNEL HORIZONTAL**

[72] KNOLLE, L. MARK, US

[73] TERRA SONIC INTERNATIONAL, LLC, US

[85] 2023-04-18

[86] 2021-10-22 (PCT/US2021/056219)

[87] (WO2022/087387)

[30] US (63/104,231) 2020-10-22

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[11] **3,202,684**  
[13] C

[51] **Int.Cl. A01K 15/02 (2006.01)**

[25] EN

[54] **PET TOY WITH INTERCONNECTING GROOVES AND OPEN CORE**

[54] **JOUET A RAINURES INTERCONNECTEES ET A NOYAU OUVERT POUR ANIMAL DOMESTIQUE**

[72] MARKHAM, JOSEPH P., US

[73] BOUNCE, INC., US

[85] 2023-06-16

[86] 2021-12-30 (PCT/US2021/065697)

[87] (WO2022/147260)

[30] US (17/138,590) 2020-12-30

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[11] **3,203,351**

[13] C

- [51] **Int.Cl. H04L 9/00 (2022.01) H04L 9/08 (2006.01) H04L 9/14 (2006.01) H04L 9/32 (2006.01)**
- [25] EN
- [54] **HOMOMORPHIC ONE-TIME PAD ENCRYPTION**
- [54] **CHIFFREMENT HOMOMORPHE AVEC MASQUE A USAGE UNIQUE**
- [72] GRANT, ROBERT EDWARD, US
- [72] ROMINE, KRISTINE, US
- [73] THEON TECHNOLOGY LLC, US
- [85] 2023-06-23
- [86] 2021-12-21 (PCT/US2021/064756)
- [87] (WO2022/140488)
- [30] US (17/132,128) 2020-12-23

[11] **3,203,365**

[13] C

- [51] **Int.Cl. E21B 10/32 (2006.01) E21B 21/08 (2006.01) E21B 21/10 (2006.01)**
- [25] EN
- [54] **DOWNHOLE TOOL MOVEMENT CONTROL SYSTEM AND METHOD OF USE**
- [54] **SYSTEME DE COMMANDE DE MOUVEMENT D'OUTIL DE FOND ET PROCEDE D'UTILISATION**
- [72] GREEN, DAVID A., US
- [73] WELL MASTER CORPORATION, US
- [85] 2023-06-23
- [86] 2022-01-15 (PCT/US2022/012643)
- [87] (WO2022/155553)
- [30] US (63/138,496) 2021-01-17

[11] **3,203,669**

[13] C

- [51] **Int.Cl. B23P 19/02 (2006.01)**
- [25] EN
- [54] **PRESS-FITTING APPARATUS, PRESS-FITTING JIG, AND MANUFACTURING APPARATUS**
- [54] **DISPOSITIF DE MONTAGE A LA PRESSE, GABARIT DE MONTAGE A LA PRESSE, ET DISPOSITIF DE FABRICATION**
- [72] ASAI, RYOTA, JP
- [72] LAU, HIENG KIONG, SG
- [73] HIRATA CORPORATION, JP
- [85] 2023-05-31
- [86] 2021-11-17 (PCT/JP2021/042306)
- [87] (WO2022/118661)
- [30] SG (10202011991V) 2020-12-01

[11] **3,203,793**

[13] C

- [51] **Int.Cl. G06F 21/53 (2013.01) G06F 8/60 (2018.01) G06F 9/44 (2018.01) G06F 9/455 (2018.01)**
- [25] EN
- [54] **SYSTEM AND METHOD FOR REAL-TIME, DYNAMIC CREATION, DELIVERY, AND USE OF CUSTOMIZABLE WEB APPLICATIONS**
- [54] **SYSTEME ET PROCEDE DE CREATION, DE DISTRIBUTION ET D'UTILISATION DYNAMIQUES EN TEMPS REEL D'APPLICATIONS WEB PERSONNALISABLES**
- [72] MASON, DAVE, US
- [72] KHORENIAN, RAFFI, D., US
- [73] APPWARD LLC, US
- [85] 2023-06-01
- [86] 2021-12-16 (PCT/US2021/063909)
- [87] (WO2022/146714)
- [30] US (63/131,271) 2020-12-28

[11] **3,203,916**

[13] C

- [51] **Int.Cl. C07C 17/275 (2006.01) B01J 23/745 (2006.01) C07C 19/01 (2006.01)**
- [25] EN
- [54] **METHODS FOR PRODUCING HALOGENATED PROPANES**
- [54] **PROCEDES DE PRODUCTION DE PROPANES HALOGENES**
- [72] DAWKINS, JOHN L., US
- [72] HOLLIS, DARRELL, US
- [72] KRAMER, KEITH S., US
- [72] CALDERWOOD, BRIAN, US
- [73] OCCIDENTAL CHEMICAL CORPORATION, US
- [86] (3203916)
- [87] (3203916)
- [22] 2017-07-24
- [62] 3,031,793
- [30] US (62/366,674) 2016-07-26

[11] **3,207,809**

[13] C

- [51] **Int.Cl. H01H 13/85 (2006.01) H01H 13/78 (2006.01)**
- [25] EN
- [54] **MULTI-MODE MECHANICAL KEYBOARD SWITCH**
- [54] **INTERROMPTEUR DE CLAVIER MECANIQUE MULTIMODE**
- [72] LIU, HENRY, CA
- [73] ZEAL GLOBAL HOLDINGS LTD., CA
- [85] 2023-08-08
- [86] 2022-02-09 (PCT/CA2022/050187)
- [87] (WO2022/170428)
- [30] US (63/147,600) 2021-02-09

[11] **3,209,080**

[13] C

- [51] **Int.Cl. E21B 17/03 (2006.01) E21B 3/02 (2006.01)**
- [25] EN
- [54] **COMBINED MULTI-COUPLER MULTI-RACCORD COMBINE**
- [72] MOLLIN, WINFRIED, DE
- [73] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US
- [86] (3209080)
- [87] (3209080)
- [22] 2018-03-05
- [62] 2,997,438
- [30] US (62/469,431) 2017-03-09
- [30] US (15/656,684) 2017-07-21

[11] **3,215,136**

[13] C

- [51] **Int.Cl. E04D 15/02 (2006.01)**
- [25] EN
- [54] **APPARATUS FOR ACCURATE INSTALLATION OF ROOF SHINGLES**
- [54] **APPAREIL POUR INSTALLATION PRECISE DE BARDEAUX DE TOIT**
- [72] BRASSARD, TOMMY, CA
- [73] 9299-8293 QUEBEC INC., CA
- [85] 2023-10-11
- [86] 2022-10-26 (PCT/CA2022/051581)
- [87] (WO2023/070207)
- [30] US (63/272,964) 2021-10-28

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[21] **3,156,949**  
[13] A1  
[51] **Int.Cl. A63B 71/12 (2006.01) A41D 13/05 (2006.01) A41F 9/00 (2006.01)**  
[25] EN  
[54] **VENUS BELT**  
[54] **CEINTURE DE VENUS**  
[72] JAMES, ADRIAN, CA  
[71] JAMES, ADRIAN, CA  
[22] 2022-07-13  
[41] 2024-01-13

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[21] **3,164,512**  
[13] A1  
[51] **Int.Cl. G01J 1/04 (2006.01) G01J 3/02 (2006.01)**  
[25] EN  
[54] **BROADBAND TIME-RESOLVED THZ SYSTEM**  
[54] **SYSTEME TERAHERTZ (THZ) A LARGE BANDE A RESOLUTION TEMPORELLE**  
[72] MENARD, JEAN-MICHEL, CA  
[72] COUTURE, NICOLAS, CA  
[71] OZ OPTICS LTD., CA  
[22] 2022-07-11  
[41] 2024-01-11

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[21] **3,167,045**  
[13] A1  
[51] **Int.Cl. A61C 5/90 (2017.01)**  
[25] EN  
[54] **PROTECTIVE SHIELD FOR DENTAL IMPLANT**  
[54] **ECRAN DE PROTECTION POUR IMPLANT DENTAIRE**  
[72] MAHABADI, MEYSAM, CA  
[72] BONAKDAR, HAMED, CA  
[72] MOGHADASI, SEYED AHMAD, CA  
[72] VAFABEE, FARIBORZ, CA  
[71] SMART DENTAL CARE INC., CA  
[22] 2022-07-07  
[41] 2024-01-07

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[21] **3,167,056**  
[13] A1  
[51] **Int.Cl. C10C 3/00 (2006.01) C10C 3/08 (2006.01) C10G 9/00 (2006.01)**  
[25] EN  
[54] **THERMAL PRETREATMENT AND SOLVENT DEASPHALTING OF HEAVY HYDROCARBON STREAMS**  
[54] **PRETRAITEMENT THERMIQUE ET DESASPHALTAGE AU SOLVANT DE MELANGES D-HYDROCARBURES LOURDS**  
[72] REMESAT, DARIUS, CA  
[72] SUN, ANNIE, CA  
[71] SUNCOR ENERGY INC., CA  
[22] 2022-07-07  
[41] 2024-01-07

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[21] **3,167,077**  
[13] A1  
[51] **Int.Cl. F21V 33/00 (2006.01) F21S 4/20 (2016.01) E04F 21/06 (2006.01) F21L 4/00 (2006.01) F21V 31/00 (2006.01)**  
[25] EN  
[54] **LINEAR COMPOUND LIGHT**  
[54] **LUMIERE COMPLEXE LINEAIRE**  
[72] POIRIER, ALEXANDRE, CA  
[71] POIRIER, ALEXANDRE, CA  
[22] 2022-07-07  
[41] 2024-01-07

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[21] **3,167,080**  
[13] A1  
[51] **Int.Cl. E04H 17/14 (2006.01) E04H 17/02 (2006.01)**  
[25] EN  
[54] **STACKABLE FENCING PANEL**  
[54] **PANNEAU DE CLOTURE EMPILABLE**  
[72] MUC, CHRISTOPHER, CA  
[71] CANPAD INC., CA  
[22] 2022-07-07  
[41] 2024-01-07

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[21] **3,167,173**  
[13] A1  
[51] **Int.Cl. G03B 15/02 (2021.01)**  
[25] EN  
[54] **PORTABLE LIGHTING GRID FOR USE IN FILM AND TELEVISION TO SUSPEND LUMINAIRES OVERHEAD OR VERTICALLY**  
[54] **GRILLE D~ECLAIRAGE PORTABLE POUR LE CINEMA ET LA TELEVISION PERMETTANT DE SUSPENDRE DES LUMINAIRES AU-DESSUS DE LA TETE OU A LA VERTICALE**  
[72] SUK, WOLFGANG, CA  
[72] SLATTER, PAUL, CA  
[71] CINEPRO LED INC., CA  
[22] 2022-07-11  
[41] 2024-01-11

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[21] **3,167,204**  
[13] A1  
[51] **Int.Cl. E01C 13/08 (2006.01) B32B 5/08 (2006.01) D04H 11/00 (2006.01)**  
[25] EN  
[54] **ARTIFICIAL TURF FREE OF INFILL MATERIAL COMPRISING TEXTURE HYDROPHILIC FIBERS**  
[54] **GAZON ARTIFICIEL SANS MATERIAU DE REMPLISSAGE COMPRENANT DES FIBRES HYDROPHILES DE TEXTURE**  
[72] VACHON, FREDERIC, CA  
[71] 4427017 CANADA INC., CA  
[22] 2022-07-11  
[41] 2024-01-11

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[21] **3,167,211**  
[13] A1

[51] **Int.Cl. G06F 3/14 (2006.01) G16H 20/70 (2018.01) G06V 40/16 (2022.01) A61B 5/16 (2006.01)**

[25] EN

[54] **COMPUTER SCREEN BACKGROUND MOOD DETECTION COLOR ALTERING METHOD**

[54] **METHODE DE MODIFICATION DE LA COULEUR DE L~ARRIERE-PLAN DE L~ECRAN D~ORDINATEUR POUR LA DETECTION DE L~AMBIANCE**

[72] PATEL, FENIL, CA  
[71] PATEL, FENIL, CA  
[22] 2022-07-11  
[41] 2024-01-07  
[30] US (17/811,155) 2022-07-07

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[21] **3,167,266**  
[13] A1

[51] **Int.Cl. D04H 5/00 (2012.01) D04H 1/28 (2012.01) D04H 1/425 (2012.01) D04H 1/492 (2012.01) D04H 1/04 (2012.01)**

[25] EN

[54] **NONWOVEN FABRIC COMPRISING CELLULOSE FILAMENTS AND METHODS OF FABRICATION THEREOF**

[54] **TISSU NON TISSE COMPRENANT DES FILAMENTS DE CELLULOSE ET SES METHODES DE FABRICATION**

[72] TOLNAI, BALAZS, CA  
[72] NJAMEN TCHAPDA, GUY, CA  
[71] KRUGER INC., CA  
[22] 2022-07-11  
[41] 2024-01-11

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[21] **3,167,267**  
[13] A1

[51] **Int.Cl. E04H 15/34 (2006.01) E04H 1/12 (2006.01) E04H 15/46 (2006.01) E04H 15/48 (2006.01) E04B 1/343 (2006.01)**

[25] EN

[54] **SCALABLE AND PORTABLE POPUP WORKSITE SYSTEM**

[54] **SYSTEME DE CHANTIER MODULABLE ET PORTABLE**

[72] YAN, GENG, CA  
[71] YAN, GENG, CA  
[22] 2022-07-11  
[41] 2024-01-11

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[21] **3,167,469**  
[13] A1

[51] **Int.Cl. B09C 1/02 (2006.01) B01J 19/08 (2006.01) B09C 1/00 (2006.01) B09C 1/08 (2006.01)**

[25] EN

[54] **A SYSTEM AND METHOD FOR DECONTAMINATING SOIL USING ELECTROKINETICS**

[54] **SYSTEME ET METHODE DE DECONTAMINATION DES SOLS PAR ELECTROCINETIQUE**

[72] HANNA, JAMES, CA  
[72] VANDERSLEEN, JOHN, CA  
[72] MACLEAN, ARYN, CA  
[72] WAY, EVAN, CA  
[71] 12974533 CANADA INC., CA  
[22] 2022-07-13  
[41] 2024-01-13

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[21] **3,167,481**  
[13] A1

[51] **Int.Cl. E04D 13/04 (2006.01) E04F 10/00 (2006.01)**

[25] EN

[54] **ADJUSTABLE DEVICE FOR DIVERTING RAINWATER RUN-OFF FROM A RETRACTABLE AWNING**

[54] **DISPOSITIF REGLABLE POUR DETOURNER L~ECOULEMENT DE L~EAU DE PLUIE D~UN AUVENT RETRACTABLE**

[72] GRIBBLE, DAVID H., CA  
[72] DEVEAU, JAMES, CA  
[72] BARBIANI, FRANCA, CA  
[71] GRIBBLE, DAVID H., CA  
[71] DEVEAU, JAMES, CA  
[71] BARBIANI, FRANCA, CA  
[22] 2022-07-13  
[41] 2024-01-13

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[21] **3,167,491**  
[13] A1

[51] **Int.Cl. B62K 21/00 (2006.01) B62K 23/00 (2006.01)**

[25] EN

[54] **A STEERING ENHANCEMENT METHOD CHARACTERIZED BY THE ABILITY TO APPLY STABILIZING FORCES FROM FLYWHEELS CONCURRENTLY AND COOPERATIVELY WITH THE DRIVERS STEERING.**

[54] **METHODE D~AMELIORATION DE LA DIRECTION CARACTERISEE PAR LA CAPACITE D~APPLIQUER DES FORCES STABILISATRICES A PARTIR DE VOLANTS D~INERTIE SIMULTANEMENT ET EN COOPERATION AVEC LA DIRECTION DU CONDUCTEUR.**

[72] PILON, DANIEL, CA  
[71] PILON, DANIEL, CA  
[22] 2022-07-08  
[41] 2024-01-08

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[21] **3,167,509**  
[13] A1

[51] **Int.Cl. H01Q 19/28 (2006.01) H01Q 1/38 (2006.01) H01Q 9/04 (2006.01) G01S 19/21 (2010.01) G01S 19/36 (2010.01)**

[25] EN

[54] **ANTI-JAMMING AND REDUCED INTERFERENCE GLOBAL POSITIONING SYSTEM RECEIVER METHODS AND DEVICES**

[54] **METHODES ET DISPOSITIFS DE RECEPTEUR DE SYSTEME DE POSITIONNEMENT MONDIAL ANTIBROUILLAGE A INTERFERENCE REDUITE**

[72] PANTHER, GYLES, CA  
[72] HAUTCOEUR, JULIEN, CA  
[71] TALLYSMAN WIRELESS INC., CA  
[22] 2022-07-13  
[41] 2024-01-13  
[30] US (62/650,535) 2018-03-30

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[21] **3,167,516**  
[13] A1

[51] **Int.Cl. A41H 1/00 (2006.01) A41C 3/00 (2006.01) A41C 5/00 (2006.01)**  
[25] EN  
[54] **A METHOD OF CUSTOM FITTING A BRA**  
[54] **METHODE D~AJUSTEMENT SUR MESURE D~UN SOUTIEN-GORGE**  
[72] SMITH, KEVIN, CA  
[71] SMITH, KEVIN, CA  
[22] 2022-07-12  
[41] 2024-01-12

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[21] **3,167,529**  
[13] A1

[51] **Int.Cl. A47G 29/02 (2006.01) B25H 3/00 (2006.01) B25H 3/02 (2006.01) B65D 25/22 (2006.01)**  
[25] EN  
[54] **STORAGE SYSTEM AND CONTAINER FOR SAME**  
[54] **SYSTEME DE STOCKAGE ET RECIPIENT POUR CELUI-CI**  
[72] FEDRIGON, JEREMY, US  
[72] SIU, WAI YIP, CN  
[72] ZHANG, GAI SHE, CN  
[71] TECHTRONIC CORDLESS GP, US  
[22] 2022-07-12  
[41] 2024-01-12

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[21] **3,167,745**  
[13] A1

[51] **Int.Cl. E04G 1/04 (2006.01)**  
[25] FR  
[54] **VERTICAL SUPPORT FOR INSTALLING MULTIPLE GUARDRAILS THAT CAN FIT ON ALL COMMONLY USED METAL SCAFFOLDS**  
[54] **SUPPORT VERTICAL POUR POSE DE GARDES CORPS MULTIPLES COMPATIBLE SUR TOUT ECHAFAUDAGE METALLIQUE D'USAGE COURANT**  
[72] PAQUETTE, CLAUDE, CA  
[71] PAQUETTE, CLAUDE, CA  
[22] 2022-07-13  
[41] 2024-01-13

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[21] **3,168,218**  
[13] A1

[51] **Int.Cl. H04R 29/00 (2006.01) H04L 12/40 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR UNIVERSAL MICROPHONE MODULE**  
[54] **SYSTEME ET METHODE POUR UN MODULE DE MICROPHONE UNIVERSEL**  
[72] MARKOU, PETER, CA  
[72] AUDETTE, ANDRE-PHILIPPE, CA  
[71] AUTOMOTIVE DATA SOLUTIONS INC., CA

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[21] **3,168,572**  
[13] A1

[51] **Int.Cl. A61G 5/10 (2006.01) B60B 33/00 (2006.01)**  
[25] EN  
[54] **WHEELCHAIR AND SUSPENSION SYSTEMS**  
[54] **FAUTEUIL ROULANT ET SYSTEMES DE SUSPENSION**  
[72] CUSON, ROBERT L., US  
[72] BEKOSCKE, ROBERT A., US  
[71] INVACARE CORPORATION, US  
[22] 2022-07-22  
[41] 2024-01-13  
[30] US (63/388,799) 2022-07-13

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[21] **3,169,310**  
[13] A1

[51] **Int.Cl. E21B 43/26 (2006.01) E21B 47/00 (2012.01)**  
[25] EN  
[54] **FRACTURE EVENT DETECTION**  
[54] **DETECTION DES FRACTURES**  
[72] INYANG, UBONG AKPAN, US  
[72] SHETTY, DINESH ANANDA, US  
[72] BAI, JIE, US  
[72] SRIDHAR, SRIVIDHYA, US  
[71] HALLIBURTON ENERGY SERVICES, INC., US  
[22] 2022-07-27  
[41] 2024-01-07  
[30] US (17/859,443) 2022-07-07

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[21] **3,171,574**  
[13] A1

[51] **Int.Cl. A47J 42/38 (2006.01) A47J 42/02 (2006.01)**  
[25] EN  
[54] **COFFEE BEAN GRINDER**  
[54] **MOULIN A CAFE**  
[72] YEH, HSIANG-CHEN, TW  
[71] CHUANG-KANG MACHINERY TECHNOLOGY CO., LTD., TW  
[22] 2022-08-30  
[41] 2024-01-13  
[30] TW (111126356) 2022-07-13

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[21] **3,171,688**  
[13] A1

[51] **Int.Cl. F16D 3/84 (2006.01)**  
[25] EN  
[54] **CONSTANT VELOCITY JOINT BOOT WITH A SPLIT SEAL**  
[54] **SOUFFLET DE JOINT HOMOCINETIQUE A JOINT FENDU**  
[72] RUIZ, RICARDO LLORENTE, US  
[72] THEOBOLD, DANIEL E., US  
[72] FETCHKO, JASON M., US  
[72] IDEN, JOHN, US  
[71] RB DISTRIBUTION, INC., US  
[22] 2022-08-30  
[41] 2024-01-08  
[30] US (17/860,384) 2022-07-08

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[21] **3,177,663**  
[13] A1

[51] **Int.Cl. G06F 17/00 (2019.01) G06T 7/00 (2017.01)**  
[25] EN  
[54] **COMPUTER SYSTEM AND METHOD FOR DETECTING A PLATFORM OF A FORENSIC IMAGE**  
[54] **SYSTEME INFORMATIQUE ET METHODE DE DETECTION D~UNE PLATEFORME D~UNE COPIE-IMAGE**  
[72] SALIBA, JAD JOHN, CA  
[72] MCILVEEN, SAMANTHA, CA  
[72] CUNNEY, KIERAN PATRICK, CA  
[72] GUGLIELMI, EMILY, CA  
[72] CORTEZ MARTINEZ, MARIEL, CA  
[72] RANDALL, GARRETT, CA  
[71] MAGNET FORENSICS INC., CA  
[22] 2022-09-29  
[41] 2024-01-11  
[30] US (63/388,070) 2022-07-11



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[21] **3,177,931**  
[13] A1

[51] **Int.Cl. H02G 3/06 (2006.01)**  
[25] EN  
[54] **FOLDABLE ELECTRICAL CABLE CLAMP**  
[54] **COLLIER POUR CABLE ELECTRIQUE PLIABLE**  
[72] FINN, JAMES HENRY, III, US  
[72] MCKAY, FRASER, US  
[71] GENWIRE LLC, US  
[22] 2022-09-29  
[41] 2024-01-12  
[30] US (17/863060) 2022-07-12

[21] **3,178,219**  
[13] A1

[51] **Int.Cl. F16K 47/02 (2006.01) F16L 55/055 (2006.01)**  
[25] EN  
[54] **WATER ARRESTOR VALVE ASSEMBLY**  
[54] **ASSEMBLAGE DE VALVE D~ARRET D~EAU**  
[72] MASON, CHRISTOPHER W., US  
[72] LYON, LISA, US  
[72] TERRY, ANDREW J., US  
[71] NIBCO INC., US  
[22] 2022-10-03  
[41] 2024-01-11  
[30] US (17/861,636) 2022-07-11

[21] **3,180,006**  
[13] A1

[51] **Int.Cl. G06F 16/903 (2019.01) G06F 16/53 (2019.01) G06F 16/54 (2019.01) G16Z 99/00 (2019.01)**  
[25] EN  
[54] **AUTOMATED BUILDING IDENTIFICATION USING FLOOR PLANS AND ACQUIRED BUILDING IMAGES**  
[54] **IDENTIFICATION AUTOMATISEE DE BATIMENTS A L~AIDE DE PLANS D~ETAGE ET D~IMAGES ACQUISES DE BATIMENTS**  
[72] KHOSRAVAN, NAJI, US  
[72] WANG, LICHEN, US  
[72] KANG, SIGN BING, US  
[71] ZILLOW, INC., US  
[22] 2022-10-27  
[41] 2024-01-13  
[30] US (17/864,234) 2022-07-13

[21] **3,180,866**  
[13] A1

[51] **Int.Cl. B21C 25/02 (2006.01) B21C 25/04 (2006.01)**  
[25] EN  
[54] **SHRINK RING FOR EXTRUSION DIE, AND EXTRUSION DIE COMPRISING SAME**  
[54] **BAGUE DE SERRAGE POUR FILIERE D~EXTRUSION ET FILIERE D~EXTRUSION LA COMPRENANT**  
[72] ZLOTNIKOV, IOURI, US  
[72] BRAUN, CHRISTOPHER, US  
[72] PETERSON, RUSSELL, US  
[72] SULISZ, ROBERT, US  
[72] KRAUSE, JASON, US  
[71] EXCO TECHNOLOGIES LIMITED, CA  
[22] 2022-11-02  
[41] 2024-01-12  
[30] US (17/862,550) 2022-07-12

[21] **3,180,873**  
[13] A1

[51] **Int.Cl. F16L 55/48 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR TRACKING AN OBJECT MOVING ALONG A CONDUIT**  
[54] **METHODES ET SYSTEMES DE SUIVI D~UN OBJET SE DEPLACANT LE LONG D~UN CONDUIT**  
[72] JALILIAN, SEYED EHSAN, CA  
[72] OWJIMEHR, MEHRI, CA  
[71] HIFI ENGINEERING INC., CA  
[22] 2022-11-02  
[41] 2024-01-07  
[30] US (63/359,128) 2022-07-07

[21] **3,184,632**  
[13] A1

[51] **Int.Cl. H02J 3/46 (2006.01) H02J 7/00 (2006.01)**  
[25] EN  
[54] **BATTERY CAPACITY CONTROLLER FOR MULTIPLE PORTABLE POWER STATIONS**  
[54] **CONTROLEUR DE CAPACITE DE BATTERIE POUR PLUSIEURS CENTRALES ELECTRIQUES PORTABLES**  
[72] LIU, YAN-FEI, CA  
[72] HE, BINGHUI, CA  
[72] CHEN, YANG, CN  
[72] SHENG, BO, CA  
[71] QUEEN'S UNIVERSITY AT KINGSTON, CA  
[22] 2022-12-12  
[41] 2024-01-11  
[30] US (63388069) 2022-07-11

[21] **3,187,513**  
[13] A1

[51] **Int.Cl. F16M 11/00 (2006.01) F24S 25/63 (2018.01) F24S 25/70 (2018.01) E04D 13/00 (2006.01) E04D 13/18 (2018.01) H02S 20/23 (2014.01)**  
[25] EN  
[54] **TRESTLE**  
[54] **CHEVALET**  
[72] KOBAYASHI, SHUICHI, JP  
[71] E-SOLTECH, LLC, JP  
[22] 2023-01-25  
[41] 2024-01-11  
[30] JP (2022-111053) 2022-07-11  
[30] JP (2022-143448) 2022-09-09

[21] **3,191,567**  
[13] A1

[51] **Int.Cl. E21B 27/00 (2006.01) E21B 37/00 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR COLLECTING DOWNHOLE DEBRIS**  
[54] **METHODE ET APPAREIL DE COLLECTE DE DEBRIS DE FOND DE TROU**  
[72] BORSCHNECK, SEAN, CA  
[72] TRIPATHI, ABHINANDAN, US  
[72] MENON, SANJAY, CA  
[72] CRIDLAND, BRADLEY, CA  
[71] TORSCH INC., CA  
[22] 2023-03-01  
[41] 2024-01-13  
[30] US (63/388,934) 2022-07-13

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[21] **3,193,795**  
[13] A1

[51] **Int.Cl. G06N 3/08 (2023.01) G06N 3/02 (2006.01)**  
 [25] EN  
 [54] **IMAGE COMPONENT GENERATION BASED ON APPLICATION OF ITERATIVE LEARNING ON AUTOENCODER MODEL AND TRANSFORMER MODEL**  
 [54] **GENERATION DE COMPOSANTS D-IMAGES FONDEE SUR L-APPLICATION DE L-APPRENTISSAGE ITERATIF SUR LE MODELE D-AUTOENCODEUR ET LE MODELE DE TRANSFORMATEUR**  
 [72] EDRAKI, MARZIEH, US  
 [72] NAKAMURA, AKIRA, US  
 [71] SONY GROUP CORPORATION, JP  
 [71] SONY CORPORATION OF AMERICA, US  
 [22] 2023-03-22  
 [41] 2024-01-13  
 [30] US (63/368,264) 2022-07-13

[21] **3,194,127**  
[13] A1

[51] **Int.Cl. B64C 25/58 (2006.01) F16F 9/02 (2006.01)**  
 [25] FR  
 [54] **LANDING GEAR EQUIPPED WITH A SHOCK ABSORPTION SYSTEM**  
 [54] **ATTERRISSEUR MUNI D'UN SYSTEME AMORTISSEUR**  
 [72] BOULOUIS, ARNAUD, FR  
 [71] AIRBUS HELICOPTERS, FR  
 [22] 2023-03-24  
 [41] 2024-01-12  
 [30] FR (2207121) 2022-07-12

[21] **3,194,794**  
[13] A1

[51] **Int.Cl. B23K 35/22 (2006.01) B33Y 70/00 (2020.01) B22F 10/00 (2021.01) B22F 1/00 (2022.01) B23K 9/00 (2006.01) B23K 9/23 (2006.01) C22C 30/00 (2006.01)**  
 [25] EN  
 [54] **HIGH GAMMA PRIME NICKEL BASED WELDING MATERIAL**  
 [54] **MATERIAU DE SOUDAGE A BASE DE NICKEL A TENEUR ELEVEE EN GAMMA PRIME**  
 [72] GONTCHAROV, ALEXANDER B., CA  
 [72] LOWDEN, PAUL, CA  
 [71] LIBURDI ENGINEERING LIMITED, CA  
 [22] 2023-03-31  
 [41] 2024-01-11  
 [30] US (17/862,128) 2022-07-11

[21] **3,195,240**  
[13] A1

[51] **Int.Cl. A01K 15/02 (2006.01)**  
 [25] EN  
 [54] **PET TREAT HOLDER AND SAFETY DEVICE**  
 [54] **DISTRIBUTEUR DE FRIANDISES POUR ANIMAUX DE COMPAGNIE ET DISPOSITIF DE SECURITE**  
 [72] KARRAS, VASILIKI, US  
 [71] KARRAS, VASILIKI, US  
 [22] 2023-04-04  
 [41] 2024-01-08  
 [30] US (18/130,616) 2023-04-04  
 [30] US (63/473,928) 2022-07-08

[21] **3,197,451**  
[13] A1

[51] **Int.Cl. E05B 47/00 (2006.01)**  
 [25] EN  
 [54] **SYSTEM AND METHOD FOR RANDOMLY GENERATING AND ASSOCIATING UNLOCK CODES AND LOCK IDENTIFIERS**  
 [54] **SYSTEME ET METHODE DE GENERATION ALEATOIRE ET D-ASSOCIATION DE CODES DE DEVERROUILLAGE ET DE NUMEROS D-IDENTIFICATION DE SERRURE**  
 [72] MINSLEY, BRADFORD, US  
 [72] MINSLEY, CLIFTON, US  
 [71] DAVINCI LOCK LLC, US  
 [22] 2023-04-19  
 [41] 2024-01-11  
 [30] US (17/861,731) 2022-07-11

[21] **3,197,862**  
[13] A1

[51] **Int.Cl. A61G 5/10 (2006.01) A61G 5/02 (2006.01) B60T 1/06 (2006.01)**  
 [25] EN  
 [54] **AUTOMATIC SPEED REDUCING WHEEL**  
 [54] **ROUE DE REDUCTION AUTOMATIQUE DE LA VITESSE**  
 [72] SU, CHIEN-CHUNG, TW  
 [71] SU, CHIEN-CHUNG, TW  
 [22] 2023-04-25  
 [41] 2024-01-13  
 [30] TW (111126252) 2022-07-13

[21] **3,198,192**  
[13] A1

[25] EN  
 [54] **AIR DATA PROBE ELECTRONICS HOUSING WITH RETENTION FEATURES**  
 [54] **BOITIER ELECTRONIQUE DE SONDE DE DONNEES AERODYNAMIQUES AVEC ELEMENTS DE RETENUE**  
 [72] GILB, ANDREW, US  
 [72] PITERA, RUDY L., US  
 [71] ROSEMOUNT AEROSPACE INC., US  
 [22] 2023-04-28  
 [41] 2024-01-11  
 [30] US (17/811,721) 2022-07-11

[21] **3,199,326**  
[13] A1

[25] EN  
 [54] **AIR DATA PROBE ELECTRONICS HOUSING WITH THERMAL ISOLATING FEATURES**  
 [54] **BOITIER ELECTRONIQUE DE SONDE DE DONNEES AERODYNAMIQUES AVEC PROPRIETES THERMO-ISOLANTES**  
 [72] GILB, ANDREW, US  
 [72] GRAHAM, LISA C., US  
 [71] ROSEMOUNT AEROSPACE INC., US  
 [22] 2023-05-11  
 [41] 2024-01-11  
 [30] US (17/811,723) 2022-07-11

**Demandes canadiennes mises à la disponibilité du public**  
**7 janvier 2024 au 13 janvier 2024**

[21] **3,199,791**  
[13] A1

[51] **Int.Cl. B29C 64/30 (2017.01) B29C 64/393 (2017.01)**  
 [25] EN  
 [54] **APPARATUS, METHODS, AND SYSTEMS FOR CALIBRATING 3D PRINTERS**  
 [54] **APPAREIL, METHODES ET SYSTEMES POUR CALIBRER LES IMPRIMANTES 3D**  
 [72] WIECKE, ALEX, CA  
 [72] CAO, ZHENWEI, CA  
 [72] GUNN, RILEY, CA  
 [71] PANTHEON DESIGN LTD., CA  
 [22] 2023-05-17  
 [41] 2024-01-10  
 [30] US (63359865) 2022-07-10

[21] **3,200,033**  
[13] A1

[51] **Int.Cl. H04L 43/0817 (2022.01) H04L 41/12 (2022.01)**  
 [25] EN  
 [54] **RAPID ERROR DETECTION THROUGH COMMAND VALIDATION**  
 [54] **DETECTION RAPIDE DES ERREURS PAR LA VALIDATION DE COMMANDES**  
 [72] KUMAR, ABHISHEK, US  
 [72] BEN ARI, TAL, US  
 [72] COELHO SILVA, RENAN, US  
 [72] SUBRAMANIAM, SREENEVAS, US  
 [72] SATISH VIMLA KUMAR, MANISH, US  
 [71] SERVICENOW, INC., US  
 [22] 2023-05-18  
 [41] 2024-01-12  
 [30] US (17/862680) 2022-07-12

[21] **3,200,414**  
[13] A1

[51] **Int.Cl. G16Y 30/00 (2020.01)**  
 [25] EN  
 [54] **ULTRA-LOW POWER MULTI-PHASE AC LOGIC FAMILY**  
 [54] **FAMILLE DE CIRCUITS LOGIQUES PAR COURANT ALTERNATIF POLYPHASE A TRES FAIBLE CONSOMMATION**  
 [72] RAMZAN, RASHAD, PK  
 [72] ROHAIL, HAZIQ, PK  
 [72] ABBAS, ZAHID, PK  
 [72] BEG, AZAM, US  
 [71] WI-LAN RESEARCH INC., US  
 [22] 2023-05-24  
 [41] 2024-01-13  
 [30] US (17/812,202) 2022-07-13

[21] **3,201,169**  
[13] A1

[25] EN  
 [54] **METHOD OF MANUFACTURING A USABLE CONTAINER CONSISTING OF A STIFF OUTER CONTAINER AND A DEFORMABLE INNER BAG**  
 [54] **METHODE DE FABRICATION D~UN CONTENEUR UTILISABLE COMPERNANT UN CONTENEUR D~EXPEDITION RIGIDE ET UN SAC INTERIEUR DEFORMABLE**  
 [72] KNEER, STEPHAN, DE  
 [72] YILGINC, KASIM, DE  
 [72] TSCHIRKOW, JOHANNES, DE  
 [72] SCHIERLEIN, RANDOLF, DE  
 [72] HASEIDL, MAXIMILIAN, DE  
 [71] GAPLAST GMBH, DE  
 [22] 2023-05-30  
 [41] 2024-01-07  
 [30] DE (10 2022 116 966.9) 2022-07-07

[21] **3,201,301**  
[13] A1

[51] **Int.Cl. C09J 131/04 (2006.01) C09J 9/00 (2006.01) C09J 129/04 (2006.01) C09J 133/04 (2006.01)**  
 [25] EN  
 [54] **AQUEOUS DISPERSION PARQUET ADHESIVE, WHICH IS VERY LOW IN EMISSIONS, IS FREE OF SOLVENTS, PLASTICIZERS, COALESCING AGENTS, FILLERS AND LIGHTWEIGHT FILLERS, HAS A LOW DENSITY, PARTICULARLY ADVANTAGEOUS MECHANICAL PROPERTIES AND ALLOWS FREE COLORATION**  
 [54] **COLLE EN DISPERSION AQUEUSE POUR PARQUET, A TRES FAIBLE EMISSION, EXEMPT DE SOLVANTS, DE PLASTIFIANTS, D~AGENTS DE COALESCENCE, DE CHARGES ET DE CHARGES LEGERES, DE FAIBLE DENSITE, PRESENTANT DES CARACTERISTIQUES MECANIQUES PARTICULIEREMENT AVANTAGEUSES ET PERMETTANT UNE COLORATION LIBRE**  
 [72] GAHLMANN, FRANK, DE  
 [71] STAUF KLEBSTOFFWERK GMBH, DE  
 [22] 2023-05-31  
 [41] 2024-01-11  
 [30] EP (22 184 173.7) 2022-07-11

[21] **3,201,334**  
[13] A1

[51] **Int.Cl. G06Q 50/02 (2012.01) G06V 10/10 (2022.01) G06V 10/58 (2022.01) G06V 20/10 (2022.01) G06V 20/13 (2022.01) G06V 20/52 (2022.01)**  
 [25] EN  
 [54] **HYBRID SYSTEM AND METHOD OF CROP IMAGERY CHANGE DETECTION**  
 [54] **SYSTEME HYBRIDE ET METHODE DE DETECTION DES CHANGEMENTS DANS L~IMAGERIE DES CULTURES**  
 [72] JENSEN, MATTHEW, CA  
 [72] LOGIE, GORDON, CA  
 [72] PALUCK, ALISSIA, CA  
 [71] FARMERS EDGE INC., CA  
 [22] 2023-05-31  
 [41] 2024-01-12  
 [30] US (63/388,374) 2022-07-12

[21] **3,201,885**  
[13] A1

[51] **Int.Cl. F16H 25/22 (2006.01) B64C 13/28 (2006.01)**  
 [25] EN  
 [54] **RADIAL BEARING SYSTEM FOR BALL NUT AND SCREW ASSEMBLY**  
 [54] **SYSTEME DE ROULEMENT RADIAL POUR ENSEMBLE VIS ET ECROU SPHERIQUE**  
 [72] DAVIES, STEPHEN HARLOW, GB  
 [71] GOODRICH ACTUATION SYSTEMS LIMITED, GB  
 [22] 2023-05-17  
 [41] 2024-01-13  
 [30] EP (22275096.0) 2022-07-13

[21] **3,202,080**  
[13] A1

[51] **Int.Cl. B65G 67/12 (2006.01) B60P 1/54 (2006.01) B60P 3/41 (2006.01) B65G 57/18 (2006.01) B65G 69/00 (2006.01) B66C 13/00 (2006.01) B66C 23/36 (2006.01)**  
 [25] EN  
 [54] **LOAD HEIGHT DETECTION SYSTEM AND METHOD**  
 [54] **SYSTEME ET METHODE DE DETECTION DE LA HAUTEUR D~UNE CHARGE**  
 [72] KANANOJA, TEEMU, DE  
 [71] DEERE & COMPANY, US  
 [22] 2023-06-05  
 [41] 2024-01-11  
 [30] EP (22184141.4) 2022-07-11

**Canadian Applications Open to Public Inspection  
January 7, 2024 to January 13, 2024**

[21] **3,204,100**  
[13] A1

[51] **Int.Cl. B63B 73/00 (2020.01) B01D 71/54 (2006.01) B63B 3/02 (2006.01) B63B 5/24 (2006.01) C08J 9/228 (2006.01) E04B 1/28 (2006.01)**

[25] EN  
[54] **METHOD OF MANUFACTURING A BODY OF A STRUCTURE**  
[54] **METHODE DE FABRICATION D-UN CORPS DE STRUCTURE**

[72] VASILCHIKOV, FEDOR, CA  
[72] AKSENOV, MAXIM, CA  
[72] EZHKOV, NIKOLAI, CA  
[71] SV BUSINESS GROUP INC., CA  
[22] 2023-06-20  
[41] 2024-01-13  
[30] US (63/388,942) 2022-07-13

[21] **3,204,166**  
[13] A1

[51] **Int.Cl. B64G 1/52 (2006.01) B60N 2/14 (2006.01) B64D 25/12 (2006.01) B64G 1/12 (2006.01) B64G 1/60 (2006.01)**

[25] EN  
[54] **SEAT SYSTEM AND CABIN AREA FOR USE IN A CREW ESCAPE SYSTEM OF A SPACE TRANSPORT VEHICLE**  
[54] **SYSTEME DE SIEGE ET ZONE DE CABINE A UTILISER DANS UN SYSTEME D'EVACUATION D'EQUIPAGE D'UN VEHICULE DE TRANSPORT SPATIAL**

[72] PLEBUCH, ALEX, DE  
[72] PRAMPOLINI, MARCO, FR  
[72] WOLF, MARCO, DE  
[71] ARIANEGROUP GMBH, DE  
[71] ARIANEGROUP SAS, FR  
[22] 2023-06-20  
[41] 2024-01-13  
[30] EP (22315145.7) 2022-07-13

[21] **3,204,391**  
[13] A1

[51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/50 (2020.01) A24F 40/90 (2020.01) H01H 1/06 (2006.01) H01H 1/14 (2006.01) H01H 1/20 (2006.01) H02J 7/00 (2006.01)**

[25] EN  
[54] **ELECTRONIC VAPORIZATION DEVICE**  
[54] **DISPOSITIF DE VAPORISATION ELECTRONIQUE**

[72] YUAN, HUAKAI, CN  
[71] SHENZHEN SMOORE TECHNOLOGY LIMITED, CN  
[22] 2023-06-21  
[41] 2024-01-08  
[30] CN (202221763532.7) 2022-07-08

[21] **3,204,953**  
[13] A1

[51] **Int.Cl. A63B 5/10 (2006.01)**

[25] EN  
[54] **DIVING BOARD LIFTER**  
[54] **ELEVATEUR DE PLONGEOIR**

[72] WALSH, MATT, US  
[71] DURAFLEX INTERNATIONAL CORPORATION, US  
[22] 2023-06-26  
[41] 2024-01-11  
[30] US (63/388024) 2022-07-11

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[21] **3,205,186**  
[13] A1

[25] EN  
[54] **RADIO FREQUENCY INTERFERENCE DATABASE FOR VEHICLE NAVIGATION PLANNING**  
[54] **BASE DE DONNEES SUR LES INTERFERENCES AUX FREQUENCES RADIO ELECTRIQUES POUR LA PLANIFICATION DE LA NAVIGATION DES VEHICULES**

[72] KUMAR, PERUMAL, US  
[72] LENKA, SANJAY, US  
[71] HONEYWELL INTERNATIONAL INC., US  
[22] 2023-06-29  
[41] 2024-01-08  
[30] US (17/933804) 2022-09-20  
[30] IN (202211039324) 2022-07-08

[21] **3,205,188**  
[13] A1

[51] **Int.Cl. E21B 43/26 (2006.01) F04B 23/00 (2006.01)**

[25] EN  
[54] **ELECTRIC FRACTURING DRIVETRAIN**  
[54] **TRANSMISSION ELECTRIQUE POUR LA FRACTURATION**

[72] PETERSON, LUCAS J., US  
[71] CATERPILLAR INC., US  
[22] 2023-06-29  
[41] 2024-01-12  
[30] US (17/811936) 2022-07-12

[21] **3,205,198**  
[13] A1

[51] **Int.Cl. B62H 3/00 (2006.01) B62D 6/00 (2006.01) B62H 3/02 (2006.01) B62H 3/04 (2006.01)**

[25] EN  
[54] **STORAGE SYSTEM AND CONTAINER FOR SAME**  
[54] **SYSTEME DE STOCKAGE ET RECIPIENT POUR CELUI-CI**

[72] FEDRIGON, JEREMY, US  
[72] SIU, WAI YIP, CN  
[72] ZHANG, GAI SHE, CN  
[71] TECHTRONIC CORDLESS GP, US  
[22] 2023-06-30  
[41] 2024-01-12  
[30] US (17/863,185) 2022-07-12

[21] **3,205,204**  
[13] A1

[25] EN  
[54] **AEROSOL DOSE TESTING DEVICE, AEROSOL-GENERATING DEVICE, AND HEATING CONTROL METHOD THEREOF**  
[54] **DISPOSITIF TESTEUR DE DOSE D-AEROSOL, DISPOSITIF DE GENERATION D-AEROSOL ET METHODE DE REGULATION DU CHAUFFAGE DE CE DISPOSITIF**

[72] YANG, WEI, CN  
[72] XIAO, FENG, CN  
[72] YUAN, HUAKAI, CN  
[71] SHENZHEN SMOORE TECHNOLOGY LIMITED, CN  
[22] 2023-06-27  
[41] 2024-01-12  
[30] CN (202210812403.0) 2022-07-12

**Demandes canadiennes mises à la disponibilité du public**  
**7 janvier 2024 au 13 janvier 2024**

[21] **3,205,239**  
[13] A1

[51] **Int.Cl. B25B 21/00 (2006.01) B25B 13/46 (2006.01) F16D 41/12 (2006.01)**  
 [25] EN  
 [54] **POWER TOOL**  
 [54] **OUTIL ELECTRIQUE**  
 [72] SAMSTAG, MATTHEW, US  
 [72] ZHOU, GUI FANG, CN  
 [72] CHANDLER, CARL, US  
 [71] TECHTRONIC CORDLESS GP, US  
 [22] 2023-06-30  
 [41] 2024-01-11  
 [30] CN (202221781021.8) 2022-07-11

[21] **3,205,262**  
[13] A1

[51] **Int.Cl. C08L 75/06 (2006.01) B32B 27/40 (2006.01) C08J 3/03 (2006.01)**  
 [25] EN  
 [54] **BIOBASED AQUEOUS POLYURETHANE DISPERSIONS**  
 [54] **DISPERSIONS AQUEUSES DE POLYURETHANE BIOSOURCEES**  
 [72] ROBINSON, JASON JAMES, CA  
 [72] HEIDARZADEH, NINA, CA  
 [72] VICOL, RADU LUCIAN, CA  
 [72] FATONA, AYODELE, CA  
 [72] KAKROODI, ADEL, CA  
 [72] SACRIPANTE, GUERINO G, CA  
 [71] EVOCO LIMITED, CA  
 [22] 2023-06-27  
 [41] 2024-01-12  
 [30] US (17/862,461) 2022-07-12

[21] **3,205,279**  
[13] A1

[25] EN  
 [54] **ZONE-BASED HEATING ELEMENT**  
 [54] **ELEMENT CHAUFFANT BASE SUR UNE ZONE**  
 [72] ROESCH, JUERGEN, DE  
 [72] ENGESESSER, BENEDIKT, DE  
 [71] GEORG FISCHER ROHRLEITUNGSSYSTEME AG, CH  
 [22] 2023-07-04  
 [41] 2024-01-08  
 [30] EP (22183714.9) 2022-07-08

[21] **3,205,395**  
[13] A1

[51] **Int.Cl. B65D 5/42 (2006.01) B65D 77/20 (2006.01)**  
 [25] FR  
 [54] **FOOD PRODUCT PACKAGING AND ASSOCIATED PACKAGING DEVICE**  
 [54] **EMBALLAGE DE PRODUITS ALIMENTAIRES ET DISPOSITIF D'EMBALLAGE ASSOCIE**  
 [72] GROSSETETE, THIERRY, FR  
 [72] L'HOSPITAL, PHILIPPE, FR  
 [71] GENEOMAT, FR  
 [71] NATURAL DEVELOPMENT, FR  
 [22] 2023-07-05  
 [41] 2024-01-07  
 [30] FR (FR2206944) 2022-07-07

[21] **3,205,432**  
[13] A1

[51] **Int.Cl. B01D 46/42 (2006.01)**  
 [25] EN  
 [54] **AN AIR FLOW GUIDING STRUCTURE AND AN AIR FILTER CARTRIDGE**  
 [54] **STRUCTURE D-ORIENTATION DU DEBIT D-AIR ET CARTOUCHE DE FILTRE A AIR**  
 [72] SEALES, FRANK, CA  
 [72] NILSSON, MIKAEL, SE  
 [72] HEDLUND, KENNY, SE  
 [72] FORSLUND, MIKAEL, SE  
 [71] CAMFIL AKTIEBOLAG, SE  
 [22] 2023-06-29  
 [41] 2024-01-11  
 [30] SE (2250891-5) 2022-07-11

[21] **3,205,445**  
[13] A1

[25] EN  
 [54] **ULTRASONIC METER WITH SINGLE TRANSDUCER**  
 [54] **COMPTEUR A ULTRASONS AVEC TRANSDUCTEUR UNIQUE**  
 [72] FOWLER, JEFFREY M., US  
 [72] MATAM, MAHESH, US  
 [72] HAMILTON, DAVID, US  
 [72] WINSTON, NICHOLAS RUSSELL, US  
 [71] NEPTUNE TECHNOLOGY GROUP INC., US  
 [22] 2023-07-05  
 [41] 2024-01-07  
 [30] US (63/367,825) 2022-07-07

[21] **3,205,447**  
[13] A1

[25] EN  
 [54] **AUTOMATIC PRESSURE HEAT TRANSFER PRINTING MACHINE**  
 [54] **MACHINE D-IMPRESSIION AUTOMATIQUE PAR TRANSFERT THERMIQUE SOUS PRESSION**  
 [72] HUANG, WENXIONG, CN  
 [72] AI, MIN, CN  
 [71] HUNAN SIJIU TECHNOLOGY CO., LTD, CN  
 [22] 2023-07-05  
 [41] 2024-01-07  
 [30] CN (2022107952096) 2022-07-07

[21] **3,205,495**  
[13] A1

[51] **Int.Cl. B64C 3/26 (2006.01) B64F 5/10 (2017.01) B64C 3/18 (2006.01) B64C 3/38 (2006.01)**  
 [25] EN  
 [54] **COMPOSITE MULTI-SPAR AIRCRAFT LIFTING SURFACE**  
 [54] **SURFACE PORTANTE D-AERONEF MULTILONGERON EN COMPOSITE**  
 [72] LINARES VILLEGAS, MARIO, ES  
 [72] ALVAREZ LLORIAN, PAULA, ES  
 [72] PARRA VILLACORTA, FRANCISCO JOSE, ES  
 [72] GALLI, MARINA, ES  
 [72] KADIRI MORENO, ALAIN, ES  
 [72] GOMEZ DEL VALLE, JAVIER CARLOS, ES  
 [72] KOBIERECKI, ROBERT, ES  
 [72] AVILES TORREGROSA, MARIA BEATRIZ, ES  
 [72] GARCIA BLANCO, MARIA JOSE, ES  
 [72] POSTIGO RODRIGUEZ, ANGEL, ES  
 [71] AIRBUS OPERATIONS, S.L.U., ES  
 [22] 2023-07-05  
 [41] 2024-01-07  
 [30] EP (22382649.6) 2022-07-07

**Canadian Applications Open to Public Inspection  
January 7, 2024 to January 13, 2024**

[21] **3,205,505**  
[13] A1

[51] **Int.Cl. C04B 41/45 (2006.01) B28B 19/00 (2006.01) C04B 26/02 (2006.01)**  
[25] EN  
[54] **COMPOSITE MATERIAL WITH COATING LAYER**  
[54] **MATERIAU COMPOSITE AVEC COUCHE DE REVETEMENT**  
[72] REHBERG, KAY UWE, US  
[72] KUHN, MATHIAS FRANK, DE  
[72] SUSS, MARCO, DE  
[72] KRAUTER, REINHARD, DE  
[71] ACS INTERNATIONAL PRODUCTS, L.P., US  
[22] 2023-07-06  
[41] 2024-01-07  
[30] EP (22 183 536.6) 2022-07-07  
[30] EP (23183325.2) 2023-07-04

[21] **3,205,535**  
[13] A1

[51] **Int.Cl. F41C 33/02 (2006.01) F41H 13/00 (2006.01)**  
[25] EN  
[54] **HOLSTER BODY**  
[54] **CORPS D~ETUI A PISTOLET**  
[72] DERENZO, ROBERT, US  
[71] SAFARILAND, LLC, US  
[22] 2023-07-06  
[41] 2024-01-07  
[30] US (63/358,912) 2022-07-07  
[30] US (18/214,834) 2023-06-27

[21] **3,205,561**  
[13] A1

[25] EN  
[54] **RECHARGE SYSTEM FOR ELECTRIC VEHICLE (EV) WITHOUT IMMEDIATE ACCESS TO PERMANENT CHARGING STATION**  
[54] **SYSTEME DE RECHARGE POUR VEHICULE ELECTRIQUE (VE) SANS ACCES IMMEDIAT A UN POSTE DE CHARGE PERMANENT**  
[72] WILLIAMS, AARON, US  
[72] BRANNAN, JOSEPH ROBERT, US  
[72] DONOVAN, JOHN, US  
[72] HARVEY, BRIAN N., US  
[71] THE TORONTO-DOMINION BANK, CA  
[22] 2023-07-06  
[41] 2024-01-07  
[30] US (63/359,098) 2022-07-07  
[30] US (63/388,404) 2022-07-12  
[30] US (17/883,447) 2022-08-08

[21] **3,205,564**  
[13] A1

[25] EN  
[54] **AUTONOMOUS VEHICLE FOR TEMPORARILY POWERING ELECTRIC VEHICLES (EVS) ON THE ROAD**  
[54] **VEHICULE AUTONOME POUR ALIMENTER TEMPORAIREMENT DES VEHICULES ELECTRIQUES (VE) SUR LA ROUTE**  
[72] WILLIAMS, AARON, US  
[72] BRANNAN, JOSEPH ROBERT, US  
[72] DONOVAN, JOHN, US  
[72] HARVEY, BRIAN N., US  
[71] THE TORONTO-DOMINION BANK, CA  
[22] 2023-07-06  
[41] 2024-01-07  
[30] US (63/359,098) 2022-07-07  
[30] US (63/388,404) 2022-07-12  
[30] US (17/883,460) 2022-08-08

[21] **3,205,619**  
[13] A1

[51] **Int.Cl. C09J 129/04 (2006.01) C09J 133/02 (2006.01)**  
[25] EN  
[54] **IMPROVED WATER ACTIVATED ADHESIVE MIXTURE**  
[54] **MELANGE ADHESIF AMELIORE A REACTIVATION A L~EAU**  
[72] FELLINGER, THOMAS JOHN, US  
[72] ZHENG, GUODONG, US  
[71] JOHNS MAINVILLE, US  
[22] 2023-07-05  
[41] 2024-01-08  
[30] US (17/860,268) 2022-07-08

[21] **3,205,641**  
[13] A1

[51] **Int.Cl. B25H 3/02 (2006.01) B65D 6/08 (2006.01) B65D 25/20 (2006.01) B65D 25/28 (2006.01)**  
[25] EN  
[54] **HARD-CORE CONTAINER WITH FABRIC POUCHES**  
[54] **CONTENEUR A NOYAU DUR AVEC Pochettes en tissu**  
[72] PANOSIAN, MICHAEL H., US  
[72] KEELER, JOSHUA M., US  
[71] PANOSIAN, MICHAEL H., US  
[71] KEELER, JOSHUA M., US  
[22] 2023-07-06  
[41] 2024-01-07  
[30] US (17/859,893) 2022-07-07

[21] **3,205,674**  
[13] A1

[51] **Int.Cl. G07B 15/02 (2011.01) G06N 20/00 (2019.01) G06Q 30/0283 (2023.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR OPERATING A PARKING FACILITY**  
[54] **SYSTEMES ET METHODES POUR L~EXPLOITATION D~UN PARC DE STATIONNEMENT**  
[72] TANBING, YAN, CA  
[72] SVITAK, GREGORY STEPHEN, US  
[72] CARLSON, RYAN, US  
[72] HUNTER, GEOFFREY A.M., CA  
[72] VISSA, SUDHIR, US  
[71] SPOTHERO, INC., US  
[22] 2023-07-06  
[41] 2024-01-12  
[30] US (17/862,828) 2022-07-12

[21] **3,205,762**  
[13] A1

[51] **Int.Cl. H04W 76/28 (2018.01) H04W 52/02 (2009.01) H04W 72/121 (2023.01) H04W 72/232 (2023.01)**  
[25] EN  
[54] **DISCONTINUOUS TRANSMISSION AND DISCONTINUOUS RECEPTION FOR ENERGY SAVING**  
[54] **TRANSMISSION DISCONTINUE ET RECEPTION DISCONTINUE POUR ECONOMIE D~ENERGIE**  
[72] ZHOU, HUA, US  
[72] CIRIK, ALI CAGATAY, US  
[72] DINAN, ESMAEL HEJAZI, US  
[72] DASHTAKI, MOHAMMAD GHADIR KHOSHKHOLGH, US  
[72] XU, KAI, US  
[72] HUI, BING, US  
[71] COMCAST CABLE COMMUNICATIONS, LLC, US  
[22] 2023-07-07  
[41] 2024-01-07  
[30] US (63/359,041) 2022-07-07

**Demandes canadiennes mises à la disponibilité du public**  
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[21] **3,205,766**  
[13] A1

[25] EN  
 [54] **OFFSHORE SYSTEM COMPRISING A DYNAMIC SUBMARINE POWER CABLE**  
 [54] **SYSTEME EN MER COMPRENANT UN CABLE D~ALIMENTATION SOUS-MARIN DYNAMIQUE**  
 [72] ERIKSSON, ERIK, SE  
 [72] THYRVIN, OLA, SE  
 [72] TYRBERG, ANDERS, SE  
 [72] JOHNSON, JOEL, SE  
 [71] NKT HV CABLES AB, SE  
 [22] 2023-07-07  
 [41] 2024-01-08  
 [30] EP (22183780.0) 2022-07-08

[21] **3,205,775**  
[13] A1

[51] **Int.Cl. H01M 50/264 (2021.01)**  
 [25] EN  
 [54] **BATTERY DEVICE, AND WORKING ASSEMBLY HAVING BATTERY DEVICE**  
 [54] **APPAREIL A PILES, ET ENSEMBLE DE TRAVAIL COMPORTANT UN APPAREIL A PILES**  
 [72] LIU, YA BIN, US  
 [72] ZHAO, JIANG, US  
 [72] ZHAO, JIAN GUO, US  
 [71] TECHTRONIC CORDLESS GP, US  
 [22] 2023-07-07  
 [41] 2024-01-12  
 [30] CN (202210821101.X) 2022-07-12

[21] **3,205,792**  
[13] A1

[51] **Int.Cl. B64D 27/00 (2006.01) B64D 35/08 (2006.01)**  
 [25] EN  
 [54] **HYBRID-ELECTRIC AIRCRAFT PROPULSION SYSTEM AND METHOD**  
 [54] **SYSTEME ET METHODE DE PROPULSION D~AERONEF HYBRIDE ELECTRIQUE**  
 [72] SMITH, MICHAEL P., CA  
 [71] PRATT & WHITNEY CANADA CORP., CA  
 [22] 2023-07-06  
 [41] 2024-01-08  
 [30] US (17/860,722) 2022-07-08

[21] **3,205,768**  
[13] A1

[25] EN  
 [54] **METHOD AND SYSTEM FOR COMMUNICATION CONTROL**  
 [54] **METHODE ET SYSTEME DE CONTROLE DE TRANSMISSION DE DONNEES**  
 [72] MOSHAYEDI, KEVAN, US  
 [71] GRANITE TELECOMMUNICATIONS, LLC, US  
 [22] 2023-07-07  
 [41] 2024-01-08  
 [30] US (63/359.576) 2022-07-08

[21] **3,205,779**  
[13] A1

[51] **Int.Cl. F24H 4/00 (2006.01) F24D 3/14 (2006.01) F24H 9/06 (2006.01)**  
 [25] EN  
 [54] **COMPOSITE HEATING PANEL**  
 [54] **PANNEAU CHAUFFANT COMPOSITE**  
 [72] CONYBEARE, NIGEL P., GB  
 [71] STUD CONNECTOR (IP) LIMITED, GB  
 [22] 2023-07-07  
 [41] 2024-01-07  
 [30] GB (2209979.0) 2022-07-07

[21] **3,205,793**  
[13] A1

[51] **Int.Cl. B65D 63/10 (2006.01) B65D 65/04 (2006.01)**  
 [25] EN  
 [54] **CABLE BUNDLING SYSTEM**  
 [54] **SYSTEME DE MISE EN FAISCEAU DE CABLES**  
 [72] COOPER, ANTHONY AUSTIN, US  
 [72] WHITE, RONALD DAVID, US  
 [72] STEFANOV, HENRY JOSEPH, US  
 [72] BAKER, JAMES, US  
 [71] ABB SCHWEIZ AG, CH  
 [22] 2023-07-07  
 [41] 2024-01-07  
 [30] US (17/859,478) 2022-07-07

[21] **3,205,770**  
[13] A1

[25] EN  
 [54] **NETWORK ACCESS CONTROL OF AUDIO CAPTURE DEVICE**  
 [54] **CONTROLE D~ACCES AU RESEAU D~UN DISPOSITIF D~ENREGISTREMENT AUDIO**  
 [72] STONE, CHRISTOPHER, US  
 [72] REKSTAD, GARY MICHAEL, US  
 [71] COMCAST CABLE COMMUNICATIONS, LLC, US  
 [22] 2023-07-07  
 [41] 2024-01-07  
 [30] US (17/859,738) 2022-07-07

[21] **3,205,787**  
[13] A1

[25] EN  
 [54] **SYSTEM AND METHOD FOR DETERMINING ROTOR WHIRL DISPLACEMENT**  
 [54] **SYSTEME ET METHODE POUR DETERMINER LE DEPLACEMENT DU ROTOR**  
 [72] TOUSIGNANT, DANICK, CA  
 [71] PRATT & WHITNEY CANADA CORP., CA  
 [22] 2023-07-06  
 [41] 2024-01-08  
 [30] US (17/860,685) 2022-07-08

[21] **3,205,794**  
[13] A1

[51] **Int.Cl. B64C 3/44 (2006.01) B64C 3/14 (2006.01) B64C 9/06 (2006.01)**  
 [25] EN  
 [54] **AIRFOIL WITH FLEXIBLE TRAILING EDGE**  
 [54] **SURFACE PORTANTE A BORD DE FUITE FLEXIBLE**  
 [72] XI, FENGFENG, CA  
 [72] MOOSAVIAN, AMIN, CA  
 [72] KOJOVIC, STEFAN, CA  
 [72] EPP, JORDAN, CA  
 [71] BOMBARDIER INC., CA  
 [22] 2023-07-06  
 [41] 2024-01-07  
 [30] US (63/367,847) 2022-07-07

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<p>[21] <b>3,205,800</b> [13] A1</p> <p>[25] EN [54] <b>OFFSHORE SYSTEM COMPRISING A DYNAMIC SUBMARINE POWER CABLE</b> [54] <b>SYSTEME EN MER COMPRENANT UN CABLE D~ALIMENTATION SOUS-MARIN DYNAMIQUE</b> [72] ERIKSSON, ERIK, SE [72] THYRVIN, OLA, SE [72] TYRBERG, ANDREAS, SE [72] JOHNSON, JOEL, SE [71] NKT HV CABLES AB, SE [22] 2023-07-07 [41] 2024-01-08 [30] EP (22183781.8) 2022-07-08</p>	<p>[21] <b>3,205,832</b> [13] A1</p> <p>[25] EN [54] <b>NON-REDUNDANT PASSIVE MULTIBEAM SATELLITE RADIO-COMMUNICATIONS SYSTEM</b> [54] <b>SYSTEME PASSIF NON REDONDANT DE RADIOCOMMUNICATIONS PAR SATELLITE A FAISCEAUX MULTIPLES</b> [72] LE BOULCH, DIDIER, FR [72] BOSSARD, PIERRE, FR [72] VOISIN, PHILIPPE, FR [71] THALES, FR [22] 2023-07-07 [41] 2024-01-07 [30] FR (2206930) 2022-07-07</p>	<p>[21] <b>3,205,863</b> [13] A1</p> <p>[51] <b>Int.Cl. F25B 1/10 (2006.01) F25B 41/20 (2021.01) F25B 5/02 (2006.01) F25B 6/02 (2006.01) F25B 29/00 (2006.01)</b> [25] EN [54] <b>REFRIGERATION SYSTEM WITH HEAT PUMP COMPRESSION</b> [54] <b>SYSTEME DE REFRIGERATION AVEC COMPRESSION PAR POMPE A CHALEUR</b> [72] BORROWMAN, WAYNE, CA [72] FAUSER, DAVID, CA [71] TOROMONT INDUSTRIES LTD., CA [22] 2023-07-07 [41] 2024-01-08 [30] US (63/359,324) 2022-07-08</p>
<p>[21] <b>3,205,818</b> [13] A1</p> <p>[51] <b>Int.Cl. E04D 1/12 (2006.01) E04D 1/30 (2006.01)</b> [25] EN [54] <b>SYSTEM, METHOD AND APPARATUS FOR VENTED BIRD STOP WITH EMBER STOP</b> [54] <b>SYSTEME, METHODE ET APPAREIL POUR ARRET D~OISEAU VENTILE AVEC ARRET DE BRAISE</b> [72] STARR, DAVE, US [72] MATHEUS, HANS, US [72] SAFFRON, STEVE, US [71] PACIFIC AWARD METALS, INC., US [22] 2023-07-07 [41] 2024-01-13 [30] US (63/388689) 2022-07-13</p>	<p>[21] <b>3,205,836</b> [13] A1</p> <p>[51] <b>Int.Cl. A61G 5/14 (2006.01) A61G 5/02 (2006.01)</b> [25] EN [54] <b>POWERED MIDWHEEL DRIVE WHEELCHAIR WITH STANDING CAPABILITY</b> [54] <b>FAUTEUIL ROULANT MOTORISE A TRACTION MEDIANE AVEC CAPACITE DE SE TENIR DEBOUT</b> [72] VAN DE WAL, HERBERT, SE [72] DANIELSSON, ANTON, SE [72] LOFVANDER, ULRIK, SE [71] PERMOBIL AB, SE [22] 2023-07-07 [41] 2024-01-07 [30] EP (22183660.4) 2022-07-07</p>	<p>[21] <b>3,205,903</b> [13] A1</p> <p>[51] <b>Int.Cl. B60D 1/34 (2006.01) B60D 1/06 (2006.01)</b> [25] EN [54] <b>WEIGHT DISTRIBUTION HITCH SYSTEM</b> [54] <b>SYSTEME D~ATTELAGE REPARTITEUR DE CHARGE</b> [72] JELINEK, TYLER, US [72] MCCALL, TRAVIS M., US [72] SORENSON, LARRY, US [72] WORKS, JOSEPH W., US [72] JONES, TAYLOR, US [71] B &amp; W CUSTOM TRUCK BEDS, INC., US [22] 2023-07-07 [41] 2024-01-07 [30] US (63/367,878) 2022-07-07 [30] US (63/381,495) 2022-10-28</p>
<p>[21] <b>3,205,826</b> [13] A1</p> <p>[51] <b>Int.Cl. C08L 95/00 (2006.01) B32B 11/02 (2006.01) C08J 3/20 (2006.01) C08J 7/12 (2006.01) C08L 21/00 (2006.01) E04D 1/22 (2006.01)</b> [25] EN [54] <b>RUBBER-CONTAINING ASPHALT COMPOSITIONS AND RELATED METHODS</b> [54] <b>COMPOSITIONS D~ASPHALTE CONTENANT DU CAOUTCHOUC ET METHODES CONNEXES</b> [72] HAMER, ANN, US [72] SPARKS, STEVEN, US [71] BMIC LLC, US [22] 2023-07-07 [41] 2024-01-08 [30] US (18/167,422) 2023-02-10 [30] US (63/359,671) 2022-07-08</p>	<p>[21] <b>3,205,843</b> [13] A1</p> <p>[51] <b>Int.Cl. A63F 1/14 (2006.01)</b> [25] EN [54] <b>SECURITY ELECTRONIC SHOE FOR CASINO</b> [54] <b>SABOT ELECTRONIQUE DE SECURITE POUR CASINO</b> [72] SHIGETA, YASUSHI, JP [71] ANGEL GROUP CO., LTD., JP [22] 2023-07-07 [41] 2024-01-08 [30] JP (JP2022-110486) 2022-07-08 [30] JP (JP2022-132265) 2022-08-23 [30] JP (JP2023-086884) 2023-05-26</p>	



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[21] **3,205,914**  
[13] A1

[51] **Int.Cl. C25B 15/08 (2006.01) H01M 8/04089 (2016.01) H01M 8/2425 (2016.01) C25B 1/042 (2021.01) C25B 9/77 (2021.01) C25B 13/07 (2021.01) C25B 1/04 (2021.01)**

[25] EN

[54] **INTEGRATED SOEC BUILDING BLOCK (SBB)**

[54] **BLOC DE CONSTRUCTION A ELECTROLYSEURS A OXYDE SOLIDE INTEGRES (SBB)**

[72] MAHLER, JESSICA, US

[72] PEARSON, CHAD, US

[72] KEMPTON, RUEBEN M., US

[71] BLOOM ENERGY CORPORATION, US

[22] 2023-07-07

[41] 2024-01-07

[30] US (63/359,135) 2022-07-07

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[21] **3,205,971**  
[13] A1

[51] **Int.Cl. H02J 13/00 (2006.01) H05B 47/105 (2020.01) H05B 47/175 (2020.01)**

[25] EN

[54] **NETWORKED LIGHTING CONTROL SYSTEM WITH LIGHTING VALUE TRACKING PROTOCOL**

[54] **SYSTEME DE COMMANDE D~ECLAIRAGE EN RESEAU AVEC PROTOCOLE DE SUIVI DES VALEURS D~ECLAIRAGE**

[72] WESTRICK, RICHARD L., JR., US

[72] ZAVERUHA, RYAN A., US

[72] VAN DER HOORN, MAURITS, CA

[71] ABL IP HOLDING LLC, US

[22] 2023-07-10

[41] 2024-01-13

[30] US (17/864,130) 2022-07-13

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[21] **3,205,988**  
[13] A1

[51] **Int.Cl. E04F 13/08 (2006.01) E04B 2/88 (2006.01) E04C 2/04 (2006.01) E04F 13/14 (2006.01)**

[25] EN

[54] **MASONRY PANEL AND FASTENER INSERT**

[54] **PANNEAU EN MACONNERIE ET DOUILLE D~ANCRAGE**

[72] CURTIS, CALEB, CA

[71] CURTIS, CALEB, CA

[22] 2023-07-10

[41] 2024-01-08

[30] US (63/359,483) 2022-07-08

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[21] **3,206,015**  
[13] A1

[51] **Int.Cl. F02C 7/00 (2006.01) B64D 33/00 (2006.01) F01D 25/00 (2006.01) F16B 39/02 (2006.01) F16L 15/00 (2006.01) F16L 41/10 (2006.01)**

[25] EN

[54] **SERVICE TUBE LOCKING DEVICE**

[54] **DISPOSITIF DE VERROUILLAGE DE TUBE DE SERVICE**

[72] LEFEBVRE, GUY, CA

[72] SYNNOTT, REMY, CA

[71] PRATT & WHITNEY CANADA CORP., CA

[22] 2023-07-05

[41] 2024-01-13

[30] US (17/812,267) 2022-07-13

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[21] **3,206,071**  
[13] A1

[51] **Int.Cl. A01H 6/34 (2018.01) A01H 1/00 (2006.01) A01H 4/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/04 (2006.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **CUCUMBER HYBRID DRCB6028 AND PARENTS THEREOF**

[54] **CONCOMBRE HYBRIDE DRCB6028 ET PARENTS**

[72] CUKADAR, BELGIN, US

[71] SEMINIS VEGETABLE SEEDS, INC., US

[22] 2023-07-06

[41] 2024-01-07

[30] US (63/359009) 2022-07-07

[30] US (17/877125) 2022-07-29

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[21] **3,206,072**  
[13] A1

[51] **Int.Cl. G06N 10/60 (2022.01) G06N 3/042 (2023.01) G06N 3/0464 (2023.01) G06N 3/09 (2023.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR SOLVING QUBO PROBLEMS WITH HYBRID CLASSICAL-QUANTUM SOLVERS**

[54] **METHODE ET SYSTEME DE RESOLUTION DE PROBLEMES D~OPTIMISATION BINAIRE QUADRATIQUE SANS CONTRAINTES A L~AIDE DE RESOLVEURS HYBRIDES CLASSIQUES-QUANTIQUES**

[72] DESHPANDE, AJINKYA, CH

[72] MELNIKOV, ALEXEY A., CH

[71] TERRA QUANTUM AG, CH

[22] 2023-07-05

[41] 2024-01-07

[30] EP (22183667.9) 2022-07-07

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[21] **3,206,123**  
[13] A1

[25] EN

[54] **BROADBAND TIME-RESOLVED THZ SYSTEM**

[54] **SYSTEME TERAHERTZ (THZ) A LARGE BANDE A RESOLUTION TEMPORELLE**

[72] MENARD, JEAN-MICHEL, CA

[72] COUTURE, NICOLAS, CA

[71] OZ OPTICS LTD., CA

[22] 2023-07-11

[41] 2024-01-11

[30] CA (3,164,512) 2022-07-11

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[21] **3,206,130**  
[13] A1

[51] **Int.Cl. F41C 33/02 (2006.01) F41H 13/00 (2006.01)**

[25] EN

[54] **HOLSTER**

[54] **ETUI A PISTOLET**

[72] MCKENDRICK, MATTHEW E., US

[71] SAFARILAND, LLC, US

[22] 2023-07-11

[41] 2024-01-13

[30] US (63/388,804) 2022-07-13

[30] US (18/219,201) 2023-07-07

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[21] **3,206,150**  
[13] A1

[25] EN  
[54] **CERAMIC INJECTION PROCESS FOR MANUFACTURING SPRAY NOZZLES USING THE WATER STOP TECHNIQUE**  
[54] **PROCEDE D~INJECTION DE CERAMIQUE POUR LA FABRICATION DE BUSES DE PULVERISATION UTILISANT LA TECHNIQUE D~ARRET D~EAU**  
[72] RIBEIRDO DA ROCHA, EDSON FRANCELIN, BR  
[71] SPRAYING SYSTEMS DO BRASIL LTDA, BR  
[22] 2023-07-11  
[41] 2024-01-12  
[30] BR (BR 10 2022 013810 9) 2022-07-12

[21] **3,206,166**  
[13] A1

[25] EN  
[54] **FLEXIBLE CONTINUOUS LOAD UNIT/MONITOR INTERFACE FOR BATTERY CAPACITY TESTING**  
[54] **UNITE DE CHARGE CONTINUE FLEXIBLE/INTERFACE DE SURVEILLANCE POUR ESSAIS DE CAPACITE DE BATTERIE**  
[72] MCDANIEL, THOMAS, US  
[72] RADZIKOWSKI, MARC, US  
[72] JONES, JAMES, US  
[71] VERTIV IT SYSTEMS, INC., US  
[22] 2023-07-11  
[41] 2024-01-12  
[30] US (18/217,682) 2023-07-03  
[30] US (63/388,473) 2022-07-12

[21] **3,206,183**  
[13] A1

[25] EN  
[54] **MAC METHOD FOR MONITORING, WITH COMMON BIAS COMPENSATION, THE INTEGRITY OF A POINT POSITIONING PROCESS USING VIRTUAL BEACONS**  
[54] **METHODE MAXIMALE AU CENTRE (MAC) POUR SURVEILLER, AVEC COMPENSATION DE POLARISATION COMMUNE; INTEGRITE D~UN PROCESSUS DE POSITIONNEMENT PAR POINT UNIQUE A L~AIDE DE BALISES VIRTUELLES**  
[72] REVOL, MARC, FR  
[71] GTS FRANCE SAS, FR  
[22] 2023-07-11  
[41] 2024-01-12  
[30] FR (2207132) 2022-07-12  
[30] FR (2208888) 2022-09-06

[21] **3,206,274**  
[13] A1

[25] EN  
[54] **METHOD AND SYSTEM FOR DRIVER ALERTS BASED ON SENSOR DATA AND CONTEXTUAL INFORMATION**  
[54] **METHODE ET SYSTEME DE CONTROLE DE VIGILANCE FONDES SUR DES DONNEES CAPTEUR ET D~INFORMATION CONTEXTUELLE**  
[72] HADPANAH, ARASH, US  
[72] BALAKRISHNAN, HARI, US  
[72] FINEGOLD, RAFI, US  
[72] MADDEN, SAMUEL, US  
[72] KOBETIS, ROBERT S., US  
[72] SACHETTA, BRIAN, US  
[72] SAHOO, SANUJIT, US  
[72] TYUKASZ, GABOR, HU  
[71] CAMBRIDGE MOBILE TELEMATICS INC., US  
[22] 2023-07-11  
[41] 2024-01-12  
[30] US (17/862943) 2022-07-12

[21] **3,206,296**  
[13] A1

[25] EN  
[54] **MODULATION METHODS AND CONTROLLERS FOR NEUTRAL POINT CLAMPED CONVERTER**  
[54] **METHODES DE MODULATION ET CONTROLEURS POUR UN CONVERTISSEUR CLAMPE PAR LE NEUTRE**  
[72] JOUZDANI, JAVAD EBRAHIMI, CA  
[72] BAKHSHAI, ALIREZA, CA  
[72] KARSHENAS, HAMIDREZA, IR  
[71] QUEEN'S UNIVERSITY AT KINGSTON, CA  
[22] 2023-07-11  
[41] 2024-01-12  
[30] US (63388265) 2022-07-12

[21] **3,206,335**  
[13] A1

[51] **Int.Cl. H02S 30/10 (2014.01) H02S 20/30 (2014.01) H02S 30/20 (2014.01)**  
[25] EN  
[54] **RETRACTABLE SOLAR SYSTEM**  
[54] **SYSTEME SOLAIRE RETRACTABLE**  
[72] ROUX HAMEED, SOFIA TALLULA, CA  
[71] ROUX HAMEED, SOFIA TALLULA, CA  
[22] 2023-07-06  
[41] 2024-01-07  
[30] US (63/359,013) 2022-07-07  
[30] US (63/524,164) 2023-06-29

[21] **3,206,375**  
[13] A1

[51] **Int.Cl. A61B 34/10 (2016.01)**  
[25] EN  
[54] **SYSTEM FOR OTHOPAEDIC SURGERY TRAINING**  
[54] **SYSTEME DE FORMATION A LA CHIRURGIE ORTHOPEDIQUE**  
[72] ZAHYNACZ, DANIEL, CA  
[72] MORGAN, GWENDOLYN, CA  
[72] LO, IAN K. Y., CA  
[72] PERSON, JOHN, CA  
[72] ANGLIN, CAROLYN, CA  
[71] TACTILE ORTHOPAEDICS INC., CA  
[22] 2023-07-12  
[41] 2024-01-13  
[30] US (63/388,904) 2022-07-13

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[21] **3,206,391**  
[13] A1

[51] **Int.Cl. C09K 8/04 (2006.01) C09K 8/035 (2006.01) C10M 101/04 (2006.01) C10M 133/46 (2006.01)**

[25] EN

[54] **LUBRICANT BLENDS AND METHODS FOR IMPROVING LUBRICITY OF BRINE-BASED DRILLING FLUIDS**

[54] **MELANGES DE LUBRIFIANTS ET METHODES POUR AMELIORER LE POUVOIR LUBRIFIANT DES BOUES DE FORAGE A BASE DE SAUMURE**

[72] TAYLOR, MATTHEW, CA  
[72] DUBBERLEY, STUART, CA  
[72] BROCKHOFF, JAY NELSON, CA  
[72] MA, KUANGBIAO, CA  
[71] SECURE ENERGY (DRILLING SERVICES) INC., CA

[22] 2023-07-12  
[41] 2024-01-12  
[30] US (63/388,519) 2022-07-12  
[30] US (63/521,583) 2023-06-16

[21] **3,206,409**  
[13] A1

[25] FR

[54] **METHOD FOR DETERMINING THE CONDITION OF AT LEAST ONE SOIL ELEMENT: ASSOCIATED SYSTEM AND ASSEMBLY**

[54] **PROCEDE DE DETERMINATION D'UN ETAT D'AU MOINS UN ELEMENT DE SOL, SYSTEME ET ENSEMBLE ASSOCIES**

[72] LOHEAC, NICOLAS ERIC MARIE, FR  
[72] BECKERS, FRANCIS, FR  
[72] ROMERO, XAVIER MAURICE GERMAIN, FR  
[72] TEURIO, CAROLE SOPHIE, FR  
[72] DEUDON, MARTIN, FR  
[72] ECH-CHEBLAOUY, YASSINE, FR  
[71] WIIDTECT, FR  
[71] ORAK, FR

[22] 2023-07-12  
[41] 2024-01-13  
[30] FR (22 07233) 2022-07-13

[21] **3,206,434**  
[13] A1

[51] **Int.Cl. A63B 71/08 (2006.01) A41D 13/05 (2006.01)**

[25] EN

[54] **SHOULDER PADS AND OTHER PROTECTIVE GEAR FOR UPPER BODY PROTECTION**

[54] **EPAULIERES ET AUTRE EQUIPEMENT DE PROTECTION POUR LA PROTECTION DU HAUT DU CORPS**

[72] BEAUREGARD, MARCO, CA  
[72] LAFLAMME GORDON, INGRID, CA  
[72] DESJARDINS, MATHIEU, CA  
[71] BAUER HOCKEY LTD., CA

[22] 2023-07-12  
[41] 2024-01-12  
[30] US (63/388,321) 2022-07-12

[21] **3,206,439**  
[13] A1

[25] EN

[54] **BLOCK VECTOR PREDICTOR CANDIDATE SELECTION**

[54] **SELECTION DE CANDIDATS POUR UN PREDICTEUR DE VECTEURS DE BLOCS**

[72] RUIZ COLL, DAMIAN, US  
[72] WARUDKAR, VIKAS, US  
[71] COMCAST CABLE COMMUNICATIONS, LLC, US

[22] 2023-07-12  
[41] 2024-01-12  
[30] US (63/388,552) 2022-07-12

[21] **3,206,546**  
[13] A1

[25] EN

[54] **OFFBOARD MONITORING SYSTEM**

[54] **SYSTEME DE SURVEILLANCE EXTERNE**

[72] CRESSMAN, TOBY J., US  
[71] JOY GLOBAL UNDERGROUND MINING LLC, US

[22] 2023-07-12  
[41] 2024-01-12  
[30] US (63/388,454) 2022-07-12

[21] **3,206,559**  
[13] A1

[51] **Int.Cl. B01J 13/22 (2006.01) B01J 2/00 (2006.01)**

[25] EN

[54] **PROCESS FOR MAKING ACTIVE CARRIERS**

[54] **PROCEDE DE FABRICATION DE PORTEUSES ACTIVES**

[72] CESTER, ACHILLE, IT  
[72] CHAUVIE, STEPHANE, IT  
[72] CESTER, LUCREZIA, GB  
[71] CESTER, ACHILLE, IT  
[71] CHAUVIE, STEPHANE, IT  
[71] GROSSO, MAURIZIO, IT  
[71] CESTER, LUCREZIA, GB  
[71] VERIFICATORI ASSOCIATI ITALIANI S.R.L., IT

[22] 2023-07-13  
[41] 2024-01-13  
[30] IT (102022000014707) 2022-07-13

[21] **3,206,581**  
[13] A1

[51] **Int.Cl. G06N 20/00 (2019.01) G06F 3/01 (2006.01)**

[25] EN

[54] **CONTROLLERS WITH MACHINE LEARNING AND SYSTEMS INCLUDING THE SAME**

[54] **CONTROLEURS AVEC APPRENTISSAGE AUTOMATIQUE ET SYSTEMES LES COMPRENANT**

[72] DAVIS, BRETT ALLEN, US  
[72] GEERTSEMA, JOHN EDWARD, JR., US  
[72] PERRY, CHRISTOPHER BRIAN, US  
[71] CATTRON NORTH AMERICA, INC., US

[22] 2023-07-12  
[41] 2024-01-12  
[30] US (63/388,504) 2022-07-12  
[30] US (63/389,798) 2022-07-15  
[30] US (63/396,136) 2022-08-08  
[30] US (PCT/US2023/027397) 2023-07-11

**Canadian Applications Open to Public Inspection  
January 7, 2024 to January 13, 2024**

[21] **3,206,619**

[13] A1

- [51] **Int.Cl. G06F 21/55 (2013.01) G06F 21/50 (2013.01) G06F 21/62 (2013.01) G06N 20/00 (2019.01) G06F 40/20 (2020.01)**
- [25] EN
- [54] **MACHINE LEARNING FOR COMPUTER SECURITY**
- [54] **APPRENTISSAGE AUTOMATIQUE POUR LA SECURITE INFORMATIQUE**
- [72] DOUGLAS, LAWRENCE, US
- [72] RULE, JEFFREY, US
- [72] MACOMBER, JACKSON, US
- [71] CAPITAL ONE SERVICES, LLC, US
- [22] 2023-07-13
- [41] 2024-01-13
- [30] US (17/812428) 2022-07-13

[21] **3,218,714**

[13] A1

- [25] EN
- [54] **ARRAY OF PACKAGES**
- [54] **ENSEMBLE D~EMBALLAGES**
- [72] BOLLOT, BENJAMIN SAYSANA, BE
- [72] BANKS, JACK M., CH
- [72] KEULEERS, ROBBY RENILDE FRANCOIS, BE
- [72] NG PAK LEUNG, CLARA SOPHIE LEA, BE
- [71] THE PROCTER & GAMBLE COMPANY, US
- [22] 2023-11-01
- [41] 2024-01-09
- [30] EP (23169243.5) 2023-04-21
- [30] EP (23169247.6) 2023-04-21
- [30] EP (23169249.2) 2023-04-21

[21] **3,207,180**

[13] A1

- [51] **Int.Cl. B07B 13/04 (2006.01) B07B 13/14 (2006.01)**
- [25] EN
- [54] **FLEXIBLE SUCTION TOOL FOR A GRABBING APPARATUS**
- [54] **OUTIL D~ASPIRATION FLEXIBLE POUR UN APPAREIL DE PREHENSION**
- [72] MASSE, MARC, CA
- [71] INDUSTRIES MACHINEX INC., CA
- [22] 2023-07-13
- [41] 2024-01-13
- [30] US (17863597) 2022-07-13

[21] **3,218,727**

[13] A1

- [51] **Int.Cl. A01M 27/00 (2006.01) A01M 23/16 (2006.01) G01S 17/88 (2006.01)**
- [25] EN
- [54] **METHOD AND APPARATUS FOR CONTROLLING PEST ANIMALS**
- [54] **METHODE ET APPAREIL POUR CONTROLER LES ANIMAUX NUISIBLES**
- [72] KREHEL, MARK, CA
- [72] GAUTHIER, KEN, CA
- [72] FERGUSON, LUCAS, CA
- [71] CATCH DATA IP HOLDINGS LTD., CA
- [22] 2023-11-03
- [41] 2024-01-10
- [30] US (63/422,910) 2022-11-04

[21] **3,207,192**

[13] A1

- [25] EN
- [54] **SYSTEM AND METHOD FOR EXTENDING THE HEIGHT OF A MANHOLE**
- [54] **SYSTEME ET METHODE POUR ETENDRE LA HAUTEUR D~UN TROU D~HOMME**
- [72] HUSTON, MATT, US
- [72] HAUCK, CHAD, US
- [71] HYDRO-KLEAN, LLC, US
- [22] 2023-07-11
- [41] 2024-01-11
- [30] US (17/811712) 2022-07-11

[21] **3,218,975**

[13] A1

- [51] **Int.Cl. G01G 19/03 (2006.01) B60W 40/107 (2012.01) B60W 40/13 (2012.01) G05D 1/678 (2024.01)**
- [25] EN
- [54] **SYSTEMS AND METHODS FOR REAL-TIME TRACTOR-TRAILER MASS ESTIMATION**
- [54] **SYSTEMES ET METHODES POUR L~ESTIMATION EN TEMPS REEL DE LA MASSE D~UN CAMION SEMI-REMORQUE**
- [72] GUDETA, SOLOMON GENENE, US
- [72] RAJALA, SAMI, US
- [72] SCANLON, JOHN, US
- [71] EMBARK TRUCKS INC., US
- [22] 2023-11-07
- [41] 2024-01-11
- [30] US (17/982,051) 2022-11-07

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[21] **3,176,691**  
[13] A1

[51] **Int.Cl. G06Q 40/08 (2012.01) G01M 3/00 (2006.01) G08B 19/00 (2006.01) G08B 25/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD OF DETERMINING A RISK PROFILE FOR A DWELLING**

[54] **SYSTEME ET METHODE DE DETERMINATION D'UN PROFIL DE RISQUE POUR UN LOGEMENT**

[72] CARLSON, PAUL JUSTIN, CA

[71] JOJO TECHNOLOGIES LTD., CA

[85] 2022-09-27

[86] 2022-09-23 (PCT/CA2022/051414)

[87] (3176691)

[30] US (63/359,165) 2022-07-07

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[21] **3,180,814**  
[13] A1

[51] **Int.Cl. A47L 9/00 (2006.01) A47L 7/00 (2006.01) A47L 11/292 (2006.01)**

[25] EN

[54] **BASE FOR CLEANING SYSTEM, CLEANING SYSTEM AND METHOD FOR DRYING ROLLING BRUSH**

[54] **BASE POUR SYSTEME DE NETTOYAGE, SYSTEME DE NETTOYAGE ET METHODE DE SECHAGE D'UNE BROSSE ROULANTE**

[72] SHEN, YANGYANG, CN

[71] SHANGHAI ZI DONG INTERNATIONAL TRADE CO., LTD., CN

[85] 2022-12-13

[86] 2022-08-04 (PCT/CN2022/110138)

[87] (3180814)

[30] CN (202210805746.4) 2022-07-08

[30] CN (202210805731.8) 2022-07-08

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[21] **3,189,711**  
[13] A1

[51] **Int.Cl. A61K 38/02 (2006.01) A61K 38/16 (2006.01) A61P 31/04 (2006.01) A61P 31/12 (2006.01) C12N 15/09 (2006.01) C12N 15/11 (2006.01) C12N 15/87 (2006.01)**

[25] EN

[54] **FUSION PROTEINS FOR THE DIAGNOSIS, PROPHYLAXIS AND TREATMENT OF INFECTIOUS DISEASES**

[54] **PROTEINES DE FUSION POUR LE DIAGNOSTIC, LA PROPHYLAXIE ET LE TRAITEMENT DE MALADIES INFECTIEUSES**

[72] AHMED, MAHIUDDIN, US

[72] SEQUEIRA, SONIA, US

[71] VITRUVIAE LLC, US

[85] 2023-02-15

[86] 2021-08-19 (PCT/US2021/046713)

[87] (WO2022/040436)

[30] US (16/997,639) 2020-08-19

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[21] **3,209,196**  
[13] A1

[51] **Int.Cl. H01L 29/778 (2006.01)**

[25] EN

[54] **GAN-BASED HEMT STRUCTURE HAVING MULTITHRESHOLD VOLTAGE, AND PREPARATION METHOD AND APPLICATION THEREFOR**

[54] **STRUCTURE DE TRANSISTOR A HAUTE MOBILITE D'ELECTRONS (HEMT) A BASE DE NITRURE DE GALLIUM PRESENTANT UNE TENSION MULTISEUIL, ET METHODE DE PREPARATION ET APPLICATION CONNEXES**

[72] GUO, XIAOLU, CN

[72] GAO, HONGWEI, CN

[72] YANG, HUI, CN

[72] CHEN, XIN, CN

[72] SUN, QIAN, CN

[72] ZHONG, YAOZONG, CN

[72] YANG, YONG, CN

[71] SUZHOU INSTITUTE OF NANO-TECH AND NANO-BIONICS (SINANO), CHINESE ACADEMY OF SCIENCES, CN

[71] GUANGDONG INSTITUTE OF SEMICONDUCTOR MICRO-NANO MANUFACTURING TECHNOLOGY, CN

[85] 2023-08-21

[86] 2022-09-07 (PCT/CN2022/117566)

[87] (3209196)

[30] CN (2022108080441) 2022-07-07

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[21] **3,211,352**  
[13] A1

[25] EN

[54] **CONNECTION SYSTEM**

[54] **SYSTEME DE CONNEXION**

[72] FITZGERALD, JACK LEIGHTON, AU

[71] THINK FENCING PTY LTD, AU

[85] 2023-09-07

[86] 2023-05-10 (PCT/AU2023/000003)

[87] (3211352)

[30] AU (2022901910) 2022-07-07

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[21] **3,214,382**  
[13] A1

[51] **Int.Cl. A61F 5/448 (2006.01) A61F 5/445 (2006.01)**

[25] EN

[54] **OSTOMY APPLIANCE WITH CUSTOMIZABLE BARRIER RING FOR LOCALIZED CONVEX SUPPORT**

[54] **APPAREIL DE STOMIE POSSEDANT UNE BAGUE DE BLOCAGE PERSONNALISABLE POUR UN SUPPORT CONVEXE LOCALISE**

[72] WINES, JAMES P., US

[72] PARK, RYAN S., US

[71] HOLLISTER INCORPORATED, US

[85] 2023-10-03

[86] 2023-04-25 (PCT/US2023/066162)

[87] (3214382)

[30] US (63/403.129) 2022-09-01

[21] **3,216,915**  
[13] A1

[51] **Int.Cl. A61F 5/445 (2006.01)**

[25] EN

[54] **OSTOMY POUCH WITH VIEWING OPTION FEATURE**

[54] **POCHE DE STOMIE AVEC OPTION DE VISUALISATION**

[72] WEINBERG, ROBERT J., US

[71] HOLLISTER INCORPORATED, US

[85] 2023-10-26

[86] 2023-07-20 (PCT/US2023/070559)

[87] (3216915)

[30] US (63/404,750) 2022-09-08

[21] **3,217,614**  
[13] A1

[51] **Int.Cl. C07K 14/435 (2006.01) C07K 16/18 (2006.01)**

[25] EN

[54] **CHIMERIC RECEPTORS AND METHODS OF USE THEREOF**

[54] **RECEPTEURS CHIMERIQUES ET LEURS METHODES D'UTILISATION**

[72] GONZALEZ-JUNCA, ALBA, US

[72] ROGUEV, ASSEN BOYANOV, US

[72] FRANKEL, NICHOLAS, US

[71] SENTI BIOSCIENCES, INC., US

[85] 2023-11-01

[86] 2022-05-06 (PCT/US2022/028202)

[87] (WO2022/236142)

[30] US (63/185,896) 2021-05-07

[30] US (63/283,147) 2021-11-24

[21] **3,219,066**  
[13] A1

[51] **Int.Cl. F04D 13/08 (2006.01) F04D 3/00 (2006.01) F04D 29/54 (2006.01)**

[25] EN

[54] **SUBMERSIBLE PUMP**

[54] **POMPE SUBMERSIBLE**

[72] SCHMIDT, PAUL WAYNE, US

[72] GHOSH, AVIJIT, US

[71] VORTEX PIPE SYSTEMS LLC, US

[85] 2023-11-03

[86] 2023-04-19 (PCT/US2023/068108)

[87] (3219066)

[30] US (63/388,308) 2022-07-12

[30] US (18/149,463) 2023-01-03

[21] **3,220,558**  
[13] A1

[51] **Int.Cl. A61M 5/168 (2006.01) B01F 33/501 (2022.01)**

[25] EN

[54] **RECIPROCATING MIXING AND INJECTOR SYSTEM**

[54] **SYSTEME DE MELANGE ET D'INJECTION EN VA-ET-VIENT**

[72] RYAN, ANDREW JOHN, US

[72] CHAGNON, JEFFREY THOMAS, US

[72] SOUCY, PHILLIP A, US

[71] WINDGAP MEDICAL, INC., US

[85] 2023-11-27

[86] 2022-05-31 (PCT/US2022/031667)

[87] (WO2022/251749)

[30] US (63/194,408) 2021-05-28

[21] **3,224,083**  
[13] A1

[51] **Int.Cl. F03D 13/25 (2016.01) E02B 17/02 (2006.01) E04H 12/08 (2006.01)**

[25] EN

[54] **CONNECTING DEVICE FOR A TOWER-LIKE STRUCTURE, IN PARTICULAR AN OFFSHORE WIND TURBINE, TOWER-LIKE STRUCTURE COMPRISING SUCH A CONNECTING DEVICE, AND METHOD FOR MANUFACTURING SAID STRUCTURE**

[54] **DISPOSITIF DE LIAISON POUR UNE STRUCTURE DE TYPE TOUR, EN PARTICULIER UNE EOLIENNE EN MER, STRUCTURE DE TYPE TOUR COMPRENANT UN TEL DISPOSITIF DE LIAISON ET PROCEDE PERMETTANT DE FABRIQUER LADITE STRUCTURE**

[72] RENTMEISTER, NILS, DE

[72] LINDNER, ALEXANDER, DE

[72] KRUEMPEL, HANNA, DE

[71] ROSEN 2 HOLDING AG, CH

[85] 2023-12-22

[86] 2022-06-29 (PCT/EP2022/067916)

[87] (WO2023/275155)

[30] BE (BE2021/5507) 2021-06-29

[21] **3,224,086**  
[13] A1

[51] **Int.Cl. H04W 36/00 (2009.01)**

[25] EN

[54] **CELL INDICATION METHOD AND APPARATUS, CELL SWITCHING METHOD AND APPARATUS, AND SERVICE NODE, TERMINAL AND MEDIUM**

[54] **PROCEDE ET APPAREIL D'INDICATION DE CELLULE, PROCEDE ET APPAREIL DE COMMUTATION DE CELLULE, ET N?UD DE SERVICE, TERMINAL ET SUPPORT**

[72] XU, WANFU, CN

[72] XIE, FENG, CN

[72] LI, JIE, CN

[71] ZTE CORPORATION, CN

[85] 2023-12-22

[86] 2022-06-21 (PCT/CN2022/100211)

[87] (WO2023/273967)

[30] CN (202110751051.8) 2021-07-02

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[21] **3,224,088**  
[13] A1

[51] **Int.Cl. F16L 1/06 (2006.01) B66F 11/00 (2006.01)**  
[25] EN  
[54] **LIFTING DEVICE FOR PIPES**  
[54] **DISPOSITIF DE LEVAGE POUR CONDUITS**  
[72] JENSEN, STEVE, CA  
[72] JENSEN, DOUG, CA  
[71] JENSEN, STEVE, CA  
[71] JENSEN, DOUG, CA  
[85] 2023-12-22  
[86] 2022-06-17 (PCT/CA2022/050983)  
[87] (WO2022/266749)  
[30] US (17/358,842) 2021-06-25  
[30] US (63/327,224) 2022-04-04

[21] **3,224,090**  
[13] A1

[51] **Int.Cl. F03D 13/25 (2016.01) E02B 17/02 (2006.01) E04H 12/08 (2006.01)**  
[25] EN  
[54] **TOWER-LIKE STRUCTURE FOR A WIND TURBINE, METHOD FOR MANUFACTURING SUCH A STRUCTURE, AND WIND TURBINE**  
[54] **STRUCTURE DE TYPE TOUR DESTINEE A UNE EOLIENNE, PROCEDE DE FABRICATION DE LADITE STRUCTURE, ET EOLIENNE**  
[72] LINDNER, ALEXANDER, DE  
[71] ROSEN 2 HOLDING AG, CH  
[85] 2023-12-22  
[86] 2022-06-29 (PCT/EP2022/067914)  
[87] (WO2023/275153)  
[30] BE (BE2021/5506) 2021-06-29

[21] **3,224,091**  
[13] A1

[25] EN  
[54] **AEROSOL GENERATING DEVICE**  
[54] **APPAREIL POUR PRODUIRE DES AEROSOLS**  
[72] KIM, TAE HUN, KR  
[72] PARK, JU EON, KR  
[72] YOON, SUNG WOOK, KR  
[72] JUNG, HYUNG JIN, KR  
[72] HAN, JUNG HO, KR  
[71] KT&G CORPORATION, KR  
[85] 2023-12-22  
[86] 2023-06-27 (PCT/KR2023/008931)  
[87] (3224091)  
[30] KR (10-2022-0080023) 2022-06-29  
[30] KR (10-2022-0160789) 2022-11-25

[21] **3,224,092**  
[13] A1

[51] **Int.Cl. A47G 1/12 (2006.01)**  
[25] EN  
[54] **COLLECTIBLE COIN HOLDER**  
[54] **ETUI POUR PIECE DE MONNAIE DE COLLECTION**  
[72] NUNEZ, ELOY, US  
[72] FIUMARA, CRAIG, US  
[72] SPIEGEL, MAX, US  
[72] SCHECHTER, SCOTT, US  
[72] YANARELLA, JOSEPH, US  
[72] LAM, STEPHEN, CN  
[71] PROVENANCE NGC LLC, US  
[85] 2023-12-22  
[86] 2022-06-23 (PCT/US2022/034806)  
[87] (WO2022/272004)  
[30] US (63/214,259) 2021-06-23

[21] **3,224,093**  
[13] A1

[51] **Int.Cl. C12Q 1/6853 (2018.01) C12Q 1/6841 (2018.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR SYNCHRONIZING REACTIONS IN SITU**  
[54] **PROCEDES ET COMPOSITIONS POUR LA SYNCHRONISATION DE REACTIONS IN SITU**  
[72] HERNANDEZ NEUTA, JORGE IVAN, US  
[72] KUHNEMUND, MALTE, US  
[72] MARKS, PATRICK J., US  
[71] 10X GENOMICS, INC., US  
[85] 2023-12-22  
[86] 2022-07-29 (PCT/US2022/038915)  
[87] (WO2023/009842)  
[30] US (63/227,830) 2021-07-30

[21] **3,224,095**  
[13] A1

[51] **Int.Cl. H04L 9/00 (2022.01)**  
[25] EN  
[54] **SECURITY RISK REMEDIATION TOOL**  
[54] **OUTIL DE REMEDIATION DE RISQUE DE SECURITE**  
[72] LIM, VITALIY, CA  
[72] TSARYNNY, IVAN, CA  
[71] FERROOT SECURITY INC., CA  
[85] 2023-12-22  
[86] 2022-06-23 (PCT/CA2022/051017)  
[87] (WO2022/266771)  
[30] US (63/214,363) 2021-06-24

[21] **3,224,096**  
[13] A1

[51] **Int.Cl. A61N 7/02 (2006.01)**  
[25] EN  
[54] **SYSTEM, METHOD, AND DEVICES FOR TISSUE MANIPULATION USING ELECTRONICALLY STEERABLE ULTRASOUND TRANSDUCER**  
[54] **SYSTEME, PROCEDE ET DISPOSITIFS DE MANIPULATION DE TISSU A L'AIDE D'UN TRANSDUCTEUR ULTRASONORE A ORIENTATION ELECTRONIQUE**  
[72] KATCHINSKIY, NIR, CA  
[72] CEROICI, CHRISTOPHER, CA  
[71] PULSEMEDICA CORP., CA  
[85] 2023-12-22  
[86] 2022-06-29 (PCT/CA2022/051038)  
[87] (WO2023/272388)  
[30] US (63/216,637) 2021-06-30  
[30] CA (PCT/CA2022/050582) 2022-04-14

[21] **3,224,097**  
[13] A1

[51] **Int.Cl. H02M 1/00 (2007.10) H02M 7/483 (2007.01) H02M 7/487 (2007.01) H02M 7/49 (2007.01)**  
[25] EN  
[54] **CELL BASED MULTILEVEL CONVERTER WITH MULTIPLE OPERATING MODES AND ASSOCIATED CONTROL METHOD**  
[54] **CONVERTISSEUR MULTINIVEAU A BASE DE CELLULES AYANT DE MULTIPLES MODES DE FONCTIONNEMENT ET PROCEDE DE COMMANDE ASSOCIE**  
[72] MIHALACHE, LIVIU, US  
[71] INNOMOTICS GMBH, DE  
[85] 2023-12-22  
[86] 2021-07-16 (PCT/US2021/041909)  
[87] (WO2023/287424)

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[21] **3,224,098**  
[13] A1

[51] **Int.Cl. F03D 13/25 (2016.01) E02B 17/02 (2006.01)**

[25] EN

[54] **METHOD FOR MANUFACTURING A CONNECTING DEVICE FOR A TOWER-LIKE STRUCTURE AND TOWER-LIKE STRUCTURE**

[54] **PROCEDE PERMETTANT DE FABRIQUER UN DISPOSITIF DE RACCORDEMENT POUR UNE STRUCTURE DE TYPE TOUR, ET STRUCTURE DE TYPE TOUR**

[72] MOELLER, DAVID, DE

[72] LINDNER, ALEXANDER, DE

[71] ROSEN 2 HOLDING AG, CH

[85] 2023-12-22

[86] 2022-06-29 (PCT/EP2022/067915)

[87] (WO2023/275154)

[30] BE (BE2021/5505) 2021-06-29

[21] **3,224,099**  
[13] A1

[51] **Int.Cl. A63G 7/00 (2006.01) A63G 21/04 (2006.01) A63G 31/02 (2006.01)**

[25] EN

[54] **AMUSEMENT RIDE AND METHOD FOR OPERATING AN AMUSEMENT RIDE**

[54] **ATTRACTION FORAINE ET PROCEDE POUR FAIRE FONCTIONNER UNE ATTRACTION FORAINE**

[72] GORDT, DENNIS, DE

[72] HAASCH, TOBIAS, DE

[72] KRAUS, MICHAEL, DE

[71] MACK RIDES IP GMBH & CO. KG, DE

[85] 2023-12-22

[86] 2022-08-10 (PCT/EP2022/072415)

[87] (WO2023/017067)

[30] DE (10 2021 121 045.3) 2021-08-12

[21] **3,224,101**  
[13] A1

[51] **Int.Cl. A61K 8/34 (2006.01) A61K 35/19 (2015.01) A61K 8/49 (2006.01) A61K 8/63 (2006.01) A61K 8/98 (2006.01) A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 31/203 (2006.01) A61K 31/4045 (2006.01) A61K 31/506 (2006.01) A61K 31/5575 (2006.01) A61K 31/58 (2006.01) A61K 38/36 (2006.01) A61K 47/10 (2017.01) A61P 17/14 (2006.01)**

[25] EN

[54] **FORMULATION FOR INCREASING HAIR GROWTH AND REDUCING HAIR THINNING**

[54] **FORMULATION POUR AUGMENTER LA POUSSE DES CHEVEUX ET REDUIRE L'AMINCISSEMENT DES CHEVEUX**

[72] VERAITCH, OPHELIA, GB

[71] DR OPHELIA LIMITED, GB

[85] 2023-12-22

[86] 2022-07-04 (PCT/GB2022/051720)

[87] (WO2023/275571)

[30] GB (2109592.2) 2021-07-02

[21] **3,224,102**  
[13] A1

[51] **Int.Cl. H04W 52/36 (2009.01)**

[25] EN

[54] **RESOURCE INDICATION METHOD AND APPARATUS**

[54] **PROCEDE ET APPAREIL D'INDICATION DE RESSOURCES**

[72] LU, YUXIN, CN

[72] LIU, CHENCHEN, CN

[72] HU, MENGSHI, CN

[72] GAN, MING, CN

[71] HUAWEI TECHNOLOGIES CO., LTD., CN

[85] 2023-12-22

[86] 2022-05-25 (PCT/CN2022/095006)

[87] (WO2022/267804)

[30] CN (202110694205.4) 2021-06-22

[21] **3,224,103**  
[13] A1

[51] **Int.Cl. A61K 47/56 (2017.01) C08G 63/02 (2006.01)**

[25] EN

[54] **SELF-ASSEMBLING AMPHIPHILIC POLYMERS AS ANTI-COVID-19 AGENTS**

[54] **POLYMERES AMPHIPHILES A AUTO-ASSEMBLAGE UTILISES EN TANT QU'AGENTS ANTI-COVID-19**

[72] DIWAN, ANIL R., US

[72] TATAKE, JAYANT G., US

[72] PANDEY, RAJESH K., US

[72] CHINIGA, VIETHA, US

[72] RAJ HOLKAR, NEELAMKUMAR, US

[72] RAJ HOLKAR, PREETAMKUMAR, US

[71] ALLEXCEL INC., US

[85] 2023-12-22

[86] 2022-06-28 (PCT/US2022/035210)

[87] (WO2022/272181)

[30] US (PCT/US21/39050) 2021-06-25

[21] **3,224,104**  
[13] A1

[51] **Int.Cl. A61L 2/10 (2006.01)**

[25] EN

[54] **ULTRAVIOLET TREATMENT APPARATUS AND METHOD**

[54] **APPAREIL ET PROCEDE DE TRAITEMENT PAR ULTRAVIOLETS**

[72] MEDAL, THOMAS ALEXANDER, CA

[72] DOBBIN, CLAIRE DEIRDRE, CA

[72] LIN, ZI-XIANG, CA

[72] ANAND, MANJUNATH, CA

[72] RAMDYAL, ALYSSA, US

[72] ATODARIA, HARSHRAJ RATNASINH, CA

[72] TAYLOR, MATTHEW GARRIN, CA

[72] MELZER, NATAN ARIEL, CA

[71] LIMESTONE LABS LIMITED, CA

[85] 2023-12-22

[86] 2022-06-23 (PCT/CA2022/051006)

[87] (WO2022/266762)

[30] US (63/214,017) 2021-06-23



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[21] **3,224,105**  
[13] A1

[51] **Int.Cl. A61P 35/02 (2006.01) C07C 53/18 (2006.01) C07D 471/04 (2006.01) C07F 7/18 (2006.01)**

[25] EN

[54] **NITROGEN-CONTAINING HETEROCYCLIC COMPOUND, AND PREPARATION METHOD THEREFOR, INTERMEDIATE THEREOF, AND APPLICATION THEREOF**

[54] **COMPOSE HETEROCYCLIQUE CONTENANT DE L'AZOTE, SON PROCEDE DE PREPARATION, ET UTILISATION ASSOCIEE**

[72] LUO, HUIBING, CN  
[72] JIANG, JIAJUN, CN  
[72] WANG, JIAPU, CN  
[72] ZHOU, HUAYONG, CN  
[71] SHANGHAI ALLIST PHARMACEUTICALS CO., LTD., CN

[85] 2023-12-22  
[86] 2022-06-29 (PCT/CN2022/102497)  
[87] (WO2023/274324)  
[30] CN (202110736463.4) 2021-06-30  
[30] CN (202110959764.3) 2021-08-20  
[30] CN (202210029060.0) 2022-01-11

[21] **3,224,106**  
[13] A1

[25] EN

[54] **COMMUNICATION PROTOCOL FOR TREATMENT DEVICES**

[54] **PROTOCOLE DE COMMUNICATION POUR DISPOSITIFS DE TRAITEMENT**

[72] HOFFMANN, HOLGER, DE  
[72] ZIES, MAIK, DE  
[71] BASF AGRO TRADEMARKS GMBH, DE

[85] 2023-12-22  
[86] 2022-06-24 (PCT/EP2022/067384)  
[87] (WO2022/269053)  
[30] EP (21181618.6) 2021-06-25  
[30] EP (21181620.2) 2021-06-25  
[30] EP (22157513.7) 2022-02-18  
[30] EP (22157516.0) 2022-02-18

[21] **3,224,107**  
[13] A1

[51] **Int.Cl. B60L 53/80 (2019.01) B60L 50/60 (2019.01) B60L 50/64 (2019.01)**

[25] EN

[54] **BATTERY PLACEMENT FOR ELECTRIC REFUSE VEHICLE**

[54] **MISE EN PLACE DE BATTERIE POUR VEHICULE A ORDURES ELECTRIQUE**

[72] KOGA, JEFFREY, US  
[72] DAVIS, EMILY, US  
[72] WECKWERTH, CLINTON T., US  
[72] HOOVER, VINCENT, US  
[72] KLEIN, ZACHARY L., US  
[72] KAPPERS, JERROD, US  
[72] WENTE, DEREK A., US  
[72] GARY, LOGAN, US  
[72] ROCHOLL, JOSHUA D., US  
[72] NASR, NADER, US  
[72] SMITH, CHAD K., US  
[72] KELLANDER, JOHN T., US  
[72] CLIFTON, CODY D., US  
[72] WACHTER, SKYLAR, US  
[72] DEKARSKE, NEIL E., US  
[71] OSHKOSH CORPORATION, US

[85] 2023-12-22  
[86] 2022-06-29 (PCT/US2022/035555)  
[87] (WO2023/278602)  
[30] US (17/362,601) 2021-06-29

[21] **3,224,109**  
[13] A1

[51] **Int.Cl. A61L 31/16 (2006.01)**

[25] EN

[54] **ALPHA-SHEET POLYPEPTIDES AND THEIR USE**

[54] **POLYPEPTIDES A FEUILLETS ALPHA ET LEUR UTILISATION**

[72] DAGGETT, VALERIE, US  
[72] SHEA, DYLAN, US  
[72] BLEEM, ALISSA, US  
[71] THE UNIVERSITY OF WASHINGTON, US

[85] 2023-12-22  
[86] 2022-05-20 (PCT/US2022/030328)  
[87] (WO2023/003623)  
[30] US (63/224,815) 2021-07-22

[21] **3,224,110**  
[13] A1

[51] **Int.Cl. H02P 6/32 (2016.01) H02P 25/022 (2016.01)**

[25] EN

[54] **SYSTEM FOR CONTROLLING AN INDUCTOR FREEWHEELING VOLTAGE**

[54] **SYSTEME DE COMMANDE D'UNE TENSION DE ROUE LIBRE D'INDUCTEUR**

[72] VANCU, FLORIAN, CH  
[72] FUEGLISTER, MARKUS, CH  
[71] ABB SCHWEIZ AG, CH

[85] 2023-12-22  
[86] 2022-05-05 (PCT/IB2022/054185)  
[87] (WO2022/269378)  
[30] EP (21180912.4) 2021-06-22

[21] **3,224,111**  
[13] A1

[51] **Int.Cl. A01M 7/00 (2006.01)**

[25] EN

[54] **SPRAYER NOZZLE MONITOR AND CONTROL SYSTEM AND METHODS FOR SAME**

[54] **DISPOSITIF DE SURVEILLANCE ET DE COMMANDE DE BUSE DE PULVERISATEUR ET PROCEDES ASSOCIES**

[72] KOCER, JARED ERNEST, US  
[72] BURGERS, TRAVIS ALLEN, US  
[72] MICHAEL, NICHOLAS OWEN, US  
[71] RAVEN INDUSTRIES, INC., US

[85] 2023-12-22  
[86] 2022-05-04 (PCT/US2022/027707)  
[87] (WO2023/278009)  
[30] US (63/217,755) 2021-07-01  
[30] US (63/254,466) 2021-10-11

[21] **3,224,112**  
[13] A1

[25] EN

[54] **PSYCHEDELIC DRUG TREATMENT OF NEUROPSYCHIATRIC DISORDERS AND CEREBRAL PALSY**

[54] **TRAITEMENT MEDICAMENTEUX PSYCHEDELIQUE DE TROUBLES NEUROPSYCHIATRIQUES ET DE PARALYSIE CEREBRALE**

[72] FEIFEL, DAVID, US  
[71] FEIFEL, DAVID, US

[85] 2023-12-22  
[86] 2022-06-22 (PCT/US2022/034544)  
[87] (WO2022/271841)  
[30] US (63/214,626) 2021-06-24

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[21] **3,224,113**  
[13] A1

[51] **Int.Cl. A61K 31/353 (2006.01) A61P 3/04 (2006.01) A61P 31/12 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR ANTIOXIDANT AND ANTI-INFLAMMATORY THERAPEUTICS**  
[54] **COMPOSITIONS ET PROCEDES POUR DES AGENTS THERAPEUTIQUES ANTIOXYDANTS ET ANTI-INFLAMMATOIRES**  
[72] ARALDI, GIAN LUCA, US  
[71] AVANTI BIOSCIENCES INC., US  
[85] 2023-12-22  
[86] 2022-07-14 (PCT/US2022/037208)  
[87] (WO2023/288020)  
[30] US (63/222,673) 2021-07-16  
[30] US (63/224,202) 2021-07-21

[21] **3,224,114**  
[13] A1

[51] **Int.Cl. C12N 5/0783 (2010.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR PREPARATION OF CYTOTOXIC T LYMPHOCYTES WITH BROAD TUMOUR-SPECIFIC REACTIVITY AND CHARACTERISTICS OF EARLY DIFFERENTIATION CELLS**  
[54] **PROCEDE DE PREPARATION DE LYMPHOCYTES T CYTOTOXIQUES PRESENTANT UNE LARGE REACTIVITE SPECIFIQUE AUX TUMEURS ET DES CARACTERISTIQUES PROPRES AUX CELLULES A DIFFERENCIATION PRECOCE**  
[72] KIRKIN, ALEXEI, DK  
[72] DJANDJOUGAZIAN, KARINE, DK  
[71] CYTOVAC A/S, DK  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/EP2022/067303)  
[87] (WO2022/269019)  
[30] EP (21181704.4) 2021-06-25

[21] **3,224,115**  
[13] A1

[51] **Int.Cl. C07D 257/04 (2006.01)**  
[25] EN  
[54] **THERMODYNAMICALLY STABLE FORM OF SCO-101**  
[54] **FORME THERMODYNAMIQUEMENT STABLE DE SCO-101**  
[72] EGE BRO, RENE, DK  
[72] JENSEN, KLAUS SNEJ, DK  
[72] LOBATO, KIARA, GB  
[72] RASMUSSEN, KAARE G., DK  
[72] SHARP, LORRAINE, GB  
[71] SCANDION ONCOLOGY A/S, DK  
[85] 2023-12-22  
[86] 2022-07-11 (PCT/EP2022/069240)  
[87] (WO2023/285344)  
[30] EP (21186075.4) 2021-07-16

[21] **3,224,116**  
[13] A1

[51] **Int.Cl. A61K 31/712 (2006.01) C12N 15/113 (2010.01) A61K 31/7125 (2006.01) A61P 3/06 (2006.01)**  
[25] EN  
[54] **PRODUCTS AND COMPOSITIONS**  
[54] **PRODUITS ET COMPOSITIONS**  
[72] SAMARSKY, DMITRY, US  
[71] SIRNAOMICS, INC., US  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/US2022/034965)  
[87] (WO2022/272108)  
[30] US (63/214,608) 2021-06-24  
[30] US (63/318,287) 2022-03-09

[21] **3,224,117**  
[13] A1

[51] **Int.Cl. A63G 31/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR CUSTOMIZED NON-FUNGIBLE TOKENS CORRESPONDING TO AN AMUSEMENT PARK ATTRACTION**  
[54] **SYSTEMES ET PROCEDES POUR JETONS NON FONGIBLES PERSONNALISES CORRESPONDANT A UNE ATTRACTION DE PARC D'ATTRACTIONS**  
[72] BOYLES, JEFFREY SCOTT, US  
[71] UNIVERSAL CITY STUDIOS LLC, US  
[85] 2023-12-22  
[86] 2022-07-21 (PCT/US2022/037797)  
[87] (WO2023/003996)  
[30] US (63/224,749) 2021-07-22  
[30] US (17/864,948) 2022-07-14

[21] **3,224,118**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITIONS OF A B7-H3 ANTIBODY AND USE OF THE SAME**  
[54] **COMPOSITIONS PHARMACEUTIQUES D'UN ANTICORPS B7-H3 ET LEUR UTILISATION**  
[72] ZHOU, YAN, US  
[72] SAMPATHKUMAR, KRISHNAN, US  
[72] BURKE, STEPHEN JAMES, US  
[72] WANG, XIAOYAN, US  
[71] MACROGENICS, INC., US  
[85] 2023-12-22  
[86] 2022-07-06 (PCT/US2022/073462)  
[87] (WO2023/288173)  
[30] US (63/222,750) 2021-07-16

[21] **3,224,119**  
[13] A1

[51] **Int.Cl. A61B 5/1473 (2006.01) A61B 5/1486 (2006.01)**  
[25] EN  
[54] **SENSOR WITH VARYING STIFFNESS**  
[54] **CAPTEUR A RIGIDITE VARIABLE**  
[72] KUEBLER, SEBASTIAN, DE  
[71] F. HOFFMANN-LA ROCHE AG, CH  
[85] 2023-12-22  
[86] 2022-09-19 (PCT/EP2022/075877)  
[87] (WO2023/046606)  
[30] EP (21197921.6) 2021-09-21

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[21] <b>3,224,120</b> [13] A1	[21] <b>3,224,122</b> [13] A1	[21] <b>3,224,124</b> [13] A1
<p>[51] <b>Int.Cl. A01M 7/00 (2006.01) A01M 21/04 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>MULTI-DEVICE AGRICULTURAL FIELD TREATMENT</b></p> <p>[54] <b>TRAITEMENT DE CHAMP AGRICOLE PAR PLUSIEURS DISPOSITIFS</b></p> <p>[72] ZIES, MAIK, DE</p> <p>[72] HOFFMANN, HOLGER, DE</p> <p>[72] EBERSOLD, DANIEL, DE</p> <p>[71] BASF AGRO TRADEMARKS GMBH, DE</p> <p>[85] 2023-12-22</p> <p>[86] 2022-06-24 (PCT/EP2022/067434)</p> <p>[87] (WO2022/269078)</p> <p>[30] EP (21181618.6) 2021-06-25</p> <p>[30] EP (21181620.2) 2021-06-25</p> <p>[30] EP (22157513.7) 2022-02-18</p> <p>[30] EP (22157516.0) 2022-02-18</p>	<p>[51] <b>Int.Cl. C07D 239/72 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>ERK5 DEGRADERS AND USES THEREOF</b></p> <p>[54] <b>AGENTS DE DEGRADATION ERK5 ET LEURS UTILISATIONS</b></p> <p>[72] YOU, INCHUL, US</p> <p>[72] WANG, ERIC, US</p> <p>[72] GRAY, NATHANAEL S., US</p> <p>[71] DANA-FARBER CANCER INSTITUTE, INC., US</p> <p>[85] 2023-12-22</p> <p>[86] 2022-09-19 (PCT/US2022/076655)</p> <p>[87] (WO2023/044482)</p> <p>[30] US (63/246,051) 2021-09-20</p>	<p>[51] <b>Int.Cl. B01J 8/02 (2006.01) B01J 19/24 (2006.01) B01J 35/00 (2024.01)</b></p> <p>[25] EN</p> <p>[54] <b>A STRUCTURED CATALYST</b></p> <p>[54] <b>CATALYSEUR STRUCTURE</b></p> <p>[72] MORTENSEN, PETER MOLGAARD, DK</p> <p>[72] WISMANN, SEBASTIAN THOR, DK</p> <p>[72] HANSEN, ANDERS HELBO, DK</p> <p>[71] TOPSOE A/S, DK</p> <p>[85] 2023-12-22</p> <p>[86] 2022-06-27 (PCT/EP2022/067534)</p> <p>[87] (WO2023/274939)</p> <p>[30] EP (21182136.8) 2021-06-28</p>
[21] <b>3,224,121</b> [13] A1	[21] <b>3,224,123</b> [13] A1	[21] <b>3,224,125</b> [13] A1
<p>[51] <b>Int.Cl. A01B 69/00 (2006.01) A01B 79/00 (2006.01) A01M 7/00 (2006.01) A01M 21/04 (2006.01) B64D 1/18 (2006.01) B64C 39/02 (2023.01)</b></p> <p>[25] EN</p> <p>[54] <b>COMPUTER-IMPLEMENTED METHOD FOR PROVIDING OPERATION DATA FOR TREATMENT DEVICES ON AN AGRICULTURAL FIELD, CORRESPONDING SYSTEMS, USE AND COMPUTER ELEMENT</b></p> <p>[54] <b>PROCEDE MIS EN ?UVRE PAR ORDINATEUR POUR FOURNIR DES DONNEES DE FONCTIONNEMENT POUR DES DISPOSITIFS DE TRAITEMENT SUR UN CHAMP AGRICOLE, ET SYSTEMES, UTILISATION ET ELEMENT INFORMATIQUE CORRESPONDANT</b></p> <p>[72] HOFFMANN, HOLGER, DE</p> <p>[72] ZIES, MAIK, DE</p> <p>[71] BASF AGRO TRADEMARKS GMBH, DE</p> <p>[85] 2023-12-22</p> <p>[86] 2022-06-24 (PCT/EP2022/067382)</p> <p>[87] (WO2022/269052)</p> <p>[30] EP (21181618.6) 2021-06-25</p> <p>[30] EP (21181620.2) 2021-06-25</p> <p>[30] EP (22157513.7) 2022-02-18</p> <p>[30] EP (22157516.0) 2022-02-18</p>	<p>[51] <b>Int.Cl. C07D 277/62 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>SMALL MOLECULE INHIBITION OF DEUBIQUITINATING ENZYME JOSEPHIN DOMAIN CONTAINING 1 (JOSD1) AS A TARGETED THERAPY FOR LEUKEMIAS WITH MUTANT JANUS KINASE 2 (JAK2)</b></p> <p>[54] <b>INHIBITION DE PETITES MOLECULES DE L'ENZYME DE DEUBIQUITINATION JOSEPHIN DOMAIN CONTAINING 1 (JOSD1) EN TANT QUE THERAPIE CIBLEE POUR DES LEUCEMIES AVEC LA JANUS KINASE 2 (JAK2) MUTANT</b></p> <p>[72] GRIFFIN, JAMES, US</p> <p>[72] BUHRLAGE, SARA, US</p> <p>[72] WEISBERG, ELLEN, US</p> <p>[72] YANG, JING, US</p> <p>[72] LIU, XIAOXI, US</p> <p>[72] MAGIN, ROBERT, US</p> <p>[72] HU, BIN, US</p> <p>[72] CHAN, WAI CHEUNG, US</p> <p>[71] DANA-FARBER CANCER INSTITUTE, INC., US</p> <p>[85] 2023-12-22</p> <p>[86] 2022-07-25 (PCT/US2022/074110)</p> <p>[87] (WO2023/009982)</p> <p>[30] US (63/225,773) 2021-07-26</p>	<p>[51] <b>Int.Cl. A01M 21/04 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>TARGETED TREATMENT OF SPECIFIC WEED SPECIES WITH MULTIPLE TREATMENT DEVICES</b></p> <p>[54] <b>TRAITEMENT CIBLE D'ESPECES DE MAUVAISES HERBES SPECIFIQUES AVEC DE MULTIPLES DISPOSITIFS DE TRAITEMENT</b></p> <p>[72] ZIES, MAIK, DE</p> <p>[72] HOFFMANN, HOLGER, DE</p> <p>[71] BASF AGRO TRADEMARKS GMBH, DE</p> <p>[85] 2023-12-22</p> <p>[86] 2022-06-24 (PCT/EP2022/067441)</p> <p>[87] (WO2022/269083)</p> <p>[30] EP (21181618.6) 2021-06-25</p> <p>[30] EP (21181620.2) 2021-06-25</p> <p>[30] EP (22157513.7) 2022-02-18</p> <p>[30] EP (22157516.0) 2022-02-18</p>
		[21] <b>3,224,126</b> [13] A1
		<p>[51] <b>Int.Cl. A61B 18/22 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>LASER SYSTEM AND COMPONENTS OF SAME</b></p> <p>[54] <b>SYSTEME LASER ET SES COMPOSANTS</b></p> <p>[72] LAMRINI, SAMIR, DE</p> <p>[72] MUEHLKE, THORSTEN, DE</p> <p>[72] CHRISTOPH, BJOERN, DE</p> <p>[71] LISA LASER PRODUCTS GMBH, DE</p> <p>[85] 2023-12-22</p> <p>[86] 2021-07-16 (PCT/IB2021/000478)</p> <p>[87] (WO2022/269306)</p> <p>[30] US (63/215,052) 2021-06-25</p>

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[21] **3,224,127**  
[13] A1

[51] **Int.Cl. A61K 9/127 (2006.01) A61K 31/12 (2006.01) A61K 31/17 (2006.01) A61K 31/704 (2006.01) A61K 35/00 (2006.01)**

[25] EN

[54] **NANOPARTICLES FOR CANCER TREATMENT**

[54] **NANOPARTICULES POUR LE TRAITEMENT DU CANCER**

[72] RACHMAN, ILYA, US

[71] IMMIX BIOPHARMA, INC., US

[85] 2023-12-22

[86] 2022-07-07 (PCT/US2022/036419)

[87] (WO2023/283380)

[30] US (63/219,348) 2021-07-07

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[21] **3,224,129**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01)**

[25] EN

[54] **UNC5B FUNCTION BLOCKING ANTIBODIES**

[54] **ANTICORPS BLOQUANT LA FONCTION UNC5B**

[72] EICHMANN, ANNE, US

[72] BOYE, KEVIN, US

[72] PIBOUIN-FRAGNER, LAURENCE, FR

[72] GERALDO, LUIZ, US

[71] YALE UNIVERSITY, US

[71] INSERM (INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE), FR

[85] 2023-12-22

[86] 2022-06-27 (PCT/US2022/035137)

[87] (WO2023/278336)

[30] US (63/215,471) 2021-06-27

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[21] **3,224,131**  
[13] A1

[51] **Int.Cl. G01N 9/08 (2006.01)**

[25] EN

[54] **METHOD AND ASSEMBLY FOR MEASURING SOLID PRECIPITATION IN DRILLING FLUIDS**

[54] **PROCEDE ET ENSEMBLE POUR MESURER UNE PRECIPITATION SOLIDE DANS DES FLUIDES DE FORAGE**

[72] ALTUN, GURSAT, TR

[72] OZEL, MUHAMMED KEMAL, TR

[71] ISTANBUL TEKNIK UNIVERSITESI, TR

[85] 2023-12-22

[86] 2022-06-09 (PCT/TR2022/050572)

[87] (WO2023/277843)

[30] TR (2021/010691) 2021-06-30

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[21] **3,224,132**  
[13] A1

[51] **Int.Cl. B28B 1/00 (2006.01) B28B 11/08 (2006.01) B28B 13/02 (2006.01) C04B 28/00 (2006.01) C04B 28/02 (2006.01)**

[25] EN

[54] **CONCRETE ELEMENT AND METHOD FOR THE PRODUCTION OF SAME**

[54] **ELEMENT NOYAU-PAREMENT EN BETON, PROCEDE POUR SA PRODUCTION ET UTILISATION D'UN LIANT HYDRAULIQUE OU POZZOLANIQUE LATENT DANS LA COUCHE DE NOYAU**

[72] VOLMER, GUIDO, DE

[72] METTEN, MICHAEL DR., DE

[71] METTEN TECHNOLOGIES GMBH & CO. KG, DE

[85] 2023-12-22

[86] 2022-06-30 (PCT/EP2022/068093)

[87] (WO2023/275267)

[30] DE (10 2021 116 928.3) 2021-06-30

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[21] **3,224,133**  
[13] A1

[51] **Int.Cl. G06F 21/57 (2013.01) G06F 21/71 (2013.01) G06F 21/12 (2013.01)**

[25] EN

[54] **SYSTEM AND METHOD IMPLEMENTING AN ARCHITECTURE FOR TRUSTED EDGE IOT SECURITY GATEWAYS**

[54] **SYSTEME ET PROCEDE METTANT EN ?UVRE UNE ARCHITECTURE POUR DES PASSERELLES DE SECURITE LO T DE BORD DE CONFIANCE**

[72] VASUDEVAN, AMIT, US

[72] MCCORMACK, MATTHEW, US

[72] SEKAR, VYAS, US

[71] CARNEGIE MELLON UNIVERSITY, US

[85] 2023-12-22

[86] 2022-06-22 (PCT/US2022/034447)

[87] (WO2022/271774)

[30] US (63/214,493) 2021-06-24

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[21] **3,224,134**  
[13] A1

[51] **Int.Cl. A61K 47/54 (2017.01) C12N 15/113 (2010.01) C12N 15/87 (2006.01)**

[25] EN

[54] **NOVEL THERAPEUTIC DELIVERY MOIETIES AND USES THEREOF**

[54] **NOUVELLES FRACTIONS D'ADMINISTRATION THERAPEUTIQUES ET LEURS UTILISATIONS**

[72] ANTONELLIS, PATRICK JOSEPH, US

[72] LACKNER, GREGORY LAWRENCE, US

[72] WILSON, TAKAKO, US

[71] ELI LILLY AND COMPANY, US

[85] 2023-12-22

[86] 2022-06-22 (PCT/US2022/034500)

[87] (WO2022/271806)

[30] US (63/214,555) 2021-06-24

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[21] **3,224,136**  
[13] A1

[51] **Int.Cl. A61L 27/52 (2006.01) A61L 27/56 (2006.01)**  
[25] EN  
[54] **THREE-DIMENSIONAL BODY IMPLANTS**  
[54] **IMPLANTS CORPORELS TRIDIMENSIONNELS**  
[72] MARQUETTE, CHRISTOPHE, FR  
[72] CHERBLANC, AUDREY, FR  
[72] DOS SANTOS, MORGAN, FR  
[72] VIDAL, LUCIANO, FR  
[72] PETIOT, EMMA, FR  
[72] CHASTAGNIER, LAURA, FR  
[72] THEPOT, AMELIE, FR  
[72] GODET, BAPTISTE, FR  
[71] UNIVERSITE CLAUDE BERNARD LYON 1, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS), FR  
[71] ECOLE CENTRALE DE NANTES, FR  
[71] ECOLE SUP CHIMIE PHYS ELECTRONIQ LYON, FR  
[71] HEALSHAPE, FR  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/FR2022/051265)  
[87] (WO2022/269215)  
[30] FR (FR2106827) 2021-06-25

[21] **3,224,137**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) C07K 14/725 (2006.01) C07K 14/765 (2006.01)**  
[25] EN  
[54] **EXTENDED-RELEASE IMMUNE CELL ENGAGING PROTEINS AND METHODS OF TREATMENT**  
[54] **PROTEINES DE CONTACT AVEC DES CELLULES IMMUNITAIRES A LIBERATION PROLONGEE ET PROCEDES DE TRAITEMENT**  
[72] WESCHE, HOLGER, US  
[72] LIN, SHUOYEN JACK, US  
[72] KWANT, KATHRYN, US  
[72] LEMON, BRYAN D., US  
[72] AUSTIN, RICHARD J., US  
[71] HARPOON THERAPEUTICS, INC., US  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/US2022/034856)  
[87] (WO2022/272033)  
[30] US (63/214,963) 2021-06-25  
[30] US (63/276,804) 2021-11-08  
[30] US (63/328,603) 2022-04-07

[21] **3,224,138**  
[13] A1

[51] **Int.Cl. A24B 3/14 (2006.01) A24D 1/20 (2020.01) A24D 1/22 (2020.01) A24F 40/20 (2020.01) A24B 15/12 (2006.01) A24B 15/16 (2020.01) A24B 15/28 (2006.01)**  
[25] EN  
[54] **SUBSTRATE WITH MULTIPLE AEROSOL FORMING MATERIALS FOR AEROSOL DELIVERY DEVICE**  
[54] **SUBSTRAT AVEC DE MULTIPLES SUBSTANCES DE FORMATION D'AEROSOL POUR DISPOSITIF DE DISTRIBUTION D'AEROSOL**  
[72] MONSALUD, LUIS, GB  
[72] FLYNN, STEVEN D., GB  
[72] MUA, JOHN PAUL, US  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-12-22  
[86] 2022-06-29 (PCT/IB2022/056074)  
[87] (WO2023/275798)  
[30] US (17/363,818) 2021-06-30

[21] **3,224,139**  
[13] A1

[51] **Int.Cl. G06Q 40/08 (2012.01) G06N 20/20 (2019.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR DETERMINING EXPECTED LOSS USING A MACHINE LEARNING FRAMEWORK**  
[54] **SYSTEME ET PROCEDE DE DETERMINATION D'UNE PERTE ATTENDUE A L'AIDE D'UNE STRUCTURE D'APPRENTISSAGE AUTOMATIQUE**  
[72] STANEVICH, ILYA, CA  
[72] LAFLEUR-FORCIER, MAXIME, CA  
[72] WANG, XULING, CA  
[72] MEUNIER, PHILIPPE, CA  
[72] JACOB, MATHIEU, CA  
[72] CHAMOUN, ROBERT, CA  
[72] VEILLETE-COSSETTE, BRUNO, CA  
[71] THE TORONTO-DOMINION BANK, CA  
[85] 2023-12-22  
[86] 2021-06-24 (PCT/CA2021/050873)  
[87] (WO2022/266742)

[21] **3,224,140**  
[13] A1

[51] **Int.Cl. A61M 39/26 (2006.01) A61M 39/10 (2006.01) A61M 39/22 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR DIRECTING FLUID FLOW**  
[54] **SYSTEMES ET PROCEDES POUR DIRIGER UN ECOULEMENT DE FLUIDE**  
[72] CHENG, JED-SIAN, US  
[72] HASAN, MOSTAFA JUBAYAR, US  
[71] HUMAN HYDROLOGY DEVICES, US  
[85] 2023-12-22  
[86] 2022-06-16 (PCT/US2022/033865)  
[87] (WO2023/278172)  
[30] US (17/364,324) 2021-06-30

[21] **3,224,142**  
[13] A1

[51] **Int.Cl. B63H 16/04 (2006.01)**  
[25] EN  
[54] **DETACHABLE PADDLE**  
[54] **PAGAIE DETACHABLE**  
[72] LIU, PENG, CN  
[71] WEIHAI WINNER INNOVATION OCEAN TECHNOLOGY CO., LTD, CN  
[85] 2023-12-22  
[86] 2021-07-27 (PCT/CN2021/108710)  
[87] (WO2022/267166)  
[30] CN (202121427713.8) 2021-06-25

[21] **3,224,143**  
[13] A1

[25] EN  
[54] **UNIVERSAL ASSAY CARTRIDGE AND METHODS OF USE**  
[54] **CARTOUCHE DE DOSAGE UNIVERSELLE ET METHODES D'UTILISATION**  
[72] NANDURI, HARIKA, US  
[72] WEITSMAN, ANDREW, US  
[72] GLASS, JENNIFER, US  
[72] IBANEZ, MICHELLE WEI, US  
[72] NOYES, TINA, US  
[71] CEPHEID, US  
[85] 2023-12-22  
[86] 2022-06-30 (PCT/US2022/035859)  
[87] (WO2023/278798)  
[30] US (63/217,672) 2021-07-01

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[21] **3,224,144**  
[13] A1

[51] **Int.Cl. A61L 27/20 (2006.01) A61L 27/26 (2006.01) A61L 27/38 (2006.01) A61L 27/52 (2006.01) A61L 27/58 (2006.01)**

[25] EN

[54] **PROCEDE DE CONSOLIDATION D'UN HYDROGEL ALGINATE / GELATINE**

[54] **PROCESS FOR CONSOLIDATING AN ALGINATE/GELATIN HYDROGEL**

[72] MARQUETTE, CHRISTOPHE, FR

[72] PETIOT, EMMA, FR

[72] CHASTAGNIER, LAURA, FR

[72] CHERBLANC, AUDREY, FR

[72] DOS SANTOS, MORGAN, FR

[72] THEPOT, AMELIE, FR

[72] GODET, BAPTISTE, FR

[71] UNIVERSITE CLAUDE BERNARD LYON 1, FR

[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS), FR

[71] ECOLE SUP CHIMIE PHYS ELECTRONIQ LYON, FR

[71] LAB SKIN CREATIONS, FR

[85] 2023-12-22

[86] 2022-06-24 (PCT/FR2022/051264)

[87] (WO2022/269214)

[30] FR (FR2106826) 2021-06-25

[21] **3,224,145**  
[13] A1

[51] **Int.Cl. A61K 47/54 (2017.01) C12N 15/113 (2010.01) C12N 15/87 (2006.01) A61P 3/06 (2006.01)**

[25] EN

[54] **NOVEL RNA THERAPEUTICS AND USES THEREOF**

[54] **NOUVEAUX AGENTS THERAPEUTIQUES A BASE D'ARN ET LEURS UTILISATIONS**

[72] BELLINGER, MELISSA ANN, US

[72] BEYER, THOMAS PATRICK, US

[72] CHENG, CHRISTINE CHIH-TAO, US

[72] EGGEN, MARIJEAN, US

[72] LACKNER, GREGORY LAWRENCE, US

[72] MILES, REBECCA RUTH, US

[72] WANG, JIBO, US

[72] ANTONELLIS, PATRICK JOSEPH, US

[72] WILSON, TAKAKO, US

[71] ELI LILLY AND COMPANY, US

[85] 2023-12-22

[86] 2022-06-22 (PCT/US2022/034504)

[87] (WO2022/271808)

[30] US (63/214,555) 2021-06-24

[30] US (63/214,584) 2021-06-24

[21] **3,224,146**  
[13] A1

[51] **Int.Cl. C10G 45/00 (2006.01) C01B 3/02 (2006.01) C01B 3/32 (2006.01)**

[25] EN

[54] **PRODUCTION OF FUEL HAVING RENEWABLE CONTENT FROM A LOW CARBON NUMBER FRACTION**

[54] **PRODUCTION DE CARBURANT A CONTENU RENOUVELABLE A PARTIR D'UNE FRACTION A FAIBLE NOMBRE D'ATOMES DE CARBONE**

[72] FOODY, PATRICK J., CA

[71] IOGEN CORPORATION, CA

[85] 2023-12-22

[86] 2022-06-26 (PCT/CA2022/051026)

[87] (WO2023/283721)

[30] US (63/203,278) 2021-07-15

[21] **3,224,147**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01)**

[25] EN

[54] **ANTIBODY CONJUGATES AND MANUFACTURE THEREOF**

[54] **CONJUGUES D'ANTICORPS ET LEUR FABRICATION**

[72] PATTABIRAMAN, VIJAYA RAGHAVAN, CH

[72] KREFT, BERTOLT, CH

[72] CARRALOT, JEAN-PHILIPPE, CH

[72] ALVAREZ SANCHEZ, RUBEN, CH

[72] MULLER, MAGALI, CH

[72] AREVALO-RUIZ, MATILDE, CH

[71] BRIGHT PEAK THERAPEUTICS AG, CH

[85] 2023-12-22

[86] 2022-07-09 (PCT/IB2022/056363)

[87] (WO2023/281481)

[30] US (63/219,981) 2021-07-09

[30] US (63/219,985) 2021-07-09

[30] US (63/219,989) 2021-07-09

[30] US (63/219,992) 2021-07-09

[30] US (63/219,995) 2021-07-09

[21] **3,224,148**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 8/00 (2006.01) A61N 7/00 (2006.01) B06B 1/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR TESTING MEMS ARRAYS AND ASSOCIATED ASICS**

[54] **SYSTEMES ET PROCEDES POUR TESTER DES RESEAUX DE MICROSYSTEME ELECTROMECHANIQUE (MEMS) ET DES CIRCUITS INTEGRES A APPLICATION SPECIFIQUE (ASIC) ASSOCIES**

[72] STRODE, JONATHAN, US

[72] SIVADASAN, RAJEEV, US

[72] SASAMORI, GORDON, US

[71] EXO IMAGING, INC., US

[85] 2023-12-22

[86] 2021-06-23 (PCT/US2021/038736)

[87] (WO2022/271169)

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[21] **3,224,150**  
[13] A1

[51] **Int.Cl. C07K 14/78 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **PROCESSES FOR MAKING AND USING A CELLULAR FIBRONECTIN COMPOSITION**  
[54] **PROCESSUS DE PREPARATION ET D'UTILISATION D'UNE COMPOSITION DE FIBRONECTINE CELLULAIRE**  
[72] ALFORD, SPENCER, US  
[72] SMITH, AUDREY, US  
[71] COMBANGIO, INC., US  
[85] 2023-12-22  
[86] 2022-07-01 (PCT/US2022/036036)  
[87] (WO2023/278883)  
[30] US (63/217,952) 2021-07-02  
[30] US (63/235,605) 2021-08-20

[21] **3,224,152**  
[13] A1

[51] **Int.Cl. B29C 48/13 (2019.01) B29C 48/25 (2019.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR MOLD BLOCK EXCHANGE ON RETURN TRACK**  
[54] **SYSTEME ET PROCEDE D'ECHANGE DE BLOCS DE MOULE SUR UNE PISTE DE RETOUR**  
[72] LUPKE, MANFRED A. A., CA  
[72] LUPKE, STEFAN A., CA  
[71] LUPKE, MANFRED A. A., CA  
[71] LUPKE, STEFAN A., CA  
[85] 2023-12-22  
[86] 2022-06-28 (PCT/CA2022/051030)  
[87] (WO2023/272382)  
[30] US (63/202,862) 2021-06-28

[21] **3,224,154**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01)**  
[25] EN  
[54] **VISUAL DETERMINATION OF SLEEP STATES**  
[54] **DETERMINATION VISUELLE D'ETATS DE SOMMEIL**  
[72] KUMAR, VIVEK, US  
[72] PACK, ALLAN I., US  
[72] GEUTHER, BRIAN, US  
[72] GEORGE, JOSHY, US  
[72] CHEN, MANDY, US  
[71] THE JACKSON LABORATORY, US  
[71] THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, US  
[85] 2023-12-22  
[86] 2022-06-27 (PCT/US2022/035112)  
[87] (WO2023/278319)  
[30] US (63/215,511) 2021-06-27

[21] **3,224,151**  
[13] A1

[51] **Int.Cl. E05D 11/00 (2006.01) E05D 13/00 (2006.01) E05D 15/16 (2006.01) E05D 15/48 (2006.01)**  
[25] EN  
[54] **POWER TRANSFER SYSTEMS FOR MOVABLE PRIVACY GLAZING STRUCTURES**  
[54] **SYSTEMES DE TRANSFERT D'ENERGIE POUR STRUCTURES DE VITRAGE OCCULTANT MOBILES**  
[72] BERNER, ERIC, US  
[71] CARDINAL IG COMPANY, US  
[85] 2023-12-22  
[86] 2022-06-23 (PCT/US2022/034653)  
[87] (WO2022/271902)  
[30] US (63/214,136) 2021-06-23

[21] **3,224,153**  
[13] A1

[51] **Int.Cl. C25B 9/70 (2021.01) C25B 3/03 (2021.01) C25B 3/07 (2021.01) C25B 3/25 (2021.01) C25B 3/26 (2021.01) C25B 9/73 (2021.01) C25B 15/023 (2021.01) C25B 1/04 (2021.01) C25B 15/02 (2021.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR AUTOMATED OPTIMIZATION OF CO X ELECTROLYSIS REACTOR**  
[54] **PROCEDES ET SYSTEMES D'OPTIMISATION AUTOMATISEE D'UN REACTEUR D'ELECTROLYSE DE COX**  
[72] FAURE, BASTIEN, FR  
[72] LAMAISON, SARAH, FR  
[72] WAKERLEY, DAVID, FR  
[71] DIOXYCLE, FR  
[85] 2023-12-22  
[86] 2022-08-12 (PCT/IB2022/057568)  
[87] (WO2023/021387)  
[30] US (17/403,453) 2021-08-16

[21] **3,224,155**  
[13] A1

[51] **Int.Cl. C07D 239/48 (2006.01) C07D 241/26 (2006.01) C07D 249/14 (2006.01)**  
[25] EN  
[54] **SYNTHESIS AND APPLICATION OF PHOSPHATASE DEGRADER**  
[54] **SYNTHESE ET UTILISATION D'AGENT DE DEGRADATION DE PHOSPHATASE**  
[72] FAN, LEI, CN  
[72] YU, HUA, CN  
[72] WANG, FEI, CN  
[72] AI, CHAOWU, CN  
[72] XU, KEXIN, CN  
[72] LIU, XINGTAI, CN  
[72] DU, JING, CN  
[72] PENG, YING, CN  
[72] LUO, TONGCHUAN, CN  
[72] PENG, SHIMING, CN  
[72] TAN, BIN, CN  
[72] XIAO, DAIBIAO, CN  
[72] HUO, YONGXU, CN  
[72] LIU, CHENGCHENG, CN  
[72] LI, XINGHAI, CN  
[72] CHEN, YUANWEI, CN  
[71] HINOVA PHARMACEUTICALS INC., CN  
[85] 2023-12-22  
[86] 2022-07-06 (PCT/CN2022/104221)  
[87] (WO2023/280237)  
[30] CN (202110769589.1) 2021-07-07

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[21] **3,224,156**  
[13] A1

[51] **Int.Cl. C07K 14/08 (2006.01) A61P 31/12 (2006.01)**  
[25] EN  
[54] **SAPOVIRUS VACCINES**  
[54] **VACCINS CONTRE LES SAPOVIRUS**  
[72] YOUNG, ALAN JOHN, US  
[71] VST LLC DBA MEDGENE LABS, US  
[85] 2023-12-22  
[86] 2022-06-28 (PCT/US2022/035211)  
[87] (WO2023/278373)  
[30] US (63/215,571) 2021-06-28

[21] **3,224,157**  
[13] A1

[51] **Int.Cl. A61B 5/155 (2006.01) A61M 5/172 (2006.01)**  
[25] EN  
[54] **BODY-ATTACHABLE UNIT FOR MEASURING BIOMETRIC INFORMATION**  
[54] **UNITE POUVANT ETRE FIXEE AU CORPS POUR MESURER DES INFORMATIONS BIOMETRIQUES**  
[72] CHOI, HYUN HO, KR  
[72] RYU, GOANG YEL, KR  
[72] WANG, JI HOON, KR  
[71] I-SENS, INC., KR  
[85] 2023-12-22  
[86] 2021-11-11 (PCT/KR2021/016415)  
[87] (WO2023/277269)  
[30] KR (10-2021-0084615) 2021-06-29

[21] **3,224,158**  
[13] A1

[51] **Int.Cl. A61B 5/145 (2006.01) A61B 5/15 (2006.01) A61B 5/155 (2006.01) A61M 5/142 (2006.01) A61M 5/172 (2006.01)**  
[25] EN  
[54] **NEEDLE FOR INSERTING TRANSCUTANEOUS SENSOR, AND NEEDLE ASSEMBLY**  
[54] **AIGUILLE POUR L'INSERTION D'UN CAPTEUR TRANSCUTANE, ET ENSEMBLE AIGUILLE**  
[72] CHOI, HYUN HO, KR  
[72] RYU, GOANG YEL, KR  
[72] WANG, JI HOON, KR  
[71] I-SENS, INC., KR  
[85] 2023-12-22  
[86] 2021-11-11 (PCT/KR2021/016418)  
[87] (WO2023/277271)  
[30] KR (10-2021-0084617) 2021-06-29

[21] **3,224,159**  
[13] A1

[51] **Int.Cl. A61B 5/155 (2006.01) A61M 5/172 (2006.01)**  
[25] EN  
[54] **APPLICATOR FOR TRANSCUTANEOUS SENSOR, AND APPLICATOR ASSEMBLY**  
[54] **APPLICATEUR POUR CAPTEUR TRANSCUTANE ET ENSEMBLE APPLICATEUR**  
[72] CHOI, HYUN HO, KR  
[72] RYU, GOANG YEL, KR  
[72] WANG, JI HOON, KR  
[71] I-SENS, INC., KR  
[85] 2023-12-22  
[86] 2021-11-10 (PCT/KR2021/016304)  
[87] (WO2023/277268)  
[30] KR (10-2021-0084623) 2021-06-29

[21] **3,224,160**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/145 (2006.01) A61B 5/15 (2006.01) A61B 5/155 (2006.01) A61M 5/00 (2006.01) A61M 5/142 (2006.01) A61M 5/172 (2006.01)**  
[25] EN  
[54] **SENSOR UNIT FOR MEASURING BIOMETRIC INFORMATION**  
[54] **UNITE DE CAPTEUR POUR LA MEASURE D'INFORMATION BIOMETRIQUE**  
[72] CHOI, HYUN HO, KR  
[72] RYU, GOANG YEL, KR  
[72] WANG, JI HOON, KR  
[71] I-SENS, INC., KR  
[85] 2023-12-22  
[86] 2021-11-11 (PCT/KR2021/016416)  
[87] (WO2023/277270)  
[30] KR (10-2021-0084616) 2021-06-29

[21] **3,224,161**  
[13] A1

[51] **Int.Cl. A61G 5/06 (2006.01) A61G 5/10 (2006.01)**  
[25] EN  
[54] **PATIENT CONTAINMENT SYSTEMS FOR USE WITH PATIENT TRANSPORT APPARATUSES**  
[54] **SYSTEMES DE CONFINEMENT DE PATIENT DESTINES A ETRE UTILISES AVEC DES APPAREILS DE TRANSPORT DE PATIENT**  
[72] TUMAVICH, JAMES ROBERT, US  
[72] MATHENY, NATHAN W., US  
[72] HERBST, CORY P., US  
[72] TESSMER, BRIAN J., US  
[71] STRYKER CORPORATION, US  
[85] 2023-12-22  
[86] 2022-06-29 (PCT/US2022/035498)  
[87] (WO2023/121716)  
[30] US (63/292,497) 2021-12-22

[21] **3,224,163**  
[13] A1

[51] **Int.Cl. A61G 5/06 (2006.01) A61G 5/08 (2006.01) A61G 5/10 (2006.01)**  
[25] EN  
[54] **PATIENT TRANSPORT APPARATUS WITH AREA LIGHTING MODULE FOR ILLUMINATING STAIRS**  
[54] **APPAREIL DE TRANSPORT DE PATIENT DOTE D'UN MODULE D'ECLAIRAGE DE ZONE POUR ECLAIRER DES ESCALIERS**  
[72] MATHENY, NATHAN W., US  
[72] HERBST, CORY P., US  
[72] BROSNAN, DANIEL V., US  
[72] TESSMER, BRIAN J., US  
[72] BUCK, JOSHUA, US  
[72] SCHABERG, ISAAC A., US  
[72] WALLACE, JOHN, US  
[71] STRYKER CORPORATION, US  
[85] 2023-12-22  
[86] 2022-06-29 (PCT/US2022/035446)  
[87] (WO2023/121715)  
[30] US (63/293,137) 2021-12-23



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[21] **3,224,164**  
[13] A1

[51] **Int.Cl. B60L 53/16 (2019.01)**  
[25] EN  
[54] **TEMPERATURE COMPENSATION METHOD AND APPARATUS BASED ON DIRECT CURRENT CHARGING BASE**  
[54] **PROCEDE ET APPAREIL DE COMPENSATION DE TEMPERATURE BASES SUR UNE BASE DE CHARGE A COURANT CONTINU**  
[72] WANG, CHAO, CN  
[71] JILIN ZHONG YING HIGH TECHNOLOGY CO., LTD., CN  
[85] 2023-12-23  
[86] 2022-07-21 (PCT/CN2022/107009)  
[87] (WO2023/001231)  
[30] CN (202110839832.2) 2021-07-23

[21] **3,224,165**  
[13] A1

[51] **Int.Cl. G06K 19/077 (2006.01) G06K 19/06 (2006.01)**  
[25] EN  
[54] **ELECTRONIC SHELF LABEL**  
[54] **ETIQUETTE DE PRIX ELECTRONIQUE**  
[72] WANG, LINJIANG, CN  
[72] SHEN, HONGBO, CN  
[72] YANG, MING, CN  
[72] ZHAO, JIANGUO, CN  
[72] FENG, YUNLIANG, CN  
[72] HOU, SHIGUO, CN  
[71] HANSHOW TECHNOLOGY CO., LTD., CN  
[85] 2023-12-23  
[86] 2021-07-05 (PCT/CN2021/104451)  
[87] (WO2023/279229)

[21] **3,224,168**  
[13] A1

[51] **Int.Cl. B65H 54/22 (2006.01)**  
[25] EN  
[54] **WINDING MACHINE FOR RAFFIA SPOOLS**  
[54] **MACHINE BOBINEUSE POUR BOBINES DE RAPHIA**  
[72] GRANADOS PUGA, GERMAN, ES  
[71] GP TECNIC SL, ES  
[85] 2023-12-26  
[86] 2022-07-08 (PCT/ES2022/070442)  
[87] (WO2023/281151)  
[30] ES (P202130655) 2021-07-09

[21] **3,224,169**  
[13] A1

[51] **Int.Cl. G02B 6/44 (2006.01)**  
[25] EN  
[54] **OPTICAL FIBER RIBBON**  
[54] **RUBAN DE FIBRES OPTIQUES**  
[72] YAMASHITA, NORIAKI, JP  
[72] ISHIDA, ITARU, JP  
[72] OSATO, KEN, JP  
[71] FUJIKURA LTD., JP  
[85] 2023-12-26  
[86] 2022-04-25 (PCT/JP2022/018749)  
[87] (WO2023/286415)  
[30] JP (2021-115536) 2021-07-13

[21] **3,224,170**  
[13] A1

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 40/42 (2020.01)**  
[25] EN  
[54] **ELECTRONIC CIGARETTE USED IN CONJUNCTION WITH MOUTH AND NOSE**  
[54] **CIGARETTE ELECTRONIQUE UTILISEE CONJOINTEMENT AVEC UNE BOUCHE ET UN NEZ**  
[72] ZHANG, LIN, CN  
[71] ZHANG, QI, CN  
[85] 2023-12-26  
[86] 2021-10-19 (PCT/CN2021/124562)  
[87] (WO2023/044998)  
[30] CN (202111118288.9) 2021-09-24

[21] **3,224,171**  
[13] A1

[51] **Int.Cl. C07K 16/34 (2006.01)**  
[25] EN  
[54] **ADMINISTRATION OF ANTI-HPA-1A ANTIBODIES**  
[54] **ADMINISTRATION D'ANTICORPS ANTI-HPA-1A**  
[72] RYDER, STEVEN, US  
[72] SHERIDAN, DOUGLAS L., US  
[71] RALLYBIO IPA, LLC, US  
[85] 2023-12-26  
[86] 2022-06-30 (PCT/US2022/035679)  
[87] (WO2023/278668)  
[30] US (63/217,637) 2021-07-01

[21] **3,224,172**  
[13] A1

[51] **Int.Cl. C12Q 1/6827 (2018.01) C12Q 1/6869 (2018.01) C12Q 1/6883 (2018.01) G16H 50/50 (2018.01) G06N 20/00 (2019.01)**  
[25] EN  
[54] **METHODS FOR DETERMINING SECONDARY IMMUNODEFICIENCY**  
[54] **PROCEDES POUR DETERMINER L'IMMUNODEFICIENCE SECONDAIRE**  
[72] GREEN, SIMON, AU  
[72] COCKS, BENJAMIN, AU  
[72] GAIL, EMMA, AU  
[71] IMMUNOSIS PTY LTD, AU  
[85] 2023-12-26  
[86] 2022-08-11 (PCT/AU2022/050881)  
[87] (WO2023/015353)  
[30] AU (2021902493) 2021-08-11

[21] **3,224,173**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) C07K 16/34 (2006.01)**  
[25] EN  
[54] **METHOD OF ADMINISTERING ANTI-HPA-1A MONOCLONAL ANTIBODY**  
[54] **METHODE D'ADMINISTRATION D'ANTICORPS MONOCLONAL ANTI-HPA-1A**  
[72] SHERIDAN, DOUGLAS L., US  
[71] RALLYBIO IPA, LLC, US  
[85] 2023-12-26  
[86] 2022-06-30 (PCT/US2022/035677)  
[87] (WO2023/278667)  
[30] US (63/217,636) 2021-07-01

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[21] **3,224,191**  
[13] A1

[51] **Int.Cl. G06F 16/28 (2019.01) G06F 16/35 (2019.01) G06F 16/38 (2019.01) G06F 16/90 (2019.01) G06F 16/93 (2019.01) G06F 40/216 (2020.01) G06F 40/268 (2020.01) G06F 40/295 (2020.01) G06F 16/906 (2019.01) G06F 16/951 (2019.01)**

[25] EN

[54] **METHOD OF GRAPH MODELING ELECTRONIC DOCUMENTS WITH AUTHOR VERIFICATION**

[54] **PROCEDE DE MODELISATION GRAPHIQUE DE DOCUMENTS ELECTRONIQUES AVEC VERIFICATION D'AUTEUR**

[72] MARMANIS, HARALAMBOS, US

[72] BRAMLEY, ROBIN JAMES, GB

[72] KLEIDERMAN, MATTHEW, US

[71] COPYRIGHT CLEARANCE CENTER, INC., US

[85] 2023-12-27

[86] 2022-06-29 (PCT/US2022/035512)

[87] (WO2023/278567)

[30] US (63/216,564) 2021-06-30

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[21] **3,224,193**  
[13] A1

[51] **Int.Cl. F04D 17/12 (2006.01) F04D 19/02 (2006.01) F04D 25/16 (2006.01)**

[25] EN

[54] **INTEGRALLY GEARED COMPRESSOR WITH AN AXIAL COMPRESSOR UNIT AND METHOD**

[54] **COMPRESSEUR A ENGRENAGE INTEGRE DOTE D'UNE UNITE DE COMPRESSEUR AXIAL ET PROCEDE**

[72] GRIMALDI, ANGELO, IT

[72] CANGIOLI, FRANCESCO, IT

[72] GUGLIELMO, ALBERTO, IT

[71] NUOVO PIGNONE TECNOLOGIE - S.R.L., IT

[85] 2023-12-27

[86] 2022-06-30 (PCT/EP2022/025301)

[87] (WO2023/280435)

[30] IT (102021000017996) 2021-07-08

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[21] **3,224,196**  
[13] A1

[51] **Int.Cl. H02J 7/00 (2006.01) H02M 1/10 (2006.01)**

[25] EN

[54] **AUTOMATIC HIGH-POWER ELECTRICAL ENERGY STORAGE SYSTEMS AND MANAGEMENT METHODS**

[54] **SYSTEMES DE STOCKAGE D'ENERGIE ELECTRIQUE HAUTE PUISSANCE AUTOMATIQUE ET PROCEDES DE GESTION**

[72] DE JONG, WILLIAM, ZA

[71] WRIGHT ENERGY STORAGE TECHNOLOGIES, INC., US

[85] 2023-12-27

[86] 2022-07-17 (PCT/US2022/037410)

[87] (WO2023/003786)

[30] US (63/222,971) 2021-07-17

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[21] **3,224,197**  
[13] A1

[51] **Int.Cl. H01H 9/52 (2006.01) H01H 50/12 (2006.01)**

[25] EN

[54] **COOLING DEVICE FOR CIRCUIT BREAKERS USING PARASITIC MAGNETIC FIELDS BASED FORCED AIR FLOW GENERATOR**

[54] **DISPOSITIF DE REFROIDISSEMENT POUR DISJONCTEURS UTILISANT UN GENERATEUR D'ECOULEMENT D'AIR FORCE A BASE DE CHAMPS MAGNETIQUES PARASITES**

[72] KITTUR, AVADHOOT, IN

[72] T. R., MILIND, IN

[72] VARRIER, MAHESH BALAKRISHNA, IN

[72] SLEPIAN, ROBERT MICHAEL, US

[71] EATON INTELLIGENT POWER LIMITED, IE

[85] 2023-12-27

[86] 2022-07-08 (PCT/EP2022/025319)

[87] (WO2023/280440)

[30] US (17/370,369) 2021-07-08

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[21] **3,224,199**  
[13] A1

[51] **Int.Cl. A21D 2/18 (2006.01) A23L 11/00 (2021.01) A23L 29/212 (2016.01) A21D 2/36 (2006.01) C08B 30/00 (2006.01)**

[25] FR

[54] **METHOD FOR FLASH HEAT TREATMENT OF PEA STARCH**

[54] **PROCEDE DE TRAITEMENT THERMIQUE FLASH DE L'AMIDON DE POIS**

[72] PARCQ, JULIEN, FR

[72] HASJIM, JOVIN, FR

[72] DUPONT, ALBAN, FR

[71] ROQUETTE FRERES, FR

[85] 2023-12-27

[86] 2022-07-05 (PCT/FR2022/051348)

[87] (WO2023/281212)

[30] FR (FR21 07402) 2021-07-08

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[21] **3,224,203**  
[13] A1

[51] **Int.Cl. F21V 17/10 (2006.01) F21V 17/18 (2006.01)**

[25] EN

[54] **LINEAR LED LUMINAIRE HOUSING FOR USE IN HARSH AND HAZARDOUS LOCATIONS**

[54] **BOITIER DE LUMINAIRE A DEL LINEAIRE DESTINE A ETRE UTILISE DANS DES EMPLACEMENTS DIFFICILES ET DANGEREUX**

[72] RING, CHRISTOPHER, US

[72] HENLEY, CHRISTOPHER G., US

[72] DOROZ, ARKADIUSZ OSKAR, US

[72] MERRIAM, VIRGINIA, US

[72] MESTRI, GANGADHAR, IN

[71] EATON INTELLIGENT POWER LIMITED, IE

[85] 2023-12-27

[86] 2022-07-11 (PCT/EP2022/025322)

[87] (WO2023/280441)

[30] US (63/220,127) 2021-07-09

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[21] **3,224,204**  
[13] A1

[51] **Int.Cl. B62B 5/04 (2006.01) B62B 5/06 (2006.01)**  
[25] EN  
[54] **TROLLEY**  
[54] **CHARIOT**  
[72] HAYWARD, TOM, GB  
[72] PARTRIDGE, MATTHEW, GB  
[71] ARMORGARD HOLDINGS LIMITED, GB  
[85] 2023-12-27  
[86] 2022-09-23 (PCT/GB2022/052425)  
[87] (WO2023/047135)  
[30] GB (2113663.5) 2021-09-24

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[21] **3,224,207**  
[13] A1

[51] **Int.Cl. B07C 5/00 (2006.01) B07C 5/02 (2006.01) B07C 5/16 (2006.01) B07C 5/36 (2006.01)**  
[25] EN  
[54] **FRUIT SORTING APPARATUS AND METHOD**  
[54] **PROCEDE ET APPAREIL DE TRI DE FRUITS**  
[72] ZHU, ER, CN  
[72] ZHU, YI, CN  
[72] LIU, HAITAO, CN  
[71] JIANGXI REEMOON TECHNOLOGY HOLDINGS CO., LTD., CN  
[85] 2023-12-27  
[86] 2022-05-07 (PCT/CN2022/091411)  
[87] (WO2023/273606)  
[30] CN (202110747514.3) 2021-07-02

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[21] **3,224,208**  
[13] A1

[51] **Int.Cl. G01N 25/04 (2006.01)**  
[25] EN  
[54] **A METHOD FOR DETERMINING AT LEAST ONE PROPERTY OF AN ALUMINIUM PRODUCTION BATH IN OF AN ALUMINIUM PRODUCTION CELL, A SYSTEM FOR DETERMINING THE AT LEAST ONE PROPERTY, AND A PROBE FOR CAPTURING A SAMPLE FROM THE ALUMINIUM PRODUCTION CELL**  
[54] **PROCEDE DE DETERMINATION D'AU MOINS UNE PROPRIETE D'UN BAIN DE PRODUCTION D'ALUMINIUM DANS UNE CELLULE DE PRODUCTION D'ALUMINIUM, UN SYSTEME POUR DETERMINER LA OU LES PROPRIETES ET UNE SONDE POUR CAPTURER UN ECHANTILLON A PARTIR DE LA CELLULE DE PRODUCTION D'ALUMINIUM**  
[72] DIAZ, CLARO ANTONIO NODA, SE  
[71] NODA TECHNOLOGIES AB, SE  
[85] 2023-12-27  
[86] 2022-07-01 (PCT/EP2022/068333)  
[87] (WO2023/275385)  
[30] EP (21183458.5) 2021-07-02

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[21] **3,224,209**  
[13] A1

[51] **Int.Cl. H02J 3/38 (2006.01) H02J 3/40 (2006.01) H02J 7/34 (2006.01)**  
[25] EN  
[54] **COMMON DC BUS AND COMMON AC BUS POWER ELECTRONICS SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES ELECTRONIQUES DE PUISSANCE DE BUS CC COMMUN ET DE BUS CA COMMUN**  
[72] BORRELLI, FRANCESCO, US  
[72] LI, CHEN, US  
[72] LIU, YANG, US  
[72] AU, ALEXANDER, US  
[71] NEXTRACKER LLC, US  
[85] 2023-12-27  
[86] 2022-07-08 (PCT/US2022/036593)  
[87] (WO2023/283470)  
[30] US (63/219,732) 2021-07-08

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[21] **3,224,212**  
[13] A1

[51] **Int.Cl. A61K 35/28 (2015.01)**  
[25] EN  
[54] **FETAL MESENCHYMAL STEM CELLS**  
[54] **CELLULES SOUCHES MESENCHYMATEUSES FOETALES**  
[72] GOTHERSTROM, CECILIA, SE  
[72] WESTGREN, MAGNUS, SE  
[72] JALLOW, LILIAN WALTHER, SE  
[71] BOOST PHARMA APS, DK  
[85] 2023-12-27  
[86] 2022-07-08 (PCT/EP2022/069097)  
[87] (WO2023/281067)  
[30] EP (21184760.3) 2021-07-09

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[21] **3,224,213**  
[13] A1

[51] **Int.Cl. F24S 25/634 (2018.01) F24S 25/632 (2018.01) H02S 20/23 (2014.01) H02S 20/30 (2014.01)**  
[25] EN  
[54] **SOLAR MODULE CLAMP**  
[54] **SYSTEME DE FIXATION POUR MODULE SOLAIRE**  
[72] SABLE, ABHIMANYU, IN  
[72] KUMAR, PHANI, IN  
[72] MORANKAR, JITENDRA, IN  
[71] NEXTRACKER LLC, US  
[85] 2023-12-27  
[86] 2022-07-01 (PCT/US2022/035973)  
[87] (WO2023/283136)  
[30] US (63/219,389) 2021-07-08

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[21] **3,224,215**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR EDITING ELECTRONIC DOCUMENTS**  
[54] **SYSTEMES ET PROCEDES POUR MODIFIER DES DOCUMENTS ELECTRONIQUES**  
[72] RAMDOSS, ASHOKKUMAR, NZ  
[72] AVASARALA, SATYA SRINIVASA SUBRAHMANYAM, NZ  
[71] XERO LIMITED, NZ  
[85] 2023-12-27  
[86] 2021-08-20 (PCT/NZ2021/050138)  
[87] (WO2023/003479)  
[30] AU (2021902217) 2021-07-19

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[21] **3,224,216**  
[13] A1

[51] **Int.Cl. H01M 50/186 (2021.01) H01M 50/209 (2021.01)**  
[25] EN  
[54] **BATTERY, POWER CONSUMPTION APPARATUS, AND METHOD AND APPARATUS FOR PRODUCING BATTERY**  
[54] **BATTERIE, APPAREIL DE CONSOMMATION D'ENERGIE ET METHODE ET DISPOSITIF DE PRODUCTION DE LA BATTERIE**  
[72] KE, JIANHUANG, CN  
[72] CHEN, XIAOBO, CN  
[72] LI, YAO, CN  
[72] PU, YUJIE, CN  
[72] JIN, QIU, CN  
[71] CONTEMPORARY AMPEREX TECHNOLOGY CO., LIMITED, CN  
[85] 2023-12-27  
[86] 2021-08-30 (PCT/CN2021/115300)  
[87] (WO2023/028748)

[21] **3,224,217**  
[13] A1

[51] **Int.Cl. E21B 41/00 (2006.01) E21B 43/00 (2006.01)**  
[25] EN  
[54] **METHOD OF PERFORMING A NUMERICAL SOLVING PROCESS**  
[54] **PROCEDE DE REALISATION D'UN PROCEDE DE RESOLUTION NUMERIQUE**  
[72] BERTRAM, FINLAY, DK  
[71] TALOS INNOVATION APS, DK  
[85] 2023-12-27  
[86] 2022-07-01 (PCT/EP2022/068305)  
[87] (WO2023/275370)  
[30] GB (2109513.8) 2021-07-01

[21] **3,224,218**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2023.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR USER INTERFACES FOR ENABLING TASK DELEGATION CONTROLS**  
[54] **SYSTEMES ET PROCEDES POUR INTERFACES UTILISATEUR DESTINES A PERMETTRE DES COMMANDES DE DELEGATION DE TACHES**  
[72] MATSUOKA, YOKY, US  
[72] VISWANATHAN, NITIN, US  
[72] LIU, LINGYUN, US  
[72] DEMING, BENJAMIN, US  
[72] PATERSON, SEAN, US  
[72] VAN DER LINDEN, GWENDOLYN W., US  
[72] BEAULIEU, MALIA, US  
[72] CIVELEKOGLU, DEFNE, US  
[71] YOHANA LLC, US  
[85] 2023-12-27  
[86] 2022-08-04 (PCT/US2022/074527)  
[87] (WO2023/015248)  
[30] US (63/229,289) 2021-08-04

[21] **3,224,219**  
[13] A1

[51] **Int.Cl. G01N 21/88 (2006.01) G06T 3/40 (2024.01)**  
[25] EN  
[54] **DETECTION SYSTEM AND METHOD, COMPUTER DEVICE, AND COMPUTER READABLE STORAGE MEDIUM**  
[54] **SYSTEME ET PROCEDE DE DETECTION, DISPOSITIF INFORMATIQUE ET SUPPORT DE STOCKAGE LISIBLE PAR ORDINATEUR**  
[72] ZHU, ER, CN  
[72] ZHU, YI, CN  
[71] JIANGXI REEMOON TECHNOLOGY HOLDINGS CO., LTD., CN  
[85] 2023-12-27  
[86] 2022-05-07 (PCT/CN2022/091409)  
[87] (WO2023/005321)  
[30] CN (202110870046.9) 2021-07-30

[21] **3,224,220**  
[13] A1

[51] **Int.Cl. B67D 7/02 (2010.01) B67D 7/36 (2010.01)**  
[25] EN  
[54] **NON-CONTACT DISPENSERS AND RELATED METHODS**  
[54] **DISTRIBUTEURS SANS CONTACT ET PROCEDES ASSOCIES**  
[72] ZHOU, XUANCE, US  
[72] SCHOCH, RETO, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-27  
[86] 2023-03-03 (PCT/US2023/063640)  
[87] (WO2023/168377)  
[30] US (63/316,715) 2022-03-04

[21] **3,224,221**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2023.01) G16H 10/60 (2018.01) G08B 21/02 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS TO REDUCE ALARM FATIGUE**  
[54] **SYSTEMES ET PROCEDES POUR REDUIRE LA FATIGUE D'ALARME**  
[72] NEUBAUER, MARC, US  
[71] NEUBAUER, MARC, US  
[85] 2023-12-27  
[86] 2022-06-09 (PCT/US2022/032827)  
[87] (WO2022/271454)  
[30] US (63/214,409) 2021-06-24  
[30] US (63/236,788) 2021-08-25  
[30] US (17/506,673) 2021-10-21  
[30] US (63/268,015) 2022-02-15  
[30] US (63/246,241) 2021-09-20  
[30] US (17/745,041) 2022-05-16

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[21] **3,224,223**  
[13] A1

[51] **Int.Cl. A23K 50/40 (2016.01) A23K 50/42 (2016.01)**  
[25] EN  
[54] **ORAL FELINE FEED AND METHODS FOR CONTROLLING FLEA INFESTATIONS IN A FELINE**  
[54] **ALIMENT POUR FELINS DESTINE A ETRE ADMINISTRE PAR VOIE ORALE ET PROCEDES DE LUTTE CONTRE LES INFESTATIONS PAR LES PUCES CHEZ UN FELIN**  
[72] READNOUR, ROBIN S., US  
[72] WINKLE, JOSEPH R., US  
[72] WILLARD, KEVIN E., US  
[71] IN THE BOWL ANIMAL HEALTH, INC., US  
[71] READNOUR, ROBIN S., US  
[71] WINKLE, JOSEPH R., US  
[71] WILLARD, KEVIN E., US  
[85] 2023-12-27  
[86] 2022-06-23 (PCT/US2022/034685)  
[87] (WO2022/271924)  
[30] US (63/214,967) 2021-06-25

[21] **3,224,224**  
[13] A1

[51] **Int.Cl. H04B 1/3827 (2015.01)**  
[25] EN  
[54] **A WEARABLE DEVICE**  
[54] **DISPOSITIF POUVANT ETRE PORTE**  
[72] BELL-BOOTH, JAMES ALEXANDER, NZ  
[71] EARSHOTS LIMITED, NZ  
[85] 2023-12-27  
[86] 2022-06-23 (PCT/NZ2022/050079)  
[87] (WO2023/277705)  
[30] NZ (777660) 2021-06-30

[21] **3,224,225**  
[13] A1

[51] **Int.Cl. A23K 50/40 (2016.01) A23K 50/42 (2016.01)**  
[25] EN  
[54] **ORAL FELINE FEED AND METHODS FOR CONTROLLING FLEA INFESTATIONS IN A FELINE**  
[54] **ALIMENT POUR FELINS DESTINE A ETRE ADMINISTRE PAR VOIE ORALE ET PROCEDES DE LUTTE CONTRE LES INFESTATIONS PAR LES PUCES CHEZ UN FELIN**  
[72] READNOUR, ROBIN S., US  
[72] WILLARD, KEVIN E., US  
[72] WINKLE, JOSEPH R., US  
[71] IN THE BOWL ANIMAL HEALTH, INC., US  
[71] READNOUR, ROBIN S., US  
[71] WILLARD, KEVIN E., US  
[71] WINKLE, JOSEPH R., US  
[85] 2023-12-27  
[86] 2022-06-23 (PCT/US2022/034704)  
[87] (WO2022/271937)  
[30] US (63/214,984) 2021-06-25

[21] **3,224,226**  
[13] A1

[51] **Int.Cl. A01N 43/80 (2006.01)**  
[25] EN  
[54] **ORAL FELINE FEED AND METHODS FOR CONTROLLING TICK INFESTATIONS IN A FELINE**  
[54] **ALIMENT POUR FELIN DESTINE A ETRE ADMINISTRE PAR VOIE ORALE ET PROCEDES DE LUTTE CONTRE LES INFESTATIONS PAR LES TIQUES CHEZ UN FELIN**  
[72] WINKLE, JOSEPH R., US  
[72] READNOUR, ROBIN S., US  
[72] WILLARD, KEVIN E., US  
[71] IN THE BOWL ANIMAL HEALTH, INC., US  
[71] WINKLE, JOSEPH R., US  
[71] READNOUR, ROBIN S., US  
[71] WILLARD, KEVIN E., US  
[85] 2023-12-27  
[86] 2022-06-23 (PCT/US2022/034746)  
[87] (WO2022/271961)  
[30] US (63/214,999) 2021-06-25

[21] **3,224,228**  
[13] A1

[25] EN  
[54] **LIBRARY PREPARATION SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES DE PREPARATION DE BANQUE**  
[72] CRANE, BRYAN, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-27  
[86] 2023-03-27 (PCT/US2023/016363)  
[87] (WO2023/192149)  
[30] US (63/325,049) 2022-03-29

[21] **3,224,230**  
[13] A1

[25] EN  
[54] **COMPOSITION**  
[54] **COMPOSITION**  
[72] BATCHELOR, STEPHEN NORMAN, NL  
[72] CUMMINS, ALISON, NL  
[72] MEALING, DAVID RICHARD ARTHUR, NL  
[72] THOMAS, MATTHEW RHYS, NL  
[71] UNILEVER GLOBAL IP LIMITED, GB  
[85] 2023-12-27  
[86] 2022-07-15 (PCT/EP2022/069933)  
[87] (WO2023/011892)  
[30] EP (21189816.8) 2021-08-05

[21] **3,224,231**  
[13] A1

[51] **Int.Cl. G06V 20/13 (2022.01) G06V 10/50 (2022.01)**  
[25] EN  
[54] **WILDFIRE IDENTIFICATION IN IMAGERY**  
[54] **IDENTIFICATION DE FEU DE FORET EN IMAGERIE**  
[72] COWAN, ELIOT JULIEN, US  
[71] X DEVELOPMENT LLC, US  
[85] 2023-12-27  
[86] 2022-06-22 (PCT/US2022/034462)  
[87] (WO2023/283046)  
[30] US (17/368,256) 2021-07-06

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[21] **3,224,232**  
[13] A1

[51] **Int.Cl. A61K 8/25 (2006.01) A61K 8/34 (2006.01) A61K 8/36 (2006.01) A61K 8/86 (2006.01) A61K 8/895 (2006.01)**

[25] EN

[54] **A PHOTOPROTECTIVE PERSONAL CARE COMPOSITION COMPOSITION DE SOINS PERSONNELS PHOTOPROTECTRICE**

[72] KULKARNI, ADITI JAYAVANT, NL  
[72] KUNDU, POOJA BHUPESH, NL  
[72] LAHORKAR, PRAFUL GULAB RAO, NL  
[72] PAWAR, ANKITA RUTU, NL  
[72] PERUMAL, RAJKUMAR, NL  
[72] VAIDYA, ASHISH ANANT, NL  
[71] UNILEVER GLOBAL IP LIMITED, GB  
[85] 2023-12-27  
[86] 2022-08-23 (PCT/EP2022/073446)  
[87] (WO2023/030963)  
[30] EP (21194673.6) 2021-09-02

[21] **3,224,233**  
[13] A1

[51] **Int.Cl. A61L 9/20 (2006.01) B01J 19/12 (2006.01) C02F 1/32 (2006.01) C09K 3/00 (2006.01)**

[25] EN

[54] **ULTRAVIOLET LIGHT FLUID TREATMENT DEVICE APPAREIL DE TRAITEMENT DE FLUIDE AVEC DE LA LUMIERE ULTRAVIOLETTE**

[72] IMAI, MASAHIRO, JP  
[72] MIYAZAWA, MASAOKI, JP  
[72] SANO, HIROKI, JP  
[72] ONOZUKA, KATSUYUKI, JP  
[71] NICHIAS CORPORATION, JP  
[85] 2023-12-27  
[86] 2022-06-24 (PCT/JP2022/025389)  
[87] (WO2023/282094)  
[30] JP (2021-113658) 2021-07-08  
[30] JP (2021-152303) 2021-09-17  
[30] JP (2021-201185) 2021-12-10  
[30] JP (2022-078359) 2022-05-11

[21] **3,224,236**  
[13] A1

[51] **Int.Cl. B65G 1/137 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR AUTOMATED SORTATION SYSTEME ET PROCEDE DE TRI AUTOMATISE**

[72] HENLEY, JEFFREY PAUL, US  
[72] RANEY, KEVIN, US  
[72] BROWDER, ROBERT, US  
[72] WHITLOCK, MARVIN GREGORY, US  
[72] CRANCE, SCOTT, US  
[72] ICE, KEN, US  
[72] YOUNT, BRIAN, US  
[72] SWEATT, BARRY, US  
[72] PHILLIPS, THOMAS M., US  
[72] YOUNG, LOGAN, US  
[72] YOUNG, ANTHONY J., US  
[72] KARAGLANIS, MICHAEL, US  
[71] AEGIS SORTATION, LLC, US  
[85] 2023-12-27  
[86] 2022-06-29 (PCT/US2022/035598)  
[87] (WO2023/278630)  
[30] US (63/216,340) 2021-06-29  
[30] US (17/566,527) 2021-12-30  
[30] US (17/843,313) 2022-06-17

[21] **3,224,237**  
[13] A1

[51] **Int.Cl. B65D 90/06 (2006.01) F25D 3/06 (2006.01)**

[25] EN

[54] **SHIPPING CONTAINER FOR SHIPPING TEMPERATURE-SENSITIVE GOODS**

[72] ROS, NICO, CH  
[72] RETZKO, STEFAN, CH  
[71] REP IP AG, CH  
[85] 2023-12-27  
[86] 2022-07-04 (PCT/IB2022/056174)  
[87] (WO2023/007278)  
[30] AT (A 131/2021) 2021-07-30

[21] **3,224,239**  
[13] A1

[51] **Int.Cl. B21D 22/26 (2006.01) B21D 37/00 (2006.01) B21D 37/01 (2006.01) B21D 37/20 (2006.01) B29C 51/30 (2006.01)**

[25] EN

[54] **MOLD FOR PRESS MOULE POUR PRESSE**

[72] TAKAHASHI, YOSHIHIRO, JP  
[72] KOYANAGI, SOICHIRO, JP  
[71] G-TEKT CORPORATION, JP  
[85] 2023-12-27  
[86] 2022-07-15 (PCT/JP2022/027929)  
[87] (WO2023/286867)  
[30] JP (2021-118253) 2021-07-16

[21] **3,224,240**  
[13] A1

[51] **Int.Cl. A61B 1/005 (2006.01) A61B 1/018 (2006.01)**

[25] EN

[54] **ARTICULATING CANNULA WITH ENDOSCOPE ATTACHMENT CANULE ARTICULEE AVEC FIXATION D'ENDOSCOPE**

[72] NOYES, WILLARD S., US  
[72] GRAY, BENJAMIN JOSEPH, US  
[71] RESNENT, LLC, US  
[85] 2023-12-27  
[86] 2022-06-29 (PCT/US2022/035541)  
[87] (WO2023/278591)  
[30] US (63/216,209) 2021-06-29

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[21] **3,224,241**  
[13] A1

[51] **Int.Cl. B60R 9/06 (2006.01) B60R 9/10 (2006.01)**  
[25] EN  
[54] **LOAD CARRIER, SUCH AS A BIKE CARRIER**  
[54] **PORTE-CHARGE, TEL QU'UN PORTE-VELO**  
[72] NILVIUS, ANDERS, SE  
[72] FERMAN, MAGNUS, SE  
[72] LINDBERG, JESPER, SE  
[72] ULVEGARD, HANNES, SE  
[72] KLASSON, DAVID, SE  
[72] MASCARENHAS, RAINER, SE  
[72] RINGDAHL, JONAS, SE  
[72] LARSSON, FREDRIK, SE  
[72] JONSSON, TOBIAS, SE  
[72] ERIKSSON, HENRIK, SE  
[72] ROSENQVIST, KLARA, SE  
[72] NORDSTROM, SIMON, SE  
[72] HELMERSSON, SIMON, SE  
[72] LARSSON, JOHAN, SE  
[72] GRANSMARK, ARVID, SE  
[72] OLAISON, HANNES, SE  
[72] NORDBERG, ALICIA, SE  
[72] GEJERVALL, ULRIK, SE  
[72] JANSSON, SIMON, SE  
[72] NEDSTEDT, FREDRIK, SE  
[72] BERGSTROM, GUSTAV, SE  
[71] THULE SWEDEN AB, SE  
[85] 2023-12-27  
[86] 2022-06-23 (PCT/EP2022/067222)  
[87] (WO2023/280585)  
[30] EP (21184014.5) 2021-07-06

[21] **3,224,242**  
[13] A1

[51] **Int.Cl. B01D 53/14 (2006.01) B01D 53/32 (2006.01) B01D 53/62 (2006.01) B01D 53/78 (2006.01) C01D 1/04 (2006.01) C07C 211/01 (2006.01) C25B 1/18 (2006.01)**  
[25] EN  
[54] **SEAWATER ELECTROLYSIS ENABLES SCALABLE ATMOSPHERIC CO<sub>2</sub> MINERALIZATION**  
[54] **ELECTROLYSE DE L'EAU DE MER PERMETTANT UNE MINERALISATION DE CO<sub>2</sub> ATMOSPHERIQUE EVOLUTIVE**  
[72] LA PLANTE, ERIKA CALLAGON, US  
[72] CHEN, XIN, US  
[72] JASSBY, DAVID, US  
[72] SANT, GAURAV, US  
[72] SIMONETTI, DANTE, US  
[72] TSENG, YENWEN, US  
[72] TRAYNOR, THOMAS, US  
[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US  
[85] 2023-12-27  
[86] 2022-06-28 (PCT/US2022/035289)  
[87] (WO2023/278423)  
[30] US (63/215,853) 2021-06-28

[21] **3,224,243**  
[13] A1

[51] **Int.Cl. B01L 3/00 (2006.01)**  
[25] EN  
[54] **REAGENT RESERVOIRS AND RELATED SYSTEMS AND METHODS**  
[54] **RESERVOIRS A REACTIFS AINSI QUE SYSTEMES ET PROCEDES ASSOCIES**  
[72] CRIVELLI, PAUL, US  
[72] DAVIDSON, JUSTIN, US  
[72] KHOO, NORMAN, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-27  
[86] 2022-12-06 (PCT/US2022/051938)  
[87] (WO2023/107434)  
[30] US (63/288,287) 2021-12-10

[21] **3,224,244**  
[13] A1

[51] **Int.Cl. C22C 1/04 (2023.01) C22C 21/08 (2006.01) C22C 32/00 (2006.01)**  
[25] EN  
[54] **POWDER METAL COMPOSITION WITH ALUMINUM NITRIDE MMC**  
[54] **COMPOSITION DE POUDRE METALLIQUE AVEC DU NITRURE D'ALUMINIUM MMC**  
[72] BISHOP, DONALD PAUL, CA  
[72] HEXEMER, RICHARD L. JR., US  
[72] DONALDSON, IAN W., US  
[71] GKN SINTER METALS, LLC, US  
[85] 2023-12-27  
[86] 2022-07-14 (PCT/US2022/037130)  
[87] (WO2023/287981)  
[30] US (63/222,240) 2021-07-15

[21] **3,224,246**  
[13] A1

[51] **Int.Cl. H04L 12/28 (2006.01)**  
[25] EN  
[54] **AUDIO VIDEO RECEIVER WITH SIMULTANEOUS MULTIZONE 8K VIDEO ROUTING**  
[54] **RECEPTEUR AUDIO VIDEO AVEC ROUTAGE VIDEO MULTIZONE 8K SIMULTANE**  
[72] STIDSEN, GREGORY R., CA  
[72] GROENEVELD, KEVIN, CA  
[71] LENBROOK INDUSTRIES LIMITED, CA  
[85] 2023-12-27  
[86] 2022-06-27 (PCT/IB2022/000362)  
[87] (WO2023/275614)  
[30] US (17/360,530) 2021-06-28

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[21] **3,224,247**  
[13] A1

[51] **Int.Cl. C07K 5/117 (2006.01) A61P 25/16 (2006.01) A61P 25/28 (2006.01)**  
[25] EN  
[54] **POLYPEPTIDE AND APPLICATION THEREOF AS CCK RECEPTOR AGONIST/ANTAGONIST**  
[54] **POLYPEPTIDE ET SON APPLICATION EN TANT QU'AGONISTE/ANTAGONISTE DU RECEPTEUR CCK**  
[72] TORTORELLA, MICKEY DANIEL, CN  
[72] HE, JUFANG, CN  
[71] CITY UNIVERSITY OF HONG KONG, CN  
[71] CENTRE FOR REGENERATIVE MEDICINE AND HEALTH, HONG KONG INSTITUTE OF SCIENCE & INNOVATION, CHINESE ACADEMY OF SCIENCES LIMITED, CN  
[85] 2023-12-27  
[86] 2022-06-30 (PCT/CN2022/102744)  
[87] (WO2023/065716)  
[30] CN (202111222161.1) 2021-10-20

[21] **3,224,248**  
[13] A1

[51] **Int.Cl. A23J 3/26 (2006.01)**  
[25] EN  
[54] **A METHOD FOR MANUFACTURING A FOOD PRODUCT FROM YEAST AND A YEAST BASED FOOD PRODUCT**  
[54] **PROCEDE DE FABRICATION D'UN PRODUIT ALIMENTAIRE A PARTIR DE LEVURE ET PRODUIT ALIMENTAIRE A BASE DE LEVURE**  
[72] MANCHULIANTSAU, ALEH, US  
[71] USARIUM INC., US  
[85] 2023-12-27  
[86] 2022-07-13 (PCT/US2022/073663)  
[87] (WO2023/288237)  
[30] US (63/221,755) 2021-07-14

[21] **3,224,249**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/444 (2006.01) A61K 31/4545 (2006.01) A61K 31/5377 (2006.01) A61P 31/12 (2006.01) A61P 31/16 (2006.01) C07D 221/20 (2006.01) C07D 401/12 (2006.01) C07D 413/12 (2006.01) C07D 413/14 (2006.01)**  
[25] EN  
[54] **COMPOUND AS KIF18A INHIBITOR**  
[54] **COMPOSE DESTINE A ETRE UTILISE EN TANT QU'INHIBITEUR DE KIF18A**  
[72] ZHANG, HANCHENG, CN  
[72] JIA, WEI, CN  
[72] CAI, CONGCONG, CN  
[71] HANGZHOU INNOGATE PHARMA CO., LTD., CN  
[85] 2023-12-27  
[86] 2022-06-27 (PCT/CN2022/101694)  
[87] (WO2022/268230)  
[30] CN (202110711270.3) 2021-06-25  
[30] CN (202110963377.7) 2021-08-20  
[30] CN (202111493904.9) 2021-12-08  
[30] CN (202210307789.X) 2022-03-25

[21] **3,224,251**  
[13] A1

[51] **Int.Cl. G01J 5/80 (2022.01) G01J 5/061 (2022.01)**  
[25] EN  
[54] **SYSTEMS AND RELATED TEMPERATURE CALIBRATION METHODS**  
[54] **SYSTEMES ET PROCEDES D'ETALONNAGE DE TEMPERATURE ASSOCIES**  
[72] BLAIR, DUSTIN, US  
[72] CHEN, XIANGXIONG, US  
[72] CHAN, GABRIEL, US  
[72] DHANEKULA, BINDYA RANI, US  
[72] EARNEY, JOHN, US  
[72] KELLEY, DAMIAN, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-27  
[86] 2022-12-21 (PCT/US2022/053587)  
[87] (WO2023/122137)  
[30] US (63/293,294) 2021-12-23

[21] **3,224,252**  
[13] A1

[51] **Int.Cl. A61L 27/20 (2006.01) A61L 27/14 (2006.01)**  
[25] EN  
[54] **ALGINATE, POLYLYSINE, AND SEED PRESERVATIVE NUTRITIONAL PRODUCT AND DIGESTIVE AID**  
[54] **ALGINATE, POLYLYSINE ET PRODUIT NUTRITIONNEL CONSERVATEUR A BASE DE GRAINES ET AIDE A LA DIGESTION**  
[72] FRANK, KEN, US  
[71] REFLUX GOURMET LLC, US  
[85] 2023-12-27  
[86] 2022-07-01 (PCT/US2022/035986)  
[87] (WO2023/283141)  
[30] US (63/218,488) 2021-07-05

[21] **3,224,253**  
[13] A1

[51] **Int.Cl. C08G 18/24 (2006.01) C08G 18/28 (2006.01) C08G 18/48 (2006.01) C08G 18/76 (2006.01)**  
[25] EN  
[54] **PRODUCTION OF PU FOAMS USING RECYCLED POLYOLS**  
[54] **PRODUCTION DE MOUSSES DE PU A L'AIDE DE POLYOLS RECYCLES**  
[72] MARQUARDT, RALPH, DE  
[72] HUBEL, ROLAND, DE  
[72] TERHEIDEN, ANNEGRET, DE  
[72] MUHLHAUS, FELIX, DE  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2023-12-27  
[86] 2022-06-28 (PCT/EP2022/067701)  
[87] (WO2023/275033)  
[30] EP (21183446.0) 2021-07-02

[21] **3,224,254**  
[13] A1

[51] **Int.Cl. G02B 6/44 (2006.01)**  
[25] EN  
[54] **OPTICAL CABLE AND OPTICAL CABLE MANUFACTURING METHOD**  
[54]  
[72] SHIMIZU, SHOGO, JP  
[72] KANEKO, SOICHIRO, JP  
[72] NAMAZUE, AKIRA, JP  
[72] OSATO, KEN, JP  
[71] FUJIKURA LTD., JP  
[85] 2023-12-27  
[86] 2022-04-19 (PCT/JP2022/018194)  
[87] (WO2023/007881)  
[30] JP (2021-124564) 2021-07-29



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[21] **3,224,255**  
[13] A1

[51] **Int.Cl. H04L 65/102 (2022.01) H04L 69/08 (2022.01)**

[25] EN

[54] **INTELLIGENT AND DYNAMIC GATEWAY**

[54] **PASSERELLE INTELLIGENTE ET DYNAMIQUE**

[72] SAPP, JEFFREY K., US

[72] SAPP, JASON B., US

[71] TRIBALCO LLC, US

[85] 2023-12-27

[86] 2022-07-29 (PCT/US2022/038831)

[87] (WO2023/009796)

[30] US (63/227,705) 2021-07-30

[30] US (63/273,064) 2021-10-28

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[21] **3,224,256**  
[13] A1

[51] **Int.Cl. C01B 32/182 (2017.01) C01B 32/194 (2017.01)**

[25] EN

[54] **POLYALKYLENE OXIDES AS DISPERSANTS FOR GRAPHENE MATERIAL**

[54] **OXYDES DE POLYALKYLENE UTILES EN TANT QUE DISPERSANTS POUR MATERIAU DE GRAPHENE**

[72] LEHMANN, KATHRIN, DE

[72] SCHUMANN, STEFAN, DE

[72] LEICH, VALERI, DE

[72] BREUERS, VERENA, DE

[72] HONIG, JONAS, DE

[72] MUCHAJER, LEA, DE

[72] HOVEN, THORSTEN, DE

[72] SEIDENSTICKER, PETER, DE

[71] EVONIK OPERATIONS GMBH, DE

[85] 2023-12-27

[86] 2022-06-29 (PCT/EP2022/067880)

[87] (WO2023/275135)

[30] EP (21183328.0) 2021-07-02

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[21] **3,224,257**  
[13] A1

[51] **Int.Cl. A61K 31/4174 (2006.01) A61P 25/00 (2006.01) A61P 25/22 (2006.01) C07D 405/00 (2006.01)**

[25] EN

[54] **METHODS FOR TREATING DEPRESSIVE STATES**

[54] **METHODES DE TRAITEMENT D'ETATS DEPRESSIFS**

[72] DE VIVO, MICHAEL, US

[72] YOCCA, FRANK D., US

[72] RISINGER, ROBERT, US

[72] BEASLEY, CHARLES, US

[71] BIOXCEL THERAPEUTICS, INC., US

[85] 2023-12-27

[86] 2022-07-01 (PCT/US2022/035919)

[87] (WO2023/278824)

[30] US (63/218,031) 2021-07-02

[30] US (63/247,122) 2021-09-22

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[21] **3,224,258**  
[13] A1

[51] **Int.Cl. G06F 16/51 (2019.01)**

[25] EN

[54] **METHOD FOR GENERATING AN IMAGE FILE ARCHIVE, METHOD FOR PROVIDING A MICROSCOPIC IMAGE IN AN IMAGE FILE ARCHIVE, METHOD FOR RESTORING A PARTIAL IMAGE FROM AN IMAGE FILE ARCHIVE, AND IMAGE FILE ARCHIV**

[54] **PROCEDE DE GENERATION D'UNE ARCHIVE DE FICHIER IMAGE, PROCEDE DE FOURNITURE D'UNE IMAGE MICROSCOPIQUE DANS UNE ARCHIVE DE FICHIER IMAGE, PROCEDE DE RESTAURATION D'UNE IMAGE PARTIELLE A PARTIR D'UNE ARCHIVE DE FICHIER IMAGE, ET ARCHIVE DE FICHIER IMAG**

[72] WILDNER, LUDWIG, DE

[71] PRECIPOINT GMBH, DE

[85] 2023-12-27

[86] 2022-06-29 (PCT/EP2022/067903)

[87] (WO2023/275146)

[30] EP (21182811.6) 2021-06-30

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[21] **3,224,259**  
[13] A1

[51] **Int.Cl. G01S 13/88 (2006.01) G01S 15/89 (2006.01)**

[25] EN

[54] **LYMPH NODE LOCATING DEVICE**

[54] **DISPOSITIF DE LOCALISATION DES GANGLIONS LYMPHATIQUES**

[72] LAVDAS, MICHAEL, CA

[72] BISWAS, SAUMIK, CA

[72] PASMAN, ELIZABETH, CA

[72] ABDOU, SHERIF, CA

[72] NGO, GORDON, CA

[72] FEDOROV, KIRILL, CA

[72] ABDIC, SEJLA, CA

[72] CECCHINI, MATTHEW, CA

[71] THE UNIVERSITY OF WESTERN ONTARIO, CA

[85] 2023-12-27

[86] 2022-07-13 (PCT/CA2022/051089)

[87] (WO2023/283734)

[30] US (63/221,172) 2021-07-13

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[21] **3,224,260**  
[13] A1

[51] **Int.Cl. D03D 11/00 (2006.01) D21F 1/10 (2006.01)**

[25] EN

[54] **INDUSTRIAL FABRIC**

[54] **TISSU INDUSTRIEL**

[72] FUJISAWA, SHIGENOBU, JP

[72] NOMURA, YUSUKE, JP

[71] NIPPON FILCON CO., LTD., JP

[85] 2023-12-27

[86] 2022-03-15 (PCT/JP2022/011458)

[87] (WO2023/276311)

[30] JP (2021-110973) 2021-07-02

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[21] **3,224,261**  
[13] A1

[51] **Int.Cl. C08G 18/16 (2006.01) C08G 18/18 (2006.01) C08G 18/24 (2006.01) C08G 18/48 (2006.01) C08G 18/76 (2006.01) C08J 11/14 (2006.01)**

[25] EN

[54] **PRODUCTION OF PU FOAMS**

[54] **PRODUCTION DE MOUSSES PU**

[72] TERHEIDEN, ANNEGRET, DE

[72] HILDEBRAND, JENS, DE

[72] HINRICHS-TONTRUP, NATALIA, DE

[72] HERMANN, DANIELA, DE

[71] EVONIK OPERATIONS GMBH, DE

[85] 2023-12-27

[86] 2022-06-28 (PCT/EP2022/067706)

[87] (WO2023/275037)

[30] EP (21183445.2) 2021-07-02

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[21] **3,224,262**  
[13] A1

[51] **Int.Cl. C08F 26/06 (2006.01) C08F 120/04 (2006.01)**  
[25] EN  
[54] **PLANT-INSPIRED ZWITTERIONIC MONOMERS, POLYMERS, AND USES THEREOF**  
[54] **MONOMERES ZWITTERIONIQUES INSPIRES DE PLANTES, POLYMERES ET LEURS UTILISATIONS**  
[72] PANZER, MATTHEW, US  
[72] TAYLOR, MORGAN, US  
[72] ALEXIOU, AYSE ASATEKIN, US  
[71] TRUSTEES OF TUFTS COLLEGE, US  
[85] 2023-12-27  
[86] 2022-06-24 (PCT/US2022/034908)  
[87] (WO2023/278268)  
[30] US (63/215,781) 2021-06-28

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[21] **3,224,263**  
[13] A1

[51] **Int.Cl. A61K 31/05 (2006.01) A61K 31/734 (2006.01) A61K 47/26 (2006.01) A61K 47/34 (2017.01) A61P 1/14 (2006.01)**  
[25] EN  
[54] **METHOD FOR NEUTRALIZING STOMACH ACID USING ALGINATE, POLYLYSINE, AND SEED PRESERVATIVES**  
[54] **PROCEDE DE NEUTRALISATION DE L'ACIDE GASTRIQUE A L'AIDE D'ALGINATE, DE POLYLYSINE ET DE CONSERVATEURS A BASE DE PEPINS**  
[72] FRANK, KEN, US  
[71] REFLUX GOURMET LLC, US  
[85] 2023-12-27  
[86] 2022-07-01 (PCT/US2022/035992)  
[87] (WO2023/283143)  
[30] US (63/218,488) 2021-07-05

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[21] **3,224,264**  
[13] A1

[51] **Int.Cl. C12Q 1/6816 (2018.01) C12Q 1/6869 (2018.01) C12Q 1/6876 (2018.01)**  
[25] EN  
[54] **APTAMER DYNAMIC RANGE COMPRESSION AND DETECTION TECHNIQUES**  
[54] **TECHNIQUES DE DETECTION ET DE COMPRESSION DE PLAGE DYNAMIQUE D'APTAMERES**  
[72] SLATTER, ANDREW, GB  
[72] RANDISE-HINCHLIFF, CARLO, US  
[72] PRICE, ANDREW, US  
[72] GORMLEY, NIAL ANTHONY, GB  
[72] MANZO, ANDREA, US  
[72] SUBRAMANIAN, NITHYA, GB  
[72] KAPER, FIONA, US  
[72] JONES, DAVID, GB  
[72] NORBERG, STEVEN, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-27  
[86] 2023-04-06 (PCT/US2023/017778)  
[87] (WO2023/196528)  
[30] US (63/329,101) 2022-04-08  
[30] US (63/343,760) 2022-05-19  
[30] US (63/347,375) 2022-05-31  
[30] US (63/385,544) 2022-11-30

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[21] **3,224,265**  
[13] A1

[51] **Int.Cl. C22B 3/04 (2006.01) C22B 3/26 (2006.01) C22B 3/40 (2006.01) C22B 26/12 (2006.01) C25C 1/02 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PRODUCING LITHIUM SALTS**  
[54] **PROCEDE DE PRODUCTION DE SELS DE LITHIUM**  
[72] JABLONKA, MARK STEPHEN, IL  
[72] DEE NOOR, ZIV, IL  
[72] AHARON, HANI, IL  
[71] TENOVA ADVANCED TECHNOLOGIES LTD., IL  
[85] 2023-12-27  
[86] 2022-07-28 (PCT/IB2022/056964)  
[87] (WO2023/017348)  
[30] GB (2111509.2) 2021-08-11

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[21] **3,224,266**  
[13] A1

[51] **Int.Cl. A24B 15/16 (2020.01) A24B 15/42 (2006.01)**  
[25] EN  
[54] **THERMALLY ENHANCED AEROSOL-FORMING SUBSTRATE**  
[54] **SUBSTRAT DE FORMATION D'AEROSOL THERMIQUEMENT AMELIORE**  
[72] HUANG, HOUXUE, CH  
[72] AJITHKUMAR, ANU, CH  
[71] PHILIP MORRIS PRODUCTS S.A., CH  
[85] 2023-12-27  
[86] 2022-07-07 (PCT/EP2022/068981)  
[87] (WO2023/281012)  
[30] EP (21184365.1) 2021-07-07  
[30] EP (22178767.4) 2022-06-13  
[30] EP (22178772.4) 2022-06-13  
[30] EP (22178770.8) 2022-06-13

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[21] **3,224,267**  
[13] A1

[51] **Int.Cl. G06Q 20/36 (2012.01) G06Q 20/34 (2012.01) G06Q 20/38 (2012.01) G06Q 20/40 (2012.01)**  
[25] EN  
[54] **SYSTEM, DEVICE AND METHOD FOR DIGITAL PAYMENT**  
[54] **SYSTEME, DISPOSITIF ET PROCEDE DE PAIEMENT NUMERIQUE**  
[72] BEN-AVI, DAVID, IL  
[72] ROSENHOIZ, GUY, IL  
[71] NAYAX LTD., IL  
[85] 2023-12-27  
[86] 2022-06-19 (PCT/IL2022/050654)  
[87] (WO2023/002469)  
[30] IL (285030) 2021-07-21

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[21] **3,224,268**  
[13] A1

[25] EN  
[54] **CATHETER ASSEMBLY  
ADAPTER, INSTRUMENT  
DELIVERY DEVICE, AND  
RELATED METHODS**  
[54] **ADAPTATEUR D'ENSEMBLE  
CATHETER, DISPOSITIF DE MISE  
EN PLACE D'INSTRUMENT ET  
METHODES ASSOCIEES**  
[72] BURKHOLZ, JONATHAN KARL, US  
[72] LACKEY, JOHN, US  
[72] NEUMANN, ERICA E., US  
[72] HARDING, WESTON F., US  
[71] BECTON, DICKINSON AND  
COMPANY, US  
[85] 2023-12-27  
[86] 2022-06-28 (PCT/US2022/035191)  
[87] (WO2023/278359)  
[30] US (63/218,127) 2021-07-02

[21] **3,224,269**  
[13] A1

[51] **Int.Cl. B65B 59/04 (2006.01) G06Q  
10/08 (2023.01) G16H 20/13 (2018.01)  
G16H 20/17 (2018.01) G16H 40/60  
(2018.01) B65B 59/02 (2006.01)**  
[25] EN  
[54] **IV BAG INSPECTION APPARATUS  
AND METHOD**  
[54] **APPAREIL ET PROCEDE  
D'INSPECTION DE SACS DE  
PERFUSION IV**  
[72] ANTHENAT, BRUCE, US  
[71] ANTHENAT, BRUCE, US  
[85] 2023-12-27  
[86] 2022-09-05 (PCT/US2022/042587)  
[87] (WO2023/038873)  
[30] US (63/242,020) 2021-09-08  
[30] US (17/902,991) 2022-09-05

[21] **3,224,270**  
[13] A1

[51] **Int.Cl. G01F 1/84 (2006.01) G01N  
11/16 (2006.01)**  
[25] EN  
[54] **CORIOLIS FLOW METER NON-  
IDEAL FLUID MEASUREMENT  
AND RELATED METHODS**  
[54] **MESURE DE FLUIDE NON  
IDEALE DE DEBITMETRE DE  
CORIOLIS ET PROCEDES  
ASSOCIES**  
[72] PATTEN, ANDREW TIMOTHY, US  
[72] BUTTLER, MARC ALLAN, US  
[72] HAYS, PAUL J., US  
[71] MICRO MOTION, INC., US  
[85] 2023-12-27  
[86] 2022-06-15 (PCT/US2022/033530)  
[87] (WO2023/278145)  
[30] US (63/215,714) 2021-06-28

[21] **3,224,271**  
[13] A1

[51] **Int.Cl. A61K 31/05 (2006.01) A61K  
31/192 (2006.01) A61K 31/235  
(2006.01)**  
[25] EN  
[54] **CANNABIDIOLIC ACID ESTERS  
FOR TREATING PRADER-WILLI  
SYNDROME**  
[54] **ESTERS D'ACIDE  
CANNABIDIOLIQUE POUR LE  
TRAITEMENT DU SYNDROME DE  
PRADER-WILLI**  
[72] SWISA, RESHEF, US  
[72] SHER, ROTEM, IL  
[72] SHAHRABANI, RON, IL  
[72] TAM, JOSEPH, IL  
[71] EPM (IP), INC., US  
[71] YISSUM RESEARCH  
DEVELOPMENT COMPANY OF  
THE HEBREW UNIVERSITY OF  
JERUSALEM LTD., IL  
[85] 2023-12-27  
[86] 2022-07-07 (PCT/IL2022/050734)  
[87] (WO2023/286047)  
[30] US (63/221,006) 2021-07-13  
[30] US (63/276,668) 2021-11-08

[21] **3,224,272**  
[13] A1

[51] **Int.Cl. H04R 1/00 (2006.01) H04R  
1/02 (2006.01) H04R 1/06 (2006.01)  
H04R 1/28 (2006.01)**  
[25] EN  
[54] **POWER OVER ETHERNET (POE)  
POWERED SMART SPEAKER**  
[54] **HAUT-PARLEUR INTELLIGENT  
ALIMENTE PAR UNE  
ALIMENTATION PAR CABLE  
ETHERNET (POE)**  
[72] STIDSEN, GREGORY R., CA  
[72] BARTON, PAUL, CA  
[72] SONDESKOV, JENS T., CA  
[72] EBERLIN, ROSS G., CA  
[71] LENBROOK INDUSTRIES LIMITED,  
CA  
[85] 2023-12-27  
[86] 2022-01-19 (PCT/IB2022/000019)  
[87] (WO2023/275612)  
[30] US (17/360,501) 2021-06-28

[21] **3,224,273**  
[13] A1

[51] **Int.Cl. C04B 28/00 (2006.01) C04B  
28/02 (2006.01) C04B 28/08 (2006.01)  
C04B 28/26 (2006.01) C04B 33/04  
(2006.01) C04B 38/00 (2006.01)**  
[25] FR  
[54] **COMPRESSED CONCRETE  
BLOCK WITH LOW MASS PER  
UNIT AREA COMPRISING A RAW  
CLAY MATRIX AND  
ASSOCIATED METHODS**  
[54] **BLOC DE BETON COMPRESSE A  
FAIBLE MASSE SURFACIQUE  
COMPORTANT UNE MATRICE  
ARGILEUSE CRUE ET  
METHODES ASSOCIEES**  
[72] MERCE, MANUEL, FR  
[72] NEUVILLE, MATHIEU, FR  
[71] MATERRUP, FR  
[85] 2023-12-27  
[86] 2022-07-21 (PCT/EP2022/070571)  
[87] (WO2023/001996)  
[30] FR (FR2107891) 2021-07-21

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[21] **3,224,275**  
[13] A1

[51] **Int.Cl. A01J 5/017 (2006.01) A01K 1/12 (2006.01)**  
[25] EN  
[54] **MILKING DEVICE AND METHOD FOR MILKING AN ANIMAL**  
[54] **DISPOSITIF DE TRAITE ET PROCEDE DE TRAITE D'UN ANIMAL**  
[72] SLAGER, JAN, NL  
[71] A4 AGRI A/S, DK  
[71] MADSEN, CHRISTIAN ORUM, DK  
[85] 2023-12-27  
[86] 2022-07-06 (PCT/IB2022/000403)  
[87] (WO2023/281312)  
[30] NL (2028641) 2021-07-06

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[21] **3,224,276**  
[13] A1

[51] **Int.Cl. C05B 1/00 (2006.01)**  
[25] EN  
[54] **AQUEOUS COMPOSITION COMPRISING SEAWEED**  
[54] **COMPOSITION AQUEUSE COMPRENANT DES ALGUES**  
[72] WARD, STUART, GB  
[72] BROWN, JONATHAN, GB  
[72] QUIGNON, CAROLINE, GB  
[72] HATHWAY, LAURA, GB  
[71] YARA UK LIMITED, GB  
[85] 2023-12-27  
[86] 2022-07-12 (PCT/GB2022/051791)  
[87] (WO2023/285798)  
[30] GB (2110025.0) 2021-07-12

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[21] **3,224,277**  
[13] A1

[51] **Int.Cl. F24D 17/00 (2022.01) F28D 7/10 (2006.01) F28D 21/00 (2006.01) F28F 1/36 (2006.01) F28F 1/42 (2006.01) F28F 9/02 (2006.01) F28F 13/12 (2006.01) F28F 27/02 (2006.01)**  
[25] EN  
[54] **GREY WATER HEAT RECOVERY APPARATUS**  
[54] **APPAREIL DE RECUPERATION DE CHALEUR DES EAUX GRISES**  
[72] BRANDT, EMIL, SE  
[72] HOSTETTER, IAN, SE  
[72] HOGANDER, MARTIN, SE  
[71] CONSAT AB, SE  
[85] 2023-12-27  
[86] 2022-06-27 (PCT/EP2022/067512)  
[87] (WO2023/274927)  
[30] EP (21182983.3) 2021-06-30

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[21] **3,224,278**  
[13] A1

[51] **Int.Cl. C12Q 1/6883 (2018.01)**  
[25] EN  
[54] **DIAGNOSING INFLAMMATORY BOWEL DISEASES**  
[54] **DIAGNOSTIC DE MALADIES INFLAMMATOIRES**  
[72] ITZKOVITZ, SHAUL SHALEV, IL  
[72] BAHAR HALPERN, KEREN, IL  
[72] EGOZI, ADI, IL  
[72] BEN-HORIN, SHOMRON SILAN, IL  
[72] UNGAR, BELLA, IL  
[72] BEN-MOSHE, SHANI, IL  
[71] YEDA RESEARCH AND DEVELOPMENT CO. LTD., IL  
[71] SHEBA IMPACT LTD., IL  
[85] 2023-12-27  
[86] 2022-07-21 (PCT/IL2022/050793)  
[87] (WO2023/002491)  
[30] IL (285031) 2021-07-21

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[21] **3,224,279**  
[13] A1

[51] **Int.Cl. C04B 26/04 (2006.01)**  
[25] EN  
[54] **SPRAY-APPLICABLE JOINT TAPE FOR DRYWALL CONSTRUCTIONS**  
[54] **BANDE DE JOINT APPLICABLE PAR PULVERISATION POUR CONSTRUCTIONS DE CLOISON SECHE**  
[72] GAMBICHLER, CAROLINE, DE  
[72] FRIEDERICH, HERBERT, DE  
[72] ARDELEAN, IOAN, DE  
[72] SCHONEICH, GABRIEL, DE  
[72] DIETZ, STEPHAN, DE  
[71] KNAUF GIPS KG, DE  
[85] 2023-12-27  
[86] 2021-07-02 (PCT/EP2021/000077)  
[87] (WO2023/274487)

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[21] **3,224,280**  
[13] A1

[51] **Int.Cl. H04N 19/114 (2014.01) H04N 19/159 (2014.01) H04N 19/172 (2014.01) H04N 19/177 (2014.01) H04N 19/40 (2014.01)**  
[25] EN  
[54] **RESTRUCTURING TECHNIQUE FOR VIDEO FRAMES**  
[54] **TECHNIQUE DE RESTRUCTURATION POUR TRAMES VIDEO**  
[72] VAN VELDHUISEN, BRENDA L., US  
[71] ARRIS ENTERPRISES LLC, US  
[85] 2023-12-27  
[86] 2022-06-28 (PCT/US2022/035319)  
[87] (WO2023/278448)  
[30] US (63/215,854) 2021-06-28

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[21] **3,224,281**  
[13] A1

[51] **Int.Cl. A61M 39/28 (2006.01)**  
[25] EN  
[54] **LEVERED IV FLOW REGULATION CLAMP ASSEMBLY**  
[54] **ENSEMBLE PINCE DE REGULATION D'ECOULEMENT IV A LEVIER**  
[72] DESAI, AMAN, IN  
[72] AGARWAL, APURVA VIKRAM, IN  
[72] JADHAV, AMARSINH DEELIPRAO, IN  
[71] CAREFUSION 303, INC., US  
[85] 2023-12-27  
[86] 2022-07-05 (PCT/US2022/036125)  
[87] (WO2023/003690)  
[30] US (63/223,436) 2021-07-19

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[21] **3,224,283**  
[13] A1

[51] **Int.Cl. G06V 10/82 (2022.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR PROCESSING IMAGES FOR IMAGE MATCHING**  
[54] **SYSTEMES ET PROCEDES DE TRAITEMENT D'IMAGES POUR LA CORRESPONDANCE D'IMAGES**  
[72] KANAN, CHRISTOPHER, US  
[72] GRADY, LEO, US  
[71] PAIGE.AI, INC., US  
[85] 2023-12-27  
[86] 2022-06-02 (PCT/US2022/031988)  
[87] (WO2023/003643)  
[30] US (63/225,373) 2021-07-23

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[21] <b>3,224,284</b> [13] A1	[21] <b>3,224,286</b> [13] A1	[21] <b>3,224,289</b> [13] A1
<p>[51] <b>Int.Cl. C07D 498/22 (2006.01)</b> [25] EN [54] <b>KRAS G12D INHIBITOR AND USE THEREOF</b> [54] <b>INHIBITEUR DE KRAS G12D ET SON UTILISATION</b> [72] WANG, FENG, CN [72] WANG, JINGLU, CN [72] ZHANG, CHUANXIU, CN [72] ZHOU, FENG, CN [72] ZHANG, MAN, CN [72] GAO, DAXIN, CN [71] SHANGHAI DE NOVO PHARMATECH CO., LTD., CN [85] 2023-12-27 [86] 2022-06-30 (PCT/CN2022/103056) [87] (WO2023/274383) [30] CN (202110752493.4) 2021-07-02 [30] CN (202110873254.4) 2021-07-30 [30] CN (202111062878.4) 2021-09-10 [30] CN (202111398357.6) 2021-11-19 [30] CN (202210042057.2) 2022-01-14 [30] CN (202210675157.9) 2022-06-15</p>	<p>[51] <b>Int.Cl. H01M 10/613 (2014.01) H01M 10/615 (2014.01) H01M 10/617 (2014.01) H01M 10/625 (2014.01) H01M 10/643 (2014.01) H01M 10/6553 (2014.01) H01M 10/6554 (2014.01) H01M 10/6556 (2014.01) H01M 10/6567 (2014.01) H01M 50/213 (2021.01) H01M 50/505 (2021.01)</b> [25] FR [54] <b>ACCUMULATOR BATTERY WITH ACTIVE THERMAL MANAGEMENT</b> [54] <b>BATTERIE D'ACCUMULATEURS A GESTION THERMIQUE ACTIVE</b> [72] KAPPLER, KEVIN, FR [72] THOMASSIER, SEBASTIEN, FR [71] SAFRAN ELECTRICAL &amp; POWER, FR [85] 2023-12-27 [86] 2022-07-01 (PCT/FR2022/051317) [87] (WO2023/281190) [30] FR (FR2107307) 2021-07-06</p>	<p>[51] <b>Int.Cl. C07D 471/04 (2006.01) A61K 31/506 (2006.01) A61P 35/00 (2006.01) C07D 403/04 (2006.01) C07D 403/14 (2006.01) C07D 519/00 (2006.01)</b> [25] EN [54] <b>PYRIMIDINE OR PYRIDINE DERIVATIVE, PREPARATION METHOD THEREFOR, AND APPLICATION THEREOF IN PHARMACY</b> [54] <b>DERIVE DE PYRIMIDINE OU DE PYRIDINE, SON PROCEDE DE PREPARATION ET SON APPLICATION EN PHARMACIE</b> [72] FENG, TAO, CN [72] ZHAO, BAOWEI, CN [72] ZHANG, MINGMING, CN [72] YANG, SHUQUN, CN [72] YU, HONGPING, CN [72] CHEN, ZHUI, CN [72] XU, YAOCHANG, CN [71] ABBISKO THERAPEUTICS CO., LTD., CN [85] 2023-12-27 [86] 2022-08-03 (PCT/CN2022/109819) [87] (WO2023/011505) [30] CN (202110899844.4) 2021-08-06 [30] CN (202210087511.6) 2022-01-25</p>
[21] <b>3,224,285</b> [13] A1	[21] <b>3,224,288</b> [13] A1	[21] <b>3,224,290</b> [13] A1
<p>[51] <b>Int.Cl. C01B 32/174 (2017.01) C08K 9/04 (2006.01) C08K 9/08 (2006.01)</b> [25] EN [54] <b>CARBON NANOTUBE COMPOSITE COMPRISING MECHANICAL LIGANDS</b> [54] <b>COMPOSITE DE NANOTUBES DE CARBONE COMPRENANT DES LIGANDS MECANIQUES</b> [72] PEDERSEN, HENRIK, DK [72] GONZALEZ SANCHEZ, MARTA, DK [72] LOPEZ MORENO, ALEJANDRO, ES [72] VILLALVA FERNANDEZ, JULIA, ES [72] GONZALEZ-JUAREZ, MARIA DE LOURDES, DK [72] EATON, MATTHEW DAVID, ES [72] PEREZ ALVAREZ, EMILIO MANUEL, ES [72] LUNDORF, MIKKEL DYBRO, DK [72] ISASTI IRIBAR, ION, DK [72] MIRANDA ALCAZAR, SILVIA, DK [72] RIVAS CARAMES, MARISOL, DK [72] NARANJO CHACON, ALICIA, DK [72] ZHANG, WANZHENG, CN [72] XU, WEI, CN [72] MENA HERNANDO, SOFIA, ES [71] NANOCORE APS, DK [85] 2023-12-27 [86] 2022-06-28 (PCT/EP2022/067728) [87] (WO2023/001506) [30] EP (21382590.4) 2021-07-02</p>	<p>[25] EN [54] <b>SYSTEMS AND METHODS TO PROCESS ELECTRONIC IMAGES TO PROVIDE BLUR ROBUSTNESS</b> [54] <b>SYSTEMES ET PROCEDES DE TRAITEMENT D'IMAGES ELECTRONIQUES POUR ASSURER UNE RESISTANCE AU FLOU</b> [72] LENTINI, RODRIGO CEBALLOS, US [72] KANAN, CHRISTOPHER, US [71] PAIGE.AI, INC., US [85] 2023-12-27 [86] 2022-04-29 (PCT/US2022/026972) [87] (WO2023/282960) [30] US (63/203,033) 2021-07-06</p>	<p>[51] <b>Int.Cl. E04C 2/16 (2006.01) D04H 1/4209 (2012.01)</b> [25] EN [54] <b>SAG-RESISTANT BUILDING PANEL</b> [54] <b>PANNEAU DE CONSTRUCTION RESISTANT A L'AFFAISSEMENT</b> [72] OLESKE, PETER J., US [72] WISE, EDWARD E., US [72] BUSQUE, CHRISTIAN, US [71] ARMSTRONG WORLD INDUSTRIES, INC., US [85] 2023-12-27 [86] 2022-06-24 (PCT/US2022/034920) [87] (WO2023/283066) [30] US (63/218,593) 2021-07-06</p>

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[21] **3,224,292**  
[13] A1

[51] **Int.Cl. A63B 21/04 (2006.01) A63B 21/22 (2006.01)**  
[25] EN  
[54] **MOTORIZED PADDLING SIMULATOR**  
[54] **SIMULATEUR DE PAGAYAGE MOTORISE**  
[72] NEUHAUS, PETER, US  
[71] OXEFIT, INC., US  
[85] 2023-12-27  
[86] 2022-08-22 (PCT/US2022/041017)  
[87] (WO2023/034052)  
[30] US (17/462,237) 2021-08-31

[21] **3,224,294**  
[13] A1

[51] **Int.Cl. H01M 50/204 (2021.01)**  
[25] EN  
[54] **BATTERY PACK, VEHICLE BODY, AND VEHICLE**  
[54] **BLOC-BATTERIE, CARROSSERIE DE VEHICULE ET VEHICULE**  
[72] YI, BENGANG, CN  
[72] YAN, JUNFEI, CN  
[72] DIAO, YIWEI, CN  
[72] LIAN, YUBO, CN  
[72] LING, HEPING, CN  
[71] BYD COMPANY LIMITED, CN  
[85] 2023-12-27  
[86] 2022-08-04 (PCT/CN2022/110298)  
[87] (WO2023/011593)  
[30] CN (202110902937.8) 2021-08-06

[21] **3,224,296**  
[13] A1

[51] **Int.Cl. G16H 20/17 (2018.01) G16H 50/50 (2018.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR SELECTING AN INJECTION SITE**  
[54] **PROCEDES ET SYSTEMES DE SELECTION D'UN SITE D'INJECTION**  
[72] PATEL, HEMANT THAKORBHAI, US  
[72] SOMLAI, LOUIS STEVENS, US  
[72] WIESLER, ADAM NATHANIEL, US  
[71] ELI LILLY AND COMPANY, US  
[85] 2023-12-27  
[86] 2022-07-14 (PCT/US2022/037041)  
[87] (WO2023/287934)  
[30] US (63/222,456) 2021-07-16

[21] **3,224,297**  
[13] A1

[51] **Int.Cl. A61B 17/86 (2006.01) A61L 27/44 (2006.01) A61L 27/58 (2006.01)**  
[25] EN  
[54] **FIBER-REINFORCED BIOCOMPOSITE MEDICAL IMPLANTS WITH DEFORMABLE PROTRUSIONS AND METHODS OF USE THEREOF**  
[54] **IMPLANTS MEDICAUX BIOCOMPOSITES RENFORCES PAR DES FIBRES AVEC DES SAILLIES DEFORMABLES ET PROCEDES D'UTILISATION ASSOCIES**  
[72] PREISS-BLOOM, ORAHN, IL  
[72] PARAG, SHAY, IL  
[72] ZEEVI, TAL, IL  
[71] OSSIO LTD., IL  
[85] 2023-12-27  
[86] 2022-07-04 (PCT/IL2022/050711)  
[87] (WO2023/002471)  
[30] US (63/223,152) 2021-07-19

[21] **3,224,298**  
[13] A1

[51] **Int.Cl. A01N 43/64 (2006.01) A61K 31/33 (2006.01) A61K 31/395 (2006.01) A61K 38/04 (2006.01) A61K 45/06 (2006.01) A61P 25/00 (2006.01) A61P 25/28 (2006.01)**  
[25] EN  
[54] **CRYSTALLINE FORMS OF TROFINETIDE**  
[54] **FORMES CRISTALLINES DE TROFINETIDE**  
[72] PETERSON, MATTHEW, US  
[72] CARLOS, MARLON, US  
[72] BOUSMANNE, MARTIN BERNARD CATHERINE, BE  
[72] BETTI, CECILIA, BE  
[72] JONAITIS, DAVID T., US  
[72] MCCRACKEN, LISA M., US  
[72] GROVE, LISA M., US  
[71] ACADIA PHARMACEUTICALS, INC., US  
[85] 2023-12-27  
[86] 2022-07-12 (PCT/US2022/036768)  
[87] (WO2023/287750)  
[30] US (63/220,660) 2021-07-12

[21] **3,224,299**  
[13] A1

[51] **Int.Cl. G06V 20/54 (2022.01) G08G 1/01 (2006.01) G08G 1/017 (2006.01) G08G 1/04 (2006.01) G08G 1/056 (2006.01) G08G 1/0967 (2006.01)**  
[25] EN  
[54] **SURVEILLANCE DATA FILTRATION TECHNIQUES**  
[54] **TECHNIQUES DE FILTRATION DE DONNEES DE SURVEILLANCE**  
[72] BEAGLE, KARLA, US  
[72] GUMMADI, RAAJITHA, US  
[72] BUITKUS, GREGORY J., US  
[71] DEKA PRODUCTS LIMITED PARTNERSHIP, US  
[85] 2023-12-27  
[86] 2022-06-29 (PCT/US2022/073247)  
[87] (WO2023/279017)  
[30] US (63/202,954) 2021-07-01

[21] **3,224,300**  
[13] A1

[51] **Int.Cl. G08G 1/00 (2006.01) G08G 1/01 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR MONITORING A VEHICLE**  
[54] **SYSTEME ET PROCEDE DE SURVEILLANCE D'UN VEHICULE**  
[72] LUDWIG, SUE HSIU YING, CA  
[72] SIC, PETAR, CA  
[71] BLACKBERRY LIMITED, CA  
[85] 2023-12-27  
[86] 2022-08-26 (PCT/US2022/041706)  
[87] (WO2023/034141)  
[30] US (17/461,637) 2021-08-30

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[21] **3,224,301**  
[13] A1

[51] **Int.Cl. A61K 51/08 (2006.01)**  
[25] EN  
[54] **A NOVEL KIT FOR RADIOPHARMACEUTICAL PREPARATION OF A RADIOMETAL LABELED CHELATE-FUNCTIONALIZED TARGETING CONJUGATE**  
[54] **NOUVEAU KIT POUR LA PREPARATION RADIOPHARMACEUTIQUE D'UN CONJUGUE DE CIBLAGE FONCTIONNALISE PAR UN CHELATE MARQUE PAR UN METAL RADIOACTIF**  
[72] ZERNA, MARION, DE  
[72] SCHIEFERSTEIN, HANNO, DE  
[72] BERNDT, MATHIAS, DE  
[71] LIFE MOLECULAR IMAGING LIMITED, GB  
[85] 2023-12-27  
[86] 2022-06-29 (PCT/EP2022/067985)  
[87] (WO2023/275195)  
[30] EP (21182551.8) 2021-06-29

[21] **3,224,302**  
[13] A1

[51] **Int.Cl. C07D 471/04 (2006.01) A61K 31/444 (2006.01)**  
[25] EN  
[54] **PYRROLOPYRIDONE DERIVATIVES USEFUL IN THE TREATMENT OF CANCER**  
[54] **DERIVES DE PYRROLOPYRIDONE UTILES DANS LE TRAITEMENT DU CANCER**  
[72] WOODLAND, CHRISTOPHER ANDREW, GB  
[72] BELL, MARK, GB  
[71] TAY THERAPEUTICS LIMITED, GB  
[85] 2023-12-27  
[86] 2022-06-29 (PCT/GB2022/051667)  
[87] (WO2023/275542)  
[30] GB (2109324.0) 2021-06-29  
[30] GB (2208160.8) 2022-06-01

[21] **3,224,303**  
[13] A1

[51] **Int.Cl. C22B 3/08 (2006.01)**  
[25] EN  
[54] **PROCESSES AND SYSTEMS FOR PURIFYING AND RECYCLING LITHIUM-ION BATTERY WASTE STREAMS**  
[54] **PROCEDES ET SYSTEMES DE PURIFICATION ET DE RECYCLAGE DE FLUX DE DECHETS DE BATTERIE LITHIUM-ION**  
[72] AKHONDI, EBRAHIM, SG  
[72] KATAL, REZA, SG  
[71] GREEN LI-ION PTE. LTD., SG  
[85] 2023-12-27  
[86] 2023-02-22 (PCT/SG2023/050108)  
[87] (WO2023/163658)  
[30] US (63/312,978) 2022-02-23

[21] **3,224,304**  
[13] A1

[51] **Int.Cl. H02B 1/18 (2006.01) H02B 1/26 (2006.01) H02B 1/46 (2006.01) H02B 1/48 (2006.01) H02J 4/00 (2006.01)**  
[25] EN  
[54] **POWER DISTRIBUTION DEVICE AND TRANSPORTATION DEVICE HAVING POWER DISTRIBUTION DEVICE**  
[54] **DISPOSITIF DE DISTRIBUTION D'ENERGIE ET DISPOSITIF DE TRANSPORT PRESENTANT UN DISPOSITIF DE DISTRIBUTION D'ENERGIE**  
[72] WU, ZHENHAN, CN  
[72] ZENG, ZHI, CN  
[71] BYD COMPANY LIMITED, CN  
[85] 2023-12-27  
[86] 2022-06-27 (PCT/CN2022/101449)  
[87] (WO2023/011048)  
[30] CN (202121785979.X) 2021-08-02

[21] **3,224,305**  
[13] A1

[51] **Int.Cl. B60R 16/037 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR APPLYING VEHICLE SETTINGS**  
[54] **SYSTEME ET PROCEDE D'APPLICATION DE REGLAGES DE VEHICULE**  
[72] LUDWIG, SUE HSIU YING, CA  
[72] LANDRY, NICHOLAS IVAN, CA  
[72] SHOME, TARUN WILLIAM, CA  
[72] SHUKLA, ABHISHEK, CA  
[71] BLACKBERRY LIMITED, CA  
[85] 2023-12-27  
[86] 2022-08-18 (PCT/US2022/040786)  
[87] (WO2023/043569)  
[30] US (17/474,900) 2021-09-14

[21] **3,224,306**  
[13] A1

[51] **Int.Cl. F16B 2/14 (2006.01)**  
[25] EN  
[54] **CONNECTING APPARATUS AND SUSPENSION ASSEMBLY**  
[54] **APPAREIL DE RACCORDEMENT ET ENSEMBLE DE SUSPENSION**  
[72] DAVIS, SIMON, GB  
[72] WHITE, SAMUEL, GB  
[72] SUNDERLAND, OLIVER, GB  
[71] GRIPPLE LIMITED, GB  
[85] 2023-12-27  
[86] 2022-06-24 (PCT/IB2022/055874)  
[87] (WO2023/275689)  
[30] GB (2109262.2) 2021-06-28  
[30] GB (2109264.8) 2021-06-28  
[30] GB (2209226.6) 2022-06-23  
[30] GB (2209230.8) 2022-06-23

[21] **3,224,307**  
[13] A1

[51] **Int.Cl. G06Q 10/02 (2012.01)**  
[25] EN  
[54] **AUTOMATED RECREATIONAL VEHICLE PARK**  
[54] **PARC DE STATIONNEMENT DE VEHICULE RECREATIF AUTOMATISE**  
[72] FALVEY, ANDREW O., US  
[71] LINDEN CAPITAL LLC, US  
[85] 2023-12-27  
[86] 2022-06-28 (PCT/US2022/035365)  
[87] (WO2023/278482)  
[30] US (63/216,325) 2021-06-29

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[21] **3,224,308**  
[13] A1

[51] **Int.Cl. A47D 13/00 (2006.01) A47D 15/00 (2006.01)**  
[25] EN  
[54] **STRUCTURE HAVING MOVABLE CENTER FOR CHILD**  
[54] **STRUCTURE AVEC CENTRE MOBILE POUR ENFANT**  
[72] LI, WEI, CN  
[71] DONGGUAN JINWANG CHILDREN PRODUCTS CO. LTD., CN  
[85] 2023-12-27  
[86] 2022-06-27 (PCT/CN2022/101548)  
[87] (WO2023/274154)  
[30] CN (202121466684.6) 2021-06-29

[21] **3,224,309**  
[13] A1

[51] **Int.Cl. A23C 9/123 (2006.01) A23L 11/50 (2021.01) A23C 11/10 (2021.01)**  
[25] EN  
[54] **LACTOBACILLUS BULGARICUS FOR USE IN PREPARATION OF FERMENTED PRODUCTS**  
[54] **LACTOBACILLUS BULGARICUS DESTINE A ETRE UTILISE DANS LA PREPARATION DE PRODUITS FERMENTES**  
[72] BONIFACE-GUIRAUD, AUDREY, FR  
[72] GARAUULT, PEGGY, FR  
[72] CAPRONNIER, SANDRINE, FR  
[71] COMPAGNIE GERVAIS DANONE, FR  
[85] 2023-12-27  
[86] 2021-07-01 (PCT/IB2021/000439)  
[87] (WO2023/275582)

[21] **3,224,310**  
[13] A1

[51] **Int.Cl. F16B 37/08 (2006.01)**  
[25] EN  
[54] **CONNECTING APPARATUS AND SUSPENSION ASSEMBLY**  
[54] **APPAREIL DE RACCORDEMENT ET ENSEMBLE DE SUSPENSION**  
[72] DAVIS, SIMON, GB  
[72] WHITE, SAMUEL, GB  
[72] SUNDERLAND, OLIVER, GB  
[71] GRIPPLE LIMITED, GB  
[85] 2023-12-27  
[86] 2022-06-24 (PCT/IB2022/055873)  
[87] (WO2023/275688)  
[30] GB (2109262.2) 2021-06-28  
[30] GB (2109264.8) 2021-06-28  
[30] GB (2209226.6) 2022-06-23  
[30] GB (2209230.8) 2022-06-23

[21] **3,224,311**  
[13] A1

[51] **Int.Cl. A23C 9/00 (2006.01) A23L 11/50 (2021.01) A23L 11/65 (2021.01) C12N 1/20 (2006.01)**  
[25] EN  
[54] **BIFIDOBACTERIA FOR USE IN PREPARATION OF FERMENTED PRODUCTS**  
[54] **BIFIDOBACTERIES POUR UTILISATION DANS LA PREPARATION DE PRODUITS FERMENTES**  
[72] BONIFACE-GUIRAUD, AUDREY, FR  
[72] GARAUULT, PEGGY, FR  
[72] FAURIE, JEAN-MICHEL, FR  
[72] GALAND, VALENTIN, FR  
[71] COMPAGNIE GERVAIS DANONE, FR  
[85] 2023-12-27  
[86] 2022-06-30 (PCT/EP2022/068205)  
[87] (WO2023/275331)  
[30] EP (21305911.6) 2021-07-01

[21] **3,224,312**  
[13] A1

[51] **Int.Cl. B60H 1/14 (2006.01) B60L 58/27 (2019.01) B60L 15/20 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR CONTROLLING HEATING OF ELECTRIC DRIVE SYSTEM OFVEHICLE, HEATING SYSTEM, AND VEHICLE**  
[54] **METHODE ET APPAREIL POUR CONTROLER LE CHAUFFAGE DU SYSTEME DE COMMANDE ELECTRIQUE DU VEHICULE, SYSTEME DE CHAUFFAGE ET VEHICULE**  
[72] XU, LUHUI, CN  
[72] XU, XIANGSHUAI, CN  
[72] REN, SHAOPENG, CN  
[72] DU, ZHIYONG, CN  
[71] BYD COMPANY LIMITED, CN  
[85] 2023-12-27  
[86] 2022-09-29 (PCT/CN2022/122450)  
[87] (WO2023/051667)  
[30] CN (202111153776.3) 2021-09-29

[21] **3,224,313**  
[13] A1

[51] **Int.Cl. A23L 33/105 (2016.01) A23L 5/43 (2016.01) A23P 10/28 (2016.01) A23P 10/30 (2016.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS TO COUNTERACT PROCESSES ASSOCIATED WITH INFLAMMATION AND SENESCENCE AND TO SUPPORT CELLULAR ENERGY AND/OR METABOLISM**  
[54] **COMPOSITIONS ET METHODES POUR LUTTER CONTRE DES PROCESSUS ASSOCIES A L'INFLAMMATION ET A LA SENESCENCE ET POUR SOUTENIR L'ENERGIE CELLULAIRE ET/OU LE METABOLISME CELLULAIRE**  
[72] POND, HARTLEY, US  
[71] DAILYCOLORS HEALTH INC., US  
[85] 2023-12-27  
[86] 2022-06-17 (PCT/US2022/033999)  
[87] (WO2023/278181)  
[30] US (63/215,716) 2021-06-28  
[30] US (63/285,591) 2021-12-03

[21] **3,224,314**  
[13] A1

[51] **Int.Cl. C07D 513/04 (2006.01)**  
[25] EN  
[54] **DIMETHYL-SUBSTITUTED THIAZOLOLACTAM COMPOUND AND USE THEREOF**  
[54] **COMPOSE DE THIAZOLOLACTAME A SUBSTITUTION DIMETHYLE ET SON UTILISATION**  
[72] LI, YI, CN  
[72] YU, TAO, CN  
[72] LIU, NING, CN  
[72] WU, CHENGDE, CN  
[72] CHEN, SHUHUI, CN  
[71] D3 BIO (WUXI) CO., LTD., CN  
[85] 2023-12-27  
[86] 2022-06-24 (PCT/CN2022/101283)  
[87] (WO2023/274088)  
[30] CN (202110723288.5) 2021-06-28  
[30] CN (202111669920.9) 2021-12-31  
[30] CN (202210693547.9) 2022-06-17



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[21] **3,224,315**  
[13] A1

[51] **Int.Cl. C07D 513/04 (2006.01)**  
[25] EN  
[54] **THIAZOLE-LACTAM-  
SPIROHETEROCYCLIC  
COMPOUNDS AND  
APPLICATIONS THEREOF**  
[54] **COMPOSES THIAZOLE-  
LACTAME-  
SPIROHETEROCYCLIQUES ET  
LEURS APPLICATIONS**  
[72] LI, YI, CN  
[72] YU, TAO, CN  
[72] LIU, NING, CN  
[72] WU, CHENGDE, CN  
[72] CHEN, SHUHUI, CN  
[71] D3 BIO (WUXI) CO., LTD., CN  
[85] 2023-12-27  
[86] 2022-06-28 (PCT/CN2022/102031)  
[87] (WO2023/274256)  
[30] CN (202110722003.6) 2021-06-28  
[30] CN (202111673614.2) 2021-12-31  
[30] CN (202210693548.3) 2022-06-17

[21] **3,224,316**  
[13] A1

[25] EN  
[54] **PATIENT-SPECIFIC  
ADJUSTMENT OF SPINAL  
IMPLANTS, AND ASSOCIATED  
SYSTEMS AND METHODS**  
[54] **AJUSTEMENT SPECIFIQUE AU  
PATIENT D'IMPLANTS  
RACHIDIENS, ET SYSTEMES ET  
METHODES ASSOCIES**  
[72] CORDONNIER, MICHAEL J., US  
[72] CASEY, NIAL PATRICK, US  
[72] HUSSAIN, SHARIQ, US  
[71] CARLSMED, INC., US  
[85] 2023-12-27  
[86] 2022-06-28 (PCT/US2022/035232)  
[87] (WO2023/278385)  
[30] US (63/215,784) 2021-06-28

[21] **3,224,317**  
[13] A1

[25] EN  
[54] **SYNCHRONIZING FILE SYSTEM  
ITEMS HAVING A DATA AND  
METADATA PORTION BETWEEN  
A SOURCE STORAGE SYSTEM  
AND A DESTINATION STORAGE  
SYSTEM**  
[54] **SYNCHRONISATION  
D'ELEMENTS DE SYSTEME DE  
FICHIERS AYANT UNE PARTIE  
DE DONNEES ET DE  
METADONNEES ENTRE UN  
SYSTEME DE STOCKAGE  
SOURCE ET UN SYSTEME DE  
STOCKAGE DE DESTINATION**  
[72] MARIVOET, KIM, BE  
[72] VARILLY, PATRICK, BE  
[71] DATADOBI BV, BE  
[85] 2023-12-27  
[86] 2022-07-15 (PCT/EP2022/069923)  
[87] (WO2023/006455)  
[30] EP (21187877.2) 2021-07-27

[21] **3,224,318**  
[13] A1

[51] **Int.Cl. B60B 33/00 (2006.01)**  
[25] EN  
[54] **WHEEL ASSEMBLY STRUCTURE  
AND CHILD ACTIVITY CENTER**  
[54] **STRUCTURE D'ENSEMBLE ROUE  
ET CENTRE D'ACTIVITE POUR  
ENFANT**  
[72] LI, WEI, CN  
[71] DONGGUAN JINWANG CHILDREN  
PRODUCTS CO. LTD., CN  
[85] 2023-12-27  
[86] 2022-06-27 (PCT/CN2022/101547)  
[87] (WO2023/274153)  
[30] CN (202121465288.1) 2021-06-29

[21] **3,224,319**  
[13] A1

[51] **Int.Cl. H01J 37/26 (2006.01) H01J  
37/145 (2006.01) H01J 37/244  
(2006.01)**  
[25] EN  
[54] **A MULTI-MODE LOW-VOLTAGE  
ELECTRON MICROSCOPE**  
[54] **UN MICROSCOPE  
ELECTRONIQUE BASSE  
TENSION MULTIMODE**  
[72] BEJDAK, TOMAS, CZ  
[72] COUFALOVA, EVA, CZ  
[72] STEPAN, PETR, CZ  
[71] DELONG INSTRUMENTS A.S., CZ  
[85] 2023-12-27  
[86] 2022-06-29 (PCT/CZ2022/050061)  
[87] (3224319)

[21] **3,224,320**  
[13] A1

[51] **Int.Cl. A63H 33/00 (2006.01) B60B  
33/00 (2006.01) B60B 33/04 (2006.01)**  
[25] EN  
[54] **WHEEL ASSEMBLY DEVICE**  
[54] **DISPOSITIF D'ASSEMBLAGE DE  
ROUE**  
[72] LI, WEI, CN  
[71] DONGGUAN JINWANG CHILDREN  
PRODUCTS CO. LTD., CN  
[85] 2023-12-27  
[86] 2022-06-27 (PCT/CN2022/101546)  
[87] (WO2023/274152)  
[30] CN (202121465547.0) 2021-06-29

[21] **3,224,321**  
[13] A1

[25] EN  
[54] **RESERVOIR FLUID TYPING**  
[54] **TYPAGE DE FLUIDE DE  
RESERVOIR**  
[72] CELY, ALEXANDRA, NO  
[72] YANG, TAO, NO  
[72] ARIEF, IBNU HAFIDZ, NO  
[72] YERKINKYZY, GULNAR, NO  
[72] ULEBERG, KNUT, NO  
[71] EQUINOR ENERGY AS, NO  
[85] 2023-12-27  
[86] 2022-07-15 (PCT/NO2022/050180)  
[87] (WO2023/287303)  
[30] GB (2110203.3) 2021-07-15

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[21] **3,224,322**  
[13] A1

[51] **Int.Cl. H04N 21/433 (2011.01) H04N 21/431 (2011.01) H04N 21/482 (2011.01)**

[25] EN

[54] **VIDEO PLAYING METHOD AND APPARATUS, AND STORAGE MEDIUM**

[54] **PROCEDE ET APPAREIL DE LECTURE VIDEO, ET SUPPORT DE STOCKAGE**

[72] CHEN, JIAYI, CN

[71] FUTU NETWORK TECHNOLOGY (SHENZHEN) CO., LTD., CN

[85] 2023-12-27

[86] 2022-06-21 (PCT/CN2022/100199)

[87] (WO2023/284498)

[30] CN (202110789130.8) 2021-07-13

[21] **3,224,323**  
[13] A1

[51] **Int.Cl. C07D 235/26 (2006.01) A61K 31/4184 (2006.01) A61P 25/20 (2006.01) A61P 25/32 (2006.01) A61P 25/34 (2006.01) A61P 25/36 (2006.01)**

[25] EN

[54] **PIPERIDINE DERIVATIVE, AND PHARMACEUTICAL COMPOSITION THEREOF, PREPARATION METHOD THEREFOR, AND USE THEREOF**

[54] **DERIVE DE PIPERIDINE, ET COMPOSITION PHARMACEUTIQUE DE CELUI-CI, PROCEDE DE PREPARATION CORRESPONDANT ET UTILISATION ASSOCIEE**

[72] WANG, JIAN, CN

[72] SHENG, XIJUN, CN

[72] LI, LIE, CN

[72] TIAN, LUANYUAN, CN

[72] LV, JINLIANG, CN

[72] WANG, MIAO, CN

[72] ZHOU, HAO, CN

[72] YANG, XIAOQING, CN

[71] YICHANG HUMANWELL PHARMACEUTICAL CO., LTD, CN

[71] TSINGHUA UNIVERSITY, CN

[85] 2023-12-27

[86] 2022-07-14 (PCT/CN2022/105776)

[87] (WO2023/284834)

[30] CN (202110797657.5) 2021-07-14

[21] **3,224,325**  
[13] A1

[51] **Int.Cl. G06Q 50/10 (2012.01) H04W 4/80 (2018.01)**

[25] EN

[54] **A MONITORING DEVICE FOR AN ANIMAL**

[54] **DISPOSITIF DE SURVEILLANCE POUR UN ANIMAL**

[72] WILDISEN, STEVEN, AU

[72] PHILLIPS, DEAN, AU

[71] XSIGHTS DIGITAL PTY LTD, AU

[85] 2023-12-27

[86] 2022-06-29 (PCT/AU2022/050666)

[87] (WO2023/279139)

[30] AU (2021902050) 2021-07-06

[21] **3,224,326**  
[13] A1

[51] **Int.Cl. B60L 50/60 (2019.01) B60L 58/27 (2019.01)**

[25] EN

[54] **INTEGRATED CONTROLLER, ELECTRIC DRIVE ASSEMBLY, AND VEHICLE**

[54] **DISPOSITIF DE COMMANDE INTEGRE, ENSEMBLE D'ENTRAINEMENT ELECTRIQUE ET VEHICULE**

[72] GUO, CAIFANG, CN

[72] QI, AXI, CN

[72] LIU, JIAN, CN

[72] GAO, JIAN, CN

[72] LI, LELE, CN

[71] BYD COMPANY LIMITED, CN

[85] 2023-12-27

[86] 2022-06-17 (PCT/CN2022/099423)

[87] (WO2023/011018)

[30] CN (202110889134.3) 2021-08-04

[21] **3,224,327**  
[13] A1

[51] **Int.Cl. H01M 50/489 (2021.01) H01M 50/107 (2021.01) H01M 50/417 (2021.01) H01M 50/449 (2021.01)**

[25] EN

[54] **IMPROVED BATTERY CELLS AND COMPONENTS THEREOF**

[54] **CELLULES DE BATTERIE AMELIOREES ET SES COMPOSANTS**

[72] ZHANG, ZHENGMING, US

[72] YIN, WENBIN, US

[71] CELGARD LLC, US

[85] 2023-12-28

[86] 2022-07-06 (PCT/US2022/036178)

[87] (WO2023/283216)

[30] US (63/218,629) 2021-07-06

[30] US (63/223,231) 2021-07-19

[21] **3,224,338**  
[13] A1

[51] **Int.Cl. B32B 13/02 (2006.01) C04B 28/14 (2006.01)**

[25] EN

[54] **BOARD WITH FIBER-REINFORCED DENSE LAYER**

[54] **PLAQUE DOTEE D'UNE COUCHE DENSE RENFORCEE PAR DES FIBRES**

[72] VILINSKA, ANNAMARIA, US

[72] HEMPHILL, MARK K., US

[72] SANG, YIJUN, US

[72] JONES, NICHOLAS S, US

[72] FRASER, KEVERN O., US

[72] CROSS, JON, US

[72] LAU, TE HUA, US

[71] KNAUF GIPS KG, DE

[85] 2023-12-28

[86] 2022-07-08 (PCT/IB2022/056336)

[87] (WO2023/281460)

[30] US (63/220,245) 2021-07-09

[30] US (63/295,016) 2021-12-30

[30] US (17/855,732) 2022-06-30

[21] **3,224,345**  
[13] A1

[51] **Int.Cl. F23D 14/22 (2006.01) F23D 14/32 (2006.01) F23D 14/66 (2006.01) F23D 14/78 (2006.01)**

[25] EN

[54] **BURNER FOR IMPLEMENTING PARTIAL OXIDATION**

[54] **BRULEUR POUR LA MISE EN ?UVRE D'UNE OXYDATION PARTIELLE**

[72] MIHAILOWITSCH, DIETER, DE

[72] MURER, MARTIN, DE

[71] LINDE GMBH, DE

[85] 2023-12-28

[86] 2022-06-01 (PCT/EP2022/025257)

[87] (WO2023/280433)

[30] EP (21020351.9) 2021-07-05

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[21] **3,224,362**  
[13] A1

[51] **Int.Cl. G06Q 40/12 (2023.01) G06F 16/90 (2019.01)**  
[25] EN  
[54] **CONNECTED ACCOUNTING SYSTEM AND USER INTERFACES**  
[54] **SYSTEME DE COMPTABILITE CONNEXTE ET INTERFACES UTILISATEUR**  
[72] WEN, PETER, US  
[72] WEN, BENSON, US  
[71] TALLYFOR, INC., US  
[85] 2023-12-28  
[86] 2022-07-22 (PCT/US2022/038033)  
[87] (WO2023/004126)  
[30] US (63/225,113) 2021-07-23

[21] **3,224,366**  
[13] A1

[51] **Int.Cl. G06F 8/76 (2018.01) G06F 8/72 (2018.01) H04L 67/10 (2022.01) G06F 9/48 (2006.01) G06F 9/50 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR BATCH AND SCHEDULER MIGRATION IN AN APPLICATION ENVIRONMENT**  
[54] **SYSTEME ET PROCEDE DE MIGRATION PAR LOTS ET PAR ORDONNANCEUR DANS UNE MIGRATION D'ENVIRONNEMENT D'APPLICATION**  
[72] PAL, CHIRODIP, IN  
[72] GANAPATHI, NATARAJAN, IN  
[72] PADMANABAN, MEENAKSHISUNDARAM, IN  
[71] HEXAWARE TECHNOLOGIES LIMITED, IN  
[85] 2023-12-28  
[86] 2021-09-09 (PCT/IB2021/058197)  
[87] (WO2023/007237)  
[30] IN (202121033779) 2021-07-27

[21] **3,224,367**  
[13] A1

[51] **Int.Cl. A01K 1/06 (2006.01) A01K 15/04 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR RESTRAINING THE LOWER LEGS AND FEET OF A LIVESTOCK ANIMAL**  
[54] **APPAREIL POUR RETENIR LES PATTES INFERIEURES ET LES PIEDS D'UN ANIMAL D'ELEVAGE**  
[72] MOLLHAGEN, JON DAVIS, US  
[71] MOLLHAGEN, JON DAVIS, US  
[85] 2023-12-28  
[86] 2022-07-12 (PCT/US2022/036838)  
[87] (WO2023/287801)  
[30] US (63/220,853) 2021-07-12

[21] **3,224,368**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2023.01) G06F 40/40 (2020.01) G06Q 30/02 (2023.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR PROCESSING TASKS DELEGATED TO A TASK FACILITATION SERVICE**  
[54] **SYSTEMES ET PROCEDES DE TRAITEMENT DE TACHES DELEGUEES A UN SERVICE DE FACILITATION DE TACHE**  
[72] MATSUOKA, YOKY, US  
[72] VISWANATHAN, NITIN, US  
[72] LIU, LINGYUN, US  
[72] DEMING, BENJAMIN, US  
[72] PATERSON, SEAN, US  
[72] VAN DER LINDEN, GWENDOLYN W., US  
[72] BEAULIEU, MALIA, US  
[71] YOHANA LLC, US  
[85] 2023-12-28  
[86] 2022-09-07 (PCT/US2022/076004)  
[87] (WO2023/039388)  
[30] US (63/241,136) 2021-09-07

[21] **3,224,369**  
[13] A1

[51] **Int.Cl. C12N 9/22 (2006.01) C12N 15/113 (2010.01) C12N 15/62 (2006.01) C12N 15/90 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR MYOSIN HEAVY CHAIN BASE EDITING**  
[54] **COMPOSITIONS ET PROCEDES D'EDITION DE BASE DE CHAINE LOURDE DE LA MYOSINE**  
[72] OLSON, ERIC N., US  
[72] BASSEL-DUBY, RHONDA, US  
[72] CHAI, ANDREAS, US  
[71] THE BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM, US  
[85] 2023-12-28  
[86] 2022-07-01 (PCT/US2022/073386)  
[87] (WO2023/279106)  
[30] US (63/217,618) 2021-07-01  
[30] US (63/218,221) 2021-07-02

[21] **3,224,370**  
[13] A1

[51] **Int.Cl. H04N 19/70 (2014.01) H04N 19/132 (2014.01) H04N 19/184 (2014.01) H04N 19/423 (2014.01) H04N 19/44 (2014.01)**  
[25] EN  
[54] **RESIDUAL AND COEFFICIENTS CODING FOR VIDEO CODING**  
[54] **CODAGE DE RESIDU ET DE COEFFICIENTS POUR UN CODAGE VIDEO**  
[72] JHU, HONG-JHENG, US  
[72] XIU, XIAOYU, US  
[72] CHEN, YI-WEN, US  
[72] CHEN, WEI, US  
[72] KUO, CHE-WEI, US  
[72] YAN, NING, US  
[72] WANG, XIANGLIN, US  
[72] YU, BING, CN  
[71] BEIJING DAJIA INTERNET INFORMATION TECHNOLOGY CO., LTD., CN  
[85] 2023-12-28  
[86] 2022-07-08 (PCT/US2022/036585)  
[87] (WO2023/283463)  
[30] US (63/220,380) 2021-07-09

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[21] **3,224,371**  
[13] A1

[51] **Int.Cl. A01M 7/00 (2006.01)**  
[25] EN  
[54] **VALVE CONTROL SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES DE COMMANDE DE VANNE**  
[72] PREHEIM, JOHN D., US  
[72] KOCER, JARED ERNEST, US  
[71] RAVEN INDUSTRIES, INC., US  
[85] 2023-12-28  
[86] 2022-06-28 (PCT/US2022/073224)  
[87] (WO2023/278998)  
[30] US (63/215,733) 2021-06-28

[21] **3,224,372**  
[13] A1

[51] **Int.Cl. C09D 7/20 (2018.01) C05G 3/70 (2020.01) B01J 2/30 (2006.01) C09D 193/04 (2006.01)**  
[25] EN  
[54] **ROSIN-BASED SUSTAINABLE DUST, CAKING, AND MOISTURE CONTROL COATINGS**  
[54] **REVETEMENTS DE PROTECTION CONTRE LA POUSSIERE, L'AGGLOMERATION ET L'HUMIDITE DURABLES A BASE DE COLOPHANE**  
[72] FERNANDEZ, JOSE, US  
[72] MOORE, LUCAS R., US  
[72] WILLIAMS, PAUL A., US  
[72] KONECKI, CHRISTINA, US  
[71] ARMAZ PRODUCTS INC., US  
[85] 2023-12-28  
[86] 2022-06-16 (PCT/US2022/033700)  
[87] (WO2023/278162)  
[30] US (63/216,060) 2021-06-29

[21] **3,224,374**  
[13] A1

[51] **Int.Cl. C07K 14/725 (2006.01) C07K 16/28 (2006.01) C07K 16/30 (2006.01)**  
[25] EN  
[54] **IMMUNE CELLS ENGINEERED TO PROMOTE THANOTRANSMISSION AND USES THEREOF**  
[54] **CELLULES IMMUNITAIRES MODIFIEES POUR FAVORISER LA THANOTRANSMISSION DE PHENYLETHANOLAMINES ET LEURS UTILISATIONS**  
[72] SCHMIDT, DARBY RYE, US  
[72] NAGARAJAN, NIRANJANA ADITI, US  
[72] KAISER, WILLIAM JOSEPH, US  
[72] GOUGH, PETER JOSEPH, US  
[72] DHAKAL, SABIN, US  
[72] HUBAUD, ALEXIS BENOIT, US  
[71] FLAGSHIP PIONEERING INNOVATIONS V, INC., US  
[85] 2023-12-28  
[86] 2022-06-29 (PCT/US2022/035612)  
[87] (WO2023/278641)  
[30] US (63/216,505) 2021-06-29  
[30] US (63/308,195) 2022-02-09

[21] **3,224,376**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) C07K 14/47 (2006.01)**  
[25] EN  
[54] **INTERLEUKIN-1 ALPHA CHIMERIC PROTEIN**  
[54] **PROTEINE CHIMERIQUE D'INTERLEUKINE-1 ALPHA**  
[72] KLEY, NIKOLAI, US  
[72] DEPLA, ERIK, BE  
[72] WAUMAN, JORIS, BE  
[72] NAKUCI, ENKELEDA, US  
[72] HO, YEN-CHING, US  
[72] KLEY, ALEXANDER LEE, US  
[71] ORIONIS BIOSCIENCES, INC., US  
[71] ORIONIS BIOSCIENCES BV, BE  
[85] 2023-12-28  
[86] 2022-07-08 (PCT/US2022/073559)  
[87] (WO2023/283638)  
[30] US (63/219,475) 2021-07-08  
[30] US (63/246,875) 2021-09-22

[21] **3,224,379**  
[13] A1

[51] **Int.Cl. B01D 61/02 (2006.01) B01D 61/14 (2006.01) B01D 61/16 (2006.01) B01D 61/58 (2006.01) C02F 1/20 (2006.01) C02F 1/44 (2006.01) C02F 1/74 (2006.01) C02F 11/121 (2019.01)**  
[25] EN  
[54] **URINE AND WASTEWATER TREATMENT SYSTEM**  
[54] **SYSTEME DE TRAITEMENT DE L'URINE ET DES EAUX USEES**  
[72] YEE, SHANNON, US  
[72] RAVNDAL, KRISTIN, GB  
[72] DAVEY, CHRIS, GB  
[72] MCADAM, EWAN, GB  
[72] SHERMAN, KRISTINE, US  
[72] AZEVEDO, KYLE, US  
[72] GAYLO, RYAN, US  
[72] TURNER, TRAVIS, US  
[71] GEORGIA TECH RESEARCH CORPORATION, US  
[71] CRANFIELD UNIVERSITY, GB  
[85] 2023-12-28  
[86] 2022-07-15 (PCT/US2022/073816)  
[87] (WO2023/288330)  
[30] US (63/222,738) 2021-07-16

[21] **3,224,380**  
[13] A1

[51] **Int.Cl. A63F 13/54 (2014.01) A63F 13/47 (2014.01)**  
[25] EN  
[54] **COMPUTER-IMPLEMENTED SYSTEMS AND METHODS FOR CUTSCENE MANAGEMENT IN ELECTRONICALLY DISPLAYED GAMES**  
[54] **SYSTEMES ET PROCEDES MIS EN OEUVRE PAR ORDINATEUR DE GESTION DE SCENE CINEMATIQUE DANS DES JEUX AFFICHES ELECTRONIQUEMENT**  
[72] CONNELLY, PETER A., US  
[72] DORRIS, JAMES F., US  
[72] ROHMAN, KENNETH WILLIAM III, US  
[72] BELL, BRIAN FRANKLIN, US  
[72] ANDERSON, PETER, US  
[72] NESBITT, RONALD E., US  
[72] HADLEY, JESSICA, US  
[71] POARCH BAND OF CREEK INDIANS, DBA PCI GAMING AUTHORITY, US  
[85] 2023-12-28  
[86] 2022-08-30 (PCT/US2022/075710)  
[87] (WO2023/034835)  
[30] US (63/239,216) 2021-08-31

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[21] **3,224,382**  
[13] A1

[51] **Int.Cl. G16B 50/30 (2019.01) G16B 30/00 (2019.01) G16B 40/20 (2019.01)**

[25] EN

[54] **SELF-LEARNED BASE CALLER, TRAINED USING OLIGO SEQUENCES**

[54] **ORGANE D'APPEL DE BASE AUTO-APPRIIS, ENTRAINE A L'AIDE D'OLIGO-SEQUENCES**

[72] KIA, AMIRALI, US  
[72] DUTTA, ANINDITA, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-28  
[86] 2022-06-29 (PCT/US2022/035564)  
[87] (WO2023/278608)  
[30] US (63/216,404) 2021-06-29  
[30] US (63/216,419) 2021-06-29  
[30] US (17/830,287) 2022-06-01  
[30] US (17/830,316) 2022-06-01

[21] **3,224,387**  
[13] A1

[51] **Int.Cl. G16B 30/00 (2019.01) G16B 40/20 (2019.01) G16B 50/30 (2019.01)**

[25] EN

[54] **SELF-LEARNED BASE CALLER, TRAINED USING ORGANISM SEQUENCES**

[54] **APPELANT DE BASE AUTO-APPRIIS, ENTRAINE A L'AIDE DE SEQUENCES D'ORGANISMES**

[72] KIA, AMIRALI, US  
[72] DUTTA, ANINDITA, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-28  
[86] 2022-06-29 (PCT/US2022/035567)  
[87] (WO2023/278609)  
[30] US (63/216,404) 2021-06-29  
[30] US (63/216,419) 2021-06-29  
[30] US (17/830,287) 2022-06-01  
[30] US (17/830,316) 2022-06-01

[21] **3,224,390**  
[13] A1

[51] **Int.Cl. C12Q 1/689 (2018.01) G16H 50/20 (2018.01)**

[25] EN

[54] **ORAL SWAB-BASED TEST FOR THE DETECTION OF VARIOUS DISEASE STATES IN DOMESTIC CATS**

[54] **TEST BASE SUR ECOUVILLON ORAL POUR LA DETECTION DE DIVERS ETATS PATHOLOGIQUES CHEZ LES CHATS DOMESTIQUES**

[72] KAO, DAMIAN, US  
[72] MIHAYLOVA, YULIANA, US  
[71] BASEPAWS, US  
[85] 2023-12-28  
[86] 2022-07-14 (PCT/US2022/073735)  
[87] (WO2023/288273)  
[30] US (63/221,558) 2021-07-14  
[30] US (63/221,559) 2021-07-14

[21] **3,224,386**  
[13] A1

[51] **Int.Cl. B01D 53/86 (2006.01) B01J 23/46 (2006.01)**

[25] EN

[54] **METHOD OF DECOMPOSING NITROUS OXIDE AND APPARATUS FOR DECOMPOSING NITROUS OXIDE**

[54] **PROCEDE DE DECOMPOSITION D'OXYDE NITREUX ET DISPOSITIF DE DECOMPOSITION D'OXYDE NITREUX**

[72] ABEKAWA, HIROAKI, JP  
[72] SUZUKI, HITOMI, JP  
[71] SUMITOMO CHEMICAL COMPANY, LIMITED, JP  
[85] 2023-12-28  
[86] 2022-05-27 (PCT/JP2022/021707)  
[87] (WO2023/021806)  
[30] JP (2021-133128) 2021-08-18

[21] **3,224,388**  
[13] A1

[51] **Int.Cl. B65D 25/10 (2006.01) B65D 25/54 (2006.01)**

[25] EN

[54] **PRESSURE-BASED PACKAGING SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE D'EMBALLAGE A BASE DE PRESSION**

[72] CATALANO, ROBERT ANTHONY, US  
[71] THE SPEARHEAD GROUP, US  
[85] 2023-12-28  
[86] 2022-06-28 (PCT/US2022/035288)  
[87] (WO2023/278422)  
[30] US (17/360,635) 2021-06-28

[21] **3,224,393**  
[13] A1

[51] **Int.Cl. G16B 20/20 (2019.01) G16B 40/20 (2019.01)**

[25] EN

[54] **MACHINE-LEARNING MODEL FOR GENERATING CONFIDENCE CLASSIFICATIONS FOR GENOMIC COORDINATES**

[54] **MODELE D'APPRENTISSAGE AUTOMATIQUE POUR GENERER DES CLASSIFICATIONS DE CONFIANCE POUR DES COORDONNEES GENOMIQUES**

[72] BEKRITSKY, MITCHELL A, US  
[72] COLOMBO, CAMILLA, US  
[72] KASHEFHAGHIGHI, DORNA, US  
[72] PAUL, ROHAN, US  
[72] ZANARELLO, FABIO, US  
[72] DINCER, TEVFIK UMUT, US  
[72] JOHNSON, NATHAN HARWOOD, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-28  
[86] 2022-06-24 (PCT/US2022/073160)  
[87] (WO2023/278966)  
[30] US (63/216,382) 2021-06-29

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[21] **3,224,394**  
[13] A1

[51] **Int.Cl. C22B 9/10 (2006.01) C22B 1/02 (2006.01) C22B 5/02 (2006.01)**

[25] EN

[54] **METHOD FOR PRODUCING VALUABLE METAL**

[54] **PROCEDE DE PRODUCTION D'UN METAL VALORISABLE**

[72] YAMASHITA, YU, JP

[72] NAGAKURA, TOSHIHIKO, JP

[72] YABE, TAKAYUKI, JP

[71] SUMITOMO METAL MINING CO., LTD., JP

[85] 2023-12-28

[86] 2022-03-25 (PCT/JP2022/014650)

[87] (WO2023/286386)

[30] JP (2021-117996) 2021-07-16

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[21] **3,224,395**  
[13] A1

[51] **Int.Cl. A61B 10/00 (2006.01) G16H 50/20 (2018.01) A61B 5/20 (2006.01) C12Q 1/04 (2006.01) G06N 5/02 (2023.01) C12Q 1/6888 (2018.01) G16H 70/60 (2018.01)**

[25] EN

[54] **ORAL SWAB-BASED TEST FOR THE DETECTION OF VARIOUS DISEASE STATES IN DOMESTIC CATS**

[54] **TEST BASE SUR UN ECOUVILLON ORAL POUR LA DETECTION DE DIVERS ETATS PATHOLOGIQUES CHEZ LES CHATS DOMESTIQUES**

[72] KAO, DAMIAN, US

[72] MIHAYLOVA, YULIANA, US

[71] BASEPAWS, US

[85] 2023-12-28

[86] 2022-07-14 (PCT/US2022/073742)

[87] (WO2023/288279)

[30] US (63/221,559) 2021-07-14

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[21] **3,224,396**  
[13] A1

[51] **Int.Cl. G01N 33/50 (2006.01) A61K 38/20 (2006.01) A61P 15/06 (2006.01)**

[25] EN

[54] **MIGRATION OF HUMAN PERIPHERAL LEUKOCYTES IN RESPONSE TO CHEMOTACTIC FACTORS DURING PREGNANCY**

[54] **MIGRATION DE LEUCOCYTES PERIPHERIQUES HUMAINS EN REPONSE A DES FACTEURS CHIMIOTACTIQUES PENDANT LA GROSSESSE**

[72] OLSON, DAVID MARK, CA

[72] LEIMERT, KELYCIA BRYNN, CA

[72] ARENS-GUBBELS, JENNIFER ANNE, US

[72] LEE, HAN HYUNG, CA

[72] FANG, XIN, CA

[72] ANTUNES, TANIA GISSELLE RODEZNO, CA

[72] TAKEDA, JUN, JP

[71] THE GOVERNORS OF THE UNIVERSITY OF ALBERTA, CA

[85] 2023-12-28

[86] 2022-06-03 (PCT/CA2022/050888)

[87] (WO2023/272376)

[30] US (63/216,682) 2021-06-30

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[21] **3,224,398**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61P 37/06 (2006.01)**

[25] EN

[54] **ANTI-CD3 ANTIBODY AND USE THEREOF**

[54] **ANTICORPS ANTI-CD3 ET SON UTILISATION**

[72] WU, CUI, CN

[72] GAO, YONGJUAN, CN

[72] ZHOU, LI, CN

[72] DIAO, JIASHENG, CN

[72] MA, XINLU, CN

[72] DONG, ZHAO, CN

[72] LI, QIANG, CN

[71] AMPSOURCE BIOPHARMA SHANGHAI INC., CN

[85] 2023-12-28

[86] 2022-06-17 (PCT/CN2022/099345)

[87] (WO2023/273914)

[30] CN (202110752589.0) 2021-07-02

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[21] **3,224,399**  
[13] A1

[51] **Int.Cl. H04B 7/06 (2006.01) H04B 7/08 (2006.01)**

[25] EN

[54] **TECHNIQUES FOR PHASED ARRAY TERMINAL ANTENNA INSTALLATION**

[54] **TECHNIQUES POUR INSTALLATION D'ANTENNE A RESEAU A COMMANDE DE PHASE**

[72] DANKBERG, MARK D., US

[72] BUER, KENNETH V., US

[71] VIASAT INC., US

[85] 2023-12-28

[86] 2022-06-09 (PCT/US2022/032881)

[87] (WO2023/278120)

[30] US (63/216,513) 2021-06-29

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[21] **3,224,400**  
[13] A1

[51] **Int.Cl. C08L 95/00 (2006.01)**

[25] EN

[54] **USE OF ASPHALT COMPOSITION FOR WEATHERPROOFING APPLICATION**

[54] **UTILISATION D'UNE COMPOSITION D'ASPHALTE POUR APPLICATION D'IMPERMEABILISATION**

[72] MALONSON, BERNIE LEWIS, US

[72] SCHATZ, WALDEMAR, DE

[72] ORR, BRIAN, US

[71] BASF SE, DE

[85] 2023-12-28

[86] 2022-05-09 (PCT/EP2022/062394)

[87] (WO2023/274609)

[30] US (63/216,011) 2021-06-29

[30] EP (21196512.4) 2021-09-14

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[21] **3,224,401**  
[13] A1

[51] **Int.Cl. G06F 3/16 (2006.01) H04M 1/72427 (2021.01) H04L 65/1046 (2022.01) H04L 65/1063 (2022.01) H04L 67/54 (2022.01) H04L 67/564 (2022.01) H04M 3/527 (2006.01) H04M 1/72484 (2021.01)**

[25] EN

[54] **A CONVERSATIONAL INTERFACE AND METHOD FOR INTERACTION WITH COMMUNICATION DEVICES**

[54] **INTERFACE CONVERSATIONNELLE ET PROCEDE D'INTERACTION AVEC DES DISPOSITIFS DE COMMUNICATION**

[72] SHARMA, NIKHITA, US  
[72] SMETANA, JOSEPH R., US  
[72] FRUIN, DAVID J., US  
[72] GURBANI, VIJAY K., US  
[71] VAIL SYSTEMS, INC., US  
[85] 2023-12-28  
[86] 2022-10-20 (PCT/US2022/078430)  
[87] (WO2023/070032)  
[30] US (63/262,930) 2021-10-22

[21] **3,224,402**  
[13] A1

[51] **Int.Cl. G16B 40/10 (2019.01) C12Q 1/6869 (2018.01) G06V 30/00 (2022.01)**

[25] EN

[54] **SIGNAL-TO-NOISE-RATIO METRIC FOR DETERMINING NUCLEOTIDE-BASE CALLS AND BASE-CALL QUALITY**

[54] **METRIQUE DE RAPPORT SIGNAL-SUR-BRUIT POUR DETERMINER DES IDENTIFICATIONS DE BASES NUCLEOTIDIQUES ET QUALITE D'IDENTIFICATION DE BASES**

[72] OJARD, ERIC JON, US  
[72] UDPA, NITIN, US  
[72] KAGALWALLA, ABDE ALI, US  
[72] VIECELI, JOHN S., US  
[72] MEHIO, RAMI, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-28  
[86] 2022-06-02 (PCT/US2022/072737)  
[87] (WO2023/278927)  
[30] US (63/216,401) 2021-06-29

[21] **3,224,403**  
[13] A1

[51] **Int.Cl. H04B 7/06 (2006.01) H04B 17/29 (2015.01) H04B 17/345 (2015.01) H04B 17/391 (2015.01)**

[25] EN

[54] **COMMUNICATION PERFORMANCE MAPPING FOR PHASED ARRAY ANTENNAS**

[54] **MAPPAGE DE PERFORMANCE DE COMMUNICATION POUR ANTENNES RESEAU A COMMANDE DE PHASE**

[72] DANKBERG, MARK D., US  
[72] BUER, KENNETH V., US  
[71] VIASAT, INC., US  
[85] 2023-12-28  
[86] 2022-06-09 (PCT/US2022/032880)  
[87] (WO2023/278119)  
[30] US (63/216,507) 2021-06-29

[21] **3,224,404**  
[13] A1

[51] **Int.Cl. C22B 9/10 (2006.01) C22B 1/04 (2006.01) C22B 5/02 (2006.01) C22B 23/02 (2006.01)**

[25] EN

[54] **PRODUCTION METHOD FOR VALUABLE METALS**

[54] **PROCEDE DE PRODUCTION DE METAUX VALORISABLES**

[72] YAMASHITA, YU, JP  
[72] NAGAKURA, TOSHIHIKO, JP  
[72] HAGIO, TOMOYA, JP  
[71] SUMITOMO METAL MINING CO., LTD., JP  
[85] 2023-12-28  
[86] 2022-03-25 (PCT/JP2022/014653)  
[87] (WO2023/286387)  
[30] JP (2021-118175) 2021-07-16

[21] **3,224,405**  
[13] A1

[51] **Int.Cl. G01S 7/481 (2006.01) G01S 17/931 (2020.01) G02B 6/12 (2006.01) G02B 6/136 (2006.01)**

[25] EN

[54] **SILICON PHOTONICS DEVICE FOR LIDAR SENSOR AND METHOD FOR FABRICATION**

[54] **DISPOSITIF PHOTONIQUE EN SILICIUM POUR CAPTEUR LIDAR ET SON PROCEDE DE FABRICATION**

[72] LIN, SEN, US  
[72] MICHAELS, ANDREW STEIL, US  
[71] AURORA OPERATIONS, INC., US  
[85] 2023-12-28  
[86] 2022-11-18 (PCT/US2022/080186)  
[87] (WO2023/097175)  
[30] US (17/535,024) 2021-11-24  
[30] US (17/535,013) 2021-11-24

[21] **3,224,406**  
[13] A1

[51] **Int.Cl. C02F 11/121 (2019.01) C02F 11/128 (2019.01) B01D 29/35 (2006.01) B01D 29/90 (2006.01) E03D 11/11 (2006.01) E03D 5/014 (2006.01)**

[25] EN

[54] **HUMAN WASTE COLLECTION AND SEPARATION SYSTEM**

[54] **SYSTEME DE COLLECTE ET DE SEPARATION DE DECHETS HUMAINS**

[72] YEE, SHANNON, US  
[72] GRUENDL, HARALD, AT  
[72] SAMPL, GEORG, AT  
[72] LEON, OSCAR ESTRADA, AT  
[72] LEHMANN, ROLAND, CH  
[72] GLATTHARD, JANINE, CH  
[71] GEORGIA TECH RESEARCH CORPORATION, US  
[85] 2023-12-28  
[86] 2022-07-15 (PCT/US2022/037398)  
[87] (WO2023/214981)  
[30] US (63/338,998) 2022-05-06

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[21] **3,224,407**  
[13] A1

[51] **Int.Cl. H01P 5/12 (2006.01) H03F 3/60 (2006.01)**  
[25] EN  
[54] **SOLID-STATE DIRECT CAVITY COMBINER (DCC) TRANSMITTER SYSTEM FOR PROVIDING MEGAWATTS OF POWER**  
[54] **SYSTEME D'EMETTEUR A COMBINAISON A CAVITE DIRECT A SEMI-CONDUCTEURS (DCC) DESTINE A FOURNIR DES MEGAWATTS DE PUISSANCE**  
[72] GAUDREAU, MARCEL PIERRE JOSEPH, US  
[72] SHEEN, DANIEL, US  
[72] KINROSS-WRIGHT, JOHN, US  
[72] RODRIGUEZ, ADAM, US  
[72] NIELL, FREDERICK MARVIN, US  
[72] JOHNSON, ERIK G., US  
[71] DIVERSIFIED TECHNOLOGIES, INC., US  
[85] 2023-12-28  
[86] 2022-06-30 (PCT/US2022/035681)  
[87] (WO2023/278669)  
[30] US (63/216,583) 2021-06-30

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[21] **3,224,408**  
[13] A1

[51] **Int.Cl. A61K 35/12 (2015.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) C07K 14/705 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **DISCERNIBLE CELL SURFACE PROTEIN VARIANTS FOR USE IN CELL THERAPY**  
[54] **VARIANTS DE PROTEINE DE SURFACE CELLULAIRE DISCERNABLES DESTINES A ETRE UTILISES EN THERAPIE CELLULAIRE**  
[72] LEPORE, ROSALBA, CH  
[72] JEKER, LUKAS, CH  
[72] URLINGER, STEFANIE, DE  
[72] LANDMANN, EMMANUELLE, CH  
[72] SINOPOLI, ALESSANDRO, FR  
[72] WIEDERKEHR, AMELIE, FR  
[72] DEVAUX, ANNA, FR  
[72] CAMUS, ANNA, CH  
[72] HAYDN, ANNA, CH  
[72] MATTER-MARONE, ROMINA, CH  
[71] UNIVERSITAT BASEL, CH  
[71] CIMEIO THERAPEUTICS AG, CH  
[85] 2023-12-28  
[86] 2022-08-05 (PCT/EP2022/072168)  
[87] (WO2023/012367)  
[30] EP (21306100.5) 2021-08-06  
[30] EP (22158991.4) 2022-02-25

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[21] **3,224,410**  
[13] A1

[51] **Int.Cl. C12Q 1/6827 (2018.01) C12Q 1/6858 (2018.01)**  
[25] EN  
[54] **A PRIMER**  
[54] **AMORCE**  
[72] ERIKSEN, HENRIK, NO  
[72] ERIKSEN, JON AMUND, NO  
[71] HUBRO THERAPEUTICS AS, NO  
[85] 2023-12-28  
[86] 2022-07-11 (PCT/EP2022/069276)  
[87] (WO2023/281117)  
[30] EP (21184877.5) 2021-07-09  
[30] GB (2205105.6) 2022-04-07

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[21] **3,224,413**  
[13] A1

[25] EN  
[54] **METHODS FOR PRESERVING PLANT MATTER**  
[54] **PROCEDES DE CONSERVATION DE MATIERE VEGETALE**  
[72] NITZAN, BOAZ, IL  
[72] ENGLANDER, JOSEPH, IL  
[71] NOVAGREEN TECHNOLOGIES LTD., IL  
[85] 2023-12-28  
[86] 2022-07-05 (PCT/IL2022/050717)  
[87] (WO2023/281501)  
[30] US (63/218,514) 2021-07-06

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[21] **3,224,414**  
[13] A1

[51] **Int.Cl. G08B 21/04 (2006.01)**  
[25] EN  
[54] **MONITORING SYSTEM FOR CONGREGATE CARE FACILITIES**  
[54] **SYSTEME DE SURVEILLANCE POUR INSTALLATIONS DE SOINS COLLECTIFS**  
[72] HARDY, JEFFERY LES, CA  
[72] CALDERONE, COLTON, CA  
[71] LIFEGUARD DIGITAL HEALTH INC., CA  
[85] 2023-12-28  
[86] 2022-06-28 (PCT/CA2022/051032)  
[87] (WO2023/000080)  
[30] US (63/215,734) 2021-06-28

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[21] **3,224,417**  
[13] A1

[51] **Int.Cl. C08J 7/04 (2020.01)**  
[25] EN  
[54] **PROPYLENE TERPOLYMER AND HEAT SEAL FILMS MADE THEREFROM**  
[54] **TERPOLYMER DE PROPYLENE ET FILMS DE THERMOSCELLAGE FABRIQUES A PARTIR DUDIT TERPOLYMER DE PROPYLENE**  
[72] MA, ZHIRU, US  
[72] REGO, JOSE MANUEL, US  
[72] REEDS, JONATHAN, US  
[72] CAI, PING, US  
[71] W. R. GRACE & CO.-CONN., US  
[85] 2023-12-28  
[86] 2022-06-30 (PCT/US2022/035826)  
[87] (WO2023/278772)  
[30] US (63/218,156) 2021-07-02



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[21] **3,224,418**  
[13] A1

[51] **Int.Cl. F42B 10/38 (2006.01) F42B 10/40 (2006.01) F42B 30/02 (2006.01)**

[25] EN

[54] **BULLET SYSTEM WITH MULTIPLE DRAG-REDUCING CAPABILITIES**

[54] **SYSTEME DE BALLE AYANT DE MULTIPLES CAPACITES DE REDUCTION DE TRAINEE**

[72] BINEK, ANTHONY A., US

[71] NEXT DYNAMICS CORP., CA

[85] 2023-12-28

[86] 2022-06-29 (PCT/CA2022/051037)

[87] (WO2023/272387)

[30] US (63/202,898) 2021-06-29

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[21] **3,224,419**  
[13] A1

[51] **Int.Cl. F25B 41/20 (2021.01) F25B 5/02 (2006.01)**

[25] EN

[54] **REFRIGERATION SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE DE REFRIGERATION**

[72] GROENEWALD, WYNAND, ZA

[71] MBGSHOLDINGS PTY LTD, AU

[85] 2023-12-28

[86] 2022-07-06 (PCT/AU2022/050704)

[87] (WO2023/279157)

[30] AU (2021902052) 2021-07-06

[30] AU (2022900444) 2022-02-25

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[21] **3,224,424**  
[13] A1

[51] **Int.Cl. G06V 10/34 (2022.01) G06T 15/20 (2011.01)**

[25] EN

[54] **METHOD FOR CALCULATING ONE OR MORE ISOVISTS OF A PHYSICAL OR EXTENDED REALITY ENVIRONMENT**

[54] **PROCEDE DE CALCUL D'UNE OU PLUSIEURS ISOVISTS D'UN ENVIRONNEMENT PHYSIQUE OU DE REALITE ETENDUE**

[72] PIGA, BARBARA ESTER ADELE, IT

[72] STANCATO, GABRIELE, IT

[72] BOFFI, MARCO, IT

[72] RAINISIO, NICOLA, IT

[72] CERAVOLO, PAOLO, IT

[72] MARQUES TAVARES, GABRIEL, IT

[71] POLITECNICO DI MILANO, IT

[71] UNIVERSITA' DEGLI STUDI DI MILANO, IT

[85] 2023-12-28

[86] 2022-06-23 (PCT/IB2022/055823)

[87] (WO2023/275679)

[30] IT (102021000017168) 2021-06-30

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[21] **3,224,425**  
[13] A1

[51] **Int.Cl. G16B 30/00 (2019.01)**

[25] EN

[54] **SINGLE-PASS METHYLATION MAPPING**

[54] **CARTOGRAPHIE DE LA METHYLATION A PASSAGE UNIQUE**

[72] RODDEY, JOHN COOPER, US

[72] LEVY, ASAF, US

[72] WANG, MENGCHI, US

[72] BIRNBAUM, ADAM, US

[72] TSUI, BRIAN Y., US

[72] RUEHLE, MICHAEL, US

[71] ILLUMINA, INC., US

[85] 2023-12-28

[86] 2023-03-14 (PCT/US2023/064302)

[87] (WO2023/178080)

[30] US (63/320,110) 2022-03-15

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[21] **3,224,426**  
[13] A1

[51] **Int.Cl. A61K 31/404 (2006.01)**

[25] EN

[54] **CRYSTALLINE HYDROCHLORIDE SALTS OF SUBSTITUTED TRYPTAMINES**

[54] **SELS DE CHLORHYDRATE CRISTALLINS DE TRYPTAMINES SUBSTITUEES**

[72] CHADEAYNE, ANDREW R., US

[71] CAAMTECH, INC., US

[85] 2023-12-28

[86] 2022-06-28 (PCT/US2022/035262)

[87] (WO2023/278403)

[30] US (63/216,159) 2021-06-29

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[21] **3,224,428**  
[13] A1

[51] **Int.Cl. E04G 1/34 (2006.01) E04G 5/02 (2006.01) E04G 5/06 (2006.01) E04G 7/30 (2006.01) E04G 7/34 (2006.01) E04G 1/15 (2006.01)**

[25] FR

[54] **SCAFFOLDING TOWER AND SCAFFOLD AND USE OF THE TOWER AND SCAFFOLD**

[54] **TOUR D'ECHAFAUDAGE ET ECHAFAUDAGE ET UTILISATION DE LA TOUR ET DE L'ECHAFAUDAGE**

[72] HUMBERSOT, MATTHIEU, FR

[72] HERVE, PIERRICK, FR

[72] HERVE, NICOLAS, FR

[71] PILION, FR

[85] 2023-12-28

[86] 2022-07-05 (PCT/FR2022/051347)

[87] (WO2023/281211)

[30] FR (FR2107270) 2021-07-05

[30] FR (FR2107271) 2021-07-05

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[21] **3,224,429**  
[13] A1

[51] **Int.Cl. A61C 7/36 (2006.01)**  
[25] EN  
[54] **MAXILLARY AND MANDIBULAR DEVICES THAT INCREASE THE SMALLEST CONCENTRIC AIRWAY CROSS-SECTIONAL AREA OF A USER FOR IMPROVEMENTS DURING PHYSICAL ACTIVITIES**  
[54] **DISPOSITIFS MAXILLAIRES ET MANDIBULAIRES QUI AUGMENTENT LA PLUS PETITE SURFACE DE SECTION TRANSVERSALE CONCENTRIQUE DES VOIES RESPIRATOIRES D'UN UTILISATEUR POUR DES AMELIORATIONS PENDANT LES ACTIVITES PHYSIQUE**  
[72] GHUGE, RAGHAVENDRA VITTHALRAO, US  
[71] SLEEP SOLUTIONS OF TEXAS, LLC, US  
[85] 2023-12-28  
[86] 2022-06-30 (PCT/US2022/073282)  
[87] (WO2023/279040)  
[30] US (17/366,649) 2021-07-02  
[30] US (17/366,702) 2021-07-02  
[30] US (17/366,421) 2021-07-02

[21] **3,224,431**  
[13] A1

[25] EN  
[54] **WEARABLE DEVICES FOR TREATING SLEEP APNEA, AND ASSOCIATED SYSTEMS AND METHODS**  
[54] **DISPOSITIFS POUVANT ETRE PORTES SUR SOI POUR TRAITER L'APNEE DU SOMMEIL ET SYSTEMES ET PROCEDES ASSOCIES**  
[72] O'CONNOR, RICHARD W., US  
[72] FAYRAM, TIMOTHY A., US  
[72] POTTS, DENNIS, US  
[72] PASPA, PAUL, US  
[72] RAUX, GUILLAUME, US  
[72] HERRON, DAVID, US  
[71] INVICTA MEDICAL, INC., US  
[85] 2023-12-28  
[86] 2022-06-28 (PCT/US2022/035281)  
[87] (WO2023/278416)  
[30] US (63/216,292) 2021-06-29

[21] **3,224,432**  
[13] A1

[25] EN  
[54] **ENGINEERED NODAVIRAL CARGO DELIVERY SYSTEMS**  
[54] **SYSTEMES DE DISTRIBUTION DE CHARGE NODAVIRALE MODIFIEE**  
[72] DHAR, ARUN, US  
[72] DHAR, ARJONEEL, US  
[72] ALENTON, ROD RUSSEL R., US  
[71] ARIZONA BOARD OF REGENTS ON BEHALF OF THE UNIVERSITY OF ARIZONA, US  
[85] 2023-12-28  
[86] 2022-06-30 (PCT/US2022/035858)  
[87] (WO2023/278797)  
[30] US (63/217,177) 2021-06-30

[21] **3,224,433**  
[13] A1

[51] **Int.Cl. H01L 29/786 (2006.01)**  
[25] EN  
[54] **THIN FILM SEMICONDUCTOR SWITCHING DEVICE**  
[54] **DISPOSITIF DE COMMUTATION A SEMI-CONDUCTEUR EN COUCHES MINCES**  
[72] BARLAGE, DOUGLAS W., CA  
[72] SHOUTE, LHING GEM, CA  
[72] CADIEN, KENNETH C., CA  
[72] MA, ALEX MUNNLICK, CA  
[72] MILBURN, ERIC WILSON, CA  
[71] ZINITE CORPORATION, CA  
[85] 2023-12-28  
[86] 2022-07-08 (PCT/IB2022/056349)  
[87] (WO2023/285936)  
[30] US (63/221,292) 2021-07-13

[21] **3,224,435**  
[13] A1

[51] **Int.Cl. E02D 3/12 (2006.01) E02D 5/36 (2006.01) E02D 5/46 (2006.01) E02D 17/13 (2006.01) E02F 3/20 (2006.01)**  
[25] EN  
[54] **METHOD FOR MANUFACTURING AN ELEMENT COMPRISING A GROUT ACTIVATION CYCLE**  
[54] **PROCEDE DE FABRICATION D'UN ELEMENT COMPRENANT UN CYCLE D'ACTIVATION D'UN COULIS**  
[72] JUSTINO, CHRISTOPHE, FR  
[71] SOLETANCHE FREYSSINET, FR  
[85] 2023-12-28  
[86] 2022-06-23 (PCT/EP2022/067279)  
[87] (WO2023/274853)  
[30] FR (FR2107053) 2021-06-30

[21] **3,224,436**  
[13] A1

[51] **Int.Cl. E21B 17/10 (2006.01) E21B 17/22 (2006.01)**  
[25] EN  
[54] **DRILL CUTTINGS AGITATOR**  
[54] **AGITATEUR DE DEBLAIS DE FORAGE**  
[72] SIMPSON, NEIL ANDREW ABERCROMBIE, GB  
[71] SIMPSON, NEIL ANDREW ABERCROMBIE, GB  
[85] 2023-12-28  
[86] 2022-07-04 (PCT/GB2022/051722)  
[87] (WO2023/281251)  
[30] GB (2109654.0) 2021-07-04

[21] **3,224,438**  
[13] A1

[25] EN  
[54] **TRANS-ACTIVATORS AND METHODS AND USE THEREOF**  
[54] **TRANS-ACTIVATEURS ET PROCEDES ET UTILISATION ASSOCIES**  
[72] TAIPALE, MIKKO JOONAS OSKARI, CA  
[72] ALERASOOL, NADER, US  
[72] LENG, HE, CA  
[71] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA  
[85] 2023-12-28  
[86] 2022-07-14 (PCT/CA2022/051100)  
[87] (WO2023/000081)  
[30] US (63/221,611) 2021-07-14

[21] **3,224,439**  
[13] A1

[25] EN  
[54] **AN ANGLED ILLUMINATION SYSTEM FOR MICROFLUIDIC DEVICES**  
[54] **SYSTEME D'ECLAIRAGE INCLINE POUR DISPOSITIFS MICROFLUIDIQUES**  
[72] SHEN, ZHONGWEI, US  
[72] HUKARI, KYLE WISDOM, US  
[72] CHEANG, KUM HON, US  
[71] FLUIDIGM CORPORATION, US  
[85] 2023-12-28  
[86] 2022-07-01 (PCT/US2022/035963)  
[87] (WO2023/278847)  
[30] US (63/217,955) 2021-07-02

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[21] **3,224,440**  
[13] A1

[51] **Int.Cl. A24B 15/14 (2006.01) A24D 1/20 (2020.01) A24B 15/16 (2020.01) A24B 15/42 (2006.01)**

[25] EN

[54] **THERMALLY-ENHANCED AEROSOL FORMING SUBSTRATE**

[54] **SUBSTRAT DE FORMATION D'AEROSOL THERMIQUEMENT AMELIORE**

[72] WAIRIMU, ESTHER, CH

[72] HUANG, HOXUE, CH

[71] PHILIP MORRIS PRODUCTS S.A., CH

[85] 2023-12-28

[86] 2022-07-07 (PCT/EP2022/068955)

[87] (WO2023/281000)

[30] EP (21184365.1) 2021-07-07

[30] EP (22178772.4) 2022-06-13

[21] **3,224,441**  
[13] A1

[25] FR

[54] **FACILITY AND METHOD FOR THE LIQUEFACTION OF HYDROGEN**

[54] **INSTALLATION ET PROCEDE DE LIQUEFACTION D'HYDROGENE.**

[72] GAERTNER, AXELLE, FR

[72] GUENEGO, BERTILLE, FR

[72] BARJHOUX, PIERRE, FR

[72] MARTIN, FLORIAN, FR

[71] L'AIR LIQUIDE SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, FR

[85] 2023-12-28

[86] 2022-06-17 (PCT/EP2022/066597)

[87] (WO2023/280549)

[30] FR (FR2107411) 2021-07-08

[21] **3,224,442**  
[13] A1

[51] **Int.Cl. C09K 8/528 (2006.01)**

[25] EN

[54] **SCALE INHIBITOR METHODS AND COMPOSITIONS IN SEVERE OPERATING CONDITIONS**

[54] **PROCEDES ET COMPOSITIONS D'INHIBITEUR D'ENTARTRAGE DANS DES CONDITIONS DE FONCTIONNEMENT DIFFICILES**

[72] LU, WEI, US

[72] RUAN, GEDENG, US

[72] BHANDARI, NARAYAN, US

[71] CHAMPIONX LLC, US

[85] 2023-12-28

[86] 2022-07-15 (PCT/US2022/037359)

[87] (WO2023/288093)

[30] US (63/222,124) 2021-07-15

[21] **3,224,444**  
[13] A1

[51] **Int.Cl. B62D 25/18 (2006.01)**

[25] FR

[54] **SPLASHGUARD DEVICE FOR A WHEELED VEHICLE AND ASSEMBLY COMPRISING SUCH A DEVICE**

[54] **DISPOSITIF DE PROTECTION ANTIPROJECTION POUR ENGIN ROULANT ET ENSEMBLE COMPRENANT UN TEL DISPOSITIF**

[72] REUS, PIERRE, FR

[71] R-PI, FR

[85] 2023-12-28

[86] 2022-06-21 (PCT/FR2022/051198)

[87] (WO2023/275455)

[30] FR (FR2107165) 2021-07-01

[21] **3,224,447**  
[13] A1

[51] **Int.Cl. C08G 69/48 (2006.01) C07D 213/38 (2006.01) C07D 233/64 (2006.01) C07D 401/12 (2006.01) C07D 403/12 (2006.01) C08F 8/42 (2006.01) C08F 20/36 (2006.01) C08F 20/38 (2006.01) C08F 20/60 (2006.01) C08G 69/08 (2006.01)**

[25] EN

[54] **METAL-CONTAINING POLYMERS FOR MASS CYTOMETRY**

[54] **POLYMERES CONTENANT DU METAL POUR LA CYTOMETRIE DE MASSE**

[72] WINNIK, MITCHELL A., CA

[72] WONG, EDMOND CHI NGAE, CA

[72] ZHANG, YEFENG, CA

[72] MAJONIS, DANIEL, CA

[72] LIU, PENG, CA

[71] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA

[71] STANDARD BIOTOOLS CANADA INC., CA

[85] 2023-12-28

[86] 2022-07-08 (PCT/CA2022/051073)

[87] (WO2023/279211)

[30] US (63/219,787) 2021-07-08

[30] US (63/359,182) 2022-07-07

[21] **3,224,448**  
[13] A1

[51] **Int.Cl. G06F 3/0481 (2022.01) G06F 3/0484 (2022.01)**

[25] EN

[54] **TECHNIQUES FOR HAPTICS COMMUNICATION**

[54] **TECHNIQUES DE COMMUNICATION HAPTIQUE**

[72] SALADA, MARK A., US

[71] DISTAL REALITY LLC, US

[85] 2023-12-28

[86] 2022-06-28 (PCT/US2022/035311)

[87] (WO2023/278442)

[30] US (63/215,907) 2021-06-28

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[21] **3,224,450**  
[13] A1

[51] **Int.Cl. G16H 50/20 (2018.01) G16H 10/60 (2018.01) G16H 40/20 (2018.01) A61B 5/1455 (2006.01)**

[25] EN

[54] **EMERGENCY PATIENT OBJECTIVE TRIAGE SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE DE TRIAGE OBJECTIF DE PATIENT AUX URGENCES**

[72] LEE, DONG KEON, KR

[71] SEOUL NATIONAL UNIVERSITY HOSPITAL, KR

[85] 2023-12-28

[86] 2022-06-28 (PCT/KR2022/009270)

[87] (WO2023/277550)

[30] KR (10-2021-0083997) 2021-06-28

[21] **3,224,451**  
[13] A1

[51] **Int.Cl. A24B 15/14 (2006.01) A24D 1/20 (2020.01) A24B 15/16 (2020.01) A24B 15/30 (2006.01) A24D 1/18 (2006.01)**

[25] EN

[54] **NOVEL AEROSOL-GENERATING SUBSTRATE COMPRISING OREGANUM SPECIES**

[54] **NOUVEAU SUBSTRAT DE GENERATION D'AEROSOL COMPRENANT L'ESPECE OREGANUM**

[72] ARNDT, DANIEL, CH

[72] CAMPANONI, PRISCA, CH

[71] PHILIP MORRIS PRODUCTS S.A., CH

[85] 2023-12-28

[86] 2022-07-14 (PCT/EP2022/069746)

[87] (WO2023/285597)

[30] EP (21186086.1) 2021-07-16

[21] **3,224,452**  
[13] A1

[51] **Int.Cl. H01L 23/535 (2006.01) H01L 29/772 (2006.01)**

[25] EN

[54] **ACTIVE VIA TROU D'INTERCONNEXION ACTIF**

[72] BARLAGE, DOUGLAS W., CA

[72] SHOUTE, LHING GEM, CA

[71] ZINITE CORPORATION, CA

[85] 2023-12-28

[86] 2022-07-11 (PCT/IB2022/056397)

[87] (WO2023/285951)

[30] US (63/221,292) 2021-07-13

[21] **3,224,453**  
[13] A1

[51] **Int.Cl. A23L 33/135 (2016.01) A61K 8/9722 (2017.01)**

[25] EN

[54] **A STRAIN OF CHLORELLA SOROKINIANA**

[54] **SOUCHE DE CHLORELLA SOROKINIANA**

[72] THRANE, SIDSEL KOGGERSBOL, DK

[72] NIELSEN, MICHAEL KRAG, DK

[71] ALIGA APS, DK

[85] 2023-12-28

[86] 2022-07-11 (PCT/EP2022/069351)

[87] (WO2023/285400)

[30] DK (PA 2021 70378) 2021-07-12

[30] DK (PA 2021 70631) 2021-12-17

[21] **3,224,454**  
[13] A1

[51] **Int.Cl. C08G 18/16 (2006.01) C08G 18/18 (2006.01) C08G 18/24 (2006.01) C08G 18/48 (2006.01) C08G 18/76 (2006.01) C08J 11/14 (2006.01)**

[25] EN

[54] **PRODUCTION OF PU FOAMS USING RECYCLED POLYOLS**

[54] **PRODUCTION DE MOUSSES DE PU A L'AIDE DE POLYOLS RECYCLES**

[72] HUBEL, ROLAND, DE

[72] TERHEIDEN, ANNEGRET, DE

[72] MUHLHAUS, FELIX, DE

[71] EVONIK OPERATIONS GMBH, DE

[85] 2023-12-28

[86] 2022-06-28 (PCT/EP2022/067697)

[87] (WO2023/275029)

[30] EP (21183451.0) 2021-07-02

[21] **3,224,455**  
[13] A1

[25] EN

[54] **A BROOM WITH A FINE DUST SWEEPING ELEMENT**

[54] **BALAI DOTE D'UN ELEMENT DE BALAYAGE DE POUSSIERE FINE**

[72] TYROLER, DAN, IL

[71] TYROLER LTD., IL

[85] 2023-12-28

[86] 2022-07-10 (PCT/IL2022/050741)

[87] (WO2023/286051)

[30] IL (284754) 2021-07-11

[21] **3,224,456**  
[13] A1

[51] **Int.Cl. C08L 75/04 (2006.01) C08K 5/5419 (2006.01) C08K 5/5425 (2006.01) C08G 18/18 (2006.01) C08G 18/20 (2006.01) C08G 18/22 (2006.01)**

[25] EN

[54] **PRODUCTION OF PU FOAMS USING RECYCLED POLYOLS**

[54] **PRODUCTION DE MOUSSES DE PU A L'AIDE DE POLYOLS RECYCLES**

[72] HUBEL, ROLAND, DE

[72] TERHEIDEN, ANNEGRET, DE

[72] MUHLHAUS, FELIX, DE

[71] EVONIK OPERATIONS GMBH, DE

[85] 2023-12-28

[86] 2022-06-28 (PCT/EP2022/067699)

[87] (WO2023/275031)

[30] EP (21183449.4) 2021-07-02

[21] **3,224,458**  
[13] A1

[51] **Int.Cl. B01D 1/00 (2006.01) B01D 3/42 (2006.01) G01N 25/08 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DETERMINING THE DISTILLATION CHARACTERISTICS OF PETROLEUM SAMPLES BY PARTIAL DISTILLATION**

[54] **SYSTEMES ET PROCEDES SERVANT A DETERMINER LES CARACTERISTIQUES DE DISTILLATION D'ECHANTILLONS DE PETROLE PAR DISTILLATION PARTIELLE**

[72] URVANTSAU, VIACHASLAU, FR

[72] PIGNOL, STEPHAN HENRI LEON, FR

[71] PETROLEUM ANALYZER COMPANY L.P., US

[85] 2023-12-28

[86] 2022-07-12 (PCT/US2022/073646)

[87] (WO2023/288224)

[30] US (63/221,281) 2021-07-13

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[21] **3,224,459**  
[13] A1

[51] **Int.Cl. A01N 43/00 (2006.01) A01N 59/00 (2006.01) C01B 17/04 (2006.01)**  
[25] EN  
[54] **A SOLID BIO-PESTICIDAL COMPOSITION COMPRISING OF ELEMENTAL SULPHUR AND AZADIRACHTIN**  
[54] **COMPOSITION BIOPESTICIDE SOLIDE COMPRENANT DU SOUFRE ELEMENTAIRE ET DE L'AZADIRACHTINE**  
[72] DOSHI, HITESHKUMAR ANILKANT, IN  
[72] PUTHENVEETIL KUNJUKRISHNA MENON, RAMDAS, IN  
[71] DOSHI, HITESHKUMAR ANILKANT, IN  
[71] PUTHENVEETIL KUNJUKRISHNA MENON, RAMDAS, IN  
[85] 2023-12-28  
[86] 2022-06-29 (PCT/IB2022/056065)  
[87] (WO2023/275789)  
[30] IN (202121029049) 2021-06-29

[21] **3,224,460**  
[13] A1

[51] **Int.Cl. G16H 50/20 (2018.01) G16H 10/60 (2018.01) G16H 40/20 (2018.01) A61B 5/1455 (2006.01)**  
[25] EN  
[54] **EMERGENCY PATIENT SEVERITY CLASSIFICATION SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE DE CLASSIFICATION DE LA GRAVITE D'UN PATIENT AUX URGENCES**  
[72] LEE, DONG KEON, KR  
[71] SEOUL NATIONAL UNIVERSITY HOSPITAL, KR  
[85] 2023-12-28  
[86] 2022-01-28 (PCT/KR2022/001666)  
[87] (WO2023/277293)  
[30] KR (10-2021-0083996) 2021-06-28

[21] **3,224,461**  
[13] A1

[51] **Int.Cl. G16B 20/00 (2019.01) C12Q 1/6827 (2018.01) C12Q 1/6886 (2018.01) G16B 30/00 (2019.01) C12Q 1/68 (2018.01)**  
[25] EN  
[54] **DETECTION OF SOMATIC MUTATIONAL SIGNATURES FROM WHOLE GENOME SEQUENCING OF CELL-FREE DNA**  
[54] **DETECTION DE SIGNATURES MUTATIONNELLES SOMATIQUES A PARTIR DU SEQUENCAGE DU GENOME ENTIER D'ADN ACELLULAIRE**  
[72] WAN, JONATHAN CHEE MING, US  
[72] DIAZ, JR. LUIS A., US  
[71] MEMORIAL SLOAN-KETTERING CANCER CENTER, US  
[71] MEMORIAL HOSPITAL FOR CANCER AND ALLIED DISEASES, US  
[71] SLOAN-KETTERING INSTITUTE FOR CANCER RESEARCH, US  
[85] 2023-12-28  
[86] 2022-06-29 (PCT/US2022/035449)  
[87] (WO2023/278524)  
[30] US (63/216,727) 2021-06-30

[21] **3,224,463**  
[13] A1

[51] **Int.Cl. H04L 12/46 (2006.01)**  
[25] EN  
[54] **DYNAMIC SOFT DUPLEX WITH MIXED MODE**  
[54] **DUPLEX SOUPLE DYNAMIQUE AVEC MODE MIXTE**  
[72] ULM, JOHN M., US  
[71] ARRIS ENTERPRISES LLC, US  
[85] 2023-12-28  
[86] 2022-06-30 (PCT/US2022/035769)  
[87] (WO2023/278730)  
[30] US (63/217,048) 2021-06-30  
[30] US (63/217,065) 2021-06-30

[21] **3,224,464**  
[13] A1

[51] **Int.Cl. E06B 9/322 (2006.01)**  
[25] EN  
[54] **WINDOW SHADE AND ACTUATING SYSTEM THEREOF**  
[54] **STORE DE FENETRE ET SON SYSTEME D'ACTIONNEMENT**  
[72] HUANG, CHUNG-CHEN, TW  
[72] LIU, KUAN-YU, TW  
[71] TEH YOR CO., LTD., TW  
[85] 2023-12-28  
[86] 2022-08-18 (PCT/US2022/075113)  
[87] (WO2023/049567)  
[30] US (63/246,987) 2021-09-22

[21] **3,224,465**  
[13] A1

[51] **Int.Cl. G01F 15/00 (2006.01)**  
[25] EN  
[54] **COST EFFECTIVE PRESSURE SENSORS FOR GAS METERS**  
[54] **CAPTEURS DE PRESSION ECONOMIQUES POUR DES COMPTEURS DE GAZ**  
[72] ILIEV, GEORGE, US  
[71] ITRON GLOBAL SARL, US  
[85] 2023-12-28  
[86] 2022-05-31 (PCT/US2022/031642)  
[87] (WO2023/014427)  
[30] US (17/395,287) 2021-08-05

[21] **3,224,466**  
[13] A1

[51] **Int.Cl. H01M 4/525 (2010.01)**  
[25] EN  
[54] **PARTICULATE MATERIAL, METHOD FOR ITS MANUFACTURE AND USE**  
[54] **MATERIAU PARTICULAIRE, SON PROCEDE DE FABRICATION ET SON UTILISATION**  
[72] LEE, ROBERT MATTHEW, DE  
[72] RIEWALD, FELIX FLORIAN, DE  
[72] KURZHALS, PHILIPP, DE  
[72] SOMMER, HEINO, DE  
[71] BASF SE, DE  
[85] 2023-12-28  
[86] 2022-06-15 (PCT/EP2022/066302)  
[87] (WO2023/274726)  
[30] EP (21183567.3) 2021-07-02

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[21] **3,224,467**  
[13] A1

[51] **Int.Cl. A61P 29/00 (2006.01) C07D 213/56 (2006.01) C07D 231/14 (2006.01) C07D 261/18 (2006.01) C07D 271/08 (2006.01) C07D 401/12 (2006.01) C07D 403/06 (2006.01) C07D 403/12 (2006.01) C07D 405/12 (2006.01) C07D 413/12 (2006.01)**

[25] EN

[54] **PHENYL ACETAMIDE BASED IL-17A MODULATORS AND USES THEREOF**

[54] **MODULATEURS D'IL-17A A BASE DE PHENYLE ACETAMIDE ET UTILISATIONS ASSOCIEES**

[72] REILLY, MAUREEN, US  
[72] FATHEREE, PAUL R., US  
[72] AQUINO, CLAUDIO, US  
[72] FREIDBERG, MICHAEL, US  
[72] CHURCH, TIMOTHY J., US  
[71] DICE ALPHA, INC., US  
[85] 2023-12-28  
[86] 2022-07-08 (PCT/US2022/036569)  
[87] (WO2023/283453)  
[30] US (63/220,404) 2021-07-09  
[30] US (63/257,896) 2021-10-20

[21] **3,224,468**  
[13] A1

[51] **Int.Cl. B29C 33/30 (2006.01) B29C 43/36 (2006.01) B30B 15/00 (2006.01) B30B 15/02 (2006.01) H01L 21/02 (2006.01)**

[25] EN

[54] **SINTERING PRESS**

[54] **PRESSE DE FRITTAGE**

[72] SCHIVALOCCHI, NICOLA, IT  
[71] AMX - AUTOMATRIX S.R.L., IT  
[85] 2023-12-28  
[86] 2021-12-28 (PCT/IB2021/062386)  
[87] (WO2023/285876)  
[30] IT (102021000018458) 2021-07-13

[21] **3,224,469**  
[13] A1

[51] **Int.Cl. B01D 61/02 (2006.01) B01D 61/08 (2006.01) C02F 1/44 (2006.01)**

[25] EN

[54] **MEMBRANES WITH CONTROLLED POROSITY FOR SERIAL FILTRATION**

[54] **MEMBRANES A POROSITE CONTROLEE POUR FILTRATION EN SERIE**

[72] LOKARE, OMKAR, US  
[72] STOVER, RICHARD, US  
[71] GRADIANT CORPORATION, US  
[85] 2023-12-28  
[86] 2022-07-01 (PCT/US2022/035979)  
[87] (WO2023/278853)  
[30] US (17/305,289) 2021-07-02

[21] **3,224,470**  
[13] A1

[51] **Int.Cl. H04L 9/08 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD OF VIRTUAL PRIVATE KEYS**

[54] **SYSTEME ET PROCEDE DE CLES PRIVEES VIRTUELLES**

[72] SPRAGGS, LYNN D., CA  
[72] SPRAGGS, ROBERT J., CA  
[71] SAFEMOON US, LLC, US  
[85] 2023-12-28  
[86] 2022-08-02 (PCT/US2022/039164)  
[87] (WO2023/278902)  
[30] US (63/216,842) 2021-06-30  
[30] US (17/852,923) 2022-06-29

[21] **3,224,471**  
[13] A1

[51] **Int.Cl. A61K 31/7088 (2006.01) C12N 15/113 (2010.01)**

[25] EN

[54] **ANTISENSE OLIGONUCLEOTIDE (ASO) GENE INHIBITION AND TREATMENT**

[54] **INHIBITION ET TRAITEMENT GENETIQUE PAR OLIGONUCLEOTIDE ANTISENS (ASO)**

[72] PRZYCHODZEN, BARTLOMIEJ, US  
[72] SMIESZEK, SANDRA, US  
[71] VANDA PHARMACEUTICALS INC., US  
[85] 2023-12-28  
[86] 2022-07-13 (PCT/US2022/073668)  
[87] (WO2023/288240)  
[30] US (63/222,336) 2021-07-15  
[30] US (63/224,362) 2021-07-21

[21] **3,224,472**  
[13] A1

[51] **Int.Cl. B01D 53/94 (2006.01) F01N 13/16 (2010.01) C11D 1/75 (2006.01) F01N 3/20 (2006.01)**

[25] EN

[54] **ADDITIF FOR CLEANING SCR SYSTEMS**

[54] **ADDITIF POUR LE NETTOYAGE DE SYSTEMES SCR**

[72] KNOTHIG, VOLKER, DE  
[72] LANGE, ALEX, DE  
[72] PAWLITSCHKEK, SERGEJ, DE  
[71] TUNAP GMBH & CO. KG, DE  
[85] 2023-12-28  
[86] 2022-07-04 (PCT/EP2022/068471)  
[87] (WO2023/280786)  
[30] EP (21183593.9) 2021-07-05

[21] **3,224,473**  
[13] A1

[51] **Int.Cl. G06Q 20/12 (2012.01) G06Q 20/34 (2012.01) G06Q 20/38 (2012.01) G06Q 30/06 (2023.01) H04L 67/025 (2022.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR INTRODUCTION OF A TRANSACTION MECHANISM TO AN E-COMMERCE WEBSITE WITHOUT NECESSITATION OF MULTI PARTY SYSTEMS INTEGRATION**

[54] **SYSTEME ET PROCEDE D'INTRODUCTION D'UN MECANISME DE TRANSACTION DANS UN SITE WEB DE COMMERCE ELECTRONIQUE SANS NECESSITER L'INTEGRATION DE SYSTEMES MULTIPARTITES**

[72] HOGG, JASON JUDE, US  
[71] RENT-A-CENTER WEST, INC., US  
[85] 2023-12-28  
[86] 2022-06-28 (PCT/US2022/035280)  
[87] (WO2023/278415)  
[30] US (17/365,516) 2021-07-01

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[21] **3,224,474**  
[13] A1

[51] **Int.Cl. H01M 4/505 (2010.01) H01M 4/525 (2010.01)**

[25] EN

[54] **BATTERY POSITIVE ELECTRODE MATERIAL AND APPLICATION THEREOF**

[54] **MATERIAU D'ELECTRODE POSITIVE DE BATTERIE ET SON APPLICATION**

[72] CHENG, BIN, CN  
[72] PAN, YI, CN  
[72] ZHUANG, MINGHAO, CN  
[72] DENG, RUOYI, CN  
[72] WU, PENGYU, CN  
[71] BYD COMPANY LIMITED, CN  
[85] 2023-12-28  
[86] 2022-09-23 (PCT/CN2022/120833)  
[87] (WO2023/046066)  
[30] CN (202111126603.2) 2021-09-24

[21] **3,224,475**  
[13] A1

[51] **Int.Cl. C08G 18/28 (2006.01) C08G 18/30 (2006.01) C08G 18/48 (2006.01)**

[25] EN

[54] **PRODUCTION OF RIGID POLYURETHANE OR POLYISOCYANURATE FOAM**

[54] **PRODUCTION DE MOUSSE DURE DE POLYURETHANE OU DE POLYISOCYANURATE**

[72] GLOS, MARTIN, DE  
[72] DIENDORF, JORG, DE  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2023-12-28  
[86] 2022-06-13 (PCT/EP2022/065981)  
[87] (WO2023/274699)  
[30] EP (21183094.8) 2021-07-01

[21] **3,224,476**  
[13] A1

[51] **Int.Cl. C07K 16/30 (2006.01) A61K 35/17 (2015.01)**

[25] EN

[54] **ANTIGEN-BINDING POLYPEPTIDE TARGETING B7H3 AND APPLICATION THEREOF**

[54] **POLYPEPTIDE DE LIAISON A L'ANTIGENE CIBLANT B7H3 ET SON APPLICATION**

[72] SHANG, XIAOYUN, CN  
[72] JIANG, HAIJUAN, CN  
[72] WANG, DAN, CN  
[72] LI, JIALU, CN  
[72] MA, SHAOWEN, CN  
[72] SHEN, HUI, CN  
[72] MA, LI, CN  
[72] CHEN, WEIJIE, CN  
[71] NINGBO T-MAXIMUM BIOPHARMACEUTICALS CO., LTD., CN  
[85] 2023-12-28  
[86] 2022-06-30 (PCT/CN2022/103070)  
[87] (WO2023/274384)  
[30] CN (202110749481.6) 2021-07-01

[21] **3,224,477**  
[13] A1

[51] **Int.Cl. C07J 5/00 (2006.01) A61K 31/573 (2006.01)**

[25] EN

[54] **MODIFIED GLUCOCORTICOIDS**

[54] **GLUCOCORTICOIDES MODIFIES**

[72] GHOSH, RITA, US  
[72] SLAGA, THOMAS J., US  
[72] GLADE, DANIEL, US  
[72] RAMIREZ, ANNA MANCHA, US  
[72] LIANG, HIYUN, US  
[71] BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, US  
[71] SLAGA, THOMAS J., US  
[71] GLADE, DANIEL, US  
[71] RAMIREZ, ANNA MANCHA, US  
[71] LIANG, HIYUN, US  
[85] 2023-12-28  
[86] 2022-06-27 (PCT/US2022/035055)  
[87] (WO2023/278289)  
[30] US (17/362,440) 2021-06-29

[21] **3,224,478**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 35/17 (2015.01) C07K 14/725 (2006.01)**

[25] EN

[54] **BCMA-DIRECTED CELLULAR IMMUNOTHERAPY COMPOSITIONS AND METHODS**

[54] **COMPOSITIONS ET METHODES D'IMMUNOTHERAPIE CELLULAIRE DIRIGEE CONTRE BCMA**

[72] RAJANGAM, KANYA LAKSHMI, US  
[72] TRAGER, JAMES BARNABY, US  
[72] GUO BUREN, LUXUAN, US  
[72] GUO, CHAO, US  
[72] LAZETIC, ALEXANDRA LEIDA LIANA, US  
[72] PATEL, NITINKUMAR LAKSHMANBHAI, US  
[71] NKARTA, INC., US  
[85] 2023-12-28  
[86] 2022-07-08 (PCT/US2022/073567)  
[87] (WO2023/288185)  
[30] US (63/220,842) 2021-07-12

[21] **3,224,479**  
[13] A1

[51] **Int.Cl. A01G 18/80 (2018.01) A01G 18/70 (2018.01) A23N 15/02 (2006.01)**

[25] EN

[54] **MUSHROOM PACKING APPARATUS**

[54] **APPAREIL D'EMBALLAGE DE CHAMPIGNONS**

[72] GARDINER, JOHN MICHAEL, CA  
[72] POSITANO, JARRED ALEXANDER, CA  
[72] HAMILTON, BAYDEN WILLIAM, CA  
[72] LOZA ALCALA, JOSE DE JESUS, CA  
[72] GARDINER, JOHN KYLE, CA  
[72] GARDINER, LAURA KIMBERLIN, CA  
[71] CONFIRMED AUTOMATION SYSTEMS INC., CA  
[85] 2023-12-28  
[86] 2021-07-22 (PCT/CA2021/051023)  
[87] (WO2023/000074)

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[21] **3,224,480**  
[13] A1

[51] **Int.Cl. H01M 4/62 (2006.01)**  
[25] EN  
[54] **POSITIVE ELECTRODE AND BATTERY**  
[54] **ELECTRODE POSITIVE ET BATTERIE**  
[72] YUAN, XIAOTAO, CN  
[72] XU, ZHAN, CN  
[72] BAO, CHUNXIAO, CN  
[72] GE, LIPING, CN  
[72] HE, KEFENG, CN  
[71] BYD COMPANY LIMITED, CN  
[85] 2023-12-28  
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[87] (WO2023/005988)  
[30] CN (202110858947.6) 2021-07-28

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[13] A1

[51] **Int.Cl. G16H 20/17 (2018.01)**  
[25] EN  
[54] **TECHNIQUES FOR PROCESSING WIRELESSLY BROADCAST PACKETS FROM A MEDICAL DEVICE WITH DOSE-RELATED DATA**  
[54] **TECHNIQUES DE TRAITEMENT DE PAQUETS DIFFUSES DE MANIERE SANS FIL A PARTIR D'UN DISPOSITIF MEDICAL CONTENANT DES DONNEES RELATIVES A UNE DOSE**  
[72] PARSHALL, JAMES HAROLD, US  
[72] WIESLER, ADAM NATHANIEL, US  
[71] ELI LILLY AND COMPANY, US  
[85] 2023-12-28  
[86] 2022-07-27 (PCT/US2022/038423)  
[87] (WO2023/009566)  
[30] US (63/203,762) 2021-07-30

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[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) A61K 38/17 (2006.01) A61P 21/00 (2006.01) C12N 15/86 (2006.01) C07K 14/47 (2006.01)**  
[25] EN  
[54] **ADENO-ASSOCIATED VIRUS PARTICLES AND METHODS OF USE THEREOF**  
[54] **PARTICULES DE VIRUS ADENO-ASSOCIES ET LEURS PROCEDES D'UTILISATION**  
[72] KASPAR, BRIAN, US  
[72] KASPAR, ALLAN, US  
[72] THOMSEN, GRETCHEN, US  
[71] INSMED INCORPORATED, US  
[85] 2023-12-28  
[86] 2022-08-05 (PCT/US2022/074622)  
[87] (WO2023/015304)  
[30] US (63/229,936) 2021-08-05  
[30] US (63/239,881) 2021-09-01

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[13] A1

[51] **Int.Cl. A24B 15/16 (2020.01) A24D 1/20 (2020.01) A24B 15/30 (2006.01)**  
[25] EN  
[54] **AEROSOL GENERATING COMPOSITION**  
[54] **COMPOSITION DE GENERATION D'AEROSOL**  
[72] CROSS, JENNIFER LOUISE, GB  
[72] MARTIN, STUART, GB  
[72] ABI AOUN, WALID, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-12-28  
[86] 2022-07-22 (PCT/EP2022/070656)  
[87] (WO2023/002031)  
[30] GB (2110571.3) 2021-07-22  
[30] GB (2114194.0) 2021-10-04

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[13] A1

[51] **Int.Cl. A24B 15/12 (2006.01) A24D 1/20 (2020.01) A24B 15/14 (2006.01) A24B 15/16 (2020.01) A24B 15/30 (2006.01)**  
[25] EN  
[54] **AEROSOL-GENERATING MATERIAL**  
[54] **MATERIAU DE GENERATION D'AEROSOL**  
[72] PHILLIPS, JEREMY, GB  
[72] WHITLEY, ALEXANDER, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-12-28  
[86] 2022-08-25 (PCT/GB2022/052183)  
[87] (WO2023/026048)  
[30] GB (2112173.6) 2021-08-25

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[13] A1

[51] **Int.Cl. H04N 13/368 (2018.01) H04N 13/30 (2018.01) H04N 13/346 (2018.01) H04N 13/361 (2018.01)**  
[25] EN  
[54] **A DISPLAY ASSEMBLY ARRANGED TO CREATE A PERCEPTION OF A THREE-DIMENSIONAL SCENE**  
[54] **ENSEMBLE D'AFFICHAGE AGENCE POUR CREER UNE PERCEPTION D'UNE SCENE TRIDIMENSIONNELLE**  
[72] DELL, BRUCE ROBERT, AU  
[71] AXIOM HOLOGRAPHICS PTY LTD, AU  
[85] 2023-12-28  
[86] 2022-06-28 (PCT/AU2022/050659)  
[87] (WO2023/272342)  
[30] AU (2021901966) 2021-06-29



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[13] A1

[51] **Int.Cl. B60T 13/66 (2006.01) B60T 13/68 (2006.01) B60T 15/02 (2006.01) B60T 17/22 (2006.01)**

[25] EN

[54] **ELECTRONIC AIR BRAKE SYSTEM AND METHOD OF PERFORMING A CONSIST SWAP WITHOUT A RISK OF ROLLAWAY**

[54] **SYSTEME DE FREINAGE PNEUMATIQUE ET PROCEDE DE REALISATION D'UN ECHANGE DE RAME SANS RISQUE DE ROULAGE**

[72] PARISIAN, MICHAEL L., US  
[72] MARGESON, SCOTT, US  
[71] NEW YORK AIR BRAKE LLC, US  
[85] 2023-12-28  
[86] 2022-07-01 (PCT/US2022/035904)  
[87] (WO2023/278820)  
[30] US (63/217,549) 2021-07-01

[21] **3,224,487**  
[13] A1

[51] **Int.Cl. A24F 40/485 (2020.01)**

[25] EN

[54] **AEROSOL PROVISION SYSTEM**

[54] **SYSTEME DE FOURNITURE D'AEROSOL**

[72] POTTER, MARK, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-12-28  
[86] 2022-07-06 (PCT/GB2022/051733)  
[87] (WO2023/002152)  
[30] GB (2110349.4) 2021-07-19

[21] **3,224,488**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) C07K 14/435 (2006.01) C12N 15/86 (2006.01)**

[25] EN

[54] **OPTIMIZED EXPRESSION CASSETTES FOR GENE THERAPY**

[54] **CASSETTES D'EXPRESSION OPTIMISEES POUR THERAPIE GENIQUE**

[72] ZHOU, HUANYU, US  
[72] REID, CHRISTOPHER A., US  
[71] TENAYA THERAPEUTICS, INC., US  
[85] 2023-12-28  
[86] 2022-07-08 (PCT/US2022/073574)  
[87] (WO2023/283649)  
[30] US (63/219,651) 2021-07-08

[21] **3,224,489**  
[13] A1

[51] **Int.Cl. A24F 40/44 (2020.01)**

[25] EN

[54] **AEROSOL PROVISION SYSTEM**

[54] **SYSTEME DE FOURNITURE D'AEROSOL**

[72] XIAO, ZHIHUANG, GB  
[72] POTTER, MARK, GB  
[72] HAINES, RICHARD, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-12-28  
[86] 2022-07-06 (PCT/GB2022/051736)  
[87] (WO2023/002155)  
[30] GB (2110311.4) 2021-07-19  
[30] GB (2110323.9) 2021-07-19  
[30] GB (2110324.7) 2021-07-19  
[30] GB (2110325.4) 2021-07-19

[21] **3,224,490**  
[13] A1

[51] **Int.Cl. A61K 38/00 (2006.01) A61K 38/16 (2006.01) A61K 38/26 (2006.01) A61K 38/27 (2006.01) C07K 1/00 (2006.01)**

[25] EN

[54] **MONOMERIC FUSION PEPTIDES AND METHOD OF USE THEREOF**

[54] **PEPTIDES DE FUSION MONOMERES ET LEUR METHODE D'UTILISATION**

[72] HSU, HENRY, US  
[72] OTVOS, LASZLO, US  
[71] ALLYSTA PHARMACEUTICALS, INC., US  
[85] 2023-12-28  
[86] 2022-06-30 (PCT/US2022/035699)  
[87] (WO2023/278683)  
[30] US (63/216,688) 2021-06-30

[21] **3,224,491**  
[13] A1

[51] **Int.Cl. A61F 5/01 (2006.01)**

[25] EN

[54] **ANKLE FOOT ORTHOSES AND METHOD OF MANUFACTURING**

[54] **ORTHESES CHEVILLE-PIED ET PROCEDE DE FABRICATION**

[72] THOR, ARNI, US  
[72] BORNHORST, ZOE, US  
[72] LI, PEI HSUAN, US  
[72] DIAZ, MARINA GURRIA, US  
[72] NAVARRETTE, EFRAIN, US  
[72] MCGEE, KELLY, US  
[71] THORWEAR, INC., US  
[85] 2023-12-28  
[86] 2022-06-29 (PCT/US2022/035611)  
[87] (WO2023/278640)  
[30] US (63/216,747) 2021-06-30

[21] **3,224,492**  
[13] A1

[51] **Int.Cl. C07D 491/22 (2006.01) A61K 47/68 (2017.01) A61K 31/4745 (2006.01) C07K 5/103 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **IMMUNOCONJUGATES AND METHODS**

[54] **IMMUNOCONJUGUES ET PROCEDES**

[72] HAN, XIAOJUN, US  
[72] ORR, SUVI TUULA MARJUKKA, US  
[72] BUNKER, KEVIN DUANE, US  
[72] HUANG, PETER QINHUA, US  
[72] FISCHER, KIMBERLEE, US  
[71] ZENO MANAGEMENT, INC., US  
[85] 2023-12-28  
[86] 2022-07-15 (PCT/US2022/073780)  
[87] (WO2023/004266)  
[30] US (63/203,347) 2021-07-19  
[30] US (63/267,471) 2022-02-02

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[51] <b>Int.Cl. C07D 487/02 (2006.01) C07D 487/04 (2006.01)</b>	[51] <b>Int.Cl. A61K 31/403 (2006.01) A61K 31/4162 (2006.01) A61K 31/4192 (2006.01) A61K 31/4245 (2006.01) A61K 31/437 (2006.01) A61K 31/4439 (2006.01) A61K 31/497 (2006.01) A61K 31/5377 (2006.01) A61K 31/538 (2006.01) A61K 31/5383 (2006.01) A61P 31/14 (2006.01) A61P 31/16 (2006.01) C07D 401/12 (2006.01) C07D 401/14 (2006.01) C07D 403/12 (2006.01) C07D 403/14 (2006.01) C07D 405/14 (2006.01) C07D 413/12 (2006.01) C07D 413/14 (2006.01) C07D 487/04 (2006.01) C07D 491/048 (2006.01) C07D 491/20 (2006.01) C07D 498/04 (2006.01)</b>	[51] <b>Int.Cl. A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 33/20 (2006.01) A61P 11/00 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>EXTERNAL ANTI-INFLAMMATORY COUPLING COMPOUND DRUG, AND PREPARATION METHOD THEREFOR AND USE THEREOF</b>	[54] <b>ANTI-VIRAL COMPOUNDS</b>	[54] <b>TREATMENT OF RESPIRATORY CONDITIONS</b>
[54] <b>ANTI-INFLAMMATOIRE EXTERNE COUPLANT UN COMPOSE ET UN MEDICAMENT, SON PROCEDE DE PREPARATION ET SON UTILISATION</b>	[54] <b>COMPOSES ANTI-VIRAUX</b>	[54] <b>TRAITEMENT D'AFFECTIONS RESPIRATOIRES</b>
[72] FENG, LICHUN, CN	[72] VANDYCK, KOEN, US	[72] DAKIN, MYLES, GB
[72] ZHANG, WEIJIANG, US	[72] BARDIOT, DOROTHEE ALICE MARIE-EVE, BE	[72] ASPINALL, RICHARD, GB
[72] WU, GUOLONG, CN	[72] RABOISSON, PIERRE JEAN-MARIE BERNARD, US	[72] KENNY, THOMAS, GB
[72] ZHANG, HAO, US	[72] BEIGELMAN, LEONID, US	[71] HYPO-STREAM LIMITED, GB
[72] LI, DAFENG, CN	[72] STOYCHEVA, ANTITSA DIMITROVA, US	[85] 2023-12-28
[71] COVAL BIOPHARMA (SHANGHAI) CO., LTD., CN	[72] BOLAND, SANDRO, BE	[86] 2022-07-08 (PCT/EP2022/069154)
[85] 2023-12-28	[72] MARCHAND, ARNAUD DIDIER MARIE, BE	[87] (WO2023/285318)
[86] 2022-07-13 (PCT/CN2022/105503)	[71] ALIGOS THERAPEUTICS, INC., US	[30] GB (2110146.4) 2021-07-14
[87] (WO2023/001045)	[71] KATHOLIEKE UNIVERSITEIT LEUVEN, BE	
[30] CN (202110834326.4) 2021-07-20	[85] 2023-12-28	
	[86] 2022-07-06 (PCT/US2022/036242)	
	[87] (WO2023/283256)	
	[30] US (63/203,135) 2021-07-09	
	[30] US (63/261,480) 2021-09-22	
	[30] US (63/264,212) 2021-11-17	
	[30] US (63/265,479) 2021-12-15	
	[30] US (63/268,052) 2022-02-15	
		[21] <b>3,224,496</b> [13] A1
		[51] <b>Int.Cl. D04B 1/10 (2006.01) D04B 1/24 (2006.01)</b>
		[25] EN
		[54] <b>FLATKNITTED COMPRESSION GARMENT</b>
		[54] <b>VETEMENT DE COMPRESSION A TRICOT PLAT</b>
		[72] BAUER, FRANK, CH
		[72] FLEISCHER, JULIA SABRINA, CH
		[71] SIGVARIS AG, CH
		[85] 2023-12-28
		[86] 2022-06-23 (PCT/EP2022/067095)
		[87] (WO2023/285094)
		[30] CH (070057/2021) 2021-07-15

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<p style="text-align: center;">[21] <b>3,224,498</b> [13] A1</p> <p>[51] <b>Int.Cl. A61K 8/37 (2006.01) A61K 8/81 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>COMPOSITIONS AND METHODS FOR IMPROVING THE PHYSICAL PROPERTIES OF HEALTHY AND DAMAGED HAIR</b></p> <p>[54] <b>COMPOSITIONS ET PROCEDES POUR AMELIORER LES PROPRIETES PHYSIQUES DE CHEVEUX SAINS ET DE CHEVEUX ENDOMMAGES</b></p> <p>[72] SCHOON, DOUGLAS DEAN, US</p> <p>[72] NORDSTROM, JAMES, US</p> <p>[72] WALLACE, EASLEY, US</p> <p>[72] SLAFF, HOWARD, US</p> <p>[71] KEVIN MURPHY GROUP PTY. LTD., AU</p> <p>[85] 2023-12-28</p> <p>[86] 2022-07-06 (PCT/IB2022/000392)</p> <p>[87] (WO2023/281310)</p> <p>[30] US (63/219,560) 2021-07-08</p>	<p style="text-align: center;">[21] <b>3,224,500</b> [13] A1</p> <p>[51] <b>Int.Cl. A61K 36/074 (2006.01) A61K 31/215 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>GANODERMA LUCIDUM SPORE OIL AND USE THEREOF IN PREPARATION OF ANTI-CANCER-RELATED FATIGUE MEDICAMENTS</b></p> <p>[54] <b>HUILE DE SPORES DE GANODERMA ET SON UTILISATION DANS LA PREPARATION D'UN MEDICAMENT CONTRE LA FATIGUE LIEE AU CANCER</b></p> <p>[72] LIU, JUYAN, CN</p> <p>[72] XU, WENDONG, CN</p> <p>[72] CAI, HONGFEI, CN</p> <p>[72] LI, JING, CN</p> <p>[72] YUAN, CHENG, CN</p> <p>[72] HAN, YAMING, CN</p> <p>[72] CAO, LIN, CN</p> <p>[72] TANG, SHUNZHI, CN</p> <p>[72] MAO, YUKANG, CN</p> <p>[72] WANG, GUOCAI, CN</p> <p>[72] ZHANG, QIN, CN</p> <p>[71] PHARMACEUTICAL CO.,LTD., CN</p> <p>[85] 2023-12-28</p> <p>[86] 2022-07-20 (PCT/CN2022/106599)</p> <p>[87] (WO2023/001161)</p> <p>[30] CN (202110830365.7) 2021-07-22</p>	<p style="text-align: center;">[21] <b>3,224,502</b> [13] A1</p> <p>[51] <b>Int.Cl. A01C 17/00 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>METHOD FOR ELECTRONIC WIND COMPENSATION OF A FERTILIZER SPREADER, CONTROL SYSTEM AND FERTILIZER SPREADER</b></p> <p>[54] <b>PROCEDE DE COMPENSATION ELECTRONIQUE DU VENT D'UN EPANDEUR D'ENGRAIS, SYSTEME DE COMMANDE ET EPANDEUR D'ENGRAIS</b></p> <p>[72] DREYER, JUSTUS, DE</p> <p>[72] GROSSE BRINKHAUS, ANDRE, DE</p> <p>[72] KIELHORN, ARND, DE</p> <p>[72] STROBEL-FROSCHLE, MARKUS, DE</p> <p>[72] RAHE, FLORIAN, DE</p> <p>[72] HEISEL, PER-CHRISTIAN, DE</p> <p>[71] AMAZONEN-WERKE H. DREYER SE &amp; CO. KG, DE</p> <p>[85] 2023-12-28</p> <p>[86] 2022-06-08 (PCT/EP2022/065454)</p> <p>[87] (WO2023/280496)</p> <p>[30] DE (10 2021 117 270.5) 2021-07-05</p>

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[21] **3,224,503**  
[13] A1

[51] **Int.Cl. H02J 3/32 (2006.01)**  
[25] EN  
[54] **ENERGY STORAGE POWER SUPPLY AND ENERGY STORAGE DEVICE**  
[54] **ALIMENTATION ELECTRIQUE DE STOCKAGE D'ENERGIE ET DISPOSITIF DE STOCKAGE D'ENERGIE**  
[72] LI, BIN, CN  
[72] XU, NAIQIAN, CN  
[72] KE, HENGZHAO, CN  
[71] ZHEJIANG LITHELI TECHNOLOGY CO., LTD., CN  
[85] 2023-12-29  
[86] 2022-06-29 (PCT/CN2022/102499)  
[87] (WO2023/274326)  
[30] CN (202110724976.3) 2021-06-29

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[21] **3,224,504**  
[13] A1

[51] **Int.Cl. H02J 3/32 (2006.01)**  
[25] EN  
[54] **ENERGY STORAGE DEVICE AND ENERGY STORAGE POWER SUPPLY THEREOF**  
[54] **DISPOSITIF DE STOCKAGE D'ENERGIE ET ALIMENTATION ELECTRIQUE DE STOCKAGE D'ENERGIE ASSOCIEE**  
[72] LI, BIN, CN  
[72] XU, NAIQIAN, CN  
[72] KE, HENGZHAO, CN  
[71] ZHEJIANG LITHELI TECHNOLOGY CO., LTD., CN  
[85] 2023-12-29  
[86] 2022-06-28 (PCT/CN2022/101914)  
[87] (WO2023/274231)  
[30] CN (202110724976.3) 2021-06-29  
[30] CN (202210224372.7) 2022-03-09

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[21] **3,224,505**  
[13] A1

[51] **Int.Cl. A61K 31/485 (2006.01) A61K 45/06 (2006.01) A61P 25/36 (2006.01)**  
[25] EN  
[54] **LOW-DOSE NALTREXOL AND USES THEREOF**  
[54] **NALTREXOL A FAIBLE DOSE ET UTILISATIONS DE CELUI-CI**  
[72] SADEE, WOLFGANG, US  
[71] AETHER THERAPEUTICS INC., US  
[85] 2023-12-29  
[86] 2022-06-24 (PCT/US2022/034828)  
[87] (WO2023/283062)  
[30] US (63/218,619) 2021-07-06

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[21] **3,224,519**  
[13] A1

[51] **Int.Cl. C07C 311/16 (2006.01) A61K 31/18 (2006.01) A61P 19/06 (2006.01) A61P 31/12 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR TREATING AND PREVENTING VIRAL INFECTIONS**  
[54] **COMPOSITIONS ET METHODES DE TRAITEMENT ET DE PREVENTION D'INFECTIONS VIRALES**  
[72] TRIPP, RALPH A., US  
[72] MURRAY, JACKELYN, US  
[72] KARUMANCHI, DEVI KALYAN, US  
[72] MARTIN, DAVID EUGENE, US  
[71] UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC., US  
[85] 2023-12-29  
[86] 2022-07-06 (PCT/US2022/073476)  
[87] (WO2023/283586)  
[30] US (63/203,026) 2021-07-06  
[30] US (63/349,364) 2022-06-06

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[21] **3,224,527**  
[13] A1

[25] EN  
[54] **A PHARMACEUTICAL COMPOSITION COMPRISING COMBINATION OF SGLT2 INHIBITOR AND DPP-IV INHIBITOR**  
[54] **COMPOSITION PHARMACEUTIQUE COMPRENANT UNE COMBINAISON D'UN INHIBITEUR DE SGLT2 ET D'UN INHIBITEUR DE DPP-IV**  
[72] SINGH, BALVIR, IN  
[72] SINGH, PUSHPENDRA, IN  
[72] KATHROTIA, DIVYESH, IN  
[72] PATEL, TEJAS, IN  
[71] UNISON PHARMACEUTICALS PVT. LTD., IN  
[85] 2023-12-29  
[86] 2022-07-24 (PCT/IN2022/050665)  
[87] (WO2023/007511)  
[30] IN (202121033510) 2021-07-26

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[21] **3,224,531**  
[13] A1

[51] **Int.Cl. A61K 31/7048 (2006.01) A61P 3/10 (2006.01) C07D 487/04 (2006.01)**  
[25] EN  
[54] **A PHARMACEUTICAL COMPOSITION COMPRISING COMBINATION OF SITAGLIPTIN AND EMPAGLIFLOZIN**  
[54] **COMPOSITION PHARMACEUTIQUE COMPRENANT UNE ASSOCIATION DE SITAGLIPTINE ET D'EMPAGLIFLOZINE**  
[72] SINGH, BALVIR, IN  
[72] SHINGALA, RAMESH, IN  
[72] PATEL, MILAP, IN  
[72] PATEL, RITESH, IN  
[71] UNISON PHARMACEUTICALS PVT. LTD., IN  
[85] 2023-12-29  
[86] 2022-10-10 (PCT/IN2022/050908)  
[87] (WO2023/062648)  
[30] IN (202121046486) 2021-10-12

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[21] **3,224,533**  
[13] A1

[51] **Int.Cl. A61K 31/352 (2006.01) A61K 31/4192 (2006.01) A61P 3/04 (2006.01) A61P 25/28 (2006.01) A61P 31/14 (2006.01) A61P 35/00 (2006.01) C07D 311/82 (2006.01) C07D 405/12 (2006.01) C07D 407/10 (2006.01) C07D 493/04 (2006.01)**

[25] EN

[54] **NOVEL COMPOUNDS DERIVED FROM SCHWEINFURTHINS G, E AND F**

[54] **NOUVEAUX COMPOSES ISSUS DES SCHWEINFURTHINES G, E ET F**

[72] ROUSSI, FANNY, FR  
[72] DESRAT, SANDY, FR  
[72] BIGNON, JEROME, FR  
[72] RAMPAL, CELINE, FR  
[72] KOVACS, DAVID, FR  
[72] ANTONNY, BRUNO, FR  
[72] BIGAY, JOELLE, FR  
[72] MESMIN, BRUNO, FR  
[72] POLIDORI, JOEL, FR  
[72] VIROLLE, THIERRY, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[71] INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE - INSERM, FR  
[71] UNIVERSITE COTE D'AZUR, FR  
[85] 2023-12-29  
[86] 2022-07-05 (PCT/EP2022/068525)  
[87] (WO2023/280817)  
[30] FR (FR2107302) 2021-07-06

[21] **3,224,534**  
[13] A1

[51] **Int.Cl. E21B 33/035 (2006.01) H02G 9/02 (2006.01)**

[25] EN

[54] **SUBSEA CABLE BUNDLE INSTALLATION**

[54] **INSTALLATION SOUS-MARINE A FAISCEAU DE CABLES**

[72] KVELLO, ODD, NO  
[72] STENEVIK, KARL ATLE, NO  
[71] EQUINOR ENERGY AS, NO  
[85] 2023-12-29  
[86] 2022-07-08 (PCT/NO2022/050171)  
[87] (WO2023/009008)  
[30] GB (2110844.4) 2021-07-28

[21] **3,224,536**  
[13] A1

[51] **Int.Cl. A61C 7/08 (2006.01) A61C 7/10 (2006.01) A61C 7/36 (2006.01)**

[25] EN

[54] **WIRE AND RAMPS IN SLEEP HABIT CORRECTOR**

[54] **FIL ET GOUTTIERES EMPLOYES DANS UN CORRECTEUR D'HABITUDES DE SOMMEIL**

[72] BERGERSEN, EARL O., US  
[71] ORTHO-TAIN, INC., US  
[85] 2023-12-29  
[86] 2021-06-29 (PCT/US2021/039577)  
[87] (WO2023/277880)  
[30] US (17/361,713) 2021-06-29

[21] **3,224,538**  
[13] A1

[51] **Int.Cl. B28B 1/54 (2006.01) C01B 25/20 (2006.01) C04B 35/653 (2006.01)**

[25] EN

[54] **METHOD FOR PREPARING CREMATION CRYSTALS USING CATALYST OBTAINED THROUGH REDUCTION OF PHOSPHORUS IN SKELETAL REMAINS**

[54] **PROCEDE DE PREPARATION DE CRISTAUX DE CREMATION UTILISANT UN CATALYSEUR OBTENU PAR REDUCTION DU PHOSPHORE DANS DES RESTES DE SQUELETTE**

[72] BOO, SE HO, KR  
[72] KO, MI KYUNG, KR  
[72] KIM, DAE HOON, KR  
[71] KO, MI KYUNG, KR  
[85] 2023-12-29  
[86] 2022-07-06 (PCT/KR2022/009722)  
[87] (WO2023/282606)  
[30] KR (10-2021-0089294) 2021-07-07

[21] **3,224,540**  
[13] A1

[51] **Int.Cl. C10G 1/08 (2006.01) B01J 8/12 (2006.01) C10G 1/10 (2006.01)**

[25] EN

[54] **APPARATUS AND PROCESSES FOR PYROLYSIS OF PLASTIC FEEDS**

[54] **APPAREIL ET PROCEDES DE PYROLYSE DE CHARGES DE MATIERES PLASTIQUES**

[72] BADIOLA, CARLO, US  
[72] WANG, SONG, US  
[72] KARRI, REDDY, US  
[72] FINDLAY, JOHN, US  
[71] E2 TECHNOLOGIES, LLC, US  
[85] 2023-12-29  
[86] 2022-06-29 (PCT/US2022/073246)  
[87] (WO2023/279016)  
[30] US (63/217,051) 2021-06-30  
[30] US (17/698,174) 2022-03-18

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[21] <b>3,224,545</b> [13] A1	[21] <b>3,224,547</b> [13] A1	[21] <b>3,224,551</b> [13] A1
[51] <b>Int.Cl. C07D 493/04 (2006.01) A61P 31/12 (2006.01)</b>	[51] <b>Int.Cl. A24F 40/53 (2020.01) A24F 40/10 (2020.01) A24F 40/40 (2020.01) A24F 40/42 (2020.01) A24F 40/60 (2020.01)</b>	[51] <b>Int.Cl. H04M 1/72418 (2021.01) A62C 3/02 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>COMPOUND OF THE 7A,8,9,10,11,11A-HEXAHYDRO-1H,7H-PYRANO[2,3-C]XANTHENE TYPE, METHOD OF PREPARATION THEREOF, INTERMEDIATES THEREOF AND THERAPEUTIC APPLICATIONS THEREOF</b>	[54] <b>REFILLING APPARATUS APPAREIL DE RECHARGE</b>	[54] <b>NETWORKS, SYSTEMS AND METHODS FOR ENHANCED WILDFIRE MITIGATION, PROTECTION AND SUPPRESSION</b>
[54] <b>COMPOSE DU TYPE 7A,8,9,10,11,11A-HEXAHYDRO-1H,7H-PYRANO[2,3-C]XANTHENE, SON PROCEDE DE PREPARATION, SES INTERMEDIAIRES ET SES APPLICATIONS THERAPEUTIQUES</b>	[54] <b>ROTHWELL, HOWARD, GB</b>	[54] <b>RESEAUX, SYSTEMES ET PROCEDES POUR DE MEILLEURES ATTENUATION, PROTECTION ET SUPPRESSION DE FEUX DE FORET</b>
[72] ROUSSI, FANNY, FR	[72] TRAN, MY-LINH, GB	[72] STATTER, HARRY A., US
[72] DESRAT, SANDY, FR	[72] POTTER, STEPHEN, GB	[71] HAS LLC, US
[72] JEZEQUEL, GWENAELLE, FR	[72] KERSEY, ROBERT, GB	[85] 2023-12-29
[72] BIGNON, JEROME, FR	[72] VINTOLA, TOMI, GB	[86] 2022-07-28 (PCT/US2022/038660)
[72] LITAUDON, MARC, FR	[71] NICOVENTURES TRADING LIMITED, GB	[87] (WO2023/009711)
[72] ANTONNY, BRUNO, FR	[85] 2023-12-29	[30] US (63/226,730) 2021-07-28
[72] BIGAY, JOELLE, FR	[86] 2022-07-01 (PCT/GB2022/051702)	
[72] MESMIN, BRUNO, FR	[87] (WO2023/281246)	
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR	[30] GB (2109697.9) 2021-07-05	
[71] INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE - INSERM, FR	[30] GB (2112578.6) 2021-09-03	
[71] UNIVERSITE NICE SOPHIA ANTIPOLIS (UNS), FR		
[85] 2023-12-29		
[86] 2022-07-04 (PCT/EP2022/068380)		
[87] (WO2023/280746)		
[30] FR (FR2107303) 2021-07-06		
	[21] <b>3,224,550</b> [13] A1	[21] <b>3,224,553</b> [13] A1
	[25] EN	[51] <b>Int.Cl. H04W 4/48 (2018.01) H04W 4/80 (2018.01)</b>
	[54] <b>EXTENDABLE URINARY CATHETER PRODUCTS</b>	[25] EN
	[54] <b>PRODUITS DE CATHETER URINAIRE EXTENSIBLE</b>	[54] <b>VEHICLE ACCESS AND FLEET MANAGEMENT CONTROL VIA BLUETOOTH BEACONS</b>
	[72] HENRY, JEROME A., US	[54] <b>COMMANDE D'ACCES DE VEHICULE ET DE GESTION DE FLOTTE PAR L'INTERMEDIAIRE DE BALISES BLUETOOTH</b>
	[72] NAUGHTON, VINCENT, US	[72] BOEHM, CHRISTOPHER A., US
	[72] MARTINS, LUIS, US	[72] BUNGEANU, MARIAN-ANDREI, RO
	[72] ARNOLD, WILLIAM K., US	[72] SELEA, RADU, RO
	[72] BIGGINS, DAMIEN, US	[72] STANCIU, ROBERT GABRIEL, RO
	[71] HOLLISTER INCORPORATED, US	[72] BUNGEANU, IONUT-GABRIEL, RO
	[85] 2023-12-29	[71] TEXTRON INC., US
	[86] 2022-06-27 (PCT/US2022/035157)	[85] 2023-12-29
	[87] (WO2023/278344)	[86] 2022-04-07 (PCT/US2022/023865)
	[30] US (63/218,148) 2021-07-02	[87] (WO2023/277984)
		[30] US (63/216,751) 2021-06-30
		[30] US (17/392,759) 2021-08-03

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[21] **3,224,557**  
[13] A1

[25] EN  
[54] **CHARGED PARTICLE  
DETECTOR**  
[54] **DETECTEUR DE PARTICULES  
CHARGEES**  
[72] MANGNUS, ALBERTUS VICTOR  
GERARDUS, NL  
[72] SLOT, ERWIN, NL  
[71] ASML NETHERLANDS B.V., NL  
[85] 2023-12-29  
[86] 2022-06-28 (PCT/EP2022/067788)  
[87] (WO2023/280644)  
[30] EP (21183811.5) 2021-07-05

[21] **3,224,558**  
[13] A1

[51] **Int.Cl. C07D 295/194 (2006.01) A61P  
31/10 (2006.01)**  
[25] EN  
[54] **APPLICATION OF POLYCYCLIC  
AROMATIC COMPOUND IN THE  
PREPARATION OF ANTIFUNGAL  
DRUGS**  
[54] **UTILISATION D'UN COMPOSE  
ARYLIQUE POLYCYCLIQUE  
DANS LA PREPARATION D'UN  
MEDICAMENT ANTIFONGIQUE**  
[72] ZHANG, HONG, CN  
[72] YE, WENCAI, CN  
[72] ZHANG, YISHAN, CN  
[72] HU, LIJUN, CN  
[72] LI, SHUIXIU, CN  
[72] ZHAO, YAJING, CN  
[72] TANG, CHUANYAN, CN  
[72] WENG, LUOBANG, CN  
[71] THE FIRST AFFILIATED HOSPITAL  
OF JINAN UNIVERSITY, CN  
[85] 2023-12-29  
[86] 2022-05-24 (PCT/CN2022/094745)  
[87] (WO2023/284420)  
[30] CN (202110803698.0) 2021-07-15

[21] **3,224,562**  
[13] A1

[51] **Int.Cl. G06F 16/242 (2019.01) G06F  
16/2455 (2019.01)**  
[25] EN  
[54] **MULTILAYERED GENERATION  
AND PROCESSING OF  
COMPUTER INSTRUCTIONS**  
[54] **GENERATION ET TRAITEMENT  
MULTICOUCHES  
D'INSTRUCTIONS  
INFORMATIQUES**  
[72] GUNDA, SIDDHARTHA, US  
[72] KETKAR, SANKET, US  
[72] BOSTON, KYLE MICHAEL, US  
[72] DONG, YU, US  
[72] CONRAD, PARKER ROUSE, US  
[71] PEOPLE CENTER, INC., US  
[85] 2023-12-29  
[86] 2022-06-29 (PCT/US2022/035513)  
[87] (WO2023/278568)  
[30] US (17/365,679) 2021-07-01  
[30] US (17/733,398) 2022-04-29

[21] **3,224,564**  
[13] A1

[51] **Int.Cl. A61P 31/04 (2006.01) C07K  
14/22 (2006.01)**  
[25] EN  
[54] **VACCINES TARGETING  
NEISSERIA GONORRHOEAE**  
[54] **VACCINS CIBLANT NEISSERIA  
GONORRHOEAE**  
[72] MATTSSON, ANDREAS HOLM, DK  
[72] STEENMANS, CHRISTIAN SKJODT,  
DK  
[71] EVAXION BIOTECH A/S, DK  
[85] 2023-12-29  
[86] 2022-07-05 (PCT/EP2022/068509)  
[87] (WO2023/280807)  
[30] EP (21183614.3) 2021-07-05

[21] **3,224,565**  
[13] A1

[51] **Int.Cl. G06F 16/25 (2019.01)**  
[25] EN  
[54] **MULTI-PLATFORM  
APPLICATION INTEGRATION &  
DATA SYNCHRONIZATION**  
[54] **INTEGRATION D'APPLICATION  
MULTIPLATEFORME ET  
SYNCHRONISATION DE  
DONNEES**  
[72] GUNDA, SIDDHARTHA, US  
[72] BOSTON, KYLE MICHAEL, US  
[72] BUSCAGLIA, DANIEL ROBERT, US  
[72] DHARMASENA, DILANKA  
THESHAN, US  
[72] REDDYPALLI, RUHITAJ, US  
[72] POCHEE, NILAY, US  
[71] PEOPLE CENTER, INC., US  
[85] 2023-12-29  
[86] 2022-06-29 (PCT/US2022/035507)  
[87] (WO2023/278563)  
[30] US (17/365,666) 2021-07-01

[21] **3,224,566**  
[13] A1

[51] **Int.Cl. A61B 17/66 (2006.01) A61B  
17/86 (2006.01)**  
[25] EN  
[54] **BONE FIXATION DEVICES,  
SYSTEMS, METHODS, AND  
INSTRUMENTS**  
[54] **DISPOSITIFS, SYSTEMES,  
PROCEDES ET INSTRUMENTS DE  
FIXATION OSSEUSE**  
[72] MANGONE, PETER, US  
[72] JOHNSON, COREY, US  
[72] FAUTH, ANDREW, US  
[72] HOFFMAN, BRUCE, US  
[72] HYER, RICHARD JUSTIN, US  
[71] RTG SCIENTIFIC, LLC, US  
[85] 2023-12-29  
[86] 2022-07-30 (PCT/US2022/038975)  
[87] (WO2023/018566)  
[30] US (63/231,429) 2021-08-10

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[21] **3,224,568**  
[13] A1

[51] **Int.Cl. G06T 7/50 (2017.01) G06T 7/13 (2017.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS OF IMAGE PROCESSING AND RENDERING THEREOF**  
[54] **SYSTEMES ET PROCEDES DE TRAITEMENT D'IMAGE ET DE RENDU DE CELLES-CI**  
[72] KAFKA, ADAM, CA  
[71] KAFKA, ADAM, CA  
[85] 2023-12-29  
[86] 2022-07-29 (PCT/CA2022/051166)  
[87] (WO2023/004512)  
[30] US (63/227,071) 2021-07-29  
[30] US (63/330,951) 2022-04-14

[21] **3,224,570**  
[13] A1

[51] **Int.Cl. B62D 63/02 (2006.01)**  
[25] EN  
[54] **VEHICLE CORNER MODULE AND METHODS FOR INSTALLATION THEREOF**  
[54] **MODULE D'ANGLE DE VEHICULE ET SES PROCEDES D'INSTALLATION**  
[72] KENION, TROY, GB  
[72] PRINCE, GAIL MARIE, GB  
[71] REE AUTOMOTIVE LTD., IL  
[85] 2023-12-29  
[86] 2022-07-19 (PCT/IB2022/056616)  
[87] (WO2023/007308)  
[30] GB (2110885.7) 2021-07-28  
[30] US (17/715,117) 2022-04-07

[21] **3,224,574**  
[13] A1

[25] EN  
[54] **INTEGRATED ANTI SHUFFLE BUMPER**  
[54] **PARE-CHOCS ANTI-SECOUSSES INTEGRE**  
[72] KUNTZE, CHRISTOPHER J., US  
[72] CHAAYA, RIAD, US  
[72] HUOTARI, KEIJO J., US  
[72] VARISTO, SCOTT, US  
[72] GEIGER, TREVOR, US  
[72] WIEDENBECK, DENNIS, US  
[71] MAGNA EXTERIORS INC., CA  
[85] 2023-12-29  
[86] 2022-06-29 (PCT/US2022/035487)  
[87] (WO2023/278549)  
[30] US (63/216,317) 2021-06-29

[21] **3,224,575**  
[13] A1

[51] **Int.Cl. C07K 14/605 (2006.01) A61K 47/68 (2017.01)**  
[25] EN  
[54] **FUSION PROTEIN AND APPLICATION THEREOF**  
[54] **PROTEINE DE FUSION ET SON APPLICATION**  
[72] XU, TING, CN  
[72] JIN, YUHAO, CN  
[72] WANG, XIAOXIAO, CN  
[72] WANG, PILIN, CN  
[72] GUO, KANGPING, CN  
[71] SUZHOU ALPHAMAB CO., LTD., CN  
[85] 2023-12-29  
[86] 2022-07-05 (PCT/CN2022/103777)  
[87] (WO2023/280133)  
[30] CN (202110764902.2) 2021-07-06  
[30] CN (202210721402.5) 2022-06-24

[21] **3,224,576**  
[13] A1

[51] **Int.Cl. H04W 16/14 (2009.01) H04W 16/28 (2009.01) H04W 72/04 (2023.01)**  
[25] EN  
[54] **COMMUNICATION CONTROL DEVICE, COMMUNICATION DEVICE, COMMUNICATION CONTROL METHOD, AND COMMUNICATION METHOD**  
[54] **DISPOSITIF DE COMMANDE DE COMMUNICATION, DISPOSITIF DE COMMUNICATION, PROCEDE DE COMMANDE DE COMMUNICATION ET PROCEDE DE COMMUNICATION**  
[72] FURUICHI, SHO, JP  
[72] KURIKI, HIROTO, JP  
[71] SONY CORPORATION, JP  
[85] 2023-12-29  
[86] 2022-07-01 (PCT/JP2022/026490)  
[87] (WO2023/026694)  
[30] JP (2021-135860) 2021-08-23

[21] **3,224,577**  
[13] A1

[51] **Int.Cl. C07C 37/82 (2006.01) C07C 39/11 (2006.01)**  
[25] EN  
[54] **PROCESS FOR OBTAINING CONCENTRATED HYDROXYTYROSOL (HT) EXTRACTS**  
[54] **PROCEDE POUR OBTENIR DES EXTRAITS CONCENTRES D'HYDROXYTYROSOL (HT)**  
[72] MANCILLA VILLALOBOS, RODRIGO ALEJANDRO, CL  
[72] ARAVENA CONTRERAS, RAUL IGNACIO, CL  
[71] AMERICAN BIOPROCESS LIMITADA, CL  
[85] 2023-12-29  
[86] 2022-07-12 (PCT/IB2022/056431)  
[87] (WO2023/285969)  
[30] CL (1885-2021) 2021-07-15

[21] **3,224,578**  
[13] A1

[51] **Int.Cl. B65D 41/17 (2006.01)**  
[25] EN  
[54] **A TAMPER-EVIDENT HOUSING BOITIER INVOLABLE**  
[72] NOVAK, MARIAN, SK  
[72] CURILA, VLADIMIR, SK  
[72] DONNELLY, DAVID, GB  
[71] CONVATEC LIMITED, GB  
[85] 2023-12-29  
[86] 2023-01-11 (PCT/GB2023/050049)  
[87] (WO2023/135419)  
[30] GB (2200304.0) 2022-01-12



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[21] **3,224,581**  
[13] A1

[51] **Int.Cl. A01N 1/02 (2006.01) F26B 5/06 (2006.01) G01N 1/42 (2006.01)**

[25] EN

[54] **DEVICE FOR VITRIFYING AND DELIVERING VITRIFIED BIOACTIVE AGENTS**

[54] **DISPOSITIF DE VITRIFICATION ET D'ADMINISTRATION D'AGENTS BIOACTIFS VITRIFIES**

[72] RATZLAFF, MARY, US

[72] MOHANTY, PRAVANSU, US

[72] WANG, ZHUORAN, US

[72] REDDY, ARUN, US

[72] BRONSART, LAURA, US

[71] UPKARA, INC., US

[85] 2023-12-29

[86] 2022-07-01 (PCT/US2022/035892)

[87] (WO2023/278815)

[30] US (63/217,460) 2021-07-01

[30] US (63/217,458) 2021-07-01

[21] **3,224,584**  
[13] A1

[51] **Int.Cl. D21H 17/56 (2006.01) C08F 226/06 (2006.01) D21H 17/37 (2006.01)**

[25] EN

[54] **N-VINYLLACTAM-CONTAINING POLYMERS FOR PAPERMAKING**

[54] **POLYMERES CONTENANT DU N-VINYLLACTAME POUR LA FABRICATION DE PAPIER**

[72] GU, QU-MING, US

[72] ABDALLAH, SUBOH, US

[72] BORKAR, SACHIN, US

[71] SOLENIS TECHNOLOGIES CAYMAN, L.P., CH

[85] 2023-12-29

[86] 2022-06-29 (PCT/US2022/073245)

[87] (WO2023/279015)

[30] US (63/202,903) 2021-06-29

[30] US (17/809,275) 2022-06-28

[21] **3,224,585**  
[13] A1

[51] **Int.Cl. A47J 31/00 (2006.01) A47J 31/06 (2006.01) A47J 31/44 (2006.01) A47J 43/046 (2006.01) A47J 43/07 (2006.01)**

[25] EN

[54] **LIQUID BREWING DEVICE**

[54] **DISPOSITIF D'INFUSION DE LIQUIDE**

[72] KIM, CHUNSHIK, US

[72] BRUNNER, TYLER, US

[72] WODKA, DANIEL, US

[71] INSTANT BRANDS HOLDINGS INC., US

[85] 2023-12-29

[86] 2022-06-23 (PCT/US2022/034652)

[87] (WO2023/278236)

[30] US (63/218,173) 2021-07-02

[30] US (63/288,223) 2021-12-10

[21] **3,224,586**  
[13] A1

[51] **Int.Cl. C40B 40/08 (2006.01) C07K 14/47 (2006.01) C07K 14/78 (2006.01)**

[25] EN

[54] **HUMAN FIBRONECTIN TYPE III PROTEIN SCAFFOLDS**

[54] **ECHAFAUDAGES PROTEIQUES DE LA FIBRONECTINE DE TYPE III HUMAINE**

[72] SWANSON, RONALD V., US

[72] DRUZINA, ZHANNA, US

[72] XIN, YAO, US

[72] O'NEIL, KARYN, US

[71] ARO BIOTHERAPEUTICS COMPANY, US

[85] 2023-12-29

[86] 2022-07-19 (PCT/US2022/037586)

[87] (WO2023/003874)

[30] US (63/203,343) 2021-07-19

[21] **3,224,587**  
[13] A1

[51] **Int.Cl. A23B 4/20 (2006.01) A23L 3/3508 (2006.01)**

[25] EN

[54] **PRESERVED FOOD PRODUCT AND PRESERVATION COMPOSITION**

[54] **PRODUIT ALIMENTAIRE CONSERVE ET COMPOSITION DE CONSERVATION**

[72] IANCU, CATALIN, NL

[72] LOMMERSE, GIJSBERTUS THEODORUS CORNELIS ANTONIUS, NL

[72] VILCHES BAZAGA, LAURA, NL

[71] PURAC BIOCHEM B.V., NL

[85] 2023-12-29

[86] 2022-07-06 (PCT/EP2022/068777)

[87] (WO2023/280936)

[30] EP (21183990.7) 2021-07-06

[21] **3,224,588**  
[13] A1

[51] **Int.Cl. C08J 7/12 (2006.01)**

[25] EN

[54] **IMPROVING RECYCLED PLASTICS AND METHODS THEREOF**

[54] **AMELIORATION DE PLASTIQUES RECYCLES ET PROCEDES ASSOCIES**

[72] ATHREYA, SIDDARTH RAM, US

[72] IYER, SUBRAMANIAN, US

[72] DARSEY, JAD, US

[71] INHANCE TECHNOLOGIES, LLC, US

[85] 2023-12-29

[86] 2022-06-09 (PCT/US2022/032842)

[87] (WO2023/287526)

[30] US (63/222,542) 2021-07-16

[30] US (17/586,861) 2022-01-28

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[21] **3,224,591**  
[13] A1

[51] **Int.Cl. A61K 31/00 (2006.01) A61K 31/33 (2006.01) A61K 47/00 (2006.01) A61K 47/06 (2006.01)**

[25] EN

[54] **METHODS OF MANUFACTURING INJECTABLE SUSTAINED RELEASE FORMULATIONS**

[54] **PROCEDES DE FABRICATION DE FORMULATIONS INJECTABLES A LIBERATION PROLONGEE**

[72] LI, YUHUA, US

[72] GUARINO, ANDREW J., US

[71] FORESEE PHARMACEUTICALS CO., LTD., TW

[85] 2023-12-29

[86] 2022-06-28 (PCT/US2022/035241)

[87] (WO2023/278392)

[30] US (63/217,839) 2021-07-02

[21] **3,224,592**  
[13] A1

[51] **Int.Cl. A61K 36/899 (2006.01) A61P 39/06 (2006.01)**

[25] EN

[54] **MIXTURE OF COMPOUNDS WITH HIGH MOLECULAR WEIGHTS, OBTAINED FROM SUGAR CANE WAX (SACCHARUM OFFICINARUM L.)**

[54] **MELANGE DE COMPOSES A POIDS MOLECULAIRES ELEVES, OBTENU A PARTIR DE LA CIRE DE CANNE A SUCRE (SACCHARUM OFFICINARUM L.)**

[72] GONZALEZ CANAVACIOLO, VICTOR LUIS, CU

[72] VICENTE MURILLO, ROXANA, CU

[72] SALAHANGE GONZALEZ, LAURA, CU

[72] MOLINA CUEVAS, VIVIAN, CU

[72] MENDOZA CASTANO, SARAH, CU

[71] CENTRO NACIONAL DE INVESTIGACIONES CIENTIFICAS, CU

[85] 2023-12-29

[86] 2022-05-23 (PCT/CU2022/050005)

[87] (WO2023/284902)

[30] CU (2021-0060) 2021-07-13

[21] **3,224,593**  
[13] A1

[25] EN

[54] **REFRACTORY LANCE ASSEMBLY AND REFRACTORY LANCE TUBE**

[54] **ENSEMBLE LANCE REFACTAIRE ET TUBE DE LANCE REFACTAIRE**

[72] MOREAU, ANDRE, CA

[72] HAMEL, ANDRE, CA

[72] SABSABI, MOHAMAD, CA

[71] NATIONAL RESEARCH COUNCIL OF CANADA, CA

[85] 2023-12-29

[86] 2022-08-04 (PCT/CA2022/051185)

[87] (WO2023/010215)

[30] US (63/229,749) 2021-08-05

[21] **3,224,594**  
[13] A1

[51] **Int.Cl. G06V 20/13 (2022.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR THE AUTOMATIC MONITORING OF A LIQUID RESOURCE STORED IN A LAKE USING SATELLITE IMAGERY**

[54] **PROCEDE ET SYSTEME DE SURVEILLANCE AUTOMATIQUE D'UNE RESSOURCE LIQUIDE STOCKEE DANS UN LAC AU MOYEN D'UNE IMAGERIE PAR SATELLITE**

[72] EHRET, THIBAUD, FR

[72] LAJOUANIE, SIMON, FR

[72] LEFRANCOIS, VICTOR, FR

[72] DE FRANCHIS, CARLO, FR

[71] KAYRROS, FR

[85] 2023-12-29

[86] 2021-12-09 (PCT/IB2021/000865)

[87] (WO2023/281289)

[30] US (63/219,105) 2021-07-07

[21] **3,224,595**  
[13] A1

[51] **Int.Cl. G16B 20/20 (2019.01) G16B 40/00 (2019.01)**

[25] EN

[54] **MACHINE-LEARNING MODELS FOR DETECTING AND ADJUSTING VALUES FOR NUCLEOTIDE METHYLATION LEVELS**

[54] **MODELES D'APPRENTISSAGE AUTOMATIQUE DESTINES A DETECTER ET AJUSTER DES VALEURS POUR DES NIVEAUX DE METHYLATION DE NUCLEOTIDES**

[72] NORBERG, STEVEN, US

[72] GUERRERO, LUIS FERNANDO CAMARILLO, GB

[72] BROWN, COLIN, US

[72] MANZO, ANDREA, US

[72] SHULTZABERGER, SARAH E., US

[72] EBERLE, MICHAEL, US

[72] ALMASI, SEPIDEH, US

[72] ROHRBACK, SUZANNE, US

[72] MATHONET, PASCALE, GB

[72] DOLZHENKO, EGOR, US

[71] ILLUMINA, INC., US

[85] 2023-12-29

[86] 2023-02-22 (PCT/US2023/063048)

[87] (WO2023/164492)

[30] US (63/268,550) 2022-02-25

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[21] **3,224,596**  
[13] A1

[51] **Int.Cl. B60L 53/30 (2019.01) G06F 30/13 (2020.01) G06F 30/20 (2020.01)**

[25] EN

[54] **SYSTEMS AND RELATED METHODS FOR THE DESIGN OF ELECTRIC VEHICLE INFRASTRUCTURE**

[54] **SYSTEMES ET PROCEDES ASSOCIES POUR LA CONCEPTION D'INFRASTRUCTURES DE VEHICULES ELECTRIQUES**

[72] COLE, DAVID, US

[72] PAIN, ARON DOMINIC, US

[72] FERRIER, WILLIAM, US

[71] KELLOGG BROWN & ROOT LLC, US

[85] 2023-12-29

[86] 2022-07-01 (PCT/US2022/035947)

[87] (WO2023/278841)

[30] US (63/218,162) 2021-07-02

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[21] **3,224,597**  
[13] A1

[51] **Int.Cl. H04W 72/04 (2023.01)**  
[25] EN  
[54] **DOWNLINK SIZE ESTIMATION FOR MULTICAST TRAFFIC**  
[54] **ESTIMATION DE TAILLE DE LIAISON DESCENDANTE POUR TRAFIC MULTIDIFFUSION**  
[72] PRASAD, ATHUL, US  
[72] BHATOOLAUL, DAVID, GB  
[72] ZHENG, NAIZHENG, CN  
[72] NAVRATIL, DAVID, FI  
[72] PAULI, VOLKER, DE  
[72] ELMALI, UGUR BARAN, DE  
[72] BAKER, MATTHEW, GB  
[71] NOKIA TECHNOLOGIES OY, FI  
[85] 2023-12-29  
[86] 2021-08-18 (PCT/CN2021/113361)  
[87] (WO2023/019488)

[21] **3,224,598**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) C07D 405/06 (2006.01) C07D 405/14 (2006.01) C07D 409/14 (2006.01) C07D 471/04 (2006.01)**  
[25] EN  
[54] **NOVEL ARYL ETHER SUBSTITUTED HETEROCYCLIC COMPOUND AS GLP1R AGONIST**  
[54] **NOUVEAU COMPOSE HETEROCYCLIQUE SUBSTITUE PAR UN ETHER ARYLIQUE UTILISES EN TANT QU'AGONISTE DU GLP1R**  
[72] ZHANG, LONG, CN  
[72] NIU, ZHANGMING, CN  
[72] TANG, BOWEN, CN  
[71] MINDRANK AI LTD., CN  
[85] 2023-12-29  
[86] 2022-01-31 (PCT/CN2022/075295)  
[87] (WO2023/029380)  
[30] CN (202111017657.5) 2021-08-30  
[30] CN (202111168512.5) 2021-09-29

[21] **3,224,599**  
[13] A1

[51] **Int.Cl. B29C 31/00 (2006.01) B29C 33/38 (2006.01) B29C 44/42 (2006.01) B29C 44/58 (2006.01)**  
[25] EN  
[54] **PROCESS AND SYSTEM FOR MANUFACTURING PRODUCTS CAST WITH POLYURETHANE AND HAVING A CONSTANT CROSS-SECTION**  
[54] **PROCEDE ET SYSTEME POUR LA FABRICATION DE PRODUITS MOULES EN POLYURETHANE A SECTION CONSTANTE**  
[72] RODRIGUEZ OUTON, PABLO, ES  
[71] INDRESMAT, S.L., ES  
[85] 2023-12-29  
[86] 2022-06-13 (PCT/ES2022/070371)  
[87] (WO2023/275417)  
[30] EP (21382588.8) 2021-07-02

[21] **3,224,600**  
[13] A1

[25] EN  
[54] **USE OF OLIGONUCLEOTIDES FOR INDIVIDUALS WITH RENAL IMPAIRMENT**  
[54] **UTILISATION D'OLIGONUCLEOTIDES POUR DES INDIVIDUS ATTEINTS D'INSUFFISANCE RENALE**  
[72] KALMEIJER, RONALD CORNELIS MARIE, US  
[71] GLAXOSMITHKLINE INTELLECTUAL PROPERTY (NO.3) LIMITED, GB  
[85] 2023-12-29  
[86] 2022-07-07 (PCT/IB2022/056278)  
[87] (WO2023/281434)  
[30] US (63/220,400) 2021-07-09

[21] **3,224,601**  
[13] A1

[51] **Int.Cl. A24B 15/16 (2020.01)**  
[25] EN  
[54] **CONSTITUENT, DERIVATIVE OR EXTRACT OF CANNABIS IN A WATER SOLUBLE MATRIX**  
[54] **COMPOSANT, DERIVE OU EXTRAIT DE CANNABIS DANS UNE MATRICE SOLUBLE DANS L'EAU**  
[72] ALDERMAN, STEVEN, US  
[72] POOLE, THOMAS, US  
[72] DANIEL, MICHAEL, US  
[72] TANG, KAI, US  
[72] XU, KEYI, US  
[72] MCQUILLAN, KARINA, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-12-29  
[86] 2022-07-21 (PCT/GB2022/051902)  
[87] (WO2023/002196)  
[30] US (63/224,623) 2021-07-22

[21] **3,224,603**  
[13] A1

[25] EN  
[54] **OCULAR INJECTION ASSEMBLY, INJECTION DEVICE AND USING THE SAME**  
[54] **ENSEMBLE D'INJECTION OPHTHALMIQUE, DISPOSITIF D'INJECTION, ET PROCEDE D'UTILISATION**  
[72] KE, XIAO, CN  
[72] ZHENG, QIANG, CN  
[72] JIANG, HAO, CN  
[72] LONG, YANG, CN  
[72] QIN, YINGFEI, CN  
[71] CHENGDU ORIGEN BIOTECHNOLOGY CO., LTD., CN  
[85] 2023-12-29  
[86] 2022-07-21 (PCT/CN2022/107104)  
[87] (WO2023/001244)  
[30] CN (202110830969.1) 2021-07-22

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[21] **3,224,604**  
[13] A1

[51] **Int.Cl. A24F 40/44 (2020.01) A24F 40/42 (2020.01) A24F 40/485 (2020.01)**

[25] EN

[54] **AEROSOL PROVISION SYSTEM**

[54] **SYSTEME DE FOURNITURE D'AEROSOL**

[72] XIAO, ZHIHUANG, GB

[72] HAINES, RICHARD, GB

[71] NICOVENTURES TRADING LIMITED, GB

[85] 2023-12-29

[86] 2022-07-04 (PCT/GB2022/051715)

[87] (WO2023/002149)

[30] GB (2110350.2) 2021-07-19

[21] **3,224,605**  
[13] A1

[51] **Int.Cl. A24F 40/85 (2020.01) A24D 1/20 (2020.01) A24F 40/20 (2020.01) A24F 40/46 (2020.01) A24F 9/04 (2006.01) A24F 9/10 (2006.01)**

[25] EN

[54] **ACCESSORY FOR AEROSOL GENERATING DEVICE AND AEROSOL GENERATING SYSTEM INCLUDING THE SAME**

[54] **ACCESSOIRE POUR DISPOSITIF DE GENERATION D'AEROSOL ET SYSTEME DE GENERATION D'AEROSOL LE COMPRENANT**

[72] KIM, DONG SUNG, KR

[72] KWON, YOUNG BUM, KR

[72] KIM, YONG HWAN, KR

[72] LIM, HUN IL, KR

[72] JANG, SEOK SU, KR

[71] KT&G CORPORATION, KR

[85] 2023-12-29

[86] 2023-04-11 (PCT/KR2023/004866)

[87] (WO2023/204510)

[30] KR (10-2022-0047502) 2022-04-18

[30] KR (10-2022-0128089) 2022-10-06

[21] **3,224,606**  
[13] A1

[51] **Int.Cl. A24F 40/485 (2020.01) A24F 40/44 (2020.01)**

[25] EN

[54] **AEROSOL PROVISION SYSTEM**

[54] **SYSTEME DE FOURNITURE D'AEROSOL**

[72] XIAO, ZHIHUANG, GB

[72] HAINES, RICHARD, GB

[71] NICOVENTURES TRADING LIMITED, GB

[85] 2023-12-29

[86] 2022-07-04 (PCT/GB2022/051717)

[87] (WO2023/002151)

[30] GB (2110353.6) 2021-07-19

[21] **3,224,607**  
[13] A1

[51] **Int.Cl. C12Q 1/6886 (2018.01)**

[25] EN

[54] **BIOMARKERS FOR ENDOMETRIAL CANCER**

[54] **BIOMARQUEURS POUR LE CANCER DE L'ENDOMETRE**

[72] COLL DE LA RUBIA, EVA, ES

[72] COLAS ORTEGA, EVA, ES

[72] CABRERA DIAZ, SILVIA, ES

[72] GIL MORENO, ANTONIO, ES

[72] MARTINEZ GARCIA, ELENA, LU

[72] DITTMAR, GUNNAR ALFRED GUNTHER, LU

[71] FUNDACIO HOSPITAL UNIVERSITARI VALL D'HEBRON - INSTITUT DE RECERCA, ES

[71] LUXEMBOURG INSTITUTE OF HEALTH (LIH), LU

[85] 2023-12-29

[86] 2022-07-22 (PCT/EP2022/070680)

[87] (WO2023/002039)

[30] EP (21382680.3) 2021-07-23

[21] **3,224,608**  
[13] A1

[51] **Int.Cl. A24F 40/44 (2020.01)**

[25] EN

[54] **AEROSOL PROVISION SYSTEM**

[54] **SYSTEME DE FOURNITURE D'AEROSOL**

[72] XIAO, ZHIHUANG, GB

[72] HAINES, RICHARD, GB

[71] NICOVENTURES TRADING LIMITED, GB

[85] 2023-12-29

[86] 2022-07-04 (PCT/GB2022/051716)

[87] (WO2023/002150)

[30] GB (2110351.0) 2021-07-19

[21] **3,224,609**  
[13] A1

[51] **Int.Cl. A01K 63/04 (2006.01) B01D 53/84 (2006.01) C02F 3/34 (2006.01)**

[25] EN

[54] **ADDITIVE BASED ON VITAMINS, MINERALS AND OTHER ORGANIC COMPOUNDS THAT IMPROVES BIOFILTER EFFICIENCY IN A RECIRCULATING AQUACULTURE SYSTEM (RAS)**

[54] **ADDITIF A BASE DE VITAMINES, DE MINERAUX ET D'AUTRES COMPOSES ORGANIQUES QUI AMELIORE L'EFFICACITE DE BIOFILTRÉS DANS DES SYSTEMES DE RECIRCULATION (RAS) D'EAUX EN AQUACULTURE**

[72] LAZARRAGA MUNOZ, RODRIGO, CL

[71] LAZARRAGA MUNOZ, RODRIGO, CL

[85] 2023-12-29

[86] 2022-05-24 (PCT/CL2022/050054)

[87] (WO2023/272406)

[30] CL (1761-2021) 2021-07-01

[21] **3,224,610**  
[13] A1

[51] **Int.Cl. A23K 10/14 (2016.01) A23K 10/30 (2016.01) A23K 10/38 (2016.01) A23K 20/189 (2016.01) A23L 5/20 (2016.01) A23L 7/104 (2016.01) A61P 31/10 (2006.01)**

[25] EN

[54] **ENZYMATIC DEGRADATION OF MYCOTOXINS DURING FERMENTATION AND POST-FERMENTATION**

[54] **DEGRADATION ENZYMATIQUE DE MYCOTOXINES LORS DE LA FERMENTATION ET DE LA POSTFERMENTATION**

[72] MANNING, ANDREW J., US

[72] BLY, STEVEN T., US

[71] POET RESEARCH, INC., US

[85] 2023-12-29

[86] 2021-09-09 (PCT/US2021/049589)

[87] (WO2023/038624)

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[21] **3,224,611**  
[13] A1

[51] **Int.Cl. A61K 31/196 (2006.01)**  
[25] EN  
[54] **METHOD OF REDUCING AGE-RELATED SYSTEMIC CHRONIC INFLAMMATION**  
[54] **METHODE DE REDUCTION D'UNE INFLAMMATION CHRONIQUE SYSTEMIQUE LIEE A L'AGE**  
[72] DIOUM, EL HADJI M., US  
[72] CHU, YIFANG, US  
[71] THE QUAKER OATS COMPANY, US  
[85] 2023-12-29  
[86] 2022-07-28 (PCT/US2022/038704)  
[87] (WO2023/009744)  
[30] US (63/226,553) 2021-07-28

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[21] **3,224,612**  
[13] A1

[51] **Int.Cl. G01F 15/063 (2022.01) G01D 3/024 (2006.01)**  
[25] EN  
[54] **METROLOGY MODULE ADAPTABLE FOR USE IN MULTIPLE GAS METERS**  
[54] **MODULE DE METROLOGIE ADAPTABLE POUR UNE UTILISATION DANS DE MULTIPLES COMPTEURS DE GAZ**  
[72] GEORGE, LLIEV, US  
[71] ITRON GLOBAL SARL, US  
[85] 2023-12-29  
[86] 2022-05-31 (PCT/US2022/031646)  
[87] (WO2023/287505)  
[30] US (17/375,800) 2021-07-14

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[21] **3,224,613**  
[13] A1

[51] **Int.Cl. A01G 31/06 (2006.01) A01G 9/02 (2018.01)**  
[25] EN  
[54] **VERTICAL FARMING WATERING SYSTEM AND METHODS OF MAKING AND USE THEREOF**  
[54] **SYSTEME D'ARROSAGE AGRICOLE VERTICAL ET SES PROCEDES DE FABRICATION ET D'UTILISATION**  
[72] FELSER, JACOB, US  
[72] FRIEDMAN, JONATHAN, US  
[72] SLATER, NIGEL, US  
[72] BIELEWICZ, PAUL, US  
[72] CULLY, EDWARD H., US  
[71] FREIGHT FARMS, INC., US  
[71] W. L. GORE & ASSOCIATES, INC., US  
[85] 2023-12-29  
[86] 2022-09-22 (PCT/US2022/044408)  
[87] (WO2023/049277)  
[30] US (63/247,615) 2021-09-23  
[30] US (17/933,309) 2022-09-19

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[21] **3,224,614**  
[13] A1

[51] **Int.Cl. F02B 7/08 (2006.01) F02D 19/08 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR INJECTING A PILOT FUEL INTO AN INTERNAL COMBUSTION ENGINE**  
[54] **APPAREIL ET PROCEDE D'INJECTION D'UN CARBURANT PILOTE DANS UN MOTEUR A COMBUSTION INTERNE**  
[72] MUNSHI, SANDEEP, CA  
[72] WICKSTONE, MICHAEL, CA  
[72] HUANG, JIAN, CA  
[72] SINGH, ASHISH, CA  
[71] WESTPORT FUEL SYSTEMS CANADA INC., CA  
[85] 2023-12-29  
[86] 2022-06-29 (PCT/CA2022/051042)  
[87] (WO2023/272392)  
[30] US (63/216,515) 2021-06-29

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[21] **3,224,615**  
[13] A1

[51] **Int.Cl. G06Q 40/00 (2023.01)**  
[25] EN  
[54] **PORTFOLIO SELECTION SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE DE SELECTION DE PORTEFEUILLE**  
[72] ROBERTS, ANGELA, US  
[72] KOCH, MICHAEL JEROME, US  
[72] GOODMAN, MICHAEL, US  
[71] U.S. MONEY RESERVE, INC., US  
[85] 2023-12-29  
[86] 2022-04-13 (PCT/US2022/024648)  
[87] (WO2023/277991)  
[30] US (63/217,428) 2021-07-01

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[21] **3,224,616**  
[13] A1

[51] **Int.Cl. A45C 7/00 (2006.01)**  
[25] EN  
[54] **EXPANDABLE LUGGAGE ASSEMBLIES**  
[54] **ENSEMBLES BAGAGES EXPANSIBLES**  
[72] TRUNG, TIEU, US  
[71] TRUNG, TIEU, US  
[85] 2023-12-29  
[86] 2022-06-29 (PCT/US2022/035592)  
[87] (WO2023/278625)  
[30] US (63/216,479) 2021-06-29  
[30] US (63/334,098) 2022-04-23

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[21] **3,224,617**  
[13] A1

[51] **Int.Cl. C07K 16/30 (2006.01)**  
[25] EN  
[54] **ANTI-TROP2 SINGLE-DOMAIN ANTIBODY AND USE THEREOF**  
[54] **ANTICORPS A DOMAINE UNIQUE ANTI-TROP2 ET SON UTILISATION**  
[72] WONG, CHUNG LIM, CN  
[72] TING, HONG HOI, CN  
[71] NANOMAB TECHNOLOGY LIMITED, CN  
[85] 2023-12-29  
[86] 2022-06-30 (PCT/CN2022/102842)  
[87] (WO2023/274365)  
[30] CN (202110750848.6) 2021-07-02

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[21] **3,224,618**  
[13] A1

[25] EN  
[54] **A GROMMET FOR A SPLICE ENCLOSURE AND A SPLICE ENCLOSURE INCLUDING A GROMMET**  
[54] **PASSE-FIL POUR ENCEINTE D'EPISSURE ET ENCEINTE D'EPISSURE COMPRENANT UN PASSE-FIL**  
[72] CLOUD, RANDY G., US  
[71] PREFORMED LINE PRODUCTS CO., US  
[71] CLOUD, RANDY G., US  
[85] 2023-12-29  
[86] 2022-06-30 (PCT/US2022/035693)  
[87] (WO2023/278680)  
[30] US (63/217,090) 2021-06-30

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[21] **3,224,619**  
[13] A1

[51] **Int.Cl. H01H 33/12 (2006.01)**  
[25] EN  
[54] **LOAD BREAK TOOL HAVING ROTATIONAL FLEXIBILITY**  
[54] **OUTIL DE RUPTURE DE CHARGE AYANT UNE FLEXIBILITE DE ROTATION**  
[72] SHIRILLA, PETER, US  
[72] WOOD, EUGENE H., US  
[72] NOLTE, MATTHEW, US  
[72] SPENCER, JONATHON S., US  
[72] BEANE, THOMAS, US  
[72] GREER, ZACHARY, US  
[71] UTILITY SOLUTIONS, INC., US  
[85] 2023-12-29  
[86] 2022-07-05 (PCT/US2022/036075)  
[87] (WO2023/283165)  
[30] US (63/219,061) 2021-07-07

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[21] **3,224,620**  
[13] A1

[51] **Int.Cl. A61N 1/05 (2006.01) A61N 1/36 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR HIGH-BANDWIDTH MINIMALLY INVASIVE BRAIN-COMPUTER INTERFACES**  
[54] **SYSTEMES ET PROCEDES POUR INTERFACES CERVEAU-ORDINATEUR MINIMALEMENT INVASIVES A LARGE BANDE PASSANTE**  
[72] RAPOPORT, BENJAMIN ISAAC, US  
[72] PAPAGEORGIOU, DEMETRIOS PHILIP, US  
[72] HETTICK, MARK JAMES, US  
[71] PRECISION NEUROSCIENCE CORPORATION, US  
[85] 2023-12-29  
[86] 2022-07-05 (PCT/US2022/036094)  
[87] (WO2023/278888)  
[30] US (63/218,063) 2021-07-02

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[21] **3,224,621**  
[13] A1

[51] **Int.Cl. A24F 40/30 (2020.01) A24F 40/42 (2020.01)**  
[25] EN  
[54] **AEROSOL PROVISION SYSTEM**  
[54] **SYSTEME DE FOURNITURE D'AEROSOL**  
[72] XIAO, ZHIHUANG, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-12-29  
[86] 2022-07-06 (PCT/GB2022/051735)  
[87] (WO2023/002154)  
[30] GB (2110315.5) 2021-07-19  
[30] GB (2110312.2) 2021-07-19

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[21] **3,224,622**  
[13] A1

[51] **Int.Cl. A24B 13/00 (2006.01) A24B 15/16 (2020.01) A61K 9/00 (2006.01) A61K 9/70 (2006.01) A61K 31/352 (2006.01)**  
[25] EN  
[54] **METHODS OF PREPARING COMPOSITIONS COMPRISING A CONSTITUENT, DERIVATIVE OR EXTRACT OF CANNABIS**  
[54] **PROCEDES DE PREPARATION DE COMPOSITIONS COMPRENANT UN CONSTITUANT, UN DERIVE OU UN EXTRAIT DE CANNABIS**  
[72] ALDERMAN, STEVEN, US  
[72] POOLE, THOMAS, US  
[72] DANIEL, MICHAEL, US  
[72] TANG, KAI, US  
[72] XU, KEYI, US  
[72] MCQUILLAN, KARINA, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-12-29  
[86] 2022-07-21 (PCT/GB2022/051901)  
[87] (WO2023/002195)  
[30] US (63/224,565) 2021-07-22

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[21] **3,224,623**  
[13] A1

[51] **Int.Cl. G10L 19/20 (2013.01) G10L 19/025 (2013.01) G10L 19/22 (2013.01) G10L 19/26 (2013.01) G10L 19/02 (2013.01)**  
[25] EN  
[54] **CODING AND DECODING OF PULSE AND RESIDUAL PARTS OF AN AUDIO SIGNAL**  
[54] **CODAGE ET DECODAGE DE PARTIES D'IMPULSION ET RESIDUELLES D'UN SIGNAL AUDIO**  
[72] MARKOVIC, GORAN, DE  
[71] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2023-12-29  
[86] 2022-07-14 (PCT/EP2022/069812)  
[87] (WO2023/285631)  
[30] EP (21185669.5) 2021-07-14

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[21] **3,224,624**  
[13] A1

[51] **Int.Cl. A24B 15/16 (2020.01)**  
[25] EN  
[54] **COMPOSITION COMPRISING A CONSTITUENT, DERIVATIVE OR EXTRACT OF CANNABIS**  
[54] **COMPOSITION COMPRENANT UN CONSTITUANT, UN DERIVE OU UN EXTRAIT DE CANNABIS**  
[72] ALDERMAN, STEVEN, US  
[72] POOLE, THOMAS, US  
[72] DANIEL, MICHAEL, US  
[72] TANG, KAI, US  
[72] XU, KEYI, US  
[72] MCQUILLAN, KARINA, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-12-29  
[86] 2022-07-21 (PCT/GB2022/051905)  
[87] (WO2023/002199)  
[30] US (63/224,622) 2021-07-22

[21] **3,224,626**  
[13] A1

[51] **Int.Cl. A61K 8/04 (2006.01) A61K 8/34 (2006.01) A61K 8/44 (2006.01) A61K 8/64 (2006.01) A61K 8/67 (2006.01) A61Q 19/00 (2006.01)**  
[25] EN  
[54] **SKIN CARE COMPOSITION FOR APPLICATION TO SKIN**  
[54] **COMPOSITION DE SOIN DE LA PEAU POUR APPLICATION SUR LA PEAU**  
[72] QUAN, YING-SHU, JP  
[72] TANAKA, HIROSHI, JP  
[72] MURAYAMA, TOMOHIRO, JP  
[72] KAMIYAMA, FUMIO, JP  
[71] NICOMED PHARMACEUTICAL CO., LTD., JP  
[85] 2023-12-29  
[86] 2022-12-27 (PCT/JP2022/048211)  
[87] (WO2023/127882)  
[30] JP (2021-214170) 2021-12-28

[21] **3,224,629**  
[13] A1

[51] **Int.Cl. A24B 15/14 (2006.01) A24D 1/20 (2020.01) A24B 15/16 (2020.01) A24B 15/28 (2006.01) A24B 15/42 (2006.01)**  
[25] EN  
[54] **IMPROVED AEROSOL-FORMING SUBSTRATE**  
[54] **SUBSTRAT DE FORMATION D'AEROSOL AMELIORE**  
[72] WAIRIMU, ESTHER, CH  
[72] HUANG, HOUXUE, CH  
[72] FEDELI, FRANCESCO, CH  
[71] PHILIP MORRIS PRODUCTS S.A., CH  
[85] 2023-12-29  
[86] 2022-07-07 (PCT/EP2022/068993)  
[87] (WO2023/281018)  
[30] EP (21184365.1) 2021-07-07  
[30] EP (22178770.8) 2022-06-13

[21] **3,224,625**  
[13] A1

[51] **Int.Cl. A24B 15/16 (2020.01)**  
[25] EN  
[54] **CONSTITUENT, DERIVATIVE OR EXTRACT OF CANNABIS IN AMORPHOUS FORM**  
[54] **COMPOSANT, DERIVE OU EXTRAIT DE CANNABIS SOUS FORME AMORPHE**  
[72] ALDERMAN, STEVEN, US  
[72] POOLE, THOMAS, US  
[72] DANIEL, MICHAEL, US  
[72] TANG, KAI, US  
[72] XU, KEYI, US  
[72] MCQUILLAN, KARINA, GB  
[71] NICOVENTURES HOLDINGS LIMITED, GB  
[85] 2023-12-29  
[86] 2022-07-21 (PCT/GB2022/051906)  
[87] (WO2023/002200)  
[30] US (63/224,626) 2021-07-22

[21] **3,224,627**  
[13] A1

[51] **Int.Cl. A24F 40/40 (2020.01)**  
[25] EN  
[54] **AEROSOL PROVISION SYSTEM**  
[54] **SYSTEME DE FOURNITURE D'AEROSOL**  
[72] ALLER, JARED, US  
[72] WOODMAN, TOM, GB  
[72] CHEN, PING CHOU, GB  
[71] CIPO, CA  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-12-29  
[86] 2022-07-11 (PCT/GB2022/051784)  
[87] (WO2023/017236)  
[30] US (17/445,050) 2021-08-13

[21] **3,224,630**  
[13] A1

[51] **Int.Cl. A24B 15/14 (2006.01) A24D 1/20 (2020.01) A24B 15/16 (2020.01) A24D 1/18 (2006.01)**  
[25] EN  
[54] **NOVEL AEROSOL-GENERATING SUBSTRATE COMPRISING CUMINUM SPECIES**  
[54] **NOUVEAU SUBSTRAT DE GENERATION D'AEROSOL COMPRENANT L'ESPECE CUMINUM**  
[72] ARNDT, DANIEL, CH  
[72] CAMPANONI, PRISCA, CH  
[71] PHILIP MORRIS PRODUCTS S.A., CH  
[85] 2023-12-29  
[86] 2022-07-14 (PCT/EP2022/069800)  
[87] (WO2023/285623)  
[30] EP (21186080.4) 2021-07-16

[21] **3,224,628**  
[13] A1

[51] **Int.Cl. A01N 43/56 (2006.01)**  
[25] EN  
[54] **INSECTICIDAL MIXTURES**  
[54] **MELANGES INSECTICIDES**  
[72] KULKARNI, PRADEEP, IN  
[71] ADAMA MAKHTESHIM LTD., IL  
[85] 2023-12-29  
[86] 2022-07-06 (PCT/IL2022/050729)  
[87] (WO2023/281511)  
[30] IN (202111030414) 2021-07-06

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[21] **3,224,631**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61G 7/057 (2006.01) G01D 5/16 (2006.01) G08B 21/22 (2006.01)**

[25] EN

[54] **PRESSURE-SENSITIVE PAD WITH CALIBRATION UNIT**

[54] **COUSSIN SENSIBLE A LA PRESSION AVEC UNITE D'ETALONNAGE**

[72] BRASCH, JOHN JOSEPH, US  
[72] SMITH JR., GORDON, US  
[72] TYLER, HAROLD TODD, US  
[71] J. BRASCH CO., LLC, US

[85] 2023-12-29  
[86] 2022-06-30 (PCT/IB2022/056123)  
[87] (WO2023/275824)  
[30] US (63/216,600) 2021-06-30

[21] **3,224,632**  
[13] A1

[51] **Int.Cl. H04R 1/24 (2006.01) H04R 7/12 (2006.01) H04R 9/06 (2006.01)**

[25] EN

[54] **SPEAKER UNIT AND SPEAKER CURVED DIAPHRAGM**

[54] **UNITE DE HAUT-PARLEUR ET MEMBRANE DE HAUT-PARLEUR INCURVEE**

[72] TANAKA, HIROSHI, JP  
[72] SUZUKI, MASAHIRO, JP  
[71] SOUND FUN CORPORATION, JP

[85] 2023-12-29  
[86] 2022-07-18 (PCT/JP2022/027958)  
[87] (WO2023/002962)  
[30] JP (2021-120069) 2021-07-20  
[30] JP (2021-120070) 2021-07-20  
[30] JP (2021-120071) 2021-07-20

[21] **3,224,633**  
[13] A1

[51] **Int.Cl. F04B 41/06 (2006.01)**

[25] EN

[54] **MODEL PREDICTIVE CONTROL OF A COMPRESSED AIR SYSTEM**

[54] **COMMANDE PREDICTIVE DE MODELE D'UN SYSTEME D'AIR COMPRI ME**

[72] VAN ROY, WIM, BE  
[71] ATLAS COPCO AIRPOWER, N.V., BE

[85] 2023-12-29  
[86] 2021-08-26 (PCT/EP2021/073675)  
[87] (WO2023/025393)

[21] **3,224,634**  
[13] A1

[51] **Int.Cl. A01N 47/28 (2006.01) A01P 1/00 (2006.01) A61K 31/17 (2006.01) A61L 2/18 (2006.01) C08G 73/02 (2006.01)**

[25] EN

[54] **COATINGS, FORMULATIONS, USES AND COATING METHODS**

[54] **REVETEMENTS, FORMULATIONS, UTILISATIONS ET PROCEDES DE REVETEMENT**

[72] LUTHRA, SAJINDER KAUR, GB  
[72] LUTHRA, ARJUN KAMAL SINGH, GB  
[72] LUTHRA, ARUNDEEP SINGH, GB

[71] BIOINTERACTIONS LTD, GB

[85] 2023-12-29  
[86] 2022-07-18 (PCT/GB2022/051848)  
[87] (WO2023/285840)  
[30] GB (2110296.7) 2021-07-16  
[30] GB (2110297.5) 2021-07-16

[21] **3,224,635**  
[13] A1

[51] **Int.Cl. C07D 401/04 (2006.01) A61K 31/4439 (2006.01) A61P 1/16 (2006.01) C07D 401/14 (2006.01)**

[25] EN

[54] **LPA1 SMALL MOLECULE ANTAGONIST**

[54] **ANTAGONISTE A PETITES MOLECULES DE LPA1**

[72] LI, YUNFEI, CN  
[72] TAN, LIANG, CN  
[72] MO, MINGGUANG, CN  
[72] ZHANG, ZHEN, CN  
[72] LIN, XIAOYAN, CN  
[72] GU, XIAOWEN, CN  
[72] LI, JIAO, CN

[71] TUOJIE BIOTECH (SHANGHAI) CO., LTD., CN

[85] 2023-12-29  
[86] 2022-07-20 (PCT/CN2022/106706)  
[87] (WO2023/001177)  
[30] CN (202110820727.4) 2021-07-20  
[30] CN (202110945201.9) 2021-08-17  
[30] CN (202111287042.4) 2021-11-02

[21] **3,224,636**  
[13] A1

[51] **Int.Cl. G06T 7/38 (2017.01) G06T 7/33 (2017.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR TRANSFERRING MARKINGS**

[54] **SYSTEMES ET PROCEDES DE TRANSFORMATION DE MARQUAGES**

[72] MORALEDA, GABRIEL JESUS SAMUEL PERLAS, US  
[72] YUAN, AMY LEE HSIEH, US  
[72] YEUNG, HUBERT, US  
[72] LEE, CHUN WAI, US

[71] GENOMIC HEALTH, INC., US

[85] 2023-12-29  
[86] 2022-07-22 (PCT/US2022/038002)  
[87] (WO2023/004108)  
[30] US (63/225,079) 2021-07-23

[21] **3,224,637**  
[13] A1

[51] **Int.Cl. C07C 9/04 (2006.01) C10G 5/06 (2006.01) C10L 3/10 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR NATURAL GAS PURIFICATION INTEGRATED WITH GAS COMPRESSION**

[54] **PROCEDES ET SYSTEMES POUR LA PURIFICATION DE GAZ NATUREL UNIFIEE AVEC LA COMPRESSION DE GAZ**

[72] VERTZ, JOHN, CA  
[72] WILSON, STEWART, CA  
[72] WOOD, DENVER, CA

[71] VALENCE NATURAL GAS SOLUTIONS LLC, US

[85] 2023-12-29  
[86] 2022-07-28 (PCT/US2022/038617)  
[87] (WO2023/009689)  
[30] US (63/226,235) 2021-07-28  
[30] US (17/875,128) 2022-07-27



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[21] **3,224,638**  
[13] A1

[51] **Int.Cl. B27L 1/00 (2006.01) C02F 1/00 (2006.01) C08L 97/02 (2006.01) D21B 1/02 (2006.01) D21C 11/00 (2006.01)**

[25] EN

[54] **METHOD FOR PROCESSING BARK PRESS WATER FROM SAWMILLS AND/OR PULP MILLS**

[54] **PROCEDE DE TRAITEMENT D'EAU DE PRESSE A ECORCES PROVENANT DE SCIERIES ET/OU D'USINES DE PATE A PAPIER**

[72] PARKAS, JIM, SE  
[72] MESIC, NARCIS, SE  
[72] SOLHAGE, FREDRIK, SE  
[71] SODRA SKOGSAGARNA EKONOMISK FORENING, SE  
[85] 2023-12-29  
[86] 2022-05-04 (PCT/EP2022/061944)  
[87] (WO2023/274604)  
[30] SE (2150865-0) 2021-07-02

[21] **3,224,639**  
[13] A1

[51] **Int.Cl. A21D 13/062 (2017.01) A23L 27/30 (2016.01) A23L 29/30 (2016.01) A23L 33/20 (2016.01) A21D 2/18 (2006.01) A21D 2/26 (2006.01)**

[25] EN

[54] **POWDERED SUGAR REPLACER**

[54] **SUCCEDANE DE SUCRE EN POUDRE**

[72] BOSMANS, GEERTRUI, BE  
[72] VAN HAESENDONCK, INGRID, BE  
[72] PAREYT, BRAM, BE  
[71] PURATOS NV, BE  
[85] 2023-12-29  
[86] 2022-08-02 (PCT/EP2022/071720)  
[87] (WO2023/012170)  
[30] BE (BE2021/5618) 2021-08-03

[21] **3,224,640**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 31/00 (2006.01) A61K 39/00 (2006.01) A61K 47/02 (2006.01) A61K 47/12 (2006.01) A61K 47/26 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL COMPOSITIONS OF A PD-1 ANTIBODY AND USE OF THE SAME**

[54] **COMPOSITIONS PHARMACEUTIQUES D'UN ANTICORPS PD-1 ET LEUR UTILISATION**

[72] SAMPATHKUMAR, KRISHNAN, US  
[72] ZHOU, YAN, US  
[72] BURKE, STEPHEN JAMES, US  
[71] MACROGENICS, INC., US  
[85] 2023-12-29  
[86] 2022-06-22 (PCT/US2022/034493)  
[87] (WO2023/283049)  
[30] US (63/220,006) 2021-07-09

[21] **3,224,641**  
[13] A1

[51] **Int.Cl. G01M 17/02 (2006.01)**

[25] EN

[54] **TYRE GAUGE**

[54] **MANOMETRE POUR PNEU**

[72] BECKLEY, JOHN PETER, GB  
[72] FORD, DAVID MICHAEL, GB  
[71] ATMS TECHNOLOGY LIMITED, GB  
[85] 2023-12-29  
[86] 2022-07-01 (PCT/GB2022/051703)  
[87] (WO2023/275561)  
[30] GB (2109638.3) 2021-07-02

[21] **3,224,642**  
[13] A1

[51] **Int.Cl. F16G 11/14 (2006.01) F16G 11/04 (2006.01)**

[25] EN

[54] **CABLE TENSIONING ASSEMBLY AND METHOD OF USING SAME**

[54] **ENSEMBLE DE MISE SOUS TENSION DE CABLE ET SON PROCEDE D'UTILISATION**

[72] LIPSCOMB, CHAD, US  
[71] WESTERN GREEN, LLC, US  
[85] 2023-12-29  
[86] 2022-09-21 (PCT/US2022/044251)  
[87] (WO2023/049179)  
[30] US (63/246,561) 2021-09-21

[21] **3,224,643**  
[13] A1

[51] **Int.Cl. A61B 8/00 (2006.01) A61B 8/08 (2006.01)**

[25] EN

[54] **ULTRASOUND SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE ULTRASONORES**

[72] ERLOV, TOBIAS, SE  
[72] CINTHIO, MAGNUS, SE  
[72] DIAS, M ISABEL O M GONCALVES V, SE  
[71] MQUS AB, SE  
[85] 2023-12-29  
[86] 2022-06-28 (PCT/EP2022/067698)  
[87] (WO2023/275030)  
[30] SE (2150866-8) 2021-07-02

[21] **3,224,644**  
[13] A1

[51] **Int.Cl. C10L 1/14 (2006.01) C10L 1/08 (2006.01) C10L 1/188 (2006.01) C10L 1/19 (2006.01)**

[25] EN

[54] **LUBRICITY IMPROVER COMPOSITION FOR FUEL OIL AND USE THEREOF**

[54] **COMPOSITION AMELIORANT LE POUVOIR LUBRIFIANT POUR FIOUL ET SON UTILISATION**

[72] LIN, JIANMIN, CN  
[72] XIA, XIN, CN  
[72] LI, BAOSHI, CN  
[72] TAO, ZHIPING, CN  
[72] LI, YAN, CN  
[71] CHINA PETROLEUM & CHEMICAL CORPORATION, CN  
[71] SINOPEC RESEARCH INSTITUTE OF PETROLEUM PROCESSING CO., LTD., CN  
[85] 2023-12-29  
[86] 2022-06-30 (PCT/CN2022/102570)  
[87] (WO2023/274335)  
[30] CN (202110740397.8) 2021-06-30

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[21] **3,224,645**  
[13] A1

[51] **Int.Cl. G06F 16/9535 (2019.01)**  
[25] EN  
[54] **TARGET RECOMMENDATION METHOD AND APPARATUS, AND STORAGE MEDIUM**  
[54] **PROCEDE ET APPAREIL DE RECOMMANDATION DE CIBLE, ET SUPPORT DE STOCKAGE**  
[72] XIAO, CHI, CN  
[72] WU, ZIHAO, CN  
[71] FUTU NETWORK TECHNOLOGY (SHENZHEN) CO., LTD., CN  
[85] 2023-12-29  
[86] 2022-06-24 (PCT/CN2022/101202)  
[87] (WO2023/284531)  
[30] CN (202110788847.0) 2021-07-13

[21] **3,224,646**  
[13] A1

[51] **Int.Cl. A61J 11/04 (2006.01)**  
[25] EN  
[54] **ARTIFICIAL TEATS HAVING IMPROVED MILK FLOW CHARACTERISTICS**  
[54] **PIS ARTIFICIELS AYANT DES CARACTERISTIQUES D'ECOULEMENT DE LAIT AMELIOREES**  
[72] MCINNES, ROSS GORDON, NZ  
[71] MCINNES, ROSS GORDON, NZ  
[85] 2023-12-29  
[86] 2022-07-14 (PCT/NZ2022/050096)  
[87] (WO2023/287306)  
[30] NZ (778189) 2021-07-14  
[30] NZ (781124) 2021-10-08

[21] **3,224,647**  
[13] A1

[51] **Int.Cl. C01B 32/198 (2017.01) C01B 32/196 (2017.01)**  
[25] EN  
[54] **METHODS OF GRAPHENE PRODUCTION & COMPOSITIONS THEREOF**  
[54] **PROCEDES DE PRODUCTION DE GRAPHENE ET COMPOSITIONS ASSOCIEES**  
[72] EL-KADY, MAHER F., US  
[72] PENG, ZHIWEI, US  
[72] FARAH, RETA BETAR, US  
[71] NANOTECH ENERGY, INC., US  
[85] 2023-12-29  
[86] 2022-07-22 (PCT/US2022/038083)  
[87] (WO2023/004162)  
[30] US (17/384,545) 2021-07-23

[21] **3,224,648**  
[13] A1

[51] **Int.Cl. A61K 31/15 (2006.01) C12N 9/18 (2006.01) A61P 25/30 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS, METHODS, AND ARTICLES COMPRISING COCAINE ESTERASE FOR DETOXIFYING AN ORGANOPHOSPHATE-BASED AGENT**  
[54] **COMPOSITIONS, PROCEDES ET ARTICLES COMPRENANT DE LA COCAINE ESTERASE POUR DETOXIFIER UN AGENT A BASE D'ORGANOPHOSPHATE**  
[72] VILLANUEVA, NICOLAS, US  
[72] VASQUEZ, ALEXIS, US  
[71] FOUR WINDS BIOTHERAPEUTICS, INC., US  
[85] 2023-12-30  
[86] 2022-07-22 (PCT/US2022/038073)  
[87] (WO2023/004152)  
[30] US (63/225,337) 2021-07-23

[21] **3,224,666**  
[13] A1

[51] **Int.Cl. C12N 15/74 (2006.01)**  
[25] EN  
[54] **GENETICALLY MODIFIED BACTERIA AND USES THEREOF FOR THE INDUCIBLE EXPRESSION OF A NUCLEIC SEQUENCE OF INTEREST**  
[54] **BACTERIES GENETIQUEMENT MODIFIEES ET LEURS UTILISATIONS POUR L'EXPRESSION INDUCTIBLE D'UNE SEQUENCE NUCLEIQUE D'INTERET**  
[72] GARDAN, ROZENN, FR  
[72] JUILLARD, VINCENT, FR  
[72] MONNET, VERONIQUE, FR  
[71] INSTITUT NATIONAL DE RECHERCHE POUR L'AGRICULTURE, L'ALIMENTATION ET ..., FR  
[71] INSTITUT DES SCIENCES ET DES INDUSTRIES DU VIVANT ET DE L'ENVIRONNEMENT, FR  
[71] UNIVERSITE PARIS-SACLAY, FR  
[85] 2024-01-02  
[86] 2022-06-23 (PCT/EP2022/067224)  
[87] (WO2023/280586)  
[30] EP (21305953.8) 2021-07-09

[21] **3,224,672**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) A61P 43/00 (2006.01)**  
[25] EN  
[54] **TREATMENT FOR TYROSINE DEGRADATION-ASSOCIATED DISORDERS**  
[54] **TRAITEMENT DE TROUBLES ASSOCIES A LA DEGRADATION DE LA TYROSINE**  
[72] ZHOU, HAIYAN, GB  
[72] GISSEN, PAUL, GB  
[72] DORESTE, BRUNO, GB  
[71] UCL BUSINESS LTD, GB  
[85] 2024-01-02  
[86] 2022-07-04 (PCT/GB2022/051714)  
[87] (WO2023/281248)  
[30] GB (2109675.5) 2021-07-05

[21] **3,224,674**  
[13] A1

[51] **Int.Cl. C07D 471/04 (2006.01) A61K 31/444 (2006.01)**  
[25] EN  
[54] **TRICYCLIC COMPOUNDS AS INHIBITORS OF KRAS**  
[54] **COMPOSES TRICYCLIQUES EN TANT QU'INHIBITEURS DE KRAS**  
[72] GAN, PEI, US  
[72] YANG, JEFFREY, US  
[72] LI, YONG, US  
[72] ZHAO, LE, US  
[72] HE, CHUNHONG, US  
[72] LAW, CHUNYIN MARSHALL, US  
[72] WANG, XIAOZHAO, US  
[72] YAO, WENQING, US  
[71] INCYTE CORPORATION, US  
[85] 2024-01-02  
[86] 2022-07-06 (PCT/US2022/036172)  
[87] (WO2023/283213)  
[30] US (63/219,274) 2021-07-07  
[30] US (63/292,774) 2021-12-22  
[30] US (63/310,811) 2022-02-16

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[21] **3,224,681**  
[13] A1

[51] **Int.Cl. C07D 307/68 (2006.01) C07B 41/12 (2006.01) C07D 307/46 (2006.01)**

[25] EN

[54] **HETEROGENEOUS STANNOUS OXIDE CATALYSTS FOR THE LOW COLOR ESTERIFICATION OF FURAN-2,5-DICARBOXYLIC ACID**

[54] **CATALYSEURS HETEROGENES A BASE D'OXYDE STANNEUX POUR L'ESTERIFICATION FAIBLE COULEUR DE L'ACIDE FURAN-2,5-DICARBOXYLIQUE**

[72] MA, CHI-CHENG, US  
[72] NEHRKORN, EMILY, US  
[72] STENSRUD, KENNETH F., US  
[72] HAGBERG, ERIK, US  
[72] HOFFMAN, WILLIAM C., US  
[71] ARCHER DANIELS MIDLAND COMPANY, US

[85] 2024-01-02  
[86] 2022-07-05 (PCT/US2022/036154)  
[87] (WO2023/283207)  
[30] US (63/219,127) 2021-07-07

[21] **3,224,682**  
[13] A1

[51] **Int.Cl. A23L 29/256 (2016.01) A23K 20/163 (2016.01) A23K 20/24 (2016.01) A23K 50/90 (2016.01)**

[25] FR

[54] **METHOD FOR PREPARING A GEL BLOCK**

[54] **PROCEDE DE PREPARATION D'UN BLOC DE GEL**

[72] SARTON DU JONCHAY, THIBAUT, FR

[72] KIRECHE, ADAM, FR  
[72] LAFFORGUE, ANTHONY, FR  
[72] PERYCHOU, FANNY, FR  
[71] YNSECT, FR

[85] 2024-01-02  
[86] 2022-07-08 (PCT/FR2022/051384)  
[87] (WO2023/285757)  
[30] FR (FR2107607) 2021-07-13

[21] **3,224,683**  
[13] A1

[51] **Int.Cl. A61B 34/30 (2016.01) A61B 34/20 (2016.01) G06T 7/50 (2017.01) G06T 7/70 (2017.01)**

[25] EN

[54] **CO-MANIPULATION SURGICAL SYSTEM HAVING OPTICAL SCANNERS FOR USE WITH SURGICAL INSTRUMENTS FOR PERFORMING LAPAROSCOPIC SURGERY**

[54] **SYSTEME CHIRURGICAL DE CO-MANIPULATION AYANT DES SCANNERS OPTIQUES A UTILISER AVEC DES INSTRUMENTS CHIRURGICAUX POUR EFFECTUER UNE CHIRURGIE LAPAROSCOPIQUE**

[72] ALVAREZ, JEFFERY BYRON, US  
[72] LINARD, NICOLAS, FR  
[72] BASAFA, EHSAN, US  
[72] UMMALANENI, RITWIK, US  
[72] FAYAD, JAD, FR  
[72] NOONAN, DAVID PAUL, US  
[72] WU, VICTORIA CHENG-TAN, US  
[72] MAGO, JESUS, FR  
[71] MOON SURGICAL SAS, FR

[85] 2024-01-02  
[86] 2022-07-01 (PCT/IB2022/056159)  
[87] (WO2023/281372)  
[30] EP (21305929.8) 2021-07-05  
[30] EP (21306904.0) 2021-12-22  
[30] EP (21306905.7) 2021-12-22  
[30] IB (PCT/IB2022/052989) 2022-03-30

[21] **3,224,685**  
[13] A1

[51] **Int.Cl. H04W 28/02 (2009.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR REPORTING BUFFERED DATA**

[54] **PROCEDE ET APPAREIL PERMETTANT DE RAPPORTER DES DONNEES DE TAMPON**

[72] KHOROV, EVGENY MIKHAILOVICH, RU  
[72] BANKOV, DMITRY, RU  
[72] LEVITSKY, ILYA, RU  
[72] GUO, YUCHEN, CN  
[72] LI, YIQING, CN  
[72] LI, YUNBO, CN  
[72] HUANG, GUOGANG, CN  
[72] GAN, MING, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN

[85] 2024-01-02  
[86] 2022-06-27 (PCT/CN2022/101381)  
[87] (WO2023/274102)  
[30] RU (2021119192) 2021-07-01

[21] **3,224,686**  
[13] A1

[51] **Int.Cl. B66F 11/04 (2006.01) B66F 9/12 (2006.01)**

[25] EN

[54] **LINK ASSEMBLY FOR AN AERIAL LIFT ASSEMBLY**

[54] **ENSEMBLE DE LIAISON POUR ENSEMBLE DE LEVAGE AERIEN**

[72] HAILEY, ADAM, US  
[72] BUCHANAN, BLAKE, US  
[71] TEREX SOUTH DAKOTA, INC., US

[85] 2024-01-02  
[86] 2022-06-08 (PCT/US2022/032713)  
[87] (WO2023/283014)  
[30] US (17/369,404) 2021-07-07

[21] **3,224,691**  
[13] A1

[51] **Int.Cl. B42D 25/20 (2014.01) G06Q 20/38 (2012.01) G06K 19/06 (2006.01) G06K 19/07 (2006.01) G06K 19/077 (2006.01) G07F 7/08 (2006.01)**

[25] EN

[54] **THERMO-SENSITIVE PAYMENT CARD**

[54] **CARTE DE PAIEMENT THERMOSENSIBLE**

[72] FLETCHER, KYLE, US  
[72] DHODAPKAR, ASHUTOSH, US  
[71] BLOCK, INC., US

[85] 2024-01-02  
[86] 2022-06-30 (PCT/US2022/035796)  
[87] (WO2023/278749)  
[30] US (17/367,041) 2021-07-02

[21] **3,224,692**  
[13] A1

[51] **Int.Cl. H04W 24/08 (2009.01)**

[25] EN

[54] **METHOD FOR SENDING DATA IN WIRELESS NETWORK, AND RELATED APPARATUS**

[54] **PROCEDE DE TRANSMISSION DE DONNEES DANS UN RESEAU SANS FIL ET APPAREIL ASSOCIE**

[72] LU, YUXIN, CN  
[72] LIU, CHENCHEN, CN  
[72] GAN, MING, CN  
[72] LI, YUNBO, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN

[85] 2024-01-02  
[86] 2022-06-29 (PCT/CN2022/102493)  
[87] (WO2023/274322)  
[30] CN (202110753768.6) 2021-07-02

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[21] **3,224,693**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01)**  
[25] EN  
[54] **ANTI-TNFR2 ANTIBODY AND USES THEREOF**  
[54] **ANTICORPS ANTI-TNFR2 ET SES UTILISATIONS**  
[72] BELTRAMINELLI, NICOLA  
ARTURO ALDO, US  
[72] WATKINS, JENNIFER, US  
[72] ADRIAN, FRANCISCO, US  
[72] ZHANG, QIAN, US  
[72] RAUE, ANDREAS, US  
[72] MARY, PASCALINE, US  
[72] SCHWEIZER, LIANG, US  
[72] WEI, SHUO, US  
[72] DELINCE, MATTHIEU, US  
[71] HIFIBIO (HK) LIMITED, CN  
[85] 2024-01-02  
[86] 2022-07-06 (PCT/IB2022/000409)  
[87] (WO2023/281313)  
[30] US (63/219,175) 2021-07-07

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[21] **3,224,694**  
[13] A1

[51] **Int.Cl. A61K 8/19 (2006.01) A61K 8/24 (2006.01) A61K 8/25 (2006.01) A61Q 11/00 (2006.01)**  
[25] EN  
[54] **ORAL CARE COMPOSITIONS COMPRISING HYDROXYAPATITE**  
[54] **COMPOSITIONS DE SOIN BUCCODENTAIRE COMPRENANT DE L'HYDROXYAPATITE**  
[72] ZHANG, DENNIS, US  
[72] RINAUDI MARRÓN, LUCIANA, US  
[72] LAVENDER, STACEY, US  
[72] GOVINDARAJU, GOKUL, US  
[72] RUAN, QICHAO, US  
[71] COLGATE-PALMOLIVE COMPANY, US  
[85] 2024-01-02  
[86] 2022-07-20 (PCT/US2022/037689)  
[87] (WO2023/003940)  
[30] US (63/223,716) 2021-07-20

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[21] **3,224,695**  
[13] A1

[51] **Int.Cl. E05B 9/04 (2006.01)**  
[25] EN  
[54] **CYLINDER LOCK ASSEMBLY**  
[54] **ENSEMBLE SERRURE A BARILLET**  
[72] OVERBEEKE, CORNELIS JACOBUS  
JOHANNES MARINUS, NL  
[71] M & C PROTECT B.V., NL  
[85] 2024-01-02  
[86] 2022-07-15 (PCT/NL2022/050417)  
[87] (WO2023/287293)  
[30] NL (2028758) 2021-07-16

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[21] **3,224,696**  
[13] A1

[51] **Int.Cl. C02F 11/12 (2019.01) C02F 11/13 (2019.01)**  
[25] EN  
[54] **VOLUME REDUCTION SOLIDS TREATMENT SYSTEM**  
[54] **SYSTEME DE TRAITEMENT DE SOLIDES A REDUCTION DE VOLUME**  
[72] YEE, SHANNON, US  
[72] DIMENICHI, DANTE III, US  
[72] HOLCOMBE, WILEY D., US  
[72] HOLMES, JONATHAN, US  
[72] NOEL, ALEXIS, US  
[72] AZEVEDO, KYLE, US  
[72] GAYLO, RYAN, US  
[72] RICHTER, STEPHANIE, US  
[72] TURNER, TRAVIS, US  
[72] SHERMAN, KRISTINE, US  
[72] HAWKINS, BRIAN, US  
[72] MILLER, GRAHAM, US  
[72] TROTOCHAUD, LENA, US  
[71] GEORGIA TECH RESEARCH CORPORATION, US  
[71] DUKE UNIVERSITY, US  
[85] 2024-01-02  
[86] 2022-07-15 (PCT/US2022/073813)  
[87] (WO2023/288327)  
[30] US (63/222,740) 2021-07-16

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[21] **3,224,697**  
[13] A1

[51] **Int.Cl. G06V 10/82 (2022.01) G06V 20/56 (2022.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR IMPROVING MACHINE PERFORMANCE BASED ON MACHINE APPLICATION IDENTIFICATION**  
[54] **SYSTEMES ET PROCEDES POUR AMELIORER LES PERFORMANCES D'UNE MACHINE SUR LA BASE D'UNE IDENTIFICATION D'APPLICATION DE MACHINE**  
[72] SARDENBERG, LUCAS I., US  
[71] CATERPILLAR INC., US  
[85] 2024-01-02  
[86] 2022-07-12 (PCT/US2022/036762)  
[87] (WO2023/287745)  
[30] US (17/373,351) 2021-07-12

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[21] **3,224,701**  
[13] A1

[51] **Int.Cl. C07D 413/04 (2006.01)**  
[25] EN  
[54] **PROCESS FOR MAKING DIARYL ISOXAZOLINE DERIVATIVE**  
[54] **PROCEDE DE FABRICATION D'UN DERIVE DE DIARYLISOXAZOLINE**  
[72] HU, JINGDAN, US  
[72] WU, GUANMIN, US  
[71] ELANCO US INC., US  
[85] 2024-01-02  
[86] 2022-08-10 (PCT/US2022/039965)  
[87] (WO2023/018806)  
[30] US (63/231,858) 2021-08-11  
[30] US (63/306,240) 2022-02-03

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[21] **3,224,702**  
[13] A1

[51] **Int.Cl. G01V 3/08 (2006.01)**  
[25] EN  
[54] **DETECTION OF NEAR SUBSURFACE VOIDS THAT ARE RESISTIVE OR CONTAIN CONDUCTIVE ELEMENTS WITHIN THE VOID SPACE**

[54] **DETECTION DE VIDES DE SOUS-SOL PROCHE QUI SONT RESISTIFS OU CONTIENNENT DES ELEMENTS CONDUCTEURS A L'INTERIEUR DE L'ESPACE DU VIDE**

[72] PUGH, TREVOR, US  
[71] DEEP IMAGING TECHNOLOGIES, INC., US  
[85] 2024-01-02  
[86] 2022-07-01 (PCT/US2022/073380)  
[87] (WO2023/279100)  
[30] US (63/202,972) 2021-07-01

[21] **3,224,703**  
[13] A1

[51] **Int.Cl. G06F 9/44 (2018.01) G06F 11/36 (2006.01) H04L 9/32 (2006.01) G06F 3/048 (2013.01)**

[25] EN  
[54] **AUTOMATED USER INTERFACE TESTING WITH MACHINE LEARNING**

[54] **TEST D'INTERFACE UTILISATEUR AUTOMATISE A L'AIDE DE L'APPRENTISSAGE MACHINE**

[72] SHARMA, HARSH, IN  
[72] KATHERIA, YOGENDRA SINGH, IN  
[72] AHAMED, SEERAJUDEEN SHEIK, IN  
[72] RAMANJANI, RAJIV, IN  
[72] GARG, SHEFALI, IN  
[71] FIDELITY INFORMATION SERVICES, LLC, US  
[85] 2024-01-02  
[86] 2022-08-17 (PCT/US2022/040558)  
[87] (WO2023/023126)  
[30] IN (202111037812) 2021-08-20  
[30] US (17/492,236) 2021-10-01

[21] **3,224,704**  
[13] A1

[51] **Int.Cl. A61K 31/5365 (2006.01) A61P 35/00 (2006.01) C07C 65/05 (2006.01) C07D 498/04 (2006.01)**

[25] EN  
[54] **SOLID FORMS OF 7-[[[(1S)-1-[4-[(1S)-2-CYCLOPROPYL-1-(4-PROP-2-ENOYLPIPER AZIN-1-YL)ETHYL]PHENYL]ETHYL]AMINO]-1-ETHYL-4H-PYRIMIDO[4,5-D]] [1,3]OXAZIN-2-ONE**

[54] **FORMES SOLIDES DE 7-[[[(1S)-1-[4-[(1S)-2-CYCLOPROPYL-1-(4-PROP-2-ENOYLPIPERAZIN-1-YL)ETHYL]PHENYL]ETHYL]AMINO]-1-ETHYL-4H-PYRIMIDO[4,5-D]][1,3]OXAZIN-2-ONE**

[72] COATES, DAVID ANDREW, US  
[72] CAO, YIZHENG, US  
[71] ELI LILLY AND COMPANY, US  
[85] 2024-01-02  
[86] 2022-08-12 (PCT/US2022/040191)  
[87] (WO2023/018955)  
[30] US (63/232,846) 2021-08-13  
[30] US (63/290,403) 2021-12-16  
[30] US (63/310,692) 2022-02-16

[21] **3,224,706**  
[13] A1

[51] **Int.Cl. H04L 5/00 (2006.01)**

[25] EN  
[54] **PILOT SIGNAL TRANSMISSION METHOD AND RELATED APPARATUS**

[54] **PROCEDE DE TRANSMISSION DE SIGNAL A FREQUENCE PILOTE ET APPAREIL ASSOCIE**

[72] LU, YUXIN, CN  
[72] LIU, CHENCHEN, CN  
[72] YU, JIAN, CN  
[72] LI, YUNBO, CN  
[72] GAN, MING, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2024-01-02  
[86] 2022-06-29 (PCT/CN2022/102494)  
[87] (WO2023/274323)  
[30] CN (202110753764.8) 2021-07-02

[21] **3,224,708**  
[13] A1

[51] **Int.Cl. A61K 47/60 (2017.01)**

[25] EN  
[54] **TARGETING ONCOGENIC KRAS WITH MOLECULAR BRUSH-CONJUGATED ANTISENSE OLIGONUCLEOTIDE**

[54] **CIBLAGE DE KRAS ONCOGENE AVEC UN OLIGONUCLEOTIDE ANTISENS CONJUGUE A UN PEIGNE MOLECULAIRE**

[72] ZHANG, KE, US  
[72] WANG, DALI, US  
[71] NORTHEASTERN UNIVERSITY, US  
[85] 2024-01-02  
[86] 2022-08-19 (PCT/US2022/075240)  
[87] (WO2023/023662)  
[30] US (63/234,847) 2021-08-19

[21] **3,224,709**  
[13] A1

[51] **Int.Cl. H01Q 9/06 (2006.01) H01Q 21/06 (2006.01)**

[25] EN  
[54] **8T8R QUASI-OMNIDIRECTIONAL ANTENNA**

[54] **ANTENNE QUASI OMNIDIRECTIONNELLE 8T8R**

[72] SUNDARARAJAN, NIRANJAN, US  
[72] WAYTON, EVAN, US  
[71] JOHN MEZZALINGUA ASSOCIATES, LLC, US  
[85] 2024-01-02  
[86] 2022-07-06 (PCT/US2022/036186)  
[87] (WO2023/283223)  
[30] US (63/218,631) 2021-07-06

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[21] **3,224,710**  
[13] A1

[51] **Int.Cl. C07D 417/14 (2006.01) C07C 381/10 (2006.01)**  
[25] EN  
[54] **PESTICIDALLY ACTIVE FUSED BICYCLIC HETEROAROMATIC COMPOUNDS**  
[54] **COMPOSES HETEROAROMATIQUES BICYCLIQUES FUSIONNES A ACTION PESTICIDE**  
[72] PITTERNA, THOMAS, CH  
[72] PHADTE, MANGALA, IN  
[72] BERARDOZZI, SIMONE, CH  
[72] WEISS, MATTHIAS, CH  
[72] JEANGUENAT, ANDRE, CH  
[72] HALL, ROGER GRAHAM, CH  
[72] KILARU, JAGADEESH PRATHAP, IN  
[72] MUEHLEBACH, MICHEL, CH  
[71] SYNGENTA CROP PROTECTION AG, CH  
[85] 2024-01-02  
[86] 2022-07-27 (PCT/EP2022/071014)  
[87] (WO2023/006789)  
[30] IN (202111034185) 2021-07-29

[21] **3,224,712**  
[13] A1

[51] **Int.Cl. A61M 5/32 (2006.01) H05B 1/02 (2006.01)**  
[25] EN  
[54] **HYPODERMIC NEEDLE DESTRUCTION**  
[54] **DESTRUCTION D'AIGUILLE HYPODERMIQUE**  
[72] KIRBY, CLIFFORD, GB  
[71] NSMART TRADING LIMITED, GB  
[85] 2024-01-02  
[86] 2021-07-09 (PCT/GB2021/051754)  
[87] (WO2023/281234)

[21] **3,224,732**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) C07D 487/04 (2006.01)**  
[25] EN  
[54] **COMPOUNDS FOR TARGETING DEGRADATION OF IRAK4 PROTEINS**  
[54] **COMPOSES POUR LE CIBLAGE DE LA DEGRADATION DE PROTEINES IRAK4**  
[72] GUCKIAN, KEVIN M., US  
[72] PETERSON, EMILY ANNE, US  
[72] GAO, FANG, US  
[72] EVANS, RYAN, US  
[72] STEFAN, ERIC, US  
[72] YAP, JEREMY L., US  
[72] ANDERSON, COREY DON, US  
[72] O'SHEA, MORGAN WELZEL, US  
[72] AHN, JAE YOUNG, US  
[72] NASVESCHUK, CHRISTOPHER G., US  
[72] HENDERSON, JAMES A., US  
[71] BIOGEN MA INC., US  
[71] C4 THERAPEUTICS, INC., US  
[85] 2024-01-03  
[86] 2022-07-07 (PCT/US2022/073522)  
[87] (WO2023/283610)  
[30] US (63/219,160) 2021-07-07  
[30] US (63/354,017) 2022-06-21

[21] **3,224,758**  
[13] A1

[51] **Int.Cl. A23G 3/02 (2006.01) A23G 3/34 (2006.01) A23G 3/50 (2006.01) A23G 4/04 (2006.01) A23G 4/18 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR MAKING A CONFECTIONERY PRODUCT**  
[54] **APPAREIL DE PRODUCTION D'UN PRODUIT DE CONFISERIE**  
[72] TULLI, ALESSIO, IT  
[72] SULEYMANOGLU, EVSEN, IT  
[71] PERFETTI VAN MELLE S.P.A., IT  
[85] 2024-01-03  
[86] 2022-07-06 (PCT/IB2022/056226)  
[87] (WO2023/281403)  
[30] IT (102021000018062) 2021-07-08

[21] **3,224,761**  
[13] A1

[51] **Int.Cl. A61K 9/14 (2006.01)**  
[25] EN  
[54] **AMORPHOUS DISPERSION OF FERRIC MALTOL AND THE PREPARATION PROCESS THEREOF**  
[54] **DISPERSION AMORPHE DE MALTOL FERRIQUE ET SON PROCEDE DE PREPARATION**  
[72] TARANTINO, MARILU, IT  
[72] RICOTTI, MAURIZIO, IT  
[72] CICERI, DANIELE (DECEASED), IT  
[71] INDENA S.P.A., IT  
[85] 2024-01-03  
[86] 2022-07-13 (PCT/IB2022/056445)  
[87] (WO2023/285979)  
[30] IT (102021000018578) 2021-07-14

[21] **3,224,767**  
[13] A1

[51] **Int.Cl. C04B 28/02 (2006.01) C04B 28/04 (2006.01) C04B 28/06 (2006.01) C04B 28/08 (2006.01)**  
[25] EN  
[54] **STRENGTH ENHANCING ADMIXTURE FOR LOW-CARBON CEMENTITIOUS COMPOSITIONS**  
[54] **ADJUVANT AMELIORANT LA RESISTANCE POUR COMPOSITIONS CIMENTAIRES A FAIBLE TENEUR EN CARBONE**  
[72] CASTIGLIONI, FABIO, IT  
[72] CORBO, PIERO, IT  
[72] SQUINZI, MARCO, IT  
[72] FERRARI, GIORGIO, IT  
[71] MAPEI SPA, IT  
[85] 2024-01-03  
[86] 2022-07-11 (PCT/EP2022/069329)  
[87] (WO2023/285386)  
[30] EP (21184949.2) 2021-07-12

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[21] **3,224,773**  
[13] A1

[51] **Int.Cl. G01N 33/86 (2006.01)**  
[25] EN  
[54] **METHOD FOR EVALUATING RESIDUAL PLATELET THROMBOTIC POTENTIAL IN PATIENTS UNDERGOING ANTIPLATELET TREATMENT**  
[54] **METHODE D'EVALUATION DU POTENTIEL THROMBOTIQUE RESIDUEL DE PLAQUETTES CHEZ LES PATIENTS SOUMIS A UN TRAITEMENT ANTIPLAQUETTAIRE**  
[72] CAMERA, MARINA, IT  
[72] BRAMBILLA, MARTA, IT  
[72] CANZANO, PAOLA, IT  
[71] CENTRO CARDIOLOGICO MONZINO S.P.A., IT  
[71] UNIVERSITA' DEGLI STUDI DI MILANO, IT  
[85] 2024-01-03  
[86] 2022-07-14 (PCT/EP2022/069766)  
[87] (WO2023/285607)  
[30] IT (102021000018803) 2021-07-15

[21] **3,224,778**  
[13] A1

[51] **Int.Cl. B65D 1/02 (2006.01) B65D 79/00 (2006.01)**  
[25] EN  
[54] **BEVERAGE CONTAINER**  
[54] **RECIPIENT POUR BOISSON**  
[72] BHAT, ADVAIT, US  
[72] TELESKA, BRUNO, US  
[72] WIESCINSKI, MARC T., US  
[71] PEPSICO, INC., US  
[85] 2024-01-03  
[86] 2022-07-08 (PCT/US2022/036535)  
[87] (WO2023/287662)  
[30] US (17/374,555) 2021-07-13

[21] **3,224,787**  
[13] A1

[51] **Int.Cl. A61K 31/00 (2006.01) A61K 31/70 (2006.01) A61K 31/715 (2006.01) A61K 31/733 (2006.01) A61K 35/00 (2006.01)**  
[25] EN  
[54] **PREBIOTIC COMPOSITION AND METHOD OF USE TO IMPROVE GASTROINTESTINAL HEALTH IN PATIENTS WITH DYSBIOSIS AND LEAKY GUT**  
[54] **COMPOSITION PREBIOTIQUE ET PROCEDE D?UTILISATION POUR AMELIORER LA SANTE GASTRO-INTESTINALE DE PATIENTS ATTEINTS DE DYSBIOSE ET D?INTESTIN PERMEABLE**  
[72] KESHAVARZIAN, ALI, US  
[72] HAMAKER, BRUCE R., US  
[72] MORO CANTU JUNGLES, THAISA, US  
[71] PURDUE RESEARCH FOUNDATION, US  
[71] RUSH UNIVERSITY MEDICAL CENTER, US  
[85] 2024-01-03  
[86] 2022-07-15 (PCT/US2022/037251)  
[87] (WO2023/288041)  
[30] US (63/222,562) 2021-07-16

[21] **3,224,793**  
[13] A1

[51] **Int.Cl. A61K 8/19 (2006.01) A61K 8/21 (2006.01) A61K 8/24 (2006.01) A61K 8/25 (2006.01) A61K 8/27 (2006.01) A61K 8/44 (2006.01) A61K 8/73 (2006.01) A61Q 11/00 (2006.01)**  
[25] EN  
[54] **ORAL CARE COMPOSITIONS COMPRISING HYDROXYAPATITE**  
[54] **COMPOSITIONS DE SOIN BUCCODENTAIRE COMPRENANT DE L'HYDROXYAPATITE**  
[72] ZHANG, DENNIS, US  
[72] RINAUDI MARRON, LUCIANA, US  
[72] LAVENDER, STACEY, US  
[72] NG, ALICE, US  
[72] RUAN, QICHAO, US  
[71] COLGATE-PALMOLIVE COMPANY, US  
[85] 2024-01-03  
[86] 2022-07-20 (PCT/US2022/037691)  
[87] (WO2023/003941)  
[30] US (63/223,720) 2021-07-20

[21] **3,224,795**  
[13] A1

[51] **Int.Cl. H01M 4/70 (2006.01) H01M 10/0525 (2010.01)**  
[25] EN  
[54] **LITHIUM ION BATTERY**  
[54] **BATTERIE AU LITHIUM-ION**  
[72] DAMITZ, THOMAS GERHARD WILHELM, CN  
[71] DAMITZ, THOMAS GERHARD WILHELM, CN  
[85] 2024-01-03  
[86] 2022-07-04 (PCT/CN2022/103667)  
[87] (WO2023/280112)  
[30] CN (202121510642.8) 2021-07-05

[21] **3,224,796**  
[13] A1

[51] **Int.Cl. A61K 8/24 (2006.01) A61K 8/25 (2006.01) A61K 8/44 (2006.01) A61Q 11/00 (2006.01)**  
[25] EN  
[54] **ORAL CARE COMPOSITIONS COMPRISING HYDROXYAPATITE**  
[54] **COMPOSITIONS DE SOIN BUCCODENTAIRE COMPRENANT DE L'HYDROXYAPATITE**  
[72] ZHANG, DENNIS, US  
[72] RINAUDI MARRON, LUCIANA, US  
[72] LAVENDER, STACEY, US  
[72] SCUOLLOS, ZOE, US  
[72] XU, YUN, US  
[72] RUAN, QICHAO, US  
[71] COLGATE-PALMOLIVE COMPANY, US  
[85] 2024-01-03  
[86] 2022-07-20 (PCT/US2022/037703)  
[87] (WO2023/003948)  
[30] US (63/223,713) 2021-07-20

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[21] **3,224,798**  
[13] A1

[51] **Int.Cl. D01D 4/02 (2006.01) D01D 1/02 (2006.01) D01F 2/02 (2006.01)**  
[25] EN  
[54] **PROCESS FOR SPINNING ALKALINE CELLULOSE SPIN DOPE**  
[54] **PROCEDE DE FILAGE D'UNE SOLUTION DE FILAGE DE CELLULOSE ALCALINE**  
[72] HEDLUND, ARTUR, SE  
[72] HAGSTROM, BENGT, SE  
[71] TREETOTEXTILE AB, SE  
[85] 2024-01-03  
[86] 2022-07-04 (PCT/EP2022/068459)  
[87] (WO2023/280779)  
[30] EP (21183794.3) 2021-07-05  
[30] EP (21212307.9) 2021-12-03

[21] **3,224,800**  
[13] A1

[51] **Int.Cl. B32B 3/28 (2006.01) B32B 5/18 (2006.01) B32B 7/12 (2006.01) B32B 27/06 (2006.01) B32B 27/08 (2006.01) B32B 27/32 (2006.01) B32B 37/16 (2006.01)**  
[25] EN  
[54] **SHEETING AND METHODS OF MANUFACTURING SHEETING**  
[54] **FEUILLE ET PROCEDES DE FABRICATION D'UNE FEUILLE**  
[72] DELAFOSSE, MARK, AU  
[71] UNIQCO-IP PTY LTD, AU  
[85] 2024-01-03  
[86] 2022-07-15 (PCT/AU2022/050752)  
[87] (WO2023/283701)  
[30] AU (2021902177) 2021-07-15  
[30] AU (2021902178) 2021-07-15  
[30] AU (2021221599) 2021-08-25  
[30] AU (2021221600) 2021-08-25

[21] **3,224,801**  
[13] A1

[51] **Int.Cl. C01D 15/08 (2006.01) C01G 53/00 (2006.01) C22B 23/02 (2006.01) C22B 26/12 (2006.01) H01M 10/54 (2006.01)**  
[25] EN  
[54] **RECYCLING METHOD OF POSITIVE ELECTRODE MATERIAL FOR SECONDARY BATTERIES AND DEVICE USING THE SAME**  
[54] **PROCEDE DE RECYCLAGE DE MATERIAU D'ELECTRODE POSITIVE POUR BATTERIES SECONDAIRES ET DISPOSITIF UTILISANT CE DERNIER**  
[72] JEON, MIN KU, KR  
[72] KIM, SUNG WOOK, KR  
[72] LEE, KEUN YOUNG, KR  
[72] EUN, HEE CHUL, KR  
[72] OH, MAENG KYO, KR  
[71] KOREA ATOMIC ENERGY RESEARCH INSTITUTE, KR  
[85] 2024-01-03  
[86] 2021-11-04 (PCT/KR2021/015932)  
[87] (WO2023/017910)  
[30] KR (10-2021-0104289) 2021-08-09

[21] **3,224,803**  
[13] A1

[51] **Int.Cl. G05B 19/042 (2006.01)**  
[25] EN  
[54] **DEVICE FOR PROCESSING FOOD WASTE AND METHOD FOR OPERATING A DEVICE FOR PROCESSING FOOD WASTE**  
[54] **EQUIPEMENT DE TRAITEMENT DE DECHETS ALIMENTAIRES ET PROCEDE DE FONCTIONNEMENT D'UN EQUIPEMENT DE TRAITEMENT DE DECHETS ALIMENTAIRES**  
[72] PRATES FILHO, JOSE EDUARDO, BR  
[71] ECO CIRCUITO IMPORTACAO E COMERCIO DE EQUIPAMENTOS LTDA. - EPP, BR  
[85] 2024-01-03  
[86] 2022-07-05 (PCT/BR2022/050248)  
[87] (WO2023/279181)  
[30] BR (1020210132752) 2021-07-05

[21] **3,224,804**  
[13] A1

[51] **Int.Cl. C07K 16/10 (2006.01) A61K 47/68 (2017.01) A61P 31/14 (2006.01) C07K 14/705 (2006.01)**  
[25] EN  
[54] **NEUTRALIZING ANTIBODIES AGAINST SARS-COV-2 AND USES THEREOF**  
[54] **ANTICORPS NEUTRALISANTS CONTRE LE SARS-COV-2 ET LEURS UTILISATIONS**  
[72] FINZI, ANDRES, CA  
[72] HADDAD, ELIE, CA  
[72] SMITH, MARTIN, CA  
[72] LAVALLEE, VINCENT-PHILIPPE, CA  
[72] LISI, VERONIQUE, CA  
[72] PREVOST, JEREMIE, CA  
[71] VAL-CHUM, LIMITED PARTNERSHIP, CA  
[71] VALORISATION HSJ, LIMITED PARTNERSHIP, CA  
[85] 2024-01-03  
[86] 2022-07-09 (PCT/CA2022/051074)  
[87] (WO2023/279212)  
[30] US (63/203,126) 2021-07-09

[21] **3,224,807**  
[13] A1

[51] **Int.Cl. C22B 26/12 (2006.01) C22B 3/02 (2006.01) C22B 3/08 (2006.01)**  
[25] EN  
[54] **PROCESS AND SYSTEM FOR RECOVERING LITHIUM FROM LITHIUM-ION BATTERIES**  
[54] **PROCESSUS ET SYSTEME DE RECUPERATION DE LITHIUM A PARTIR DE BATTERIES AU LITHIUM-ION**  
[72] KATAL, REZA, SG  
[72] AKHONDI, EBRAHIM, SG  
[71] GREEN LI-ION PTE. LTD., SG  
[85] 2024-01-03  
[86] 2023-04-17 (PCT/SG2023/050257)  
[87] (WO2023/204761)  
[30] US (63/332,025) 2022-04-18



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[21] **3,224,808**  
[13] A1

[51] **Int.Cl. G06F 16/903 (2019.01) G06F 16/9035 (2019.01) G06F 16/9038 (2019.01) G06N 20/00 (2019.01)**

[25] EN

[54] **MACHINE-LEARNED DESKING VEHICLE RECOMMENDATION**

[54] **RECOMMANDATION DE VEHICULE SUR LA BASE DE SOUMISSIONS A APPRENTISSAGE AUTOMATIQUE**

[72] GUPTA, NITIKA, US  
[72] SURTANI, VED, US  
[71] TEKION CORP, US

[85] 2023-12-30  
[86] 2022-09-08 (PCT/US2022/042882)  
[87] (WO2023/039048)

[30] US (17/472,407) 2021-09-10  
[30] US (17/835,182) 2022-06-08

[21] **3,224,809**  
[13] A1

[51] **Int.Cl. A61K 8/02 (2006.01) A61K 8/14 (2006.01) A61K 8/67 (2006.01) A61K 8/73 (2006.01) A61K 9/127 (2006.01) A61K 47/36 (2006.01) A61Q 19/00 (2006.01)**

[25] EN

[54] **SKIN MOISTURIZING COMPOSITIONS**

[54] **COMPOSITIONS HYDRATANTES POUR LA PEAU**

[72] SARKAR, PARAMITA, US  
[72] SMITH, TROY, US  
[71] OCUSOFT, INC., US

[85] 2024-01-03  
[86] 2022-07-11 (PCT/US2022/036653)  
[87] (WO2023/287690)

[30] US (63/220,888) 2021-07-12

[21] **3,224,811**  
[13] A1

[51] **Int.Cl. B29B 7/48 (2006.01) B29B 7/58 (2006.01) B29B 7/82 (2006.01) B29B 17/04 (2006.01) C10C 3/00 (2006.01) E01C 19/10 (2006.01) B29B 7/72 (2006.01)**

[25] FR

[54] **HEATABLE MIXER FOR COMPOSITE PRODUCTS WITH CONTROLLED OUTLET**

[54] **MELANGEUR CHAUFFANT POUR PRODUITS COMPOSITES A SORTIE REGULEE**

[72] BINDSCHEDLER, PIERRE-ETIENNE, FR

[72] BALL, PATRICK, FR  
[71] SOPREMA, FR

[85] 2024-01-03  
[86] 2022-07-08 (PCT/EP2022/069052)  
[87] (WO2023/285303)

[30] FR (FR2107679) 2021-07-16

[21] **3,224,812**  
[13] A1

[51] **Int.Cl. C09D 7/80 (2018.01) C09D 7/43 (2018.01) C09D 7/61 (2018.01) C09D 7/62 (2018.01) B01F 33/84 (2022.01) C08K 9/10 (2006.01) C08K 3/22 (2006.01)**

[25] EN

[54] **IN-LINE PROCESS FOR PREPARING PAINT**

[54] **PROCEDE EN LIGNE POUR LA PREPARATION DE PEINTURE**

[72] NUNGESSER, EDWIN A., US  
[72] HARSH, PHILIP R., US  
[72] BOHLING, JAMES C., US  
[71] ROHM AND HAAS COMPANY, US

[85] 2024-01-03  
[86] 2022-06-15 (PCT/US2022/033508)  
[87] (WO2023/287539)

[30] US (63/221,043) 2021-07-13

[21] **3,224,814**  
[13] A1

[51] **Int.Cl. B01J 23/50 (2006.01) B01J 23/68 (2006.01) B01J 37/02 (2006.01) C07D 301/10 (2006.01)**

[25] EN

[54] **ALKYLENE OXIDE CATALYST THAT CAN BE MANUFACTURED RAPIDLY IN ONE STEP**

[54] **CATALYSEUR D'OXYDE D'ALKYLENE POUVANT ETRE FABRIQUE RAPIDEMENT EN UNE ETAPE**

[72] SMOLL, KARENA, US  
[72] VAN NOYEN, JASPER, NL  
[72] PAZMINO, JORGE H., US  
[72] SANTOS CASTRO, VERA P., NL  
[72] MCADON, MARK H., US  
[72] LIU, ANNY, US

[71] DOW GLOBAL TECHNOLOGIES LLC, US

[85] 2024-01-03  
[86] 2022-05-26 (PCT/US2022/031025)  
[87] (WO2023/287500)

[30] US (63/222,122) 2021-07-15

[21] **3,224,816**  
[13] A1

[51] **Int.Cl. A61K 8/02 (2006.01) A61K 8/92 (2006.01) A61P 17/00 (2006.01) A61Q 15/00 (2006.01) A61Q 19/10 (2006.01) C11D 3/00 (2006.01) C11D 9/26 (2006.01)**

[25] EN

[54] **SOLID PERSONAL CARE COMPOSITIONS INCORPORATING NATURAL BENEFIT AGENTS SUCH AS FLAXSEED OIL AND METHODS FOR THE SAME**

[54] **COMPOSITIONS DE SOINS PERSONNELS COMPRENANT DES AGENTS BENEFIQUES NATURELS TELS QUE DE L'HUILE DE LIN ET LEURS METHODES D'UTILISATION**

[72] OLVERA, DAVID, MX  
[72] MORALES, SARA, MX  
[72] ESPINOSA, REINA, MX  
[72] LOPEZ, LUIS MIGUEL, MX  
[72] RAMIREZ MENDEZ, ANTONIA DE LA CRUZ, MX  
[72] GONZALEZ, ARISAI, MX  
[72] WU, QIANG, US  
[71] COLGATE-PALMOLIVE COMPANY, US

[85] 2024-01-03  
[86] 2022-07-22 (PCT/US2022/037989)  
[87] (WO2023/004100)

[30] US (63/225,202) 2021-07-23

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[21] **3,224,818**  
[13] A1

[51] **Int.Cl. C07C 69/716 (2006.01) C07C 67/347 (2006.01) C07C 227/04 (2006.01) C07C 229/08 (2006.01)**

[25] EN

[54] **METHOD FOR THE PREPARATION OF .OMEGA.-AMINO-CARBOXYLIC ACIDS AND DERIVATIVES THEREOF**

[54] **PROCEDE DE PREPARATION D'ACIDES .OMEGA. -AMINO-CARBOXYLIQUES ET DE LEURS DERIVES**

[72] VECCHINI, NICOLA, IT  
[72] NODARI, MIRCO, IT  
[72] GALEOTTI, ARMANDO, IT  
[72] DELLEDONNE, DANIELE, IT  
[71] VERSALIS S.P.A., IT  
[85] 2024-01-03  
[86] 2022-08-09 (PCT/IB2022/057410)  
[87] (WO2023/026127)  
[30] IT (102021000022328) 2021-08-25

[21] **3,224,819**  
[13] A1

[51] **Int.Cl. B62D 5/30 (2006.01)**

[25] EN

[54] **FAULT DETECTION FOR SECONDARY STEERING SYSTEM**

[54] **DETECTION DE DEFAUT POUR SYSTEME DE DIRECTION SECONDAIRE**

[72] MATE, EDWARD W., US  
[72] O'NEILL, WILLIAM N., US  
[72] PETERSON, JEREMY T., US  
[72] CARPENTER, RICHARD A., US  
[71] CATERPILLAR INC., US  
[85] 2024-01-03  
[86] 2022-07-13 (PCT/US2022/036978)  
[87] (WO2023/287890)  
[30] US (17/376,982) 2021-07-15

[21] **3,224,821**  
[13] A1

[51] **Int.Cl. A01N 31/08 (2006.01) A61K 8/34 (2006.01) A61K 8/35 (2006.01) A61K 8/365 (2006.01)**

[25] EN

[54] **PERSONAL CARE COMPOSITIONS**

[54] **COMPOSITIONS DE SOINS PERSONNELS**

[72] LIAO, YUXI, CN  
[72] LU, XIAOJING, CN  
[72] SHI, MANYING, CN  
[72] ZHANG, YUCHEN, CN  
[72] WANG, XIAOJUN, CN  
[71] COLGATE-PALMOLIVE COMPANY, US  
[85] 2024-01-03  
[86] 2022-08-02 (PCT/US2022/039154)  
[87] (WO2023/014706)  
[30] CN (202110884865.9) 2021-08-03

[21] **3,224,823**  
[13] A1

[51] **Int.Cl. C08J 3/24 (2006.01) C08J 5/00 (2006.01) C08K 5/14 (2006.01) C08L 23/00 (2006.01)**

[25] EN

[54] **HIGH TEMPERATURE, LOW SCORCH METHODS OF MAKING CROSSLINKABLE COMPOUND COMPOSITIONS AND THE COMPOSITIONS MADE THEREBY**

[54] **PROCEDES A HAUTE TEMPERATURE ET FAIBLE GRILLAGE POUR LA FABRICATION DE COMPOSITIONS DE MELANGE CRU RETICULABLE ET FABRIQUEES**

[72] ESSEGHIR, MOHAMED, US  
[72] DUNCHUS, NEIL W., US  
[72] GOU, QIAN, US  
[72] SENGUPTA, SAURAV S., US  
[72] COGEN, JEFFREY M., US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2024-01-03  
[86] 2022-07-06 (PCT/US2022/036211)  
[87] (WO2023/287619)  
[30] US (63/222,000) 2021-07-15

[21] **3,224,824**  
[13] A1

[51] **Int.Cl. B65D 5/00 (2006.01) B65D 5/02 (2006.01) B65D 5/06 (2006.01) B65D 5/08 (2006.01) B65D 5/18 (2006.01) B65D 5/36 (2006.01) B65D 5/42 (2006.01) B65D 5/48 (2006.01)**

[25] EN

[54] **CONTAINER WITH INTEGRAL CONDIMENT POCKET**

[54] **RECIPIENT AVEC POCHE DE CONDIMENT INTEGREE**

[72] LEARN, ANGELA E., US  
[71] PACTIV LLC, US  
[85] 2024-01-03  
[86] 2022-07-08 (PCT/US2022/036443)  
[87] (WO2023/283396)  
[30] US (63/219,634) 2021-07-08

[21] **3,224,825**  
[13] A1

[51] **Int.Cl. A61K 35/74 (2015.01) A23L 33/135 (2016.01) A61P 25/22 (2006.01) A61P 25/24 (2006.01)**

[25] EN

[54] **COMPOSITION COMPRISING PASTEURIZED AKKERMANSIA FOR THE TREATMENT OR PREVENTION OF IBS-RELATED ANXIETY**

[54] **COMPOSITION COMPRENANT DE L'AKKERMANSIA PASTEURISEE DESTINEE AU TRAITEMENT OU A LA PREVENTION DE L'ANXIETE ASSOCIEE A L'IBS**

[72] CANI, PATRICE, BE  
[72] BROCHOT, AMANDINE, BE  
[71] THE AKKERMANSIA COMPANY, BE  
[85] 2024-01-03  
[86] 2022-08-02 (PCT/EP2022/071663)  
[87] (WO2023/020827)  
[30] BE (BE2021/5660) 2021-08-19

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[21] **3,224,826**  
[13] A1

[51] **Int.Cl. B01D 53/96 (2006.01) B01D 53/14 (2006.01) C02F 1/28 (2006.01) C02F 1/72 (2006.01)**

[25] EN

[54] **ZERO-LIQUID DISCHARGE AMINE RECLAMATION PROCESS FOR CARBON CAPTURE AND OTHER ACID GAS RECOVERY**

[54] **PROCEDE DE RECUPERATION D'AMINE A REJET DE LIQUIDE NUL POUR CAPTURE DE CARBONE ET RECUPERATION D'AUTRE GAZ ACIDE**

[72] PARISI, PAUL, US  
[71] ELECTROSEP INC., US  
[85] 2024-01-03  
[86] 2023-06-23 (PCT/CA2023/050877)  
[87] (WO2023/245300)  
[30] US (63/366,890) 2022-06-23

[21] **3,224,828**  
[13] A1

[51] **Int.Cl. A61F 13/02 (2024.01) A61L 24/00 (2006.01) A61L 26/00 (2006.01) A61L 27/52 (2006.01) C08J 3/075 (2006.01)**

[25] EN

[54] **REVERSIBLE ELECTROADHESION OF HYDROGELS TO ANIMAL TISSUES FOR SUTURELESS REPAIR OF CUTS OR TEARS**

[54] **ELECTRO-ADHERENCE REVERSIBLE D'HYDROGELS A DES TISSUS ANIMAUX POUR LA REPARATION SANS SUTURE DE COUPURES OU DE DECHIRURES**

[72] RAGHAVAN, SRINIVASA, US  
[72] BORDEN, LEAH, US  
[71] UNIVERSITY OF MARYLAND, COLLEGE PARK, US  
[85] 2024-01-03  
[86] 2022-07-08 (PCT/US2022/073562)  
[87] (WO2023/283640)  
[30] US (63/220,427) 2021-07-09

[21] **3,224,829**  
[13] A1

[51] **Int.Cl. F25J 1/00 (2006.01)**

[25] EN

[54] **INTEGRATED REFRIGERATION SYSTEM OF A LIQUEFIED NATURAL GAS PRODUCTION PLANT COMPRISING A CARBON CAPTURE UNIT**

[54] **SYSTEME DE REFRIGERATION INTEGRE D'UNE INSTALLATION DE PRODUCTION DE GAZ NATUREL LIQUEFIE COMPRENANT UNE UNITE DE CAPTURE DE CARBONE**

[72] STALLMANN, OLAF, DE  
[72] DI FEDERICO MANGIFEDERICO, GIANLUCA, DE  
[72] WEINGAERTNER, CHRISTOPH, DE  
[71] NUOVO PIGNONE TECNOLOGIE - S.R.L., IT  
[85] 2024-01-03  
[86] 2022-07-14 (PCT/EP2022/025329)  
[87] (WO2023/285001)  
[30] IT (102021000018731) 2021-07-15

[21] **3,224,831**  
[13] A1

[51] **Int.Cl. C07C 17/07 (2006.01) C07C 17/04 (2006.01) C07C 19/16 (2006.01)**

[25] EN

[54] **AN INTEGRATED PROCESS FOR PRODUCING TRIFLUOROIODOMETHANE**

[54] **PROCEDE INTEGRE DE PRODUCTION DE TRIFLUOROIODOMETHANE**

[72] KOPKALLI, HALUK, US  
[72] WANG, HAIYOU, US  
[72] CERRI, GUSTAVO, US  
[72] BEKTESEVIC, SELMA, US  
[72] CHIU, YUON, US  
[72] JUNGONG, CHRISTIAN, US  
[72] HORWATH, RICHARD D., US  
[72] MERKEL, DANIEL C., US  
[72] MCCLAIN, JENNIFER W., US  
[72] YANG, TERRIS, US  
[72] WILCOX, RICHARD, US  
[72] CLOSE, JOSHUA, US  
[72] MALLEPALLY, RAJENDAR, US  
[71] HONEYWELL INTERNATIONAL INC., US  
[85] 2024-01-03  
[86] 2022-07-11 (PCT/US2022/073603)  
[87] (WO2023/288201)  
[30] US (63/222,819) 2021-07-16

[21] **3,224,832**  
[13] A1

[51] **Int.Cl. B23Q 1/54 (2006.01)**

[25] EN

[54] **WORKING HEAD FOR A MACHINE TOOL HAVING AN INTERCHANGEABLE ELECTROSPINDLE**

[54] **TETE DE TRAVAIL POUR UNE MACHINE-OUTIL A ELECTRO-BROCHE INTERCHANGEABLE**

[72] PICCOLO, GABRIELE, IT  
[71] HPT SINERGY S.R.L., IT  
[85] 2024-01-03  
[86] 2022-07-27 (PCT/IB2022/056928)  
[87] (WO2023/007388)  
[30] IT (102021000020099) 2021-07-28

[21] **3,224,833**  
[13] A1

[51] **Int.Cl. B63B 27/22 (2006.01) B63G 8/00 (2006.01) G01V 1/38 (2006.01)**

[25] EN

[54] **UNCREWED OFFSHORE NODE DEPLOYMENT SYSTEMS AND METHODS**

[54] **SYSTEMES ET PROCEDES DE DEPLOIEMENT DE NOEUDS EN MER SANS EQUIPAGE**

[72] MANNING, TED, GB  
[72] STONE, JOHNATHAN, GB  
[71] BP EXPLORATION OPERATING COMPANY LIMITED, GB  
[85] 2024-01-03  
[86] 2022-07-22 (PCT/GB2022/051935)  
[87] (WO2023/002220)  
[30] US (63/224,595) 2021-07-22

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[21] **3,224,834**  
[13] A1

[51] **Int.Cl. G01S 13/02 (2006.01) B60W 50/14 (2020.01) H04L 67/12 (2022.01) G07C 5/08 (2006.01)**

[25] EN

[54] **A SYSTEM FOR INSTALLING, OPERATING AND CONFIGURING AFTERMARKET VEHICLE SAFETY SYSTEMS**

[54] **SYSTEME D'INSTALLATION, DE FONCTIONNEMENT ET DE CONFIGURATION DE SYSTEMES DE SECURITE DE VEHICULES AUTOMOBILES APRES VENTE**

[72] WOODFORD, PETER, AU

[71] AUSTRALIAN MITIGATION ENGINEERING DEVELOPMENTS PTY LTD, AU

[85] 2024-01-03

[86] 2022-07-06 (PCT/AU2022/050705)

[87] (WO2023/279158)

[30] AU (2021902058) 2021-07-06

[21] **3,224,835**  
[13] A1

[51] **Int.Cl. A61K 31/4045 (2006.01)**

[25] EN

[54] **NOVEL PSILOCIN PRODRUG COMPOUNDS AND METHODS OF SYNTHESIZING THE SAME**

[54] **NOUVEAUX COMPOSES DE PROMEDICAMENTS DE PSILOCINE ET LEURS PROCEDES DE SYNTHESE**

[72] HOYER, DENTON W., US

[72] ROSCOW, ROBERT F., US

[71] MYDECINE INNOVATIONS GROUP INC., US

[85] 2024-01-03

[86] 2023-04-25 (PCT/US2023/019714)

[87] (WO2023/219789)

[30] US (63/340,067) 2022-05-10

[21] **3,224,837**  
[13] A1

[51] **Int.Cl. C11D 3/00 (2006.01) C11D 3/30 (2006.01) C11D 3/33 (2006.01)**

[25] EN

[54] **CLEANING BOOSTER**

[54] **RENFORCATEUR DE NETTOYAGE**

[72] IZMITLI, ASLIN, US

[72] MITCHELL, MICHAEL C., US

[72] PULUKKODY, RANDARA, US

[72] SATHIOSATHAM, MUHUNTHAN, US

[72] TULCHINSKY, MICHAEL L., US

[72] WASSERMAN, ERIC, US

[71] DOW GLOBAL TECHNOLOGIES LLC, US

[71] ROHM AND HAAS COMPANY, US

[85] 2024-01-03

[86] 2022-07-13 (PCT/US2022/036888)

[87] (WO2023/287837)

[30] US (63/222,450) 2021-07-16

[21] **3,224,838**  
[13] A1

[51] **Int.Cl. C11D 3/37 (2006.01)**

[25] EN

[54] **LIQUID LAUNDRY DETERGENT**

[54] **DETERGENT A LESSIVE LIQUIDE**

[72] IZMITLI, ASLIN, US

[72] MITCHELL, MICHAEL C., US

[72] PULUKKODY, RANDARA, US

[72] SATHIOSATHAM, MUHUNTHAN, US

[72] TULCHINSKY, MICHAEL L., US

[72] WASSERMAN, ERIC, US

[71] DOW GLOBAL TECHNOLOGIES LLC, US

[71] ROHM AND HAAS COMPANY, US

[85] 2024-01-03

[86] 2022-07-13 (PCT/US2022/036885)

[87] (WO2023/287834)

[30] US (63/222,454) 2021-07-16

[21] **3,224,839**  
[13] A1

[51] **Int.Cl. F04C 18/10 (2006.01)**

[25] EN

[54] **COMPRESSOR ASSEMBLY**

[54] **ENSEMBLE COMPRESSEUR**

[72] SWERTS, THOMAS LUC, BE

[72] DE VLOO, TOM RAYMOND JOZEF HENDRIK, BE

[71] ATLAS COPCO AIRPOWER, NAAMLOZE VENNOOTSCHAP, BE

[85] 2024-01-03

[86] 2022-07-15 (PCT/EP2022/069934)

[87] (WO2023/016751)

[30] BE (BE2021/5642) 2021-08-12

[30] BE (2022/5228) 2022-03-30

[30] BE (2022/5229) 2022-03-30

[30] BE (2022/5398) 2022-05-23

[21] **3,224,841**  
[13] A1

[51] **Int.Cl. C07D 471/04 (2006.01)**

[25] EN

[54] **TRICYCLIC COMPOUNDS AS INHIBITORS OF KRAS**

[54] **COMPOSES TRICYCLIQUES UTILES EN TANT QU'INHIBITEURS DE KRAS**

[72] LI, ZHENWU, US

[72] YU, ZHIYONG, US

[72] ROACH, JEREMY, US

[72] HOANG, GIA, US

[72] HU, BIN, US

[72] LI, GENCHENG, US

[72] MCATEE, RORY, US

[72] MUKAI, KEN, US

[72] POLICARPO, ROCCO, US

[72] SUSICK, ROBERT, US

[72] WANG, XIAOZHAO, US

[72] YAO, WENQING, US

[71] INCYTE CORPORATION, US

[85] 2024-01-03

[86] 2022-07-13 (PCT/US2022/036986)

[87] (WO2023/287896)

[30] US (63/221,595) 2021-07-14

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[21] **3,224,842**  
[13] A1

[51] **Int.Cl. C11D 3/37 (2006.01)**  
[25] EN  
[54] **CLEANING BOOSTER ADDITIVE**  
[54] **ADDITIF DE RENFORCATEUR DE NETTOYAGE**

[72] IZMITLI, ASLIN, US  
[72] MITCHELL, MICHAEL C., US  
[72] PULUKKODY, RANDARA, US  
[72] SATHIOSATHAM, MUHUNTHAN, US  
[72] TULCHINSKY, MICHAEL L., US  
[72] WASSERMAN, ERIC, US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2024-01-03  
[86] 2022-07-13 (PCT/US2022/036886)  
[87] (WO2023/287835)  
[30] US (63/222,453) 2021-07-16

[21] **3,224,843**  
[13] A1

[51] **Int.Cl. G06K 19/077 (2006.01)**  
[25] EN  
[54] **A DUAL INTERFACE SMART CARD WITH METAL FACE LAYER AND MANUFACTURING METHOD THEREOF**

[54] **CARTE A PUCE A DOUBLE INTERFACE AVEC COUCHE DE FACE METALLIQUE ET SON PROCEDE DE FABRICATION**

[72] DEVADIGA, SHRIKANTH N, IN  
[72] RAO, SUSHIR, IN  
[72] SHET, NISHANTH N, IN  
[72] BHAT, NAGABHUSHAN S, IN  
[72] RAO, SUDHISH S, IN  
[72] GUPTA, ABHAY, IN  
[71] MCT CARDS & TECHNOLOGY PRIVATE LIMITED, IN  
[85] 2024-01-03  
[86] 2022-07-21 (PCT/IB2022/056762)  
[87] (WO2023/131825)  
[30] IN (202241000462) 2022-01-04

[21] **3,224,844**  
[13] A1

[51] **Int.Cl. H01S 5/40 (2006.01)**  
[25] EN  
[54] **CORRECTION OPTICAL ELEMENTS FOR COHERENT BEAM COMBINING SYSTEMS AND SYSTEMS AND METHODS FOR COHERENT BEAM COMBINING USING SAME**

[54] **ELEMENTS OPTIQUES DE CORRECTION POUR SYSTEMES DE COMBINAISON DE FAISCEAUX COHERENTS, ET SYSTEMES ET PROCEDES DE COMBINAISON DE FAISCEAUX COHERENTS LES UTILISANT**

[72] SCHIFFER, ZEEV, IL  
[72] LEVY, DANIEL, IL  
[72] MAROM, RAN ZVI, IL  
[71] ELBIT SYSTEMS ELECTRO-OPTICS - ELOP LTD., IL  
[85] 2024-01-03  
[86] 2022-07-06 (PCT/IL2022/050732)  
[87] (WO2023/281513)  
[30] IL (284740) 2021-07-08

[21] **3,224,846**  
[13] A1

[51] **Int.Cl. B65D 43/06 (2006.01)**  
[25] EN  
[54] **DRINK CUP LID**  
[54] **COUVERCLE DE GOBELET POUR BOISSON**

[72] O'NAN, DAVID Y., US  
[72] ARNOLD, DAVID C., US  
[72] KLUEH, DOUGLAS E., US  
[71] BERRY GLOBAL, INC., US  
[85] 2024-01-03  
[86] 2022-07-01 (PCT/US2022/035911)  
[87] (WO2023/283119)  
[30] US (63/218,672) 2021-07-06

[21] **3,224,847**  
[13] A1

[51] **Int.Cl. H01M 10/0525 (2010.01)**  
**H01M 10/058 (2010.01)**  
[25] EN  
[54] **LITHIUM ION BATTERY AND MANUFACTURING METHOD THEREOF**

[54] **BATTERIE AU LITHIUM-ION ET SON PROCEDE DE FABRICATION**

[72] DAMITZ, THOMAS GERHARD WILHELM, CN  
[71] DAMITZ, THOMAS GERHARD WILHELM, CN  
[85] 2024-01-03  
[86] 2022-07-04 (PCT/CN2022/103627)  
[87] (WO2023/280102)  
[30] CN (202110755849.X) 2021-07-05

[21] **3,224,848**  
[13] A1

[51] **Int.Cl. H01M 10/0585 (2010.01)**  
[25] EN  
[54] **BATTERY CELL FOR LITHIUM ION BATTERY**

[54] **ELEMENT DE BATTERIE POUR BATTERIE AU LITHIUM-ION**

[72] DAMITZ, THOMAS GERHARD WILHELM, CN  
[71] DAMITZ, THOMAS GERHARD WILHELM, CN  
[85] 2024-01-03  
[86] 2022-07-04 (PCT/CN2022/103629)  
[87] (WO2023/280104)  
[30] CN (202121511617.1) 2021-07-05

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[21] **3,224,849**  
[13] A1

[51] **Int.Cl. C09B 67/54 (2006.01)**  
[25] EN  
[54] **A PROCESS FOR THE PURIFICATION OF ANTHOCYANINS AND ANTHOCYANIDINS FROM NATURAL EXTRACTS USING ADSORPTION RESINS AND ACIDIFIED WATER AS DESORBENT**

[54] **PROCEDE DE PURIFICATION D'ANTHOCYANINES ET D'ANTHOCYANIDINES A PARTIR D'EXTRAITS NATURELS A L'AIDE DE RESINES D'ADSORPTION ET D'EAU ACIDIFIEE EN TANT QUE DESORBANT**

[72] MANCILLA VILLALOBOS, RODRIGO ALEJANDRO, CL  
[72] ARAVENA CONTRERAS, RAUL IGNACIO, CL  
[71] AMERICAN BIOPROCESS LIMITADA, CL  
[85] 2024-01-03  
[86] 2022-07-12 (PCT/IB2022/056433)  
[87] (WO2023/285970)  
[30] CL (1886-2021) 2021-07-15

[21] **3,224,850**  
[13] A1

[51] **Int.Cl. C07K 16/22 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **ANTI-ERYTHROPOIETIN ANTIBODY**

[54] **ANTICORPS ANTI-ERYTHROPOIETINE**

[72] MARFIA, GIOVANNI, IT  
[72] NAVONE, STEFANIA ELENA, IT  
[72] SCALVINI, GIUSEPPE, IT  
[72] CAMPANELLA, ROLANDO, IT  
[72] ALOTTA, GIOVANNI ANDREA, IT  
[72] BARILLA, EMANUELA, IT  
[71] ANDREMACON S.R.L., IT  
[85] 2024-01-03  
[86] 2022-07-06 (PCT/EP2022/068805)  
[87] (WO2023/280952)  
[30] EP (PCT/EP2021/068690) 2021-07-06

[21] **3,224,851**  
[13] A1

[51] **Int.Cl. A42B 3/06 (2006.01)**  
[25] EN  
[54] **HELMET, PARTICULARLY CYCLING HELMET COMPRISING SPACERS TO REDUCE MECHANICAL LOCKING OF OPPOSING LAYERS OF THE HELMET, AND HELMET WITH REDUCED GEOMETRICAL LOCKING**

[54] **CASQUE, EN PARTICULIER CASQUE DE CYCLISME COMPRENANT DES ELEMENTS D'ESPACEMENT POUR REDUIRE LE VERROUILLAGE MECANIQUE DE COUCHES OPPOSEES DU CASQUE, ET CASQUE A VERROUILLAGE GEOMETRIQUE REDUIT**

[72] SPICER, ROBIN, GB  
[72] LEVY, ADAM, GB  
[72] NEILSON, HENRY, GB  
[72] COOK, JAMES, GB  
[71] HEXR LTD, GB  
[85] 2024-01-03  
[86] 2022-07-13 (PCT/EP2022/069698)  
[87] (WO2023/285577)  
[30] EP (21185448.4) 2021-07-13  
[30] EP (21185689.3) 2021-07-14  
[30] EP (21187554.7) 2021-07-23  
[30] EP (21187556.2) 2021-07-23  
[30] EP (21188100.8) 2021-07-27  
[30] EP (22152819.3) 2022-01-21  
[30] EP (22152820.1) 2022-01-21  
[30] EP (22153059.5) 2022-01-24  
[30] EP (22153062.9) 2022-01-24  
[30] EP (22154594.0) 2022-02-01

[21] **3,224,852**  
[13] A1

[51] **Int.Cl. F16B 31/02 (2006.01)**  
[25] EN  
[54] **FASTENER, MONITORING METHOD AND SYSTEM**

[54] **DISPOSITIF DE FIXATION, PROCEDE ET SYSTEME DE SURVEILLANCE**

[72] POGGIPOLINI, MICHELE, IT  
[71] SENS-IN S.R.L., IT  
[85] 2024-01-03  
[86] 2022-07-07 (PCT/IB2022/056272)  
[87] (WO2023/281429)  
[30] IT (102021000018041) 2021-07-08

[21] **3,224,853**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01)**  
[25] EN  
[54] **ANTI-C-C MOTIF CHEMOKINE RECEPTOR 8 (CCR8) ANTIBODIES AND METHODS OF USE**

[54] **ANTICORPS ANTI-RECEPTEUR DE CHIMIOKINE A MOTIF C-C 8 (CCR8) ET METHODES D'UTILISATION**

[72] GAMPA, GAUTHAM, US  
[72] HOSSEINI, IRAJ, US  
[72] HUSENI, MAHRUKH, US  
[72] KOERBER, JAMES THOMAS, US  
[72] PAYANDEH, JIAN MEHR-DEAN, US  
[72] RUTZ, SASCHA, US  
[72] SUN, YONGLIAN, US  
[72] CHIU, CECILIA PUI CHI, US  
[72] DELFINO, TERESITA ARENZANA, US  
[71] GENENTECH, INC., US  
[85] 2024-01-03  
[86] 2022-07-13 (PCT/US2022/073671)  
[87] (WO2023/288241)  
[30] US (63/221,734) 2021-07-14  
[30] US (63/253,676) 2021-10-08

[21] **3,224,854**  
[13] A1

[51] **Int.Cl. H04W 16/28 (2009.01) H04W 16/26 (2009.01) H04W 88/04 (2009.01) H04W 76/15 (2018.01)**  
[25] EN  
[54] **MULTIPATH REPEATER SYSTEMS**

[54] **SYSTEMES REPETEURS A TRAJETS MULTIPLES**

[72] BLACK, ERIC JAMES, US  
[71] PIVOTAL COMMWARE, INC., US  
[85] 2024-01-03  
[86] 2022-07-07 (PCT/US2022/036381)  
[87] (WO2023/283352)  
[30] US (63/219,318) 2021-07-07  
[30] US (17/859,632) 2022-07-07

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[21] **3,224,862**  
[13] A1

[51] **Int.Cl. A61L 9/01 (2006.01) A61L 9/00 (2006.01) C12N 9/16 (2006.01) C11D 11/00 (2006.01)**

[25] EN

[54] **COMPOSITION AND METHOD FOR ODOR REDUCTION AND BACTERIAL CONTROL ON A TEXTILE**

[54] **COMPOSITION ET PROCEDE DE REDUCTION D'ODEUR ET DE LUTTE CONTRE LES BACTERIES SUR UN TEXTILE**

[72] LI, YIHONG, US  
[72] ONG, IVAN WEI KANG, US  
[72] FEI, XIUZHU, US  
[71] MICROBAN PRODUCTS COMPANY, US

[85] 2023-12-19  
[86] 2022-06-22 (PCT/US2022/034602)  
[87] (WO2023/278218)  
[30] US (63/216,321) 2021-06-29  
[30] US (17/845,924) 2022-06-21

[21] **3,224,892**  
[13] A1

[25] EN

[54] **DRIVER SOCKET FOR INSTALLATION OF A GROUND REINFORCEMENT BOLT**

[54] **DOUILLE D'ENTRAINEMENT POUR L'INSTALLATION D'UN BOULON DE RENFORCEMENT DE SOL**

[72] RATAJ, MIETEK, AU  
[72] DARLINGTON, BRADLEY, AU  
[72] ROACH, WARREN, AU  
[72] BARRY, JOHN, AU  
[72] YOUNG, PETER, AU  
[72] WEAVER, STEVEN, AU  
[72] VALLATI, OSVALDO, AU  
[71] SANDVIK MINING AND CONSTRUCTION AUSTRALIA (PRODUCTION SUPPLY) PTY LTD, AU

[85] 2024-01-04  
[86] 2022-08-01 (PCT/AU2022/050821)  
[87] (WO2023/010158)  
[30] EP (21189965.3) 2021-08-05

[21] **3,224,893**  
[13] A1

[25] EN

[54] **AIR TURBINE DRIVEN ROTARY VALVE FOR VITRECTOMY PROBE**

[54] **POMPE ROTATIVE ENTRAINEE PAR UNE TURBINE A AIR POUR VITREOTOME**

[72] CHARLES, STEVEN T., US  
[71] ALCON INC., CH

[85] 2024-01-04  
[86] 2022-07-19 (PCT/IB2022/056648)  
[87] (WO2023/021343)  
[30] US (63/234,765) 2021-08-19

[21] **3,224,899**  
[13] A1

[51] **Int.Cl. A43C 15/06 (2006.01) A43C 15/02 (2006.01) A43C 15/14 (2006.01)**

[25] EN

[54] **REMOTE-CONTROLLED TRACTION DEVICE FOR FOOTWEAR**

[54] **DISPOSITIF DE TRACTION TELECOMMANDE POUR ARTICLE CHAUSSANT**

[72] LEVESQUE, STEVE, CA  
[72] PELLETIER, MARC, CA  
[71] XMEN SERVICES INC., CA

[85] 2024-01-04  
[86] 2022-06-22 (PCT/CA2022/050998)  
[87] (WO2023/245272)

[21] **3,224,902**  
[13] A1

[51] **Int.Cl. G06T 5/00 (2024.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR GENERATING ENHANCED OPHTHALMIC IMAGES**

[54] **SYSTEMES ET PROCEDES DE PRODUCTION D'IMAGES OPHTALMIQUES AMELIOREES**

[72] YIN, LU, US  
[72] SARANGAPANI, RAMESH, US  
[71] ALCON INC., CH

[85] 2024-01-04  
[86] 2022-08-03 (PCT/IB2022/057227)  
[87] (WO2023/021356)  
[30] US (63/234,959) 2021-08-19

[21] **3,224,903**  
[13] A1

[51] **Int.Cl. C01D 1/28 (2006.01) C08H 8/00 (2010.01) C08B 1/00 (2006.01) C08B 16/00 (2006.01) C08L 1/02 (2006.01) D01D 1/02 (2006.01) D01D 5/06 (2006.01) D01F 2/00 (2006.01) D01F 2/02 (2006.01) D01F 2/08 (2006.01) D01F 13/02 (2006.01)**

[25] EN

[54] **A METHOD FOR PROVIDING A FILTERED SPINNING DOPE**

[54] **PROCEDE DE PREPARATION D'UNE SOLUTION A FILER FILTREE**

[72] HEDLUND, ARTUR, SE  
[71] TREETOTEXTILE AB, SE

[85] 2024-01-04  
[86] 2022-07-08 (PCT/EP2022/069071)  
[87] (WO2023/281058)  
[30] EP (21184429.5) 2021-07-08

[21] **3,224,907**  
[13] A1

[51] **Int.Cl. A61K 35/15 (2015.01) A61K 39/00 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) A61P 37/04 (2006.01) C07K 7/06 (2006.01) C07K 7/08 (2006.01) C07K 14/47 (2006.01) C07K 14/705 (2006.01) C07K 14/725 (2006.01) C07K 16/28 (2006.01) C12N 5/10 (2006.01) C12N 15/12 (2006.01)**

[25] EN

[54] **NOVEL TUMOR-SPECIFIC ANTIGENS FOR CANCER STEM CELLS AND USES THEREOF**

[54] **NOUVEAUX ANTIGENES A SPECIFICITE TUMORALE POUR LES CELLULES SOUCHES CANCEREUSES ET LEURS UTILISATIONS**

[72] PERREAULT, CLAUDE, CA  
[72] THIBAUT, PIERRE, CA  
[72] HARDY, MARIE-PIERRE, CA  
[72] APAVALOAEI, ANCA, CA  
[71] UNIVERSITE DE MONTREAL, CA

[85] 2024-01-04  
[86] 2022-07-07 (PCT/CA2022/051068)  
[87] (WO2023/023840)  
[30] US (63/203,320) 2021-07-16

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[21] **3,224,911**  
[13] A1

[51] **Int.Cl. C12N 7/00 (2006.01) C12N 15/10 (2006.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING REASSORTANT REOVIRIDAE VIRUS, AND VECTOR LIBRARY FOR SAME**  
[54] **PROCEDE DE PRODUCTION D'UN VIRUS REASSORTI REOVIRIDAE, ET BANQUE DE VECTEURS POUR CELUI-CI**  
[72] SEO, KI WEON, KR  
[72] KWON, TAE WOO, KR  
[72] JUNG, SEO YEON, KR  
[72] PARK, MIN JUNG, KR  
[72] LEE, KUN SE, KR  
[72] LEE, HYUN JOO, KR  
[71] SK BIOSCIENCE CO., LTD., KR  
[85] 2024-01-04  
[86] 2022-06-24 (PCT/KR2022/009016)  
[87] (WO2023/282510)  
[30] KR (10-2021-0088575) 2021-07-06

[21] **3,224,923**  
[13] A1

[51] **Int.Cl. B01F 23/451 (2022.01) B01F 25/32 (2022.01) C08J 3/02 (2006.01) C08L 21/02 (2006.01)**  
[25] EN  
[54] **SYSTEM AND TECHNIQUE FOR INVERTING POLYMERS UNDER ULTRA-HIGH SHEAR**  
[54] **SYSTEME ET TECHNIQUE POUR INVERSER DES POLYMERES SOUS L'EFFET D'UN CISAILLEMENT ULTRA-ELEVE**  
[72] BRINKMAN, KERRY CHARLES, US  
[72] HUANG, CHENG-SUNG, US  
[72] CHENGARA, ANOOP VEEDU, US  
[71] ECOLAB USA INC., US  
[85] 2024-01-04  
[86] 2022-07-07 (PCT/US2022/036349)  
[87] (WO2023/283328)  
[30] US (63/219,817) 2021-07-08

[21] **3,224,924**  
[13] A1

[51] **Int.Cl. B07C 5/346 (2006.01) B02C 23/08 (2006.01) B02C 23/22 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR CONDUCTING ORE PRESORTING BASED ON HIERARCHICAL ARRAYED INTELLIGENT SORTING**  
[54] **PROCEDE ET SYSTEME POUR EFFECTUER UNE PREPARATION MECANIQUE PREALABLE DE MINERAIS SUR LA BASE D'UNE PREPARATION MECANIQUE INTELLIGENTE DE TYPE RESEAU HIERARCHIQUE**  
[72] GUO, JIN, CN  
[72] TONG, XIAOLEI, CN  
[71] HUZHOU HONEST INTELLIGENT TECHNOLOGY CO., LTD, CN  
[85] 2024-01-04  
[86] 2022-07-08 (PCT/CN2022/104611)  
[87] (WO2023/280302)  
[30] CN (202110774607.5) 2021-07-08

[21] **3,224,925**  
[13] A1

[51] **Int.Cl. E03C 1/00 (2006.01) E04B 1/62 (2006.01) E04B 1/68 (2006.01) E04B 1/70 (2006.01) F16L 5/00 (2006.01) F16L 5/02 (2006.01) F16L 5/10 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR SEALING PIPES AND PLUMBING FITTINGS & FIXTURES**  
[54] **APPAREIL POUR ETANCHEIFIER DES TUYAUX ET DES RACCORDES ET ACCESSOIRES SANITAIRES**  
[72] LUCCIA, PAUL, US  
[71] LUCCIA, PAUL, US  
[85] 2024-01-04  
[86] 2022-05-09 (PCT/US2022/028275)  
[87] (WO2023/282969)  
[30] US (17/367,908) 2021-07-06

[21] **3,224,934**  
[13] A1

[51] **Int.Cl. A61L 29/04 (2006.01) A61L 29/08 (2006.01) A61L 29/14 (2006.01)**  
[25] EN  
[54] **INTERMITTENT CATHETERS**  
[54] **CATHETERS INTERMITTENTS**  
[72] PYTEL, RACHEL ZIMET, US  
[72] CARTY, NEAL ROBERT, US  
[72] KANDRAC, LUKAS, SK  
[71] CONVATEC LIMITED, GB  
[85] 2024-01-04  
[86] 2022-07-22 (PCT/GB2022/051922)  
[87] (WO2023/007129)  
[30] US (63/203,590) 2021-07-27

[21] **3,224,935**  
[13] A1

[51] **Int.Cl. A61L 29/04 (2006.01) A61L 29/14 (2006.01)**  
[25] EN  
[54] **PACKAGED INTERMITTENT CATHETERS**  
[54] **CATHETERS INTERMITTENTS EMBALLES**  
[72] KANDRAC, LUKAS, SK  
[72] POLLARD, DAVID, GB  
[72] PYTEL, RACHEL ZIMET, US  
[71] CONVATEC LIMITED, GB  
[85] 2024-01-04  
[86] 2022-07-22 (PCT/GB2022/051923)  
[87] (WO2023/007130)  
[30] US (63/203,594) 2021-07-27

[21] **3,224,937**  
[13] A1

[51] **Int.Cl. C10G 2/00 (2006.01)**  
[25] EN  
[54] **CONVERSION OF SYNTHESIS GAS TO LIQUID FUELS**  
[54] **CONVERSION DE GAZ DE SYNTHESE EN COMBUSTIBLES LIQUIDES**  
[72] GARG, AARON R., US  
[72] ZHANG, LEI, US  
[72] TABORGA CLAURE, MICAELA, US  
[72] SOLED, STUART L., US  
[71] EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY, US  
[85] 2024-01-04  
[86] 2022-06-17 (PCT/US2022/034106)  
[87] (WO2023/283038)  
[30] US (63/219,746) 2021-07-08



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[21] **3,224,939**  
[13] A1

[51] **Int.Cl. B22C 1/02 (2006.01) B22C 1/18 (2006.01)**  
[25] EN  
[54] **INORGANIC BINDER SYSTEM**  
[54] **SYSTEME DE LIANT INORGANIQVES**  
[72] HAANAPPEL, VINCENT, NL  
[72] LINKE, THOMAS, DE  
[71] FOSECO INTERNATIONAL LIMITED, GB  
[85] 2024-01-04  
[86] 2022-07-12 (PCT/EP2022/069506)  
[87] (WO2023/285482)  
[30] EP (21184981.5) 2021-07-12

[21] **3,224,941**  
[13] A1

[51] **Int.Cl. C12N 9/88 (2006.01) C12P 7/02 (2006.01) C12Q 1/527 (2006.01)**  
[25] EN  
[54] **RECOMBINANT MANUFACTURE OF C-20 TERPENOID ALCOHOLS**  
[54] **FABRICATION RECOMBINANTE D'ALCOOLS TERPENOIDES EN C-20**  
[72] BEEKWILDER, MARTINUS JULIUS, NL  
[72] STYLES, MATTHEW QUINN, NL  
[72] BOSCH, HENDRIK JAN, NL  
[72] VOS, AURIN MINNERT, NL  
[72] VAN HOUWELINGEN, ADELE MARGARETHA MARIA LIDUINA, NL  
[71] ISOBIONICS B.V., NL  
[85] 2024-01-04  
[86] 2022-06-30 (PCT/EP2022/068104)  
[87] (WO2023/280677)  
[30] EP (21184067.3) 2021-07-06

[21] **3,224,942**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) C07H 21/00 (2006.01)**  
[25] EN  
[54] **CONDITIONALLY ACTIVATABLE NUCLEIC ACID COMPLEXES**  
[54] **COMPLEXES D'ACIDES NUCLEIQUES A ACTIVATION CONDITIONNELLE**  
[72] HAN, SI-PING, US  
[72] DUFF, ROBERT, US  
[72] SCHERER, LISA, US  
[71] SWITCH THERAPEUTICS INC., US  
[85] 2024-01-04  
[86] 2022-07-05 (PCT/US2022/073426)  
[87] (WO2023/283546)  
[30] US (63/218,833) 2021-07-06

[21] **3,224,943**  
[13] A1

[51] **Int.Cl. A61K 39/29 (2006.01) A61K 31/7088 (2006.01) A61P 31/14 (2006.01) A61P 37/04 (2006.01) C07K 16/10 (2006.01) C12N 7/00 (2006.01) G01N 33/576 (2006.01)**  
[25] EN  
[54] **P7 CONTAINING NUCLEOSIDE-MODIFIED MRNA-LIPID NANOPARTICLE LINEAGE VACCINE FOR HEPATITIS C VIRUS**  
[54] **VACCIN DE LIGNEE DE NANOPARTICULES D'ARNM-LIPEDE MODIFIE PAR NUCLEOSIDE P7 CONTRE LE VIRUS DE L'HEPATITE C**  
[72] REAGAN, ERIN KATHLEEN, US  
[72] WEISSMAN, DREW, US  
[71] THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, US  
[85] 2024-01-04  
[86] 2022-07-06 (PCT/US2022/073463)  
[87] (WO2023/283576)  
[30] US (63/218,685) 2021-07-06

[21] **3,224,947**  
[13] A1

[51] **Int.Cl. B63B 73/20 (2020.01) B63B 73/30 (2020.01) B63B 75/00 (2020.01)**  
[25] EN  
[54] **METHOD FOR PREPARING AN INTEGRATED PRODUCTION COMPLEX ON A GRAVITY-BASED STRUCTURE (GBS)**  
[54] **PROCEDE DE FABRICATION D'UN COMPLEXE DE PRODUCTION INTEGRE SUR UNE BASE DE TYPE GRAVITATIONNEL**  
[72] MIKHELSON, LEONID VIKTOROVICH, RU  
[72] RETIVOV, VALERIY NIKOLAEVICH, RU  
[72] SOLOVYEV, SERGEY GENNADYEVICH, RU  
[71] PUBLICHNOE AKTSIONERNOE OBSHCHESTVO "NOVATEK", RU  
[85] 2024-01-04  
[86] 2022-07-14 (PCT/RU2022/000226)  
[87] (WO2023/009032)  
[30] RU (2021122903) 2021-07-30

[21] **3,224,950**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01)**  
[25] EN  
[54] **SIGNAL ACTIVATABLE NUCLEIC ACID COMPLEXES**  
[54] **COMPLEXES D'ACIDES NUCLEIQUES ACTIVABLES PAR UN SIGNAL**  
[72] HAN, SI-PING, US  
[72] DUFF, ROBERT, US  
[72] SCHERER, LISA, US  
[71] SWITCH THERAPEUTICS INC., US  
[85] 2024-01-04  
[86] 2022-07-05 (PCT/US2022/073430)  
[87] (WO2023/283550)  
[30] US (63/218,852) 2021-07-06

[21] **3,224,955**  
[13] A1

[51] **Int.Cl. E01F 15/14 (2006.01) E01F 9/662 (2016.01) B60D 1/24 (2006.01) E01F 15/06 (2006.01)**  
[25] EN  
[54] **EMERGENCY RESPONSE BARRIER**  
[54] **BARRIERE DE REPOSE D'URGENCE**  
[72] GROENEWEG, KEVIN K., US  
[72] GROENEWEG, TAYLOR, US  
[71] CONCATEN INC., US  
[85] 2024-01-04  
[86] 2022-07-28 (PCT/US2022/038676)  
[87] (WO2023/009725)  
[30] US (63/227,256) 2021-07-29  
[30] US (17/875,955) 2022-07-28

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[21] **3,224,956**  
[13] A1

[51] **Int.Cl. B01D 69/02 (2006.01) B01D 69/12 (2006.01) B01D 71/32 (2006.01) B01D 71/44 (2006.01) B01D 71/70 (2006.01) B01D 71/82 (2006.01)**

[25] EN

[54] **THIN-FILM COMPOSITE MEMBRANES HAVING IMPROVED ADHESION BETWEEN LAYERS AND USES THEREOF**

[54] **MEMBRANES COMPOSITES A COUCHES MINCES AYANT UNE ADHERENCE AMELIOREE ENTRE DES COUCHES ET LEURS UTILISATIONS**

[72] MAJUMDAR, SUDIPTO, US

[72] LOUSENBERG, ROBERT D., US

[72] LOPRETE, KENNETH E., US

[72] SHANGGUAN, NING, US

[72] GONCHAROVSKY, IRENE, US

[72] WARGO, JACOB A., US

[71] COMPACT MEMBRANE SYSTEMS INC., US

[85] 2024-01-04

[86] 2022-07-07 (PCT/US2022/036284)

[87] (WO2023/287628)

[30] US (63/220,780) 2021-07-12

[21] **3,224,958**  
[13] A1

[51] **Int.Cl. C25B 1/042 (2021.01) H01M 8/0206 (2016.01) H01M 8/0228 (2016.01) H01M 8/0232 (2016.01) H01M 8/0247 (2016.01) C25B 1/23 (2021.01) C25B 9/75 (2021.01) H01M 8/12 (2016.01)**

[25] EN

[54] **SOC STACK COMPRISING INTEGRATED INTERCONNECT, SPACER AND FIXTURE FOR A CONTACT ENABLING LAYER**

[54] **EMPILEMENT DE SOC COMPRENANT UNE INTERCONNEXION INTEGREE, UNE ENTRETOISE ET UN ACCESSOIRE POUR UNE COUCHE D'ACTIVATION DE CONTACT**

[72] HEIREDAL-CLAUSEN, THOMAS, DK

[72] RASS-HANSEN, JEPPE, DK

[72] BLENNOW, BENGT PETER GUSTAV, DK

[72] REFSLUND NIELSEN, MARTIN, DK

[72] NORBY, TOBIAS HOLT, DK

[72] KUNGAS, RAINER, EE

[72] KLITHOLM, CLIVER SOREN, DK

[71] TOPSOE A/S, DK

[85] 2024-01-04

[86] 2022-03-15 (PCT/EP2022/056613)

[87] (WO2023/280446)

[30] EP (21184186.1) 2021-07-07

[21] **3,224,961**  
[13] A1

[51] **Int.Cl. H01M 50/533 (2021.01) H01M 10/0525 (2010.01)**

[25] EN

[54] **LITHIUM ION BATTERY**

[54] **BATTERIE AU LITHIUM-ION**

[72] DAMITZ, THOMAS GERHARD WILHELM, CN

[71] DAMITZ, THOMAS GERHARD WILHELM, CN

[85] 2024-01-04

[86] 2022-07-04 (PCT/CN2022/103628)

[87] (WO2023/280103)

[30] CN (202121510900.2) 2021-07-05

[21] **3,224,963**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) C07K 14/005 (2006.01)**

[25] EN

[54] **BIOLOGICALLY PRODUCED NUCLEIC ACID FOR VACCINE PRODUCTION**

[54] **ACIDE NUCLEIQUE PRODUIT BIOLOGIQUEMENT POUR LA PRODUCTION DE VACCINS**

[72] KIPFER, ENJA TATJANA, CH

[72] KLIMKAIT, THOMAS, DE

[72] MITTELHOLZER, CHRISTIAN, CH

[72] OTTE, FABIAN, DE

[71] UNIVERSITAT BASEL, CH

[85] 2024-01-04

[86] 2022-09-09 (PCT/EP2022/075140)

[87] (WO2023/036947)

[30] EP (21195643.8) 2021-09-09

[30] EP (22179777.2) 2022-06-19

[21] **3,224,964**  
[13] A1

[51] **Int.Cl. H02H 1/00 (2006.01) H02H 3/08 (2006.01) H02H 7/26 (2006.01)**

[25] EN

[54] **CIRCUIT BREAKER TRIP DEVICE**

[54] **DISPOSITIF DE DECLenchement DE DISJONCTEUR**

[72] STROYER, BENJAMIN G., US

[71] STROYER, BENJAMIN G., US

[85] 2024-01-04

[86] 2022-10-14 (PCT/US2022/046651)

[87] (WO2023/069307)

[30] US (63/271,131) 2021-10-23

[30] US (17/954,943) 2022-09-28

[21] **3,224,966**  
[13] A1

[51] **Int.Cl. G01N 23/227 (2018.01) G06N 10/00 (2022.01)**

[25] EN

[54] **PROCESS AND DEVICE FOR THE SPATIALLY RESOLVED LOCALIZATION OF DEFECTS IN MATERIALS**

[54] **PROCESSUS ET DISPOSITIF DE LOCALISATION A RESOLUTION SPATIALE DE DEFAUTS DANS DES MATERIAUX**

[72] ARUMUGAM, SRI RANJINI, DE

[71] ARUMUGAM, SRI RANJINI, DE

[85] 2024-01-04

[86] 2022-07-04 (PCT/EP2022/068408)

[87] (WO2023/280758)

[30] DE (10 2021 117 409.0) 2021-07-06

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[21] **3,224,967**  
[13] A1

[51] **Int.Cl. A47B 88/463 (2017.01) A47B 88/467 (2017.01) E05B 65/462 (2017.01)**

[25] EN

[54] **DEVICE FOR HOLDING, BRAKING OR ACCELERATING A MOVABLE FURNITURE PART, CLOSING SYSTEM AND PIECE OF FURNITURE**

[54] **DISPOSITIF DESTINE A MAINTENIR, FREINER OU ACCELERER UN ELEMENT DE MEUBLE MOBILE, SYSTEME DE FERMETURE ET MEUBLE**

[72] KLAUS, STEFAN, DE  
[72] POHLMANN, VOLKER, DE  
[71] PAUL HETTICH GMBH & CO. KG, DE

[85] 2024-01-04  
[86] 2022-08-09 (PCT/EP2022/072316)  
[87] (WO2023/017017)  
[30] DE (10 2021 120 931.5) 2021-08-11

[21] **3,224,968**  
[13] A1

[51] **Int.Cl. A42B 3/06 (2006.01)**

[25] EN

[54] **FUNCTIONAL REACTIVE LAYER HELMET**

[54] **CASQUE A COUCHE REACTIVE FONCTIONNELLE**

[72] SPICER, ROBIN, GB  
[72] LEVY, ADAM, GB  
[72] NEILSON, HENRY, GB  
[72] COOK, JAMES, GB  
[71] HEXR LTD, GB

[85] 2024-01-04  
[86] 2022-07-13 (PCT/EP2022/069697)  
[87] (WO2023/285576)  
[30] EP (21185448.4) 2021-07-13  
[30] EP (21185689.3) 2021-07-14  
[30] EP (21187554.7) 2021-07-23  
[30] EP (21187556.2) 2021-07-23  
[30] EP (21188100.8) 2021-07-27  
[30] EP (21195162.9) 2021-09-06  
[30] EP (22152819.3) 2022-01-21  
[30] EP (22152820.1) 2022-01-21  
[30] EP (22153059.5) 2022-01-24  
[30] EP (22153062.9) 2022-01-24  
[30] EP (22154594.0) 2022-02-01  
[30] EP (22160362.4) 2022-03-05  
[30] EP (22164237.4) 2022-03-24

[21] **3,224,969**  
[13] A1

[51] **Int.Cl. A61K 31/00 (2006.01) A61K 31/16 (2006.01) A61K 31/352 (2006.01) A61K 47/00 (2006.01)**

[25] EN

[54] **BRUISING AND FILLER COMPOSITIONS AND METHODS FOR USE**

[54] **COMPOSITIONS POUR ECCHYMOSES ET D'AGENT DE COMPLEMENT ET LEURS PROCEDES D'UTILISATION**

[72] WIDGEROW, ALAN DAVID, US  
[72] GARRUTO, JOHN A., US  
[71] ALASTIN SKINCARE, INC., US

[85] 2024-01-04  
[86] 2022-07-07 (PCT/US2022/036363)  
[87] (WO2023/283339)  
[30] US (63/219,664) 2021-07-08

[21] **3,224,970**  
[13] A1

[51] **Int.Cl. C12N 9/12 (2006.01) C12N 15/10 (2006.01) C12N 15/62 (2006.01) C12P 19/34 (2006.01) C12N 15/90 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR EFFICIENT GENOME EDITING**

[54] **COMPOSITIONS ET PROCEDES D'EDITION DE GENOME EFFICACE**

[72] REES, HOLLY A., US  
[72] PACKER, MICHAEL, US  
[72] BARRERA, LUIS, US  
[72] SLAYMAKER, IAN, US  
[71] PRIME MEDICINE, INC., US

[85] 2024-01-04  
[86] 2022-06-29 (PCT/US2022/035613)  
[87] (WO2023/283092)  
[30] US (63/218,744) 2021-07-06  
[30] US (63/219,623) 2021-07-08

[21] **3,224,971**  
[13] A1

[51] **Int.Cl. C07D 413/12 (2006.01) C07C 253/30 (2006.01) C07C 255/58 (2006.01) C07C 313/06 (2006.01)**

[25] EN

[54] **PROCESS FOR PREPARING AFICAMTEN**

[54] **PROCEDE DE PREPARATION D'AFICAMTEN**

[72] ANDERSEN, DENISE, US  
[72] PFEIFFER, MATTHEW, US  
[72] TOM, NORMA, US  
[72] MORGAN, BRADLEY P., US  
[71] CYTOKINETICS, US

[85] 2024-01-04  
[86] 2022-08-02 (PCT/US2022/074427)  
[87] (WO2023/015184)  
[30] US (63/203,888) 2021-08-03

[21] **3,224,972**  
[13] A1

[51] **Int.Cl. H01L 31/02 (2006.01) H02S 20/23 (2014.01) H02S 40/22 (2014.01) H02S 40/34 (2014.01) H01L 31/048 (2014.01) H01L 31/05 (2014.01)**

[25] EN

[54] **JUMPER MODULE FOR PHOTOVOLTAIC SYSTEMS**

[54] **MODULE DE CAVALIER POUR SYSTEMES PHOTOVOLTAIQUES**

[72] CLEMENTE, PETER, US  
[72] ABRA, LEWIS, US  
[72] WRAY, EVAN, US  
[72] KUIPER, MICHAEL, US  
[72] YANG, ALEX, US  
[71] GAF ENERGY LLC, US

[85] 2024-01-04  
[86] 2022-07-06 (PCT/US2022/036232)  
[87] (WO2023/283248)  
[30] US (63/218,641) 2021-07-06

[21] **3,224,973**  
[13] A1

[51] **Int.Cl. G06T 7/00 (2017.01) G06T 13/40 (2011.01)**

[25] EN

[54] **THREE DIMENSIONAL HAND POSE ESTIMATOR**

[54] **DISPOSITIF D'ESTIMATION TRIDIMENSIONNELLE DE POSE DE MAIN**

[72] GONZALEZ GARCIA, ABEL, CA  
[71] HINGE HEALTH, INC., US

[85] 2024-01-04  
[86] 2021-07-08 (PCT/IB2021/056150)  
[87] (WO2023/281299)

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[21] **3,224,974**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01) A61K 38/00 (2006.01) A61K 48/00 (2006.01) C12N 15/10 (2006.01) C12N 15/11 (2006.01) C12N 15/86 (2006.01)**

[25] EN

[54] **POLYCISTRONIC VECTORS FOR CELL-BASED THERAPIES**

[54] **VECTEURS POLYCISTRONIQUES POUR THERAPIES CELLULAIRES**

[72] MATIAS, ALBERT RUZO, US

[72] DOWDLE, WILLIAM, US

[72] THAM, ELEONORE, US

[72] ELMAN, JESSICA S., US

[72] JOHNSON, ADAM, US

[71] SANA BIOTECHNOLOGY, INC., US

[85] 2024-01-04

[86] 2022-07-18 (PCT/US2022/073862)

[87] (WO2023/288338)

[30] US (63/222,954) 2021-07-16

[30] US (63/282,961) 2021-11-24

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[21] **3,224,975**  
[13] A1

[51] **Int.Cl. G06V 10/764 (2022.01) G06N 20/00 (2019.01) G06V 40/10 (2022.01)**

[25] EN

[54] **FELINE COMFORT LEVEL CLASSIFICATION SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE DE CLASSIFICATION DE NIVEAU DE CONFORT DE FELIN**

[72] SHARMA, HARSH, CA

[72] KOTTAYIL, NAVANEETH KAMBALLUR, CA

[72] BECKER, RICHARD J., CA

[72] GROENEVELD, SUSAN MARIE, CA

[71] SYLVESTER.AI INC., CA

[85] 2024-01-04

[86] 2022-05-24 (PCT/CA2022/050823)

[87] (WO2023/279197)

[30] US (63/218,819) 2021-07-06

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[21] **3,224,976**  
[13] A1

[51] **Int.Cl. G06F 16/332 (2019.01) G06F 16/783 (2019.01) G06F 16/787 (2019.01) G06F 16/9032 (2019.01) G06V 10/764 (2022.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR ADAPTIVE ORCHESTRATED PROCESS PARALLELIZATION**

[54] **SYSTEME ET PROCEDE DE PARALLELISATION DE PROCESSUS ORCHESTREE ADAPTATIVE**

[72] O'HERLIHY, ALAN, IE

[72] CIUBOTARU, BOGDAN, IE

[72] HARTNETT, MARGARET, IE

[72] ALLEN, JOE, IE

[71] EVERSEEN LIMITED, IE

[85] 2023-12-20

[86] 2023-05-01 (PCT/IB2023/054528)

[87] (WO2023/214293)

[30] US (63/338,262) 2022-05-04

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[21] **3,224,979**  
[13] A1

[51] **Int.Cl. A47J 36/02 (2006.01) A47J 43/27 (2006.01)**

[25] EN

[54] **MULTI-COMPARTMENT COOKING TRAY AND METHODS RELATED THERETO**

[54] **PLATEAU DE CUISSON A PLUSIEURS COMPARTIMENTS ET PROCEDES ASSOCIES**

[72] KUBACKI, LINDSEY, US

[72] SELNER, KYRA LYNN, US

[72] YENCER, TSZYAN CHLOE, US

[71] H.J. HEINZ COMPANY BRANDS LLC, US

[85] 2023-12-20

[86] 2022-06-30 (PCT/US2022/035739)

[87] (WO2023/278711)

[30] US (63/217,128) 2021-06-30

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[21] **3,224,980**  
[13] A1

[51] **Int.Cl. C09D 5/02 (2006.01) C09D 7/61 (2018.01) C09D 183/00 (2006.01) C09D 183/06 (2006.01) C09G 1/04 (2006.01)**

[25] EN

[54] **AUTOMOTIVE GRAPHENE SURFACE TREATMENT COMPOSITION AND PROCESS FOR USE THEREOF**

[54] **COMPOSITION DE TRAITEMENT DE SURFACE DE GRAPHENE AUTOMOBILE ET SON PROCEDE D'UTILISATION**

[72] HUANG, TSAO-CHIN CLARENCE, US

[72] ESCOTO, JOHN ISIDORO, JR., US

[71] ILLINOIS TOOL WORKS INC., US

[85] 2023-12-20

[86] 2022-06-30 (PCT/US2022/035730)

[87] (WO2023/278706)

[30] US (63/217,345) 2021-07-01

[30] US (17/854,608) 2022-06-30

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[21] **3,224,981**  
[13] A1

[51] **Int.Cl. C12N 5/071 (2010.01) C12N 5/073 (2010.01) C12N 5/077 (2010.01) C12N 5/00 (2006.01)**

[25] EN

[54] **STRUCTURALLY COMPLETE ORGANOIDS**

[54] **ORGANOIDES STRUCTURELLEMENT COMPLETS**

[72] WELLS, JAMES MACORMACK, US

[72] EICHER, ALEXANDRA KAY, US

[71] CHILDREN'S HOSPITAL MEDICAL CENTER, US

[85] 2023-12-20

[86] 2022-06-30 (PCT/US2022/035689)

[87] (WO2023/278676)

[30] US (63/202,998) 2021-07-02

[30] US (63/221,916) 2021-07-14

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[21] **3,224,982**  
[13] A1

[51] **Int.Cl. A01H 6/46 (2018.01) C12N 9/22 (2006.01) C12N 15/82 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR ENHANCING ROOT SYSTEM DEVELOPMENT**  
[54] **PROCEDES ET COMPOSITIONS POUR AMELIORER LE DEVELOPPEMENT DE SYSTEME RACINAIRE**  
[72] MOJICA, JULIUS, US  
[71] PAIRWISE PLANTS SERVICES, INC., US  
[85] 2023-12-20  
[86] 2022-06-30 (PCT/US2022/035641)  
[87] (WO2023/278651)  
[30] US (63/217,332) 2021-07-01

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[21] **3,224,983**  
[13] A1

[51] **Int.Cl. G01N 33/68 (2006.01) G01N 27/447 (2006.01) G01N 30/02 (2006.01)**  
[25] EN  
[54] **COUPLING ISOELECTRIC FOCUSING-BASED FRACTIONATION WITH MASS SPECTROMETRY ANALYSIS**  
[54] **FRACTIONNEMENT PAR COUPLAGE BASE SUR LA FOCALISATION ISOELECTRIQUE AVEC ANALYSE PAR SPECTROMETRIE DE MASSE**  
[72] YAN, YUETIAN, US  
[72] XING, TAO, US  
[72] WANG, SHUNHAI, US  
[71] REGENERON PHARMACEUTICALS, INC., US  
[85] 2023-12-20  
[86] 2022-06-29 (PCT/US2022/035602)  
[87] (WO2023/278634)  
[30] US (63/217,125) 2021-06-30  
[30] US (63/301,350) 2022-01-20

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[21] **3,224,986**  
[13] A1

[51] **Int.Cl. G01B 11/16 (2006.01)**  
[25] EN  
[54] **OPTICAL SURFACE STRAIN MEASUREMENTS FOR PIPE INTEGRITY MONITORING**  
[54] **MESURES DE CONTRAINTE DE SURFACE OPTIQUES POUR LA SURVEILLANCE DE L'INTEGRITE D'UN TUYAU**  
[72] RHYNE, LEE, US  
[72] TANJU, BAHA, US  
[72] JANAKIRAM SUBRAMANI, HARIPRASAD, US  
[72] CROWDER, PETER, US  
[72] VARGAS, PEDRO, US  
[72] SALMATANIS, NIKOLAOS IOANNIS, US  
[72] PRABHU, MILIND L., US  
[71] CHEVRON U.S.A. INC., US  
[85] 2023-12-20  
[86] 2022-06-28 (PCT/US2022/035314)  
[87] (WO2023/278444)  
[30] US (17/363,512) 2021-06-30

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[21] **3,224,987**  
[13] A1

[51] **Int.Cl. G01R 33/46 (2006.01) G01N 24/08 (2006.01) G01R 33/465 (2006.01)**  
[25] EN  
[54] **NMR METHODS FOR ANTIBODY HIGHER ORDER STRUCTURE COMPARABILITY**  
[54] **PROCEDES DE RMN POUR UNE COMPARABILITE DE STRUCTURE D'ORDRE SUPERIEUR D'ANTICORPS**  
[72] DIKIY, IGOR, US  
[72] MATOUSEK, WILLIAM, US  
[71] REGENERON PHARMACEUTICALS, INC., US  
[85] 2023-12-20  
[86] 2022-06-28 (PCT/US2022/035312)  
[87] (WO2023/278443)  
[30] US (63/216,501) 2021-06-29

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[21] **3,224,989**  
[13] A1

[51] **Int.Cl. C07K 7/08 (2006.01) A61K 38/15 (2006.01) A61P 31/06 (2006.01) C07K 11/02 (2006.01)**  
[25] EN  
[54] **A NOVEL COMPOUND ACTING AGAINST A SELECT GROUP OF BACTERIA**  
[54] **NOUVEAU COMPOSE AGISSANT CONTRE UN GROUPE DE BACTERIES SELECTIONNE**  
[72] LEWIS, KIM, US  
[72] IMAI, YU, US  
[71] NORTHEASTERN UNIVERSITY, US  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/US2022/034703)  
[87] (WO2022/271936)  
[30] US (63/213,876) 2021-06-23  
[30] US (63/299,290) 2022-01-13  
[30] US (63/323,671) 2022-03-25

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[21] **3,224,990**  
[13] A1

[51] **Int.Cl. H04W 72/04 (2023.01) H04B 7/026 (2017.01)**  
[25] EN  
[54] **DYNAMIC SPECTRUM ACCESS FOR SINGLE-CHANNEL MOBILE AD-HOC NETWORKS**  
[54] **ACCES DYNAMIQUE AU SPECTRE POUR DES RESEAUX MOBILES AD HOC A CANAL UNIQUE**  
[72] ZHU, HUA, US  
[72] KOSE, CENK, US  
[71] TRELISWARE TECHNOLOGIES, INC., US  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/US2022/034688)  
[87] (WO2022/271927)  
[30] US (63/214,561) 2021-06-24

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[21] **3,224,994**  
[13] A1

[51] **Int.Cl. A61K 31/437 (2006.01) A61K 31/506 (2006.01) A61K 31/53 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) A61P 35/04 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **(1H-PYRROLO[2,3-B]PYRIDIN-1-YL)PYRIMIDIN-2-YL-AMINO-PHENYL--ACRYLAMIDE INHIBITORS OF EGFR FOR USE IN THE TREATMENT OF BRAIN TUMORS**

[54] **INHIBITEURS (1H-PYRROLO[2,3-B]PYRIDIN-1-YL)PYRIMIDIN-2-YL-AMINO-PHENYL-ACRYLAMIDE DE L'EGFR POUR L'UTILISATION DANS LE TRAITEMENT DE TUMEURS CEREBRALES**

[72] ZHAO, JEAN, US

[72] KERNS, WILLIAM, US

[71] DANA-FARBER CANCER INSTITUTE, INC., US

[71] CRIMSON BIOPHARM INC., US

[85] 2023-12-20

[86] 2022-06-22 (PCT/US2022/034574)

[87] (WO2022/271861)

[30] US (63/213,301) 2021-06-22

[30] US (63/257,907) 2021-10-20

[21] **3,224,995**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 9/127 (2006.01) A61K 31/7088 (2006.01) A61P 25/28 (2006.01) C12N 9/22 (2006.01)**

[25] EN

[54] **METHODS FOR IN VIVO EDITING OF A LIVER GENE**

[54] **PROCEDES D'EDITION IN VIVO D'UN GENE HEPATIQUE**

[72] LEBWOHL, DAVID, US

[72] MAITLAND, MICHAEL, US

[72] STROH, MARK, US

[72] XU, YUANXIN, US

[71] INTELLIA THERAPEUTICS, INC., US

[85] 2023-12-20

[86] 2022-06-22 (PCT/US2022/034454)

[87] (WO2022/271780)

[30] US (63/202,744) 2021-06-22

[30] US (63/202,812) 2021-06-25

[30] US (63/263,466) 2021-11-03

[30] US (63/264,435) 2021-11-22

[30] US (63/314,878) 2022-02-28

[21] **3,224,996**  
[13] A1

[51] **Int.Cl. A61M 5/178 (2006.01) A61M 5/31 (2006.01)**

[25] EN

[54] **SYRINGES, ASSEMBLIES, AND METHODS OF MANUFACTURE**

[54] **SERINGUES, ENSEMBLES, ET PROCEDES DE FABRICATION**

[72] OHLENSCHLAEGER, RASMUS, US

[72] OLIVAS, JEROME, US

[71] AMGEN INC., US

[85] 2023-12-20

[86] 2022-06-22 (PCT/US2022/034424)

[87] (WO2022/271760)

[30] US (63/214,218) 2021-06-23

[21] **3,224,997**  
[13] A1

[51] **Int.Cl. C12Q 1/6869 (2018.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR DETECTION OF COVID VARIANTS**

[54] **PROCEDES ET SYSTEMES DE DETECTION DE VARIANTS PROVOQUANT LA COVID**

[72] WILLIAMS, JONATHAN DAVID, US

[72] KRUEGER, BRIAN, US

[72] NORVELL, BRIAN MATTHEW, US

[72] PARKER, SCOTT, US

[72] IYER, LAKSHMANAN K., US

[72] BROCHU, HAYDEN N., US

[71] LABORATORY CORPORATION OF AMERICA HOLDINGS, US

[85] 2023-12-20

[86] 2022-06-21 (PCT/US2022/034331)

[87] (WO2022/271690)

[30] US (63/213,110) 2021-06-21

[21] **3,225,000**  
[13] A1

[51] **Int.Cl. B23D 47/02 (2006.01) B23D 45/02 (2006.01) B26D 1/18 (2006.01) B27B 5/18 (2006.01) B23Q 1/28 (2006.01)**

[25] EN

[54] **SAW SLIDE DEVICE**

[54] **DISPOSITIF DE CHARIOT DE SCIE**

[72] YOUNG, DOUGLAS, US

[72] DAVIS, WILLIAM H., US

[72] PISKURA, ROBERT, US

[72] ZAHN, JEFFREY N., US

[71] DAVIS YOUNG LLC, US

[85] 2023-12-20

[86] 2022-06-21 (PCT/US2022/034315)

[87] (WO2022/271680)

[30] US (63/212,887) 2021-06-21

[21] **3,225,001**  
[13] A1

[51] **Int.Cl. H04W 4/40 (2018.01) H04W 76/10 (2018.01) H04W 76/14 (2018.01) H04W 76/15 (2018.01)**

[25] EN

[54] **DEVICE FOR EASILY ADDING A PORTABLE SPEAKER TO AN EXISTING AUTOMOBILE SOUND SYSTEM**

[54] **DISPOSITIF POUR AJOUTER FACILEMENT UN HAUT-PARLEUR PORTABLE A UN SYSTEME SONORE D'AUTOMOBILE EXISTANT**

[72] PRICE, STEVEN, US

[72] MACIEJEWSKI, JAKE, US

[72] TOMICH, PETER ALEXANDER, US

[71] TRULLI ENGINEERING, LLC, US

[85] 2023-12-20

[86] 2022-06-21 (PCT/US2022/034236)

[87] (WO2022/271625)

[30] US (63/213,470) 2021-06-22

[21] **3,225,004**  
[13] A1

[51] **Int.Cl. G03B 21/14 (2006.01)**

[25] EN

[54] **ADJUSTABLE LENS APERTURE ELEMENT IN A PROJECTION LENS**

[54] **ELEMENT D'OUVERTURE DE LENTILLE REGLABLE DANS UNE LENTILLE DE PROJECTION**

[72] READ, STEVEN CHARLES, CA

[72] CONSTANTINOU, PAUL, CA

[71] IMAX CORPORATION, CA

[85] 2024-01-05

[86] 2022-07-15 (PCT/IB2022/056555)

[87] (WO2023/286033)

[30] US (63/222,753) 2021-07-16

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[21] **3,225,005**  
[13] A1

[51] **Int.Cl. C09J 7/20 (2018.01)**  
[25] FR  
[54] **ADHESIVE TAPE HAVING AN ANTI-SLIP SURFACE WHICH DOES NOT ADHERE TO THE ADHESIVE SURFACE AND MANUFACTURING METHOD THEREOF**  
[54] **BANDE ADHESIVE COMPORTANT UNE FACE ANTI-GLISSE QUI NE COLLE PAS A LA FACE ADHESIVE ET SON PROCEDE DE FABRICATION**  
[72] LOUETTE, JEAN-MARIE, FR  
[71] PACKINVEST, FR  
[85] 2024-01-05  
[86] 2022-07-07 (PCT/IB2022/056269)  
[87] (WO2023/281427)  
[30] FR (FR2107338) 2021-07-07

[21] **3,225,007**  
[13] A1

[51] **Int.Cl. F02M 21/02 (2006.01) F17C 6/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD WITH BOIL-OFF MANAGEMENT FOR LIQUEFIED GAS STORAGE**  
[54] **SYSTEME ET PROCEDE DE GESTION D'EVAPORATION POUR LE STOCKAGE DE GAZ LIQUEFIE**  
[72] LI, XIANMING, US  
[72] KU, ANTHONY, US  
[72] STAGER, JERAD ALLEN, US  
[72] RAMTEKE, ASHWIN, US  
[71] CHINA ENERGY INVESTMENT CORPORATION LIMITED, CN  
[71] NATIONAL INSTITUTE OF CLEAN-AND-LOW-CARBON ENERGY, CN  
[85] 2024-01-05  
[86] 2022-06-08 (PCT/CN2022/097666)  
[87] (WO2023/279907)  
[30] US (17/371,370) 2021-07-09

[21] **3,225,008**  
[13] A1

[51] **Int.Cl. A61K 31/36 (2006.01) A61K 45/06 (2006.01)**  
[25] EN  
[54] **SAFER PSYCHOACTIVE COMPOSITIONS**  
[54] **COMPOSITIONS PSYCHOACTIVES PLUS FIABLES**  
[72] OBIDIN, NIKITA, US  
[72] HEYWOOD, JAMES, US  
[71] ARCADIA MEDICINE, INC., US  
[85] 2024-01-05  
[86] 2022-07-07 (PCT/US2022/036427)  
[87] (WO2023/283386)

[21] **3,225,010**  
[13] A1

[51] **Int.Cl. F17C 5/00 (2006.01) F17C 5/02 (2006.01) F17C 5/06 (2006.01) F17C 6/00 (2006.01) F17C 7/00 (2006.01) F17C 7/02 (2006.01) F17C 7/04 (2006.01) F17C 9/00 (2006.01) F17C 9/02 (2006.01) F17C 9/04 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR REFUELING AND BACKUP POWER GENERATION**  
[54] **SYSTEME ET PROCEDE DE RAVITAILLEMENT ET DE GENERATION D'ENERGIE DE SECOURS**  
[72] KU, ANTHONY, US  
[72] LI, XIANMING, US  
[72] RAMTEKE, ASHWIN, US  
[72] STAGER, JERAD ALLEN, US  
[71] CHINA ENERGY INVESTMENT CORPORATION LIMITED, CN  
[71] NATIONAL INSTITUTE OF CLEAN-AND-LOW-CARBON ENERGY, CN  
[85] 2024-01-05  
[86] 2022-06-08 (PCT/CN2022/097667)  
[87] (WO2023/279908)  
[30] US (17/371,175) 2021-07-09

[21] **3,225,011**  
[13] A1

[51] **Int.Cl. A61B 18/04 (2006.01) A61B 18/12 (2006.01) A61B 18/20 (2006.01) A61B 18/22 (2006.01) A61F 7/00 (2006.01) A61N 1/00 (2006.01) A61N 5/06 (2006.01)**  
[25] EN  
[54] **AN ESTHETIC APPARATUS USEFUL FOR INCREASING SKIN REJUVENATION AND METHODS THEREOF**  
[54] **APPAREIL A USAGE ESTHETIQUE UTILE POUR ACCROITRE LE RAJEUNISSEMENT DE LA PEAU ET METHODES ASSOCIEES**  
[72] EPSHTEIN, HAIM, IL  
[72] POLYAKOV, VADIM, IL  
[72] RON EDOUTE, ODED, IL  
[72] RON EDOUTE, ORIT, IL  
[72] KREMIN, ITZHAK, IL  
[71] VENUS CONCEPT LTD., IL  
[85] 2024-01-05  
[86] 2022-07-08 (PCT/IB2022/056307)  
[87] (WO2023/281448)  
[30] US (63/219,385) 2021-07-08  
[30] US (17/859,933) 2022-07-07

[21] **3,225,014**  
[13] A1

[51] **Int.Cl. C12Q 1/6858 (2018.01) C12Q 1/6883 (2018.01) C12Q 1/6886 (2018.01)**  
[25] EN  
[54] **METHODS FOR DETECTING NEOPLASM IN PREGNANT WOMEN**  
[54] **PROCEDES DE DETECTION DE NEOPLASME CHEZ DES FEMMES ENCEINTES**  
[72] GOLDRING, GEORGINA, US  
[72] DINONNO, WENDY, US  
[72] XU, WENBO, US  
[72] LEONARD, SAMANTHA, US  
[72] MELTZER, JEFFREY, US  
[71] NATERA, INC., US  
[85] 2024-01-05  
[86] 2022-07-29 (PCT/US2022/038832)  
[87] (WO2023/014597)  
[30] US (63/228,565) 2021-08-02

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[21] **3,225,016**  
[13] A1

[51] **Int.Cl. A61N 1/04 (2006.01) A61N 1/36 (2006.01)**

[25] EN

[54] **MULTI-ELECTRODE PAD FOR TRANSCUTANEOUS STIMULATION**

[54] **TAMPON DE MULTI-ELECTRODE POUR STIMULATION TRANSCUTANEE**

[72] BALDWIN, ALEXANDER BARNES, US

[72] FOROOZAN, ALEXIS, US

[72] PETERSON, COLLIN, US

[72] RANDHAWA, GHAZAL, US

[72] LO, YI-KAI, US

[71] NICHE BIOMEDICAL INC, US

[85] 2023-12-20

[86] 2022-06-21 (PCT/US2022/034216)

[87] (WO2022/271614)

[30] US (63/213,299) 2021-06-22

[30] US (63/213,400) 2021-06-22

[21] **3,225,017**  
[13] A1

[51] **Int.Cl. E21B 34/00 (2006.01) E21B 43/40 (2006.01)**

[25] EN

[54] **EJECTOR MANIFOLD AND SUBSURFACE PROCESS TO HARVEST LOW-PRESSURE NATURAL GAS**

[54] **COLLECTEUR D'EJECTEUR ET PROCEDE SOUTERRAIN POUR LA RECOLTE DE GAZ NATUREL BASSE PRESSION**

[72] BRUNER, SCOTT D., US

[71] HAWK ENERGY SOLUTIONS, LLC, US

[85] 2024-01-05

[86] 2022-07-01 (PCT/US2022/035976)

[87] (WO2023/283137)

[30] US (63/219,253) 2021-07-07

[30] US (17/854,969) 2022-06-30

[21] **3,225,019**  
[13] A1

[51] **Int.Cl. G06Q 30/02 (2023.01) G06Q 50/00 (2024.01)**

[25] EN

[54] **COOPERATIVE DECISION MAKING IN A SOCIAL NETWORK**

[54] **PRISE DE DECISION COOPERATIVE DANS UN RESEAU SOCIAL**

[72] BENCHETRIT, RONEN, BM

[72] SHAUKAT, TARIQ MASUD, US

[71] AMI HOLDINGS LIMITED, BM

[85] 2023-12-20

[86] 2022-06-17 (PCT/US2022/033994)

[87] (WO2022/271551)

[30] US (63/212,951) 2021-06-21

[21] **3,225,020**  
[13] A1

[51] **Int.Cl. G06F 16/33 (2019.01) G06F 16/35 (2019.01)**

[25] EN

[54] **AUTOMATIC LABELING OF TEXT DATA**

[54] **MARQUAGE AUTOMATIQUE DE DONNEES DE TEXTE**

[72] SEWAK, MOHIT, US

[72] POLURI, RAVI KIRAN REDDY, US

[72] BLUM, WILLIAM, US

[72] CHAN, PAK ON, US

[72] LI, WEISHENG, US

[72] ACHARYA, SHARADA SHIRISH, US

[72] RUDNICK, CHRISTIAN, US

[72] BETSER, MICHAEL ABRAHAM, US

[72] DRINIC, MILENKO, US

[72] LIU, SIHONG, US

[71] MICROSOFT TECHNOLOGY LICENSING, LLC, US

[85] 2023-12-20

[86] 2022-05-23 (PCT/US2022/030464)

[87] (WO2023/278070)

[30] IN (202141029147) 2021-06-29

[30] US (17/711,506) 2022-04-01

[21] **3,225,022**  
[13] A1

[51] **Int.Cl. A63B 69/12 (2006.01) A63B 5/10 (2006.01) A63K 3/02 (2006.01) E04H 4/14 (2006.01)**

[25] EN

[54] **SWIMMING STARTING BLOCK FRONT FOOT SUPPORT**

[54] **SUPPORT DE PIED AVANT DE BLOC DE DEPART DE NATATION**

[72] KERESZY, TAMAS, US

[71] KERESZY, TAMAS, US

[85] 2023-12-20

[86] 2022-04-27 (PCT/IB2022/053919)

[87] (WO2022/269374)

[30] US (63/202,718) 2021-06-22

[30] US (17/708,537) 2022-03-30

[21] **3,225,025**  
[13] A1

[51] **Int.Cl. B32B 27/10 (2006.01) B65D 65/40 (2006.01)**

[25] EN

[54] **METHOD FOR PRODUCING GAS BARRIER PAPER PACKAGING MATERIAL AND GAS BARRIER PAPER PACKAGING MATERIAL**

[54] **PROCEDE DE PRODUCTION D'UN MATERIAU D'EMBALLAGE DE PAPIER BARRIERE AUX GAZ, ET MATERIAU D'EMBALLAGE A BASE DE PAPIER BARRIERE AUX GAZ**

[72] ITO, GENTA, JP

[72] TANAKA, HIROKI, JP

[72] KOBAYASHI, KYOHEI, JP

[72] FUJITA, ATSUSHI, JP

[72] HARADA, JUNICHI, JP

[71] SAKATA INX CORP., JP

[85] 2023-12-20

[86] 2022-06-09 (PCT/JP2022/023243)

[87] (WO2023/276601)

[30] JP (2021-108968) 2021-06-30



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[21] **3,225,028**

[13] A1

- [51] **Int.Cl. A01G 9/12 (2006.01)**  
 [25] EN  
 [54] **TYING MACHINE AND METHOD FOR TYING MACHINE D'ATTACHE ET PROCEDE D'ATTACHE**  
 [72] ASAI, MASATOSHI, JP  
 [72] OSUGA, SATOSHI, JP  
 [71] MAX CO., LTD., JP  
 [85] 2023-12-20  
 [86] 2022-07-08 (PCT/JP2022/027093)  
 [87] (WO2023/286708)  
 [30] JP (2021-117383) 2021-07-15  
 [30] JP (2021-117401) 2021-07-15

[21] **3,225,031**

[13] A1

- [51] **Int.Cl. A61G 7/057 (2006.01)**  
 [25] EN  
 [54] **PNEUMATIC CONNECTOR ASSEMBLY, INFLATABLE MATTRESS AND PATIENT SUPPORT APPARATUS ENSEMBLE RACCORD PNEUMATIQUE, MATELAS GONFLABLE ET APPAREIL DE SUPPORT DE PATIENT**  
 [72] BAILY, GREG, GB  
 [72] GOODFIELD, CLIVE, GB  
 [72] HARRISON, RYAN WILLIAM, GB  
 [72] JACKSON, PHILIP JAMES, GB  
 [71] ARJO IP HOLDING AKTIEBOLAG, SE  
 [85] 2023-12-20  
 [86] 2022-06-10 (PCT/SE2022/050568)  
 [87] (WO2023/277759)  
 [30] SE (2150821-3) 2021-06-28

[21] **3,225,033**

[13] A1

- [51] **Int.Cl. A21D 13/16 (2017.01) A21D 13/17 (2017.01) A21D 13/19 (2017.01) A21D 13/22 (2017.01) A21D 13/28 (2017.01) A21D 13/31 (2017.01) A21D 10/02 (2006.01)**  
 [25] EN  
 [54] **ROLLED DOUGH PRODUCT AND METHOD OF PRODUCING PRODUIT A BASE DE PATE ROULEE ET PROCEDE DE PRODUCTION**  
 [72] CAIN, CASSEE MALIA, US  
 [72] O'CONNOR, CHRISTINE, US  
 [72] STINGACIU, SORIN, CA  
 [71] GENERAL MILLS, INC., US  
 [85] 2023-12-20  
 [86] 2021-06-22 (PCT/US2021/038363)  
 [87] (WO2022/271152)

[21] **3,225,040**

[13] A1

- [51] **Int.Cl. A61B 17/17 (2006.01)**  
 [25] EN  
 [54] **SYSTEMS AND METHODS FOR USING PHOTOGRAMMETRY TO CREATE PATIENT-SPECIFIC GUIDES FOR ORTHOPEDIC SURGERY SYSTEMES ET PROCEDES D'UTILISATION DE PHOTOGRAMMETRIE PERMETTANT DE CREER DES GUIDES SPECIFIQUES A UN PATIENT POUR UNE CHIRURGIE ORTHOPEDIQUE**  
 [72] MCDANIEL, C. BRIAN, US  
 [72] BRYANT, PAUL S., US  
 [72] BOWMAN, FRED W., US  
 [72] HARRIS, BRIAN R., US  
 [71] MICROPORT ORTHOPEDICS HOLDINGS INC., US  
 [85] 2024-01-05  
 [86] 2022-07-19 (PCT/US2022/073868)  
 [87] (WO2023/004299)  
 [30] US (63/223,844) 2021-07-20

[21] **3,225,045**

[13] A1

- [51] **Int.Cl. C07D 519/00 (2006.01) A61K 31/519 (2006.01) A61K 31/55 (2006.01) A61K 31/551 (2006.01) A61P 35/00 (2006.01) C07D 471/04 (2006.01)**  
 [25] EN  
 [54] **HER2 MUTATION INHIBITORS INHIBITEURS DE MUTATION HER2**  
 [72] ELLIS, BRYAN DANIEL, US  
 [72] HICKEN, ERIK JAMES, US  
 [72] LAIRD, ELLEN RUTH, US  
 [72] LAZZARA, NICHOLAS CHARLES, US  
 [72] NEWHOUSE, BRADLEY JON, US  
 [72] PAJK, SPENCER PHILLIP, US  
 [72] ROSEN, RACHEL ZOE, US  
 [72] SHELPE, RUSSELL ANDREW, US  
 [71] ARRAY BIOPHARMA INC., US  
 [85] 2023-12-20  
 [86] 2022-06-23 (PCT/IB2022/055827)  
 [87] (WO2022/269531)  
 [30] US (63/215,435) 2021-06-26  
 [30] US (63/294,590) 2021-12-29  
 [30] US (63/350,495) 2022-06-09
- [21] **3,225,052**
- [13] A1
- [51] **Int.Cl. B01D 27/02 (2006.01) A23L 2/72 (2006.01) B01D 27/14 (2006.01)**  
 [25] EN  
 [54] **FILTER MEDIA, FILTER CARTRIDGE CONTAINING FILTER MEDIA, AND METHOD OF FILTERING WATER MILIEUX FILTRANTS, CARTOUCHE FILTRANTE CONTENANT DES MILIEUX FILTRANTS, ET PROCEDE DE FILTRATION D'EAU**  
 [72] KAMALI, FARSHAD, US  
 [72] FANTAPPIE, GIANCARLO, US  
 [72] JERSEY, STEVEN T., US  
 [71] PEPSICO, INC., US  
 [85] 2023-12-20  
 [86] 2022-06-30 (PCT/US2022/035767)  
 [87] (WO2023/278728)  
 [30] US (63/217,677) 2021-07-01

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[21] **3,225,067**  
[13] A1

[51] **Int.Cl. B65D 83/14 (2006.01) B65D 83/22 (2006.01) B65D 83/38 (2006.01) B65D 83/40 (2006.01) B65D 83/42 (2006.01)**

[25] FR

[54] **CARTRIDGE CONTAINING A BEVERAGE AND BEING INTENDED TO BE MOUNTED IN A DEVICE FOR STORING AND CONTROLLING THE OPENING AND CLOSING OF SAID CARTRIDGE, AND ASSOCIATED DEVICE ASSEMBLY AND METHOD**

[54] **CARTOUCHE CONTENANT UNE BOISSON DESTINEE A ETRE MONTEE DANS UN DISPOSITIF POUR STOCKER ET CONTROLER L'OUVERTURE ET LA FERMETURE DE LADITE CARTOUCHE, DISPOSITIF ENSEMBLE ET PROCEDE ASSOCIES**

[72] DE GAULLE, OCTAVE, FR  
[72] SINDALL, MATTHEW, FR  
[71] G.H. MUMM ET CIE - SOCIETE VINICOLE DE CHAMPAGNE SUCESSEUR, FR

[85] 2024-01-05  
[86] 2022-08-01 (PCT/FR2022/051536)  
[87] (WO2023/012426)  
[30] FR (FR2108430) 2021-08-03

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[21] **3,225,083**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 31/713 (2006.01) A61P 19/10 (2006.01)**

[25] EN

[54] **TREATMENT OF DECREASED BONE MINERAL DENSITY WITH WNT FAMILY MEMBER 5B (WNT5B) INHIBITORS**

[54] **TRAITEMENT DE LA BAISSSE DE DENSITE MINERALE OSSEUSE PAR DES INHIBITEURS DE L'ELEMENT 5B DE LA FAMILLE WNT (WNT5B)**

[72] BOVIJN, JONAS, US  
[72] SOSINA, OLUKAYODE, US  
[72] LOTTA, LUCA ANDREA, US  
[72] BARAS, ARIS, US  
[71] REGENERON PHARMACEUTICALS, INC., US

[85] 2023-12-20  
[86] 2022-06-30 (PCT/US2022/035846)  
[87] (WO2023/278787)  
[30] US (63/218,209) 2021-07-02

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[21] **3,225,086**  
[13] A1

[51] **Int.Cl. B25F 5/00 (2006.01) H02J 7/00 (2006.01)**

[25] EN

[54] **POWER TOOLS AND BATTERY PACKS SYSTEM**

[54] **OUTILS ELECTRIQUES ET SYSTEME DE BLOCS-BATTERIES**

[72] WALDRON, MICHAEL, GB  
[72] ENSING, GEERT, GB  
[72] BAKKER, RIENS, GB  
[71] 7RDD LIMITED, GB

[85] 2024-01-05  
[86] 2022-05-04 (PCT/GB2022/051118)  
[87] (WO2022/234259)  
[30] GB (2106424.1) 2021-05-05

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[21] **3,225,088**  
[13] A1

[51] **Int.Cl. C08K 3/04 (2006.01) C09D 183/04 (2006.01)**

[25] EN

[54] **SOLVENT BASED AUTOMOTIVE GRAPHENE SURFACE TREATMENT AND PROCESS FOR USE THEREOF**

[54] **TRAITEMENT DE SURFACE POUR AUTOMOBILE A BASE DE GRAPHENE A BASE DE SOLVANT ET PROCEDE D'UTILISATION DE CE TRAITEMENT**

[72] HUANG, TSAO-CHIN CLARENCE, US  
[72] ESCOTO, JOHN ISIDORO, JR., US  
[71] ILLINOIS TOOL WORKS INC., US

[85] 2023-12-20  
[86] 2022-07-01 (PCT/US2022/035890)  
[87] (WO2023/278813)  
[30] US (63/217,365) 2021-07-01  
[30] US (17/855,834) 2022-07-01

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[21] **3,225,090**  
[13] A1

[51] **Int.Cl. H01M 10/613 (2014.01) H01M 10/625 (2014.01) H01M 10/6567 (2014.01) H01M 10/6568 (2014.01) C09K 5/10 (2006.01)**

[25] EN

[54] **PHOSPHATE ESTER HEAT TRANSFER FLUIDS FOR IMMERSION COOLING SYSTEM**

[54] **FLUIDES CALOPORTEURS A BASE D'ESTER DE PHOSPHATE POUR SYSTEME DE REFROIDISSEMENT PAR IMMERSION**

[72] FLETSCHINGER, MICHAEL, CH  
[72] MILNE, NEAL, GB  
[72] BENANTI, TRAVIS, US  
[71] LANXESS CORPORATION, US

[85] 2023-12-20  
[86] 2022-07-01 (PCT/US2022/035902)  
[87] (WO2023/283115)  
[30] US (63/219,204) 2021-07-07  
[30] EP (21191203.5) 2021-08-13

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[21] **3,225,095**  
[13] A1

[51] **Int.Cl. C09K 5/10 (2006.01) H01M 10/613 (2014.01) C07F 9/00 (2006.01)**

[25] EN

[54] **PHOSPHATE ESTER HEAT TRANSFER FLUIDS AND THEIR USE IN AN IMMERSION COOLING SYSTEM**

[54] **FLUIDES CALOPORTEURS A BASE D'ESTER DE PHOSPHATE ET LEUR UTILISATION DANS UN SYSTEME DE REFROIDISSEMENT PAR IMMERSION**

[72] FLETSCHINGER, MICHAEL, CH  
[72] MILNE, NEAL, GB  
[72] BENANTI, TRAVIS, US  
[71] LANXESS CORPORATION, US

[85] 2023-12-20  
[86] 2022-07-01 (PCT/US2022/035905)  
[87] (WO2023/283117)  
[30] US (63/219,227) 2021-07-07  
[30] EP (21191201.9) 2021-08-13

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[21] **3,225,096**  
[13] A1

[51] **Int.Cl. H01M 10/613 (2014.01) H01M 10/625 (2014.01) H01M 10/647 (2014.01) H01M 10/6556 (2014.01) H01M 10/6557 (2014.01) H01M 10/6565 (2014.01) H01M 50/209 (2021.01) H01M 50/249 (2021.01) H01M 50/256 (2021.01) H01M 50/262 (2021.01) H01M 50/264 (2021.01) H01M 50/291 (2021.01) H01M 50/293 (2021.01)**

[25] FR

[54] **BATTERY MODULE FOR A MOTOR VEHICLE**

[54] **ENSEMBLE BATTERIE POUR VEHICULE AUTOMOBILE**

[72] DERANGERE, NICOLAS, BE

[72] DHAUSSY, FRANCK, BE

[72] OSZWALD, PIERRE, BE

[72] BRUNEL, JONATHAN, BE

[71] PLASTIC OMNIUM CLEAN ENERGY SYSTEMS RESEARCH, FR

[85] 2024-01-05

[86] 2022-09-02 (PCT/EP2022/074506)

[87] (WO2023/031425)

[30] LU (LU500615) 2021-09-02

[21] **3,225,098**  
[13] A1

[51] **Int.Cl. G16H 20/10 (2018.01) G06Q 10/06 (2023.01) G06Q 10/08 (2023.01) G16H 40/20 (2018.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR EFFICIENT AND ECONOMICAL FULFILMENT OF PRESCRIPTION ORDERS**

[54] **SYSTEMES ET PROCEDES POUR REMPLIR DE MANIERE EFFICACE ET ECONOMIQUE DES ORDONNANCES**

[72] KOUZA, RAAD SHAMOON, US

[72] KOUZA, RAMIS SHAMOON, US

[72] ASMAR, ANTHONY RYIADH, US

[71] SLICK RX, LLC, US

[85] 2024-01-05

[86] 2021-07-08 (PCT/US2021/040897)

[87] (WO2022/011146)

[30] US (63/049,454) 2020-07-08

[21] **3,225,104**  
[13] A1

[51] **Int.Cl. C01B 11/02 (2006.01)**

[25] EN

[54] **A SOLID FORMULATION FOR GENERATING CHLORINE DIOXIDE IN SITU AND A PROCESS FOR PREPARATION THEREOF**

[54] **FORMULATION SOLIDE DE GENERATION DE DIOXYDE DE CHLORE IN SITU ET PROCEDE DE PREPARATION ASSOCIE**

[72] SHAH, NIKUNJ, IN

[72] SHAH, KEYUR, IN

[71] SHAH, NIKUNJ, IN

[71] SHAH, KEYUR, IN

[85] 2024-01-05

[86] 2021-03-16 (PCT/IN2021/050266)

[87] (WO2022/162678)

[30] IN (202121003693) 2021-01-27

[21] **3,225,110**  
[13] A1

[51] **Int.Cl. H01M 10/613 (2014.01) H01M 10/625 (2014.01) H01M 10/6567 (2014.01) H01M 10/6568 (2014.01) C09K 5/00 (2006.01) C09K 5/10 (2006.01) C09K 21/06 (2006.01)**

[25] EN

[54] **PHOSPHATE ESTER HEAT TRANSFER FLUIDS FOR IMMERSION COOLING SYSTEM**

[54] **FLUIDES CALOPORTEURS A BASE D'ESTER DE PHOSPHATE POUR SYSTEME DE REFROIDISSEMENT PAR IMMERSION**

[72] FLETSCHINGER, MICHAEL, CH

[72] MILNE, NEAL, GB

[72] BENANTI, TRAVIS, US

[71] LANXESS CORPORATION, US

[85] 2023-12-20

[86] 2022-07-01 (PCT/US2022/035912)

[87] (WO2023/283120)

[30] US (63/219,241) 2021-07-07

[30] EP (21191198.7) 2021-08-13

[21] **3,225,137**  
[13] A1

[51] **Int.Cl. A61F 9/00 (2006.01)**

[25] EN

[54] **INSERTER SYSTEM FOR ROD IMPLANTS AND METHODS OF USE**

[54] **SYSTEME D'INSERTION POUR IMPLANTS DE TIGE ET PROCEDES D'UTILISATION**

[72] HORVATH, JOSHUA DAVID, US

[72] VOGEL, ANNA LUCIA, US

[72] ARNOTT, RACHEL PAIGE, US

[72] WAITZ, ARIEL EPHRAIM, US

[72] HENNING, RUSSELL RICHARD, US

[72] DENDULK, BRUCE RODNEY, US

[72] TRIGG, LAURENCE EDWARD, US

[71] GENENTECH, INC., US

[85] 2023-12-20

[86] 2022-07-07 (PCT/US2022/036295)

[87] (WO2023/283291)

[30] US (63/203,082) 2021-07-07

[21] **3,225,138**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) C12N 5/07 (2010.01) C12N 5/10 (2006.01) C12N 9/22 (2006.01) C12N 15/11 (2006.01) C12N 15/63 (2006.01)**

[25] EN

[54] **ENGINEERED CELLS FOR THERAPY**

[54] **CELLULES INGENIERISEES POUR UNE THERAPIE**

[72] ZURIS, JOHN ANTHONY, US

[71] EDITAS MEDICINE, INC., US

[85] 2023-12-20

[86] 2022-06-23 (PCT/US2022/073126)

[87] (WO2022/272292)

[30] US (63/214,157) 2021-06-23

[30] US (63/233,695) 2021-08-16

[30] US (63/340,225) 2022-05-10

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[21] **3,225,139**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61K 47/68 (2017.01) A61P 35/00 (2006.01) C07K 14/705 (2006.01) A61K 38/00 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR INHIBITING THE EXPRESSION OF TMIGD2**

[54] **COMPOSITIONS ET METHODES D'INHIBITION DE L'EXPRESSION DE TMIGD2**

[72] ZANG, XINGXING, US  
[72] WANG, HAO, US  
[72] SICA, ROBERTO ALEJANDRO, US  
[71] ALBERT EINSTEIN COLLEGE OF MEDICINE, US

[85] 2023-12-20  
[86] 2022-07-01 (PCT/US2022/073387)  
[87] (WO2023/279107)  
[30] US (63/217,630) 2021-07-01

[21] **3,225,146**  
[13] A1

[51] **Int.Cl. A41C 3/14 (2006.01) A41C 3/10 (2006.01)**

[25] EN

[54] **ARTICLE OF APPAREL INCLUDING A BLADDER**

[54] **ARTICLE D'HABILLEMENT COMPRENANT UNE VESSIE**

[72] CASILLAS, TINA M., US  
[72] DUPRE, RISHA, US  
[72] LACEY, SAM, US  
[72] ORAND, AUSTIN J., US  
[72] PANIAN, NADIA M., US  
[72] PARKINSON, ADAM, US  
[72] QUAY, SIMON, US  
[72] RIND, VICTORIA, US  
[72] SOKOL, KIMBERLY A., US  
[72] SPANKS, JEFFREY C., US  
[71] NIKE INNOVATE C.V., US

[85] 2023-12-20  
[86] 2022-08-02 (PCT/US2022/074428)  
[87] (WO2023/015185)  
[30] US (63/228,310) 2021-08-02  
[30] US (63/366,768) 2022-06-21  
[30] US (17/816,647) 2022-08-01

[21] **3,225,147**  
[13] A1

[51] **Int.Cl. C07D 495/04 (2006.01)**

[25] EN

[54] **SYNTHESIS OF A BIS-MESYLATE SALT OF 4-AMINO-N-(1-((3-CHLORO-2-FLUOROPHENYL)AMINO)-6-METHYLISOQUINOLIN-5-YL)THIENO[3,2-D]PYRIMIDINE-7-CARBOXAMIDE AND INTERMEDIATES THERETO**

[54] **SYNTHESE D'UN SEL BIS-MESYLATE DU 4-AMINO-N-(1-((3-CHLORO-2-FLUOROPHENYL)AMINO)-6-METHYLISOQUINOLEIN-5-YL)THIENO[3,2-D]PYRIMIDINE-7-CARBOXAMIDE ET DE SES INTERMEDIAIRES**

[72] GOSSELIN, FRANCIS, US  
[72] KOENIG, STEFAN G., US  
[72] MERCADO-MARIN, EDUARDO V., US  
[72] STUMPF, ANDREAS, US  
[72] ZELL, DANIEL, US  
[72] ZHANG, HAIMING, US  
[72] BACHMANN, STEPHAN, CH  
[72] CARRERA, DIANE ELIZABETH, US  
[72] DALZIEL, MICHAEL EUAN, US  
[72] GE, YONGHUI, CN  
[72] ZHANG, JIE, CN  
[72] BIGLER, RAPHAEL, CH  
[72] FINET, LAURE ELISABETH SIMONE, CH  
[72] MONDIERE, REGIS JEAN GEORGES, CH  
[72] NAKAGAWA, YUKI, JP  
[71] GENENTECH, INC., US  
[71] F. HOFFMANN-LA ROCHE AG, CH

[85] 2023-12-20  
[86] 2022-06-28 (PCT/US2022/073195)  
[87] (WO2023/278981)  
[30] CN (PCT/CN2021/103873) 2021-06-30

[21] **3,225,149**  
[13] A1

[51] **Int.Cl. B65G 1/137 (2006.01) B65G 47/51 (2006.01)**

[25] EN

[54] **DISTRIBUTOR SYSTEM AND METHOD FOR CONVEYING GOODS IN A STORAGE AND ORDER-PICKING SYSTEM**

[54] **SYSTEME DISTRIBUTEUR ET PROCEDE DE TRANSPORT DE MARCHANDISES DANS UN SYSTEME DE STOCKAGE ET DE PREPARATION DE COMMANDES**

[72] LINDLEY, TIMOTHY, DE  
[72] KETTLGRUBER, GERALD, DE  
[71] TGW LOGISTICS GROUP GMBH, AT

[85] 2023-12-21  
[86] 2022-06-23 (PCT/AT2022/060211)  
[87] (WO2022/266686)  
[30] AT (A 50522/2021) 2021-06-24

[21] **3,225,152**  
[13] A1

[51] **Int.Cl. C07D 471/04 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **PYRIDOPYRIMIDINE DERIVATIVES USEFUL AS WEE1 KINASE INHIBITORS**

[54] **DERIVES DE PYRIDOPYRIMIDINE UTILES EN TANT QU'INHIBITEURS DE KINASE WEE1**

[72] GILAD, OREN, US  
[72] VACCA, JOSEPH, US  
[71] APREA THERAPEUTICS, INC., US

[85] 2023-12-01  
[86] 2022-06-03 (PCT/US2022/032203)  
[87] (WO2022/256680)  
[30] US (63/196,744) 2021-06-04

[21] **3,225,155**  
[13] A1

[51] **Int.Cl. B66C 23/78 (2006.01)**

[25] EN

[54] **METHOD FOR SUPPORTING A CARRIER VEHICLE**

[54] **PROCEDE DE SUPPORT D'UN VEHICULE DE TRANSPORT**

[72] JUDS, BENJAMIN, AT  
[72] EMMINGER, WERNER, AT  
[72] GSCHAIDER, FRIEDRICH, AT  
[72] PETRONIJEVIC, BOBAN, AT  
[71] PALFINGER AG, AT

[85] 2023-12-21  
[86] 2022-06-23 (PCT/AT2022/060212)  
[87] (WO2022/266687)  
[30] AT (GM 50128/2021) 2021-06-24

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[21] **3,225,161**  
[13] A1

[51] **Int.Cl. F28D 21/00 (2006.01) B01D 61/36 (2006.01) B01D 63/08 (2006.01) F28D 9/00 (2006.01) F28F 9/00 (2006.01) F28F 9/007 (2006.01)**

[25] EN

[54] **MEMBRANE ASSEMBLY FOR MEMBRANE ENERGY EXCHANGER**

[54] **ENSEMBLE MEMBRANE POUR ECHANGEUR D'ENERGIE A MEMBRANE**

[72] LEPOUDRE, PHILIP PAUL, CA  
[72] NIROOMAND, SHIRIN, CA  
[72] CUI, ZHENG, CA  
[71] NORTEK AIR SOLUTIONS CANADA, INC., CA

[85] 2023-12-21  
[86] 2022-06-24 (PCT/CA2022/051019)  
[87] (WO2022/266773)  
[30] US (63/215,302) 2021-06-25

[21] **3,225,162**  
[13] A1

[51] **Int.Cl. C04B 7/24 (2006.01) C04B 7/02 (2006.01) C04B 7/40 (2006.01) C04B 7/60 (2006.01) C04B 28/00 (2006.01) C04B 28/04 (2006.01)**

[25] EN

[54] **IMPROVED POZZOLAN AND METHODS OF MAKING AND USING SAME**

[54] **POZZOLANE AMELIOREE ET PROCEDES POUR LA FABRIQUER ET L'UTILISER**

[72] GRANT, IAN, CA  
[72] HARPUR, STEPHEN, CA  
[72] MAH, ROGER, CA  
[71] PROGRESSIVE PLANET SOLUTIONS INC., CA

[85] 2023-12-21  
[86] 2022-07-18 (PCT/CA2022/051111)  
[87] (WO2023/283746)  
[30] US (63/222,912) 2021-07-16

[21] **3,225,164**  
[13] A1

[51] **Int.Cl. C07D 403/12 (2006.01) A61K 31/506 (2006.01) A61P 35/00 (2006.01) C07D 471/10 (2006.01) C07D 487/10 (2006.01)**

[25] EN

[54] **CRYSTAL FORM OF PYRIMIDINE DERIVATIVE AND PREPARATION METHOD THEREFOR**

[54] **FORME CRISTALLINE D'UN DERIVE DE PYRIMIDINE ET SON PROCEDE DE PREPARATION**

[72] ZHAO, MEIYU, CN  
[72] CHEN, LIANWEI, CN  
[72] LI, NA, CN  
[72] SHI, ZHENJUAN, CN  
[72] ZHENG, JIANFENG, CN  
[72] SU, DI, CN  
[71] ZHEJIANG HISUN PHARMACEUTICAL CO., LTD., CN

[85] 2023-12-21  
[86] 2022-06-21 (PCT/CN2022/100065)  
[87] (WO2022/268063)  
[30] CN (202110696953.6) 2021-06-23

[21] **3,225,165**  
[13] A1

[51] **Int.Cl. A61L 2/00 (2006.01) A61L 2/14 (2006.01) A61L 2/20 (2006.01) A61L 2/24 (2006.01) A61L 9/00 (2006.01) A61L 9/015 (2006.01)**

[25] EN

[54] **SYSTEMS, METHODS, AND APPARATUSES FOR DISINFECTION AND DECONTAMINATION**

[54] **SYSTEMES, METHODES ET APPAREILS DE DESINFECTION ET DE DECONTAMINATION**

[72] RADER, RICHARD S., US  
[72] HEATER, KENNETH J., US  
[72] DESABATO, RAYMOND, US  
[72] LORCH, DANIEL P., US  
[72] LEWIS, ADRIANE L., US  
[72] WELLS, TIMOTHY N., US  
[71] RADER, RICHARD S., US  
[71] HEATER, KENNETH J., US  
[71] DESABATO, RAYMOND, US  
[71] LORCH, DANIEL P., US  
[71] LEWIS, ADRIANE L., US  
[71] WELLS, TIMOTHY N., US  
[71] CHORUS, LLC, US

[85] 2023-12-04  
[86] 2021-12-08 (PCT/US2021/062496)  
[87] (WO2022/260702)  
[30] US (PCT/US2021/036501) 2021-06-08

[21] **3,225,166**  
[13] A1

[51] **Int.Cl. C07D 209/12 (2006.01) A61K 31/404 (2006.01) A61P 31/14 (2006.01)**

[25] EN

[54] **PROCESSES FOR THE PREPARATION OF (S)-2-(4-CHLORO-2-METHOXYPHENYL)-2-((3-METHOXY-5-(METHYLSULFONYL)PHENYL)AMINO)-1-(1H-INDOL-3-YL)ETHENONE DERIVATIVES**

[54] **PROCEDES POUR LA PREPARATION DE DERIVES DE (S)-2-(4-CHLORO-2-METHOXYPHENYL)-2-((3-METHOXY-5-(METHYLSULFONYL)PHENYL)AMINO)-1-(1H-INDOL-3-YL)ETHENONE**

[72] WU, KAI, CN  
[72] OOST, RIK, BE  
[72] SCHWEITZER-CHAPUT, BERTRAND, BE  
[72] ERIKSSON, CARL ARNE MAGNUS, BE  
[72] COESEMANS, ERWIN, BE  
[71] JANSSEN PHARMACEUTICALS, INC., US

[85] 2023-12-21  
[86] 2022-06-28 (PCT/CN2022/101942)  
[87] (WO2023/274237)  
[30] CN (PCT/CN2021/103244) 2021-06-29  
[30] CN (PCT/CN2022/091064) 2022-05-06

[21] **3,225,167**  
[13] A1

[51] **Int.Cl. B65G 1/137 (2006.01)**

[25] EN

[54] **IMPROVED METHOD FOR PICKING GOODS THAT COME FROM TWO DIFFERENT SUBSYSTEMS, AND STORAGE AND PICKING SYSTEM THEREFOR**

[54] **PROCEDE AMELIORE DE PREPARATION DE COMMANDES DE MARCHANDISES PROVENANT DE DEUX SOUS-SYSTEMES DIFFERENTS, ET SYSTEME DE STOCKAGE ET DE PREPARATION DE COMMANDES ASSOCIE**

[72] LINDLEY, TIMOTHY, DE  
[72] KETTLGRUBER, GERALD, AT  
[71] TGW LOGISTICS GROUP GMBH, AT

[85] 2023-12-21  
[86] 2022-06-28 (PCT/AT2022/060224)  
[87] (WO2023/272322)  
[30] AT (A 50542/2021) 2021-06-30

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[21] **3,225,169**  
[13] A1

[51] **Int.Cl. H02J 3/14 (2006.01) C25B 1/02 (2006.01) H02J 11/00 (2006.01) H02J 15/00 (2006.01)**

[25] EN

[54] **METHOD FOR ALLOCATING ELECTRICAL ENERGY WITHIN AN ELECTROLYSIS PLANT**

[54] **PROCEDE D'ATTRIBUTION D'ENERGIE ELECTRIQUE DANS UNE INSTALLATION D'ELECTROLYSE**

[72] NEUBACHER, DIETMAR, AT

[71] H2I GREENHYDROGEN GMBH, AT

[85] 2023-12-21

[86] 2022-06-29 (PCT/AT2022/060230)

[87] (WO2023/272327)

[30] AT (A 50551/2021) 2021-07-01

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[21] **3,225,172**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 31/4439 (2006.01) A61K 31/665 (2006.01) A61K 45/06 (2006.01) A61P 1/16 (2006.01)**

[25] EN

[54] **COMBINATION THERAPY FOR TREATMENT OF LIVER DISEASES**

[54] **POLYTHERAPIE POUR LE TRAITEMENT DE MALADIES HEPATIQUES**

[72] WU, JINZI JASON, CN

[71] GANNEX PHARMA CO., LTD., CN

[85] 2023-12-21

[86] 2022-07-05 (PCT/CN2022/103864)

[87] (WO2023/280152)

[30] US (63/203,032) 2021-07-06

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[21] **3,225,173**  
[13] A1

[25] EN

[54] **METHOD AND SYSTEM OF DETECTING OBSTACLE ELEMENTS WITH A VISUAL AID DEVICE**

[54] **PROCEDE ET SYSTEME DE DETECTION D'ELEMENTS D'OBSTACLE AVEC UN DISPOSITIF D'AIDE VISUELLE**

[72] PUIG ADAMUZ, JAUME, ES

[72] CABANEROS LOPEZ, ALEX, ES

[72] SANZ MONTEMAYOR, ANTONIO, ES

[72] GARCIA ESPINOSA, FRANCISCO JOSE, ES

[72] CONSTANZA LUCERO, MARIA, ES

[71] BIEL GLASSES, S.L., ES

[85] 2023-12-21

[86] 2021-07-07 (PCT/EP2021/068877)

[87] (WO2022/008612)

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[21] **3,225,175**  
[13] A1

[51] **Int.Cl. A24D 3/10 (2006.01) A24F 15/12 (2006.01) A24F 17/00 (2006.01) B01D 39/18 (2006.01) B32B 27/10 (2006.01) B32B 29/02 (2006.01)**

[25] EN

[54] **A SMOKING TIP**

[54] **EMBOUT D'ARTICLE A FUMER**

[72] DIMOPOULOS, MALAN, AU

[72] DIMOPOULOS, GREG, AU

[71] DIMOPOULOS, MALAN, AU

[71] DIMOPOULOS, GREG, AU

[85] 2023-12-21

[86] 2021-06-21 (PCT/AU2021/050645)

[87] (WO2021/258134)

[30] AU (2020902062) 2020-06-22

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[21] **3,225,177**  
[13] A1

[51] **Int.Cl. C25B 1/04 (2021.01) C25B 15/08 (2006.01)**

[25] EN

[54] **ELECTROLYSIS SYSTEM HAVING AN AUXILIARY ION EXCHANGER**

[54] **SYSTEME D'ELECTROLYSE COMPRENANT UN ECHANGEUR D'IONS AUXILIAIRE**

[72] CHOI, DU-FHAN, DE

[72] TREMEL, ALEXANDER, DE

[72] UNGERER, MARKUS, DE

[71] SIEMENS ENERGY GLOBAL GMBH & CO. KG, DE

[85] 2023-12-21

[86] 2022-04-25 (PCT/EP2022/060811)

[87] (WO2022/268378)

[30] EP (21181820.8) 2021-06-25

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[21] **3,225,178**  
[13] A1

[51] **Int.Cl. C21B 3/08 (2006.01) C22B 7/04 (2006.01)**

[25] EN

[54] **HEAT RECOVERY ON STEEL SLAG**

[54] **RECUPERATION DE CHALEUR SUR DES SCORIES D'ACIER**

[72] THOELLEN, THOMAS, BE

[71] JOHN COCKERILL S.A., BE

[85] 2023-12-21

[86] 2022-06-17 (PCT/EP2022/066563)

[87] (WO2023/274754)

[30] EP (21182919.7) 2021-06-30

[30] EP (21199716.8) 2021-09-29

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[21] **3,225,189**  
[13] A1

[51] **Int.Cl. B65D 65/42 (2006.01) C09D 105/00 (2006.01) D21H 17/22 (2006.01) D21H 19/12 (2006.01) D21H 19/50 (2006.01) D21H 27/10 (2006.01)**

[25] FR

[54] **MULTILAYER MATERIAL USEFUL AS PACKAGING, COMPRISING A LAYER OF CELLULOSIC MATERIAL AND A LAYER OF MATERIAL COMPRISING AT LEAST ONE MOINS ONE CASEIN AND/OR AT LEAST ONE CASEINATE**

[54] **MATERIAU MULTICOUCHE POUVANT ETRE UTILISE COMME EMBALLAGE, COMPRENANT UNE COUCHE DE MATERIAU CELLULOSIQUE ET UNE COUCHE DE MATERIAU COMPRENANT AU MOINS UNE CASEINE ET/OU AU MOINS UN CASEINATE**

[72] BESSAIRE, BASTIEN, FR  
[72] MELLOUKI, KHEIRDINE, FR  
[72] CHEVALIER, ELODIE, FR  
[72] CHIROUSSEL, FANNIE, FR  
[71] LACTIPS, FR  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/FR2022/051226)  
[87] (WO2022/269198)  
[30] FR (FR2106706) 2021-06-23

[21] **3,225,190**  
[13] A1

[51] **Int.Cl. A01N 43/56 (2006.01) C07D 231/22 (2006.01) C07D 401/04 (2006.01) C07D 401/14 (2006.01)**

[25] EN

[54] **(1,4,5-TRISUBSTITUTED-1H-PYRAZOLE-3-YL)OXY-2-ALKOXY ALKYL ACIDS AND THEIR DERIVATIVES, THEIR SALTS AND THEIR USE AS HERBICIDAL AGENTS**

[54] **ACIDES (1,4,5-TRISUBSTITUES-1H-PYRAZOLE-3-YL)OXY-2-ALCOXY ALKYLE ET LEURS DERIVES, LEURS SELS ET LEUR UTILISATION EN TANT QU'AGENTS HERBICIDES**

[72] BUSCATO, ESTELLA, DE  
[72] HELMKE, HENDRIK, DE  
[72] JAKOBI, HARALD, DE  
[72] MULLER, THOMAS, DE  
[72] BOLLENBACH-WAHL, BIRGIT, DE  
[72] DITTGEN, JAN, DE  
[72] GATZWEILER, ELMAR, DE  
[72] BOJACK, GUIDO, DE  
[71] BAYER AKTIENGESELLSCHAFT, DE  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/EP2022/067124)  
[87] (WO2022/268933)  
[30] EP (21181914.9) 2021-06-25

[21] **3,225,191**  
[13] A1

[51] **Int.Cl. H04L 9/40 (2022.01)**

[25] FR

[54] **SECURE TRANSFER GATEWAY**

[54] **PASSERELLE DE TRANSFERT SECURISE**

[72] COMBIER, ARNAUD, FR  
[71] ARC DATA SHIELD, FR  
[85] 2023-12-21  
[86] 2022-07-07 (PCT/FR2022/051364)  
[87] (WO2023/281223)  
[30] FR (21 07339) 2021-07-07

[21] **3,225,192**  
[13] A1

[51] **Int.Cl. G16C 60/00 (2019.01)**

[25] EN

[54] **A METHOD FOR DEVELOPING SUSTAINABLE ALUMINIUM PRODUCTS, AND A PRODUCT PRODUCED ACCORDING TO THE METHOD**

[54] **PROCEDE DE DEVELOPPEMENT DE PRODUITS EN ALUMINIUM DURABLES, ET PRODUIT OBTENU SELON LE PROCEDE**

[72] FURU, TROND, NO  
[72] MYHR, OLE RUNAR, NO  
[71] NORSK HYDRO ASA, NO  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/EP2022/067227)  
[87] (WO2023/274846)  
[30] EP (21181919.8) 2021-06-27

[21] **3,225,193**  
[13] A1

[51] **Int.Cl. H02J 50/00 (2016.01) H02J 11/00 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR ENERGY HARVESTING FROM A CURRENT SOURCE**

[54] **PROCEDE ET APPAREIL DE COLLECTE D'ENERGIE A PARTIR D'UNE SOURCE DE COURANT**

[72] TAJFAR, ALIREZA, US  
[72] KLIPPEL, TODD W., US  
[71] S&C ELECTRIC COMPANY, US  
[85] 2023-12-21  
[86] 2022-06-08 (PCT/US2022/032585)  
[87] (WO2023/283012)  
[30] US (63/220,288) 2021-07-09

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[21] **3,225,194**  
[13] A1

[51] **Int.Cl. C07K 1/22 (2006.01) C07K 16/18 (2006.01) C40B 30/04 (2006.01) G01N 33/543 (2006.01) G01N 33/566 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **MEANS AND METHODS FOR SELECTION OF SPECIFIC BINDERS**

[54] **MOYENS ET PROCEDES DE SELECTION DE LIANTS SPECIFIQUES**

[72] STEYAERT, JAN, BE  
[72] PARDON, ELS, BE  
[72] WOHLKONIG, ALEXANDRE, BE  
[72] ZOGG, THOMAS, BE  
[72] KALICHUK, VALENTINA, BE  
[71] VIB VZW, BE  
[71] VRIJE UNIVERSITEIT BRUSSEL, BE  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/EP2022/067256)  
[87] (WO2022/268993)  
[30] EP (21181272.2) 2021-06-23  
[30] EP (21181405.8) 2021-06-24

[21] **3,225,196**  
[13] A1

[51] **Int.Cl. G06F 40/174 (2020.01) G06F 16/25 (2019.01) G06N 20/00 (2019.01) G06F 40/205 (2020.01)**

[25] EN

[54] **AUTOMATIC DATA ENTRY FOR FORM DATA STRUCTURES USING APPLICATION PROGRAMMING INTERFACES**

[54] **ENTREE DE DONNEES AUTOMATIQUE POUR STRUCTURES DE DONNEES DE FORMULAIRE A L'AIDE D'INTERFACES DE PROGRAMMATION D'APPLICATION**

[72] SPIRIG, MILO, US  
[72] TANDEL, PRATIK, US  
[71] BREX INC., US  
[85] 2023-12-21  
[86] 2022-06-15 (PCT/US2022/033681)  
[87] (WO2023/278161)  
[30] US (17/364,215) 2021-06-30

[21] **3,225,199**  
[13] A1

[51] **Int.Cl. B01D 24/04 (2006.01) B32B 5/16 (2006.01) B32B 7/02 (2019.01) C02F 1/28 (2006.01) C02F 9/00 (2023.01)**

[25] EN

[54] **LAYERED CAPILLARY WETTING**

[54] **MOUILLAGE CAPILLAIRE EN COUCHES**

[72] POTTS, DAVID A., US  
[71] GEOMATRIX, LLC, US  
[85] 2023-12-21  
[86] 2022-06-17 (PCT/US2022/033925)  
[87] (WO2022/271538)  
[30] US (63/213,563) 2021-06-22  
[30] US (17/746,741) 2022-05-17

[21] **3,225,202**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2023.01)**

[25] EN

[54] **METHOD FOR DETERMINING A CAUSE OF FAULT IN AN INTRALOGISTICS SYSTEM WITH THE HELP OF A GRAPH MODEL**

[54] **PROCEDE DE DETERMINATION D'UNE CAUSE D'ERREUR DANS UN SYSTEME INTRALOGISTIQUE A L'AIDE D'UN MODELE DE GRAPHE**

[72] MAHRINGER, THOMAS, AT  
[71] TGW LOGISTICS GROUP GMBH, AT  
[85] 2023-12-21  
[86] 2022-06-24 (PCT/EP2022/067308)  
[87] (WO2022/269022)  
[30] EP (21181705.1) 2021-06-25

[21] **3,225,204**  
[13] A1

[51] **Int.Cl. G01K 13/08 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR WIRELESS TEMPERATURE MONITORING OF AN IMPLEMENT**

[54] **SYSTEMES ET PROCEDES POUR SURVEILLANCE DE TEMPERATURE SANS FIL D'UN OUTIL**

[72] DOCKTER, NATHAN, US  
[72] KONEN, RYAN, US  
[72] ORE, STEPHEN D., US  
[71] VERMEER MANUFACTURING COMPANY, US  
[85] 2023-12-21  
[86] 2022-06-20 (PCT/US2022/034171)  
[87] (WO2022/271593)  
[30] US (63/215,068) 2021-06-25

[21] **3,225,205**  
[13] A1

[51] **Int.Cl. C23C 22/34 (2006.01) C23C 22/73 (2006.01) C23C 22/76 (2006.01) C25D 13/20 (2006.01)**

[25] EN

[54] **METHOD FOR SEQUENTIALLY CONSTRUCTING A CONVERSION LAYER ON COMPONENTS COMPRISING STEEL SURFACES**

[54] **PROCEDE DE CONSTRUCTION SEQUENTIELLE D'UNE COUCHE DE CONVERSION SUR DES COMPOSANTS PRESENTANT DES SURFACES EN ACIER**

[72] BROUWER, JAN-WILLEM, DE  
[72] PILAREK, FRANK-OLIVER, DE  
[72] RESANO ARTALEJO, FERNANDO JOSE, DE  
[72] WAPNER, KRISTOF, DE  
[72] SINNWELL, SEBASTIAN, DE  
[71] HENKEL AG & CO. KGAA, DE  
[85] 2023-12-21  
[86] 2022-06-30 (PCT/EP2022/068099)  
[87] (WO2023/275270)  
[30] EP (21183374.4) 2021-07-02

[21] **3,225,207**  
[13] A1

[51] **Int.Cl. D03D 15/50 (2021.01) D03D 15/513 (2021.01) D06M 11/42 (2006.01) D06M 23/08 (2006.01)**

[25] EN

[54] **ANTIMICROBIAL AND ANTIBACTERIAL THERMAL-REGULATING FABRIC FOR USE IN GARMENTS, WITHIN GARMENTS AND IN OTHER OBJECTS**

[54] **TISSU A REGULATION THERMIQUE ANTIMICROBIEN ET ANTIBACTERIEN DESTINE A ETRE UTILISE DANS DES VETEMENTS, A L'INTERIEUR DE VETEMENTS ET DANS D'AUTRES OBJETS**

[72] MAZURKIEWICZ, LARRY M., US  
[71] MAZURKIEWICZ, LARRY M., US  
[71] AG THERMAL PRODUCTS, LLC., US  
[85] 2023-12-21  
[86] 2022-06-21 (PCT/US2022/034211)  
[87] (WO2022/271610)  
[30] US (63/213,057) 2021-06-21  
[30] US (17/844,239) 2022-06-20



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[21] **3,225,209**  
[13] A1

[51] **Int.Cl. C07H 1/00 (2006.01) C07H 17/07 (2006.01)**  
[25] FR  
[54] **PROCESS FOR PREPARING DIOSMIN AND FLAVONOID FRACTION**  
[54] **PROCEDE DE PREPARATION DE DIOSMINE ET DE FRACTION FLAVONOIQUE**  
[72] SARI, OZKAN, FR  
[72] SCHIAVI, BRUNO, FR  
[72] LAVAL, STEPHANE, FR  
[72] RASSON, CORENTIN, BE  
[71] LES LABORATOIRES SERVIER, FR  
[85] 2023-12-21  
[86] 2022-07-05 (PCT/EP2022/068596)  
[87] (WO2023/280857)  
[30] EP (21305932.2) 2021-07-06

[21] **3,225,212**  
[13] A1

[51] **Int.Cl. C07C 267/00 (2006.01) C07C 269/02 (2006.01) C07C 271/28 (2006.01) C08G 18/02 (2006.01) C08K 5/29 (2006.01)**  
[25] EN  
[54] **AROMATIC CARBODIIMIDES, PROCESSES FOR PRODUCTION THEREOF AND USE THEREOF**  
[54] **CARBODIIMIDES AROMATIQUES, LEUR PROCEDE DE PREPARATION ET LEUR UTILISATION**  
[72] LAUFER, WILHELM, DE  
[71] LANXESS DEUTSCHLAND GMBH, DE  
[85] 2023-12-21  
[86] 2022-07-08 (PCT/EP2022/069107)  
[87] (WO2023/285310)  
[30] EP (21185586.1) 2021-07-14

[21] **3,225,221**  
[13] A1

[51] **Int.Cl. A61K 31/5377 (2006.01) A61K 45/06 (2006.01) A61P 17/00 (2006.01) A61P 19/02 (2006.01) A61P 37/02 (2006.01) A61P 37/06 (2006.01)**  
[25] EN  
[54] **TREATMENT OF INFLAMMATORY DISEASES**  
[54] **TRAITEMENT DE MALADIES INFLAMMATOIRES**  
[72] DAO, JUSTINE, CH  
[72] GALIEN, RENE, ALEXANDRE, FR  
[72] PETKOVA, MAGDALENA YONKOVA, BE  
[72] SEEMAYER, CHRISTIAN ALEXANDER, CH  
[72] HELLOT, EDOUARD, FR  
[72] RUEDA RINCON, NATALIA, BE  
[71] GALAPAGOS NV, BE  
[85] 2023-12-21  
[86] 2022-07-11 (PCT/EP2022/069362)  
[87] (WO2023/285405)  
[30] EP (21305971.0) 2021-07-12  
[30] EP (22315039.2) 2022-02-24

[21] **3,225,223**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/08 (2006.01)**  
[25] EN  
[54] **METHOD FOR QUANTIFICATION OF A LEVEL OF RESPONSE TO HYPOGLOSSAL NERVE STIMULATION AND METHOD OF PREDICTING**  
[54] **PROCEDE DE QUANTIFICATION D'UN NIVEAU DE REPONSE A UNE STIMULATION DU NERF HYPOGLOSSAL ET PROCEDE DE PREDICTION ASSOCIE**  
[72] KOHN, SARAH, IL  
[72] KATZIR, DORON, IL  
[72] TSUKRAN, ROI, IL  
[72] TOBERMAN, DANIEL, IL  
[72] LICHTENSTADT, ASSAF, IL  
[72] NELSON, DWIGHT, US  
[71] NYXOAH SA, BE  
[85] 2023-12-21  
[86] 2022-07-12 (PCT/EP2022/069421)  
[87] (WO2023/285441)  
[30] EP (21185093.8) 2021-07-12

[21] **3,225,224**  
[13] A1

[51] **Int.Cl. B65G 1/04 (2006.01)**  
[25] EN  
[54] **PICKING STATION**  
[54] **POSTE DE PREPARATION DE COMMANDES**  
[72] CLANCY, TOM, GB  
[72] BRETT, CHRISTOPHER RICHARD JAMES, GB  
[72] LORA, DAVIDE, GB  
[72] SOBEY, DAVID, GB  
[71] OCADO INNOVATION LIMITED, GB  
[85] 2023-12-21  
[86] 2022-07-12 (PCT/EP2022/069511)  
[87] (WO2023/285487)  
[30] GB (2110019.3) 2021-07-12  
[30] GB (2115426.5) 2021-10-27  
[30] GB (2115916.5) 2021-11-05  
[30] GB (2200770.2) 2022-01-21

[21] **3,225,273**  
[13] A1

[25] EN  
[54] **METHOD AND APPARATUS FOR DETERMINING A FAULT OF A HEATING DEVICE AND AN ELECTRIC WATER HEATER**  
[54] **PROCEDE ET APPAREIL POUR DETERMINER UN DEFAUT D'APPAREIL DE CHAUFFAGE, ET CHAUFFE-EAU ELECTRIQUE**  
[72] LIU, XING, CN  
[72] TAO, RAN, CN  
[72] HUANG, QIANG, CN  
[71] A.O. SMITH (CHINA) WATER HEATER CO., LTD., CN  
[85] 2024-01-08  
[86] 2022-03-15 (PCT/CN2022/080810)  
[87] (WO2022/262334)  
[30] CN (202110665170.1) 2021-06-16

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[21] **3,225,284**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01) C07K 14/705 (2006.01)**

[25] EN

[54] **SYNTHETIC RECEPTOR FOR CONDITIONAL ACTIVATION OF IMMUNE CELLS**

[54] **RECEPTEUR SYNTHETIQUE POUR L'ACTIVATION CONDITIONNELLE DE CELLULES IMMUNITAIRES**

[72] JACKO, MARTIN, US

[72] GOEBEL, AARON, US

[72] FARLOW, JUSTIN, US

[72] VARGAS-INCHAUSTEGUI, DIEGO A., US

[72] GOFMAN, YANA, US

[71] SEROTINY, INC., US

[85] 2024-01-08

[86] 2022-06-09 (PCT/US2022/032865)

[87] (WO2022/261346)

[30] US (63/208,580) 2021-06-09

[21] **3,225,296**  
[13] A1

[51] **Int.Cl. A61K 31/145 (2006.01) A61P 29/00 (2006.01) A61P 37/06 (2006.01) A61P 39/04 (2006.01)**

[25] EN

[54] **TREATMENT OF ACUTE TISSUE INJURY**

[54] **TRAITEMENT D'UNE LESION TISSULAIRE AIGUE**

[72] FAHL, WILLIAM, US

[72] GOESCH, TORSTEN, SG

[72] GOESCH, HANNAH REBECCA, DE

[72] GOESCH, SARAH RICARDA, DE

[71] OBVIA PHARMACEUTICALS LTD., US

[85] 2023-12-21

[86] 2022-07-14 (PCT/EP2022/069810)

[87] (WO2023/285629)

[30] US (63/222,663) 2021-07-16

[21] **3,225,297**  
[13] A1

[51] **Int.Cl. C12Q 1/6806 (2018.01) C12N 15/10 (2006.01) G06N 3/00 (2023.01)**

[25] EN

[54] **PROCESSING METHODS FOR NUCLEIC ACID DATA STORAGE**

[54] **PROCEDES DE TRAITEMENT POUR LE STOCKAGE DE DONNEES D'ACIDE NUCLEIQUE**

[72] FLICKINGER, SARAH, US

[72] KAMBARA, TRACY, US

[72] LEAKE, DEVIN, US

[72] NORSWORTHY, MICHAEL, US

[71] CATALOG TECHNOLOGIES, INC., US

[85] 2023-12-21

[86] 2022-06-24 (PCT/US2022/034912)

[87] (WO2022/272068)

[30] US (63/215,223) 2021-06-25

[21] **3,225,299**  
[13] A1

[51] **Int.Cl. A61J 15/00 (2006.01)**

[25] EN

[54] **GASTROSTOMY TUBE DEVICES AND METHODS FOR USE**

[54] **DISPOSITIFS DE TUBE DE GASTROSTOMIE ET LEURS PROCEDES D'UTILISATION**

[72] GOLDENBERG, DAVID, US

[72] TZVETANOV, IVAN, US

[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US

[85] 2023-12-21

[86] 2022-06-21 (PCT/US2022/034337)

[87] (WO2022/271694)

[30] US (63/213,060) 2021-06-21

[21] **3,225,301**  
[13] A1

[51] **Int.Cl. A61C 8/00 (2006.01) A61C 13/00 (2006.01)**

[25] EN

[54] **ROOT-ANALOG DENTAL IMPLANTS AND SYSTEMS, DEVICES, AND METHODS FOR DESIGNING AND MANUFACTURING SAME**

[54] **RACINE D'ANALOGUES D'IMPLANTS DENTAIRE ET SYSTEMES, DISPOSITIFS ET METHODES POUR SA CONCEPTION ET SA FABRICATION**

[72] SANDERSON, DAVID, US

[72] COLLINS, MICHAEL, US

[72] BOWMAN, BRIAN, US

[72] MURPHY, COLIN, US

[72] DUQUESNEL, BRANDON, US

[71] IDENTICAL, INC., US

[85] 2023-12-21

[86] 2022-06-21 (PCT/US2022/034388)

[87] (WO2022/271734)

[30] US (63/213,192) 2021-06-21

[30] US (63/251,623) 2021-10-02

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[13] A1

[51] **Int.Cl. G01N 33/68 (2006.01) A61K 39/00 (2006.01)**  
[25] EN  
[54] **BIOMARKERS FOR ALZHEIMER'S DISEASE TREATMENT**  
[54] **BIOMARQUEURS POUR LE TRAITEMENT DE LA MALADIE D'ALZHEIMER**  
[72] SWANSON, CHAD, US  
[72] KOYAMA, AKIHIKO, US  
[72] KANEKIYO, MICHIO, US  
[72] IRIZARRY, MICHAEL, US  
[72] KRAMER, LYNN, US  
[72] KAPLOW, JUNE, US  
[72] VERBEL, DAVID, US  
[72] DHADDA, SHOBHA, US  
[72] SACHDEV, PALLAVI, US  
[72] REYDERMAN, LARISA, US  
[72] HAYATO, SEIICHI, JP  
[72] LANDRY, ISHANI, US  
[72] GORDON, ROBERT, GB  
[71] EISAI R&D MANAGEMENT CO., LTD., JP  
[85] 2023-12-21  
[86] 2022-07-08 (PCT/US2022/073576)  
[87] (WO2023/283650)  
[30] US (63/220,434) 2021-07-09  
[30] US (63/203,444) 2021-07-22  
[30] US (63/263,255) 2021-10-29  
[30] US (63/263,928) 2021-11-11  
[30] US (63/264,551) 2021-11-24  
[30] US (63/306,028) 2022-02-02  
[30] US (63/269,372) 2022-03-15  
[30] US (63/364,618) 2022-05-12

[21] **3,225,305**  
[13] A1

[51] **Int.Cl. A61K 31/155 (2006.01) A61K 31/4985 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR INHIBITING CREATINE TRANSPORT AS A TREATMENT FOR CANCER**  
[54] **COMPOSITIONS ET PROCEDES D'INHIBITION DU TRANSPORT DE LA CREATINE EN TANT QUE TRAITEMENT DU CANCER**  
[72] TAVAZOIE, MASOUD, US  
[72] KURTH, ISABEL, US  
[72] DARST, DAVID, US  
[71] INSPIRNA, INC., US  
[85] 2023-12-21  
[86] 2022-07-19 (PCT/US2022/073884)  
[87] (WO2023/004308)  
[30] US (63/223,926) 2021-07-20

[21] **3,225,306**  
[13] A1

[51] **Int.Cl. G01N 33/50 (2006.01) A61K 35/17 (2015.01) A61K 39/00 (2006.01) G01N 33/574 (2006.01)**  
[25] EN  
[54] **MONITORING AND MANAGEMENT OF CELL THERAPY-INDUCED TOXICITIES**  
[54] **SURVEILLANCE ET GESTION DE TOXICITES INDUITES PAR UNE THERAPIE CELLULAIRE**  
[72] SONG, QINGHUA, US  
[71] KITE PHARMA, INC., US  
[85] 2023-12-21  
[86] 2022-07-29 (PCT/US2022/074306)  
[87] (WO2023/010114)  
[30] US (63/227,677) 2021-07-30  
[30] US (63/279,615) 2021-11-15

[21] **3,225,307**  
[13] A1

[51] **Int.Cl. A63B 69/20 (2006.01) A63B 69/00 (2006.01) A63B 69/34 (2006.01)**  
[25] EN  
[54] **STRIKING TRAINING APPARATUS**  
[54] **APPAREIL D'ENTRAINEMENT A LA FRAPPE**  
[72] RODITIS, GEORGE, AU  
[71] FRONTHILL INDUSTRIES PTY LTD, AU  
[85] 2023-12-22  
[86] 2021-05-13 (PCT/AU2021/050452)  
[87] (WO2021/226676)  
[30] AU (2020901542) 2020-05-13

[21] **3,225,309**  
[13] A1

[51] **Int.Cl. C22B 3/12 (2006.01) C22B 3/14 (2006.01) C22B 3/42 (2006.01) C22B 34/22 (2006.01)**  
[25] EN  
[54] **RECOVERY OF VANADIUM FROM LEACH RESIDUES**  
[54] **RECUPERATION DE VANADIUM A PARTIR DE RESIDUS DE LIXIVIATION**  
[72] ROBINSON, DAVID, AU  
[71] AVANTI MATERIALS LTD, AU  
[85] 2023-12-22  
[86] 2022-06-30 (PCT/AU2022/050677)  
[87] (WO2023/279143)  
[30] AU (2021902081) 2021-07-08

[21] **3,225,311**  
[13] A1

[51] **Int.Cl. H04W 36/00 (2009.01)**  
[25] EN  
[54] **COMMUNICATION MODE SWITCHING METHOD AND RELATED APPARATUS**  
[54] **PROCEDE DE COMMUTATION DE MODE DE TRANSMISSION ET APPAREIL ASSOCIE**  
[72] XU, SHENGFENG, CN  
[72] YANG, YANMEI, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2023-12-22  
[86] 2022-06-15 (PCT/CN2022/098825)  
[87] (WO2023/273880)  
[30] CN (202110753597.7) 2021-07-02

[21] **3,225,316**  
[13] A1

[51] **Int.Cl. B65G 1/04 (2006.01)**  
[25] EN  
[54] **A GRID FRAMEWORK STRUCTURE**  
[54] **STRUCTURE D'OSSATURE DE GRILLE**  
[72] PARKS, IAN, GB  
[72] INGRAM-TEDD, ANDREW, GB  
[71] OCADO INNOVATION LIMITED, GB  
[85] 2023-12-21  
[86] 2022-07-21 (PCT/EP2022/070473)  
[87] (WO2023/001955)  
[30] GB (2110636.4) 2021-07-23

[21] **3,225,318**  
[13] A1

[51] **Int.Cl. E04G 21/10 (2006.01) E04F 21/00 (2006.01)**  
[25] EN  
[54] **DURABLE SMOOTHING TROWEL**  
[54] **TRUELLE A LISSER DURABLE**  
[72] FREUDENREICH, FRANK, DE  
[71] NELA GMBH, DE  
[85] 2023-12-22  
[86] 2022-06-23 (PCT/EP2022/000058)  
[87] (WO2023/274571)  
[30] EP (21000163.2) 2021-06-23

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[21] **3,225,319**  
[13] A1

[51] **Int.Cl. C25B 1/04 (2021.01) B01D 53/26 (2006.01) C01B 3/50 (2006.01) C25B 15/08 (2006.01)**

[25] EN

[54] **METHOD FOR OPERATING AN ELECTROLYSIS PLANT, AND ELECTROLYSIS PLANT**

[54] **PROCEDE DE FONCTIONNEMENT D'UNE INSTALLATION D'ELECTROLYSE ET INSTALLATION D'ELECTROLYSE**

[72] BIELMEIER, THOMAS, DE

[72] BRAUN, STEFAN, DE

[72] RECKELS, UDO, DE

[72] WOLF, ERIK, DE

[71] SIEMENS ENERGY GLOBAL GMBH & CO. KG, DE

[85] 2023-12-22

[86] 2022-05-04 (PCT/EP2022/061963)

[87] (WO2022/268391)

[30] EP (21181396.9) 2021-06-24

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[21] **3,225,324**  
[13] A1

[51] **Int.Cl. G06F 40/295 (2020.01) G06F 40/30 (2020.01) G06N 3/02 (2006.01) G06Q 40/00 (2023.01)**

[25] EN

[54] **IMPROVED MODEL FOR TEXTUAL AND NUMERICAL INFORMATION RETRIEVAL IN DOCUMENTS**

[54] **MODELE AMELIORE POUR LA RECUPERATION D'INFORMATIONS TEXTUELLES ET NUMERIQUES DANS DES DOCUMENTS**

[72] MENG, LIXIN, US

[72] ZHANG, CHANGLIN, US

[72] SINGH, SANGAMMOHAN HARIMOHAN, US

[71] BILL OPERATIONS, LLC, US

[85] 2023-12-21

[86] 2022-07-11 (PCT/US2022/036707)

[87] (WO2023/287716)

[30] US (17/374,373) 2021-07-13

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[21] **3,225,342**  
[13] A1

[51] **Int.Cl. H04N 21/45 (2011.01) H04N 21/81 (2011.01) H04N 21/84 (2011.01) G06Q 30/02 (2023.01)**

[25] EN

[54] **SYSTEMS AND METHODS TO PREVENT OR REDUCE AD FATIGUE USING USER PREFERENCES**

[54] **SYSTEMES ET PROCEDES POUR PREVENIR OU REDUIRE LA FATIGUE PUBLICITAIRE A L'AIDE DE PREFERENCES D'UTILISATEUR**

[72] EMMANUEL, DAINA, IN

[72] CHANDRASHEKAR, PADMASSRI, IN

[71] ROVI GUIDES, INC., US

[85] 2023-12-21

[86] 2021-12-20 (PCT/US2021/064290)

[87] (WO2022/271196)

[30] US (17/358,294) 2021-06-25

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[21] **3,225,350**  
[13] A1

[51] **Int.Cl. E04F 10/10 (2006.01) E04H 1/12 (2006.01) E04H 15/10 (2006.01)**

[25] EN

[54] **OUTDOOR STRUCTURE DESIGN AND COMPONENTS**

[54] **CONCEPTION DE STRUCTURE EXTERIEURE ET ELEMENTS**

[72] SELZER, CHRISTOPHER SCOTT, US

[71] THE AZEK GROUP LLC, US

[85] 2023-12-21

[86] 2022-06-22 (PCT/US2022/034592)

[87] (WO2022/271870)

[30] US (63/213,940) 2021-06-23

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[21] **3,225,353**  
[13] A1

[51] **Int.Cl. A61K 31/135 (2006.01) A61P 25/00 (2006.01) A61P 25/24 (2006.01) C07C 225/20 (2006.01)**

[25] EN

[54] **ARYLCYCLOHEXYLAMINE DERIVATIVES AND THEIR USE IN THE TREATMENT OF PSYCHIATRIC DISORDERS**

[54] **DERIVES ARYLCYCLOHEXYLAMINE ET LEUR UTILISATION DANS LE TRAITEMENT DE TROUBLES PSYCHIATRIQUES**

[72] KRUEGEL, ANDREW CARRY, US

[71] GILGAMESH PHARMACEUTICALS, INC., US

[85] 2023-12-21

[86] 2022-06-27 (PCT/US2022/035179)

[87] (WO2022/272174)

[30] US (63/215,151) 2021-06-25

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[21] **3,225,354**  
[13] A1

[51] **Int.Cl. A61L 29/04 (2006.01) A61L 29/06 (2006.01) A61L 29/08 (2006.01) A61L 29/14 (2006.01)**

[25] EN

[54] **URINARY CATHETERS AND METHODS**

[54] **CATHETERS URINAIRES ET METHODES**

[72] DAW, KYLE, US

[72] LEGASPI, RONALD N., US

[71] C. R. BARD, INC., US

[85] 2023-12-21

[86] 2022-06-29 (PCT/US2022/035565)

[87] (WO2023/003682)

[30] US (63/223,503) 2021-07-19

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[21] **3,225,355**  
[13] A1

[51] **Int.Cl. B65G 21/06 (2006.01) B65G 21/02 (2006.01) B65G 21/10 (2006.01) B65G 41/00 (2006.01)**

[25] EN

[54] **CONVEYOR IDLERS REPLACEMENT SYSTEM**

[54] **SYSTEME DE REMPLACEMENT DE ROULEAUX LIBRES DE CONVOYEUR**

[72] LAWSON, BRADLEY, US  
[72] JENNINGS, ANDREW, US  
[72] PORTER, BRANDT, US  
[71] CONVEYOR DYNAMICS, INC., US  
[85] 2023-12-21  
[86] 2022-06-29 (PCT/US2022/035586)  
[87] (WO2023/278620)  
[30] US (63/218,147) 2021-07-02

[21] **3,225,356**  
[13] A1

[51] **Int.Cl. A23L 13/40 (2023.01) A23L 13/70 (2023.01) A22C 9/00 (2006.01) A22C 17/00 (2006.01) A23B 4/28 (2006.01) A23J 3/14 (2006.01) A23J 3/22 (2006.01)**

[25] EN

[54] **FULL NEEDLE PENETRATION ON CONVEYOR BELT INJECTOR**

[54] **PENETRATION D'AIGUILLE COMPLETE SUR UN INJECTEUR A BANDE TRANSPORTEUSE**

[72] HUNT, DALE R., US  
[71] JOHN BEAN TECHNOLOGIES CORPORATION, US  
[85] 2023-12-21  
[86] 2022-07-06 (PCT/US2022/036234)  
[87] (WO2023/283249)  
[30] US (63/218,871) 2021-07-06

[21] **3,225,408**  
[13] A1

[51] **Int.Cl. A45D 19/00 (2006.01) A61K 8/18 (2006.01) A61K 8/92 (2006.01) A61Q 5/06 (2006.01)**

[25] EN

[54] **NON-SILICONE SILKY FRAGRANCE PRODUCT FOR HAIR**

[54] **PRODUIT DE PARFUM SOYEUX SANS SILICONE POUR LES CHEVEUX**

[72] MEEHAN, MATTHEW, US  
[72] O'HALLORAN, DAVID, US  
[71] AKI, INC., US  
[85] 2024-01-09  
[86] 2022-08-10 (PCT/US2022/039955)  
[87] (WO2023/018798)  
[30] US (63/260,190) 2021-08-12

[21] **3,225,414**  
[13] A1

[51] **Int.Cl. G01N 33/574 (2006.01) C07K 14/78 (2006.01) C07K 16/00 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **BIGLYCAN PEPTIDE AND ANTIBODIES**

[54] **PEPTIDE BIGLYCAN ET ANTICORPS**

[72] SKIOLDEBRAND, EVA, SE  
[72] LINDAHL, ANDERS, SE  
[72] EKMAN, STINA, SE  
[71] SGPTH LIFE SCIENCE AB, SE  
[85] 2023-12-22  
[86] 2022-06-23 (PCT/EP2022/067140)  
[87] (WO2022/268940)  
[30] SE (2150815-5) 2021-06-23

[21] **3,225,416**  
[13] A1

[51] **Int.Cl. G01C 11/00 (2006.01) B65D 47/08 (2006.01) G02B 26/10 (2006.01) G02B 26/12 (2006.01)**

[25] EN

[54] **HYPER CAMERA WITH SHARED MIRROR**

[54] **HYPERCAMERA A MIROIR PARTAGE**

[72] BESLEY, JAMES AUSTIN, AU  
[72] TARLINTON, MARK HAROLD, AU  
[72] BLEADS, DAVID ARNOLD, AU  
[71] NEARMAP AUSTRALIA PTY LTD., AU  
[85] 2023-12-21  
[86] 2021-06-28 (PCT/IB2021/000430)  
[87] (WO2023/275580)

[21] **3,225,417**  
[13] A1

[51] **Int.Cl. C07K 14/47 (2006.01) C12N 15/62 (2006.01) C12N 15/81 (2006.01)**

[25] EN

[54] **RECOMBINANT PROTEINS**

[54] **PROTEINES DE RECOMBINAISON**

[72] NELISSE, PIETER, NL  
[72] SAGT, CEES, NL  
[72] LOS, ALRIK, NL  
[72] HILL, JEREMY, NZ  
[72] ANEMA, SKELTE, NZ  
[72] HEWITT, SHEELAGH, NZ  
[72] VAN DER HOEVEN, ROBERTUS ANTONIUS MIJNDERT, NL  
[72] WELMAN, ALAN, NZ  
[72] MEIJRINK, BERNARD, NL  
[71] FONTERRA CO-OPERATIVE GROUP LIMITED, NZ  
[85] 2023-12-21  
[86] 2022-06-24 (PCT/IB2022/055858)  
[87] (WO2022/269549)  
[30] AU (2021901917) 2021-06-24  
[30] AU (2021903589) 2021-11-10

[21] **3,225,418**  
[13] A1

[51] **Int.Cl. G08B 13/196 (2006.01) G08B 17/00 (2006.01) G08B 17/12 (2006.01) G08B 31/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR DETECTING HIGH-RISK LIGHTNING STRIKES FOR USE IN PREDICTING AND IDENTIFYING WILDFIRE IGNITION LOCATIONS**

[54] **SYSTEME ET PROCEDE DE DETECTION DE COUPS DE Foudre A HAUT RISQUE POUR UNE UTILISATION DANS LA PREDICTION ET L'IDENTIFICATION D'EMPLACEMENTS DE DEPART DE FEUX DE FORET**

[72] KERESZY, TAMAS, US  
[72] KERESZY, ITSVAN, US  
[71] HELIOS POMPANO, INC., US  
[85] 2023-12-21  
[86] 2022-07-05 (PCT/IB2022/056191)  
[87] (WO2023/281386)  
[30] US (63/218,423) 2021-07-05  
[30] US (63/203,238) 2021-07-14  
[30] US (63/263,886) 2021-11-11

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[21] **3,225,419**  
[13] A1

[51] **Int.Cl. A23B 7/16 (2006.01) A23P 20/10 (2016.01)**  
[25] EN  
[54] **FOOD LAMINA AND USE OF SAME**  
[54] **PLAQUE MINCE ALIMENTAIRE ET SON UTILISATION**  
[72] LEVY, MEYDAN, IL  
[72] BRANTZ, ESTER, IL  
[72] SHAFRIR, IDAN, IL  
[72] NATAN, ANAT, IL  
[72] ROZNER, DORIT, IL  
[71] ANINA CULINARY ART LTD., IL  
[85] 2023-12-21  
[86] 2022-06-27 (PCT/IL2022/050688)  
[87] (WO2023/275866)  
[30] US (63/215,588) 2021-06-28

[21] **3,225,420**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61K 31/282 (2006.01) A61K 31/7068 (2006.01) A61K 45/00 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) A61P 43/00 (2006.01)**  
[25] EN  
[54] **MEDICAMENT FOR TREATMENT AND/OR PREVENTION OF CANCER**  
[54] **MEDICAMENT POUR LE TRAITEMENT ET/OU LA PREVENTION DU CANCER**  
[72] OKANO, FUMIYOSHI, JP  
[72] AKAZAWA, DAISUKE, JP  
[71] TORAY INDUSTRIES, INC., JP  
[85] 2023-12-21  
[86] 2022-06-22 (PCT/JP2022/024812)  
[87] (WO2022/270523)  
[30] JP (2021-103818) 2021-06-23

[21] **3,225,422**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61K 31/4745 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) A61P 43/00 (2006.01)**  
[25] EN  
[54] **MEDICAMENT FOR TREATMENT AND/OR PREVENTION OF CANCER**  
[54] **MEDICAMENT POUR LE TRAITEMENT ET/OU LA PREVENTION DU CANCER**  
[72] OKANO, FUMIYOSHI, JP  
[72] AKAZAWA, DAISUKE, JP  
[71] TORAY INDUSTRIES, INC., JP  
[85] 2023-12-21  
[86] 2022-06-22 (PCT/JP2022/024814)  
[87] (WO2022/270524)  
[30] JP (2021-103819) 2021-06-23

[21] **3,225,423**  
[13] A1

[51] **Int.Cl. H01M 50/293 (2021.01) H01M 50/571 (2021.01) H01M 50/588 (2021.01) H01M 50/593 (2021.01)**  
[25] EN  
[54] **PARTITION MEMBER, BATTERY MODULE, AND BATTERY PACK**  
[54] **ELEMENT DE SEPARATION, MODULE DE BATTERIE ET BLOC-BATTERIE**  
[72] KAWAI, TOMOHIRO, JP  
[72] HASHIMOTO, KEI, JP  
[71] MITSUBISHI CHEMICAL CORPORATION, JP  
[85] 2023-12-21  
[86] 2022-06-22 (PCT/JP2022/024952)  
[87] (WO2022/270552)  
[30] JP (2021-103794) 2021-06-23

[21] **3,225,424**  
[13] A1

[51] **Int.Cl. H02J 15/00 (2006.01) B63B 25/02 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR TRANSPORTING ENERGY BY SHIP**  
[54] **SYSTEME ET PROCEDE DE TRANSPORT D'ENERGIE PAR NAVIRE**  
[72] ITO, MASAHIRO, JP  
[71] POWERX, INC., JP  
[85] 2023-12-21  
[86] 2022-08-12 (PCT/JP2022/030729)  
[87] (WO2023/022103)  
[30] JP (2021-132402) 2021-08-16

[21] **3,225,425**  
[13] A1

[51] **Int.Cl. A61K 31/454 (2006.01) A61P 11/00 (2006.01) A61P 17/00 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITION FOR PREVENTING OR TREATING SYSTEMIC SCLEROSIS**  
[54] **COMPOSITION PHARMACEUTIQUE POUR LA PREVENTION OU LE TRAITEMENT DE LA SCLERODERMIE GENERALISEE**  
[72] LEE, CAROLINE HEE, KR  
[72] BAE, DA JEONG, KR  
[72] CHO, MIN JAE, KR  
[72] PARK, JOON SEOK, KR  
[71] DAEWOONG PHARMACEUTICAL CO., LTD., KR  
[85] 2023-12-21  
[86] 2022-07-22 (PCT/KR2022/010751)  
[87] (WO2023/003416)  
[30] KR (10-2021-0097163) 2021-07-23

[21] **3,225,426**  
[13] A1

[51] **Int.Cl. A01K 1/00 (2006.01) H04W 84/18 (2009.01) A01K 1/03 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR CONNECTING AN ANIMAL CAGE MONITORING SYSTEM TO AN ANIMAL CAGE RACK**  
[54] **PROCEDE ET SYSTEME POUR CONNECTER UN SYSTEME DE SURVEILLANCE DE CAGE D'ANIMAL A UN RAYONNAGE DE CAGE D'ANIMAL**  
[72] COIRO, JOHN, US  
[72] MILLER, STEVEN J., US  
[72] STARK, JENNIFER, US  
[71] ALLENTOWN LLC, US  
[85] 2023-12-22  
[86] 2022-05-27 (PCT/US2022/031311)  
[87] (WO2022/251609)  
[30] US (63/193,617) 2021-05-27

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[21] **3,225,427**  
[13] A1

[51] **Int.Cl. C07D 487/14 (2006.01) A61K 31/519 (2006.01)**  
[25] EN  
[54] **THERAPEUTIC COMPOUNDS**  
[54] **COMPOSES THERAPEUTIQUES**  
[72] PARHI, AJIT K., US  
[72] YUAN, YI, US  
[72] ZHANG, YONGZHENG, US  
[72] ROSADO, JESUS, US  
[72] DATTA, PRATIK, US  
[71] TAXIS PHARMACEUTICALS, INC., US  
[85] 2023-12-22  
[86] 2022-06-21 (PCT/US2022/034374)  
[87] (WO2022/271723)  
[30] US (63/213,519) 2021-06-22

[21] **3,225,428**  
[13] A1

[51] **Int.Cl. B60P 1/26 (2006.01)**  
[25] EN  
[54] **DUMP TRUCK BED WITH A CHAIN ADHERENT RELEASE DEVICE**  
[54] **BENNE DE CAMION A BENNE BASCULANTE DOTEE D'UN DISPOSITIF DE LIBERATION D'ADHERENCE DE CHAINE**  
[72] BALDERAS, MICHAEL JUSTIN, US  
[71] DEVINE HOLDINGS CORPORATION, US  
[85] 2023-12-22  
[86] 2022-06-23 (PCT/US2022/034646)  
[87] (WO2023/278233)  
[30] US (17/362,240) 2021-06-29

[21] **3,225,431**  
[13] A1

[51] **Int.Cl. A01D 65/02 (2006.01)**  
[25] EN  
[54] **CROP LIFTER FOR A MOWING UNIT OF A HARVESTING MACHINE**  
[54] **DISPOSITIF DE LEVAGE DE RECOLTE POUR UNE UNITE DE FAUCHAGE D'UNE MOISSONNEUSE**  
[72] HOLLER, FRANK, DE  
[71] SMF-HOLDING GMBH, DE  
[85] 2023-12-22  
[86] 2022-06-23 (PCT/EP2022/067172)  
[87] (WO2022/268950)  
[30] EP (21181120.3) 2021-06-23

[21] **3,225,432**  
[13] A1

[51] **Int.Cl. H04N 21/218 (2011.01) H04N 21/6587 (2011.01) G06F 3/0481 (2022.01) H04N 13/111 (2018.01) H04N 13/279 (2018.01) G06T 15/00 (2011.01)**  
[25] EN  
[54] **IMAGE GENERATION**  
[54] **GENERATION D'IMAGE**  
[72] VAREKAMP, CHRISTIAAN, NL  
[72] VAN GEEST, BARTHOLOMEUS WILHELMUS DAMIANUS, NL  
[71] KONINKLIJKE PHILIPS N.V., NL  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/EP2022/067371)  
[87] (WO2023/274879)  
[30] EP (21182528.6) 2021-06-29

[21] **3,225,433**  
[13] A1

[51] **Int.Cl. A61B 90/00 (2016.01) A61B 17/00 (2006.01)**  
[25] EN  
[54] **IMPLANTABLE MARKER**  
[54] **MARQUEUR IMPLANTABLE**  
[72] HESKE, THOMAS, DE  
[71] HESKE, THOMAS, DE  
[85] 2023-12-22  
[86] 2022-06-30 (PCT/EP2022/068034)  
[87] (WO2023/275227)  
[30] DE (10 2021 116 873.2) 2021-06-30

[21] **3,225,434**  
[13] A1

[51] **Int.Cl. A61C 7/02 (2006.01)**  
[25] EN  
[54] **ORTHODONTIC TOOLS AND STORAGE CASE**  
[54] **OUTILS ORTHODONTIQUES ET BOITIER DE STOCKAGE**  
[72] EPSTEIN, SIMA YAKOBY, US  
[72] MELVILLE, DOUGLAS F., US  
[71] ORTHONU, LLC, US  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/US2022/035009)  
[87] (WO2022/272141)  
[30] US (17/357,864) 2021-06-24

[21] **3,225,436**  
[13] A1

[51] **Int.Cl. A61M 27/00 (2006.01)**  
[25] EN  
[54] **METHOD OF REGULATING GENE EXPRESSION**  
[54] **METHODE DE REGULATION DE L'EXPRESSION GENIQUE**  
[72] RICCARDI, GIANNA, US  
[72] SIOPE, WILLIAM X., JR., US  
[72] GLICKMAN, MARCIE, US  
[72] DEPASQUA, ANTHONY, US  
[72] KALISH, KEVIN, US  
[72] VOSE, JOSHUA G., US  
[72] PATEL, RAJAN, US  
[71] ENCLEAR THERAPIES, INC., US  
[85] 2023-12-22  
[86] 2022-06-23 (PCT/US2022/034706)  
[87] (WO2022/271938)  
[30] US (63/214,239) 2021-06-23

[21] **3,225,437**  
[13] A1

[51] **Int.Cl. G06V 20/10 (2022.01) G06V 10/82 (2022.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR CATEGORIZING IMAGE PIXELS**  
[54] **SYSTEMES ET PROCEDES DE CATEGORISATION DE PIXELS D'IMAGE**  
[72] BRUMBY, STEVEN P., US  
[72] KONTGIS, CAITLIN, US  
[72] KARRA, KRISHNA, US  
[71] IMPACT OBSERVATORY, INC., US  
[85] 2023-12-22  
[86] 2022-06-23 (PCT/US2022/034712)  
[87] (WO2022/271942)  
[30] US (63/214,174) 2021-06-23

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[21] **3,225,439**  
[13] A1

[51] **Int.Cl. A61K 31/4162 (2006.01) A61K 31/33 (2006.01) A61K 45/00 (2006.01) A61K 31/00 (2006.01)**

[25] EN

[54] **CDK2 INHIBITORS AND METHODS OF USING THE SAME**

[54] **INHIBITEURS DE CDK2 ET LEURS PROCÉDES D'UTILISATION**

[72] KIRMAN, LOUISE CLARE, US  
[72] SCHWARTZ, CARL ERIC, US  
[72] MICHOWSKI, WOJTEK, US  
[72] PORTER, JR., DALE A., US  
[72] FEUTRILL, JOHN, AU  
[72] RIPPER, JUSTIN, AU  
[71] CEDILLA THERAPEUTICS, INC., US  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/US2022/034963)  
[87] (WO2022/272106)  
[30] US (63/202,844) 2021-06-26

[21] **3,225,440**  
[13] A1

[51] **Int.Cl. A24B 15/16 (2020.01) A24D 1/20 (2020.01) A24B 15/42 (2006.01)**

[25] EN

[54] **AEROSOL-FORMING SUBSTRATE WITH EXPANDED GRAPHITE**

[54] **SUBSTRAT DE FORMATION D'AEROSOL A GRAPHITE EXPANSE**

[72] FEDELI, FRANCESCO, CH  
[72] HUANG, HOXUE, CH  
[71] PHILIP MORRIS PRODUCTS S.A., CH  
[85] 2023-12-22  
[86] 2022-07-07 (PCT/EP2022/068988)  
[87] (WO2023/281014)  
[30] EP (21184365.1) 2021-07-07  
[30] EP (22178767.4) 2022-06-13  
[30] EP (22178772.4) 2022-06-13  
[30] EP (22178770.8) 2022-06-13

[21] **3,225,441**  
[13] A1

[51] **Int.Cl. B42D 25/324 (2014.01) B42D 25/328 (2014.01) G02B 3/00 (2006.01) G02B 3/08 (2006.01) G02B 5/18 (2006.01)**

[25] EN

[54] **OPTICAL SECURITY COMPONENTS, MANUFACTURE OF SUCH COMPONENTS AND SECURE DOCUMENTS EQUIPPED WITH SUCH COMPONENTS**

[54] **COMPOSANTS OPTIQUES DE SECURITE, FABRICATION DE TELS COMPOSANTS ET DOCUMENTS SECURISES EQUIPES DE TELS COMPOSANTS**

[72] GANANATHAN, NELSON, FR  
[71] SURYS, FR  
[85] 2023-12-22  
[86] 2022-07-11 (PCT/EP2022/069357)  
[87] (WO2023/281123)  
[30] FR (2107518) 2021-07-09

[21] **3,225,442**  
[13] A1

[51] **Int.Cl. H05H 1/24 (2006.01) F01N 3/00 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR ELECTRON IRRADIATION SCRUBBING**

[54] **APPAREIL ET PROCÉDE POUR NETTOYAGE PAR IRRADIATION D'ELECTRONS**

[72] MICHAN, JUAN MARIO, CH  
[72] RAMSAY, WILLIAM JAMIESON, CH  
[72] NEUMAYR, DOMINIK, CH  
[71] DAPHNE TECHNOLOGY SA, CH  
[85] 2023-12-22  
[86] 2022-07-08 (PCT/EP2022/069018)  
[87] (WO2023/285299)  
[30] GB (2110271.0) 2021-07-16

[21] **3,225,443**  
[13] A1

[51] **Int.Cl. H01M 50/231 (2021.01) H01M 50/249 (2021.01) H01M 50/276 (2021.01) H01M 50/282 (2021.01) B32B 15/01 (2006.01) C22C 21/00 (2006.01) C22C 21/02 (2006.01) C22C 38/00 (2006.01) C22C 38/06 (2006.01) C23C 2/12 (2006.01)**

[25] EN

[54] **STEEL SHEET FOR TOP COVER OF BATTERY PACK AND ITS MANUFACTURING METHOD**

[54] **FEUILLE D'ACIER POUR COUVERCLE SUPERIEUR DE BLOC-BATTERIE ET SON PROCÉDE DE FABRICATION**

[72] SANZEY, PASCALE, FR  
[72] MACHADO AMORIM, TIAGO, FR  
[72] KRIM, TAREK, FR  
[72] DOSDAT, LAURENCE, FR  
[72] BESSON, AURELIE, FR  
[71] ARCELORMITTAL, LU  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/IB2022/055870)  
[87] (WO2023/012539)  
[30] IB (PCT/IB2021/057036) 2021-08-02

[21] **3,225,444**  
[13] A1

[51] **Int.Cl. A61K 31/343 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **DOSING REGIMEN FOR A TEAD INHIBITOR**

[54] **SCHEMA POSOLOGIQUE POUR UN INHIBITEUR DE TEAD**

[72] CHAPEAU, EMILIE, CH  
[71] NOVARTIS AG, CH  
[85] 2023-12-22  
[86] 2022-08-30 (PCT/IB2022/058130)  
[87] (WO2023/031798)  
[30] US (63/239,506) 2021-09-01



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[21] **3,225,446**  
[13] A1

[51] **Int.Cl. C21B 13/14 (2006.01) C21B 3/02 (2006.01) C21C 5/28 (2006.01) C21C 5/52 (2006.01)**

[25] EN

[54] **A METHOD FOR PROCESSING IRON ORE TO OBTAIN STEEL**

[54] **PROCEDE DE TRAITEMENT DE MINERAI DE FER POUR OBTENIR DE L'ACIER**

[72] HAIMI, TIMO, FI

[72] PEKKALA, OLLI, FI

[71] METSO METALS OY, FI

[85] 2023-12-22

[86] 2021-07-06 (PCT/FI2021/050526)

[87] (WO2023/281153)

[21] **3,225,447**  
[13] A1

[51] **Int.Cl. B60R 19/04 (2006.01) B62D 21/15 (2006.01)**

[25] EN

[54] **REINFORCING UNIT AND REINFORCING MEMBER**

[54] **UNITE DE RENFORCEMENT ET ELEMENT DE RENFORCEMENT**

[72] FUNADA, RYUICHI, US

[72] NAM, KIWOONG, US

[72] UENO, NORIEDA, JP

[72] KUMENO, HIROYUKI, JP

[72] SAKAMAKI, KOZABURO, JP

[71] SUMITOMO HEAVY INDUSTRIES, LTD., JP

[85] 2023-12-22

[86] 2022-04-26 (PCT/JP2022/018837)

[87] (WO2023/276430)

[30] US (17/363,019) 2021-06-30

[21] **3,225,448**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) C07K 7/08 (2006.01) C07K 14/705 (2006.01)**

[25] EN

[54] **CALCIUM CHANNEL 3.2 INHIBITORY PEPTIDES AND USES THEREOF**

[54] **PEPTIDES INHIBITEURS DU CANAL CALCIQUE 3.2 ET LEURS UTILISATIONS**

[72] HOGAN, QUINN H., US

[72] YU, HONGWEI, US

[71] THE MEDICAL COLLEGE OF WISCONSIN, INC., US

[85] 2023-12-22

[86] 2022-06-29 (PCT/US2022/035509)

[87] (WO2023/278565)

[30] US (63/216,032) 2021-06-29

[21] **3,225,450**  
[13] A1

[51] **Int.Cl. C21D 9/00 (2006.01) C21D 1/74 (2006.01) C21D 1/76 (2006.01) C21D 8/12 (2006.01) C21D 9/46 (2006.01) H01F 41/02 (2006.01)**

[25] EN

[54] **HEAT TREATMENT FURNACE**

[54] **FOUR DE TRAITEMENT THERMIQUE**

[72] TAKAHASHI, SHINICHI, JP

[72] TAKAHASHI, KENSUKE, JP

[72] KANDA, KIICHI, JP

[72] TAKAHARA, KOSUKE, JP

[72] OSHITA, HIROSHI, JP

[71] KANTO YAKIN KOGYO CO., LTD., JP

[85] 2023-12-22

[86] 2022-08-15 (PCT/JP2022/030911)

[87] (WO2023/022134)

[30] JP (2021-134222) 2021-08-19

[21] **3,225,451**  
[13] A1

[51] **Int.Cl. B21D 26/039 (2011.01)**

[25] EN

[54] **MOLDING DEVICE**

[54] **DISPOSITIF DE MOULAGE**

[72] YAMAUCHI, KEI, JP

[72] KOUYAMA, EIJI, JP

[72] KAN, HIROYUKI, JP

[72] UENO, NORIEDA, JP

[71] SUMITOMO HEAVY INDUSTRIES, LTD., JP

[85] 2023-12-22

[86] 2022-05-24 (PCT/JP2022/021249)

[87] (WO2023/042488)

[30] JP (2021-152045) 2021-09-17

[21] **3,225,454**  
[13] A1

[51] **Int.Cl. A61K 31/70 (2006.01) C12N 15/113 (2010.01) A61K 31/7016 (2006.01) A61K 31/7088 (2006.01) A61K 31/712 (2006.01) A61K 31/7125 (2006.01) A61K 47/26 (2006.01) A61P 13/12 (2006.01) A61P 39/02 (2006.01)**

[25] EN

[54] **NEPHROTOXICITY REDUCING AGENT**

[54] **AGENT DE REDUCTION DE LA NEPHROTOXICITE**

[72] HORIUCHI, TAKASHI, JP

[71] NIPPON SHINYAKU CO., LTD., JP

[85] 2023-12-22

[86] 2022-07-08 (PCT/JP2022/027104)

[87] (WO2023/282345)

[30] JP (2021-113563) 2021-07-08

[21] **3,225,458**  
[13] A1

[51] **Int.Cl. G01N 35/02 (2006.01) C12Q 1/6806 (2018.01) C12Q 1/686 (2018.01) G01N 35/00 (2006.01) G01N 35/04 (2006.01) G01N 35/10 (2006.01)**

[25] EN

[54] **AUTOMATED ANALYSIS SYSTEM USING INDIVIDUALLY OPERATED BIOLOGICAL DEVICES, ANALYSIS METHOD AND STORAGE MEDIUM**

[54] **SYSTEME D'ANALYSE AUTOMATISE UTILISANT DES DISPOSITIFS BIOLOGIQUES ACTIONNES INDIVIDUELLEMENT, PROCEDE D'ANALYSE ET SUPPORT DE STOCKAGE**

[72] YOON, SU MI, KR

[72] KIM, JAE YOUNG, KR

[72] PARK, SANG JONG, KR

[71] SEEGENE, INC., KR

[85] 2023-12-22

[86] 2022-06-24 (PCT/KR2022/009053)

[87] (WO2022/270984)

[30] KR (10-2021-0082324) 2021-06-24

[30] KR (10-2021-0096081) 2021-07-21

[30] KR (10-2021-0096088) 2021-07-21

[30] KR (10-2021-0115009) 2021-08-30

[21] **3,225,460**  
[13] A1

[51] **Int.Cl. C02F 1/32 (2006.01)**

[25] EN

[54] **LIQUID TREATMENT METHOD AND APPARATUS**

[54] **PROCEDE ET APPAREIL DE TRAITEMENT DE LIQUIDE**

[72] SHILTON, ANDREW NICHOLAS, NZ

[71] NOVOLABS LIMITED, NZ

[85] 2023-12-22

[86] 2022-06-23 (PCT/NZ2022/050082)

[87] (WO2022/271040)

[30] NZ (777519) 2021-06-25

[30] AU (2021221445) 2021-08-24

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[21] **3,225,464**  
[13] A1

[51] **Int.Cl. A01G 13/02 (2006.01)**  
[25] EN  
[54] **SYSTEM WITH ROTATIONAL GUIDE RAILS FOR PROTECTION OF AN ORCHARD AGAINST WEATHER CONDITIONS**  
[54] **SYSTEME DOTE DE RAILS DE GUIDAGE ROTATIFS DE PROTECTION D'UN VERGER CONTRE DES CONDITIONS METEOROLOGIQUES**  
[72] KOKANOVIC, MOMCILO, RU  
[72] KOKANOVIC, MARKO, RS  
[72] KOKANOVIC, MIODRAG, RS  
[72] KOKANOVIC, FILIP, RS  
[71] KOKANOVIC, MOMCILO, RU  
[71] KOKANOVIC, MARKO, RS  
[71] KOKANOVIC, FILIP, RS  
[71] KOKANOVIC, MIODRAG, RS  
[85] 2023-12-22  
[86] 2022-05-20 (PCT/RS2022/000008)  
[87] (WO2022/245232)  
[30] RS (P-2021/0633) 2021-05-21

[21] **3,225,469**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR TREATING AN ANGIOTENSINOGEN- (AGT-) ASSOCIATED DISORDER**  
[54] **PROCEDES ET COMPOSITIONS POUR LE TRAITEMENT D'UN TROUBLE ASSOCIE A L'ANGIOTENSINOGENE (AGT)**  
[72] HUANG, STEPHEN ALBERT, US  
[72] FUJITA, KENJI P., US  
[72] LIN, KANG, US  
[72] MEHROTRA, NITIN, US  
[72] ROBBIE, GABRIEL, US  
[72] LEE, JONGTAE, US  
[72] AGARWAL, SAGAR, US  
[71] ALNYLAM PHARMACEUTICALS, INC., US  
[85] 2023-12-22  
[86] 2022-06-29 (PCT/US2022/035523)  
[87] (WO2023/278576)  
[30] US (63/216,758) 2021-06-30  
[30] US (63/276,808) 2021-11-08

[21] **3,225,473**  
[13] A1

[51] **Int.Cl. A47G 19/18 (2006.01) A47J 47/01 (2006.01) A47J 47/08 (2006.01) B65D 83/00 (2006.01) B67D 3/00 (2006.01)**  
[25] EN  
[54] **CONDIMENT DISPENSING APPARATUS, SYSTEM, AND METHODS OF USE**  
[54] **APPAREIL DE DISTRIBUTION DE CONDIMENT, SYSTEME ET PROCEDES D'UTILISATION**  
[72] KALYVIOTI, IVI, NL  
[72] LEECH, GREGG TIMOTHY FRANCIS, GB  
[72] BERTENS-VLEMS, KIM, NL  
[72] OBERDORF, JOSEPH ELISABETH, NL  
[71] H.J. HEINZ COMPANY BRANDS LLC, US  
[85] 2023-12-22  
[86] 2022-07-06 (PCT/US2022/036165)  
[87] (WO2023/283210)  
[30] US (63/218,826) 2021-07-06  
[30] US (63/218,838) 2021-07-06

[21] **3,225,468**  
[13] A1

[51] **Int.Cl. H04N 21/431 (2011.01) H04N 21/435 (2011.01) H04N 21/442 (2011.01) H04N 21/466 (2011.01) H04N 21/475 (2011.01) H04N 21/485 (2011.01) H04N 21/488 (2011.01)**  
[25] EN  
[54] **SUBTITLE RENDERING BASED ON THE READING PACE**  
[54] **RENDU DE SOUS-TITRES BASE SUR LE RYTHME DE LECTURE**  
[72] CHANDRASHEKAR, PADMASSRI, IN  
[72] EMMANUEL, DAINA, IN  
[72] HARB, REDA, US  
[71] ROVI GUIDES, INC., US  
[85] 2023-12-22  
[86] 2021-12-21 (PCT/US2021/064567)  
[87] (WO2023/277948)  
[30] US (17/361,043) 2021-06-28  
[30] US (17/361,047) 2021-06-28  
[30] US (17/361,050) 2021-06-28

[21] **3,225,470**  
[13] A1

[51] **Int.Cl. H01H 33/666 (2006.01) H01H 33/662 (2006.01)**  
[25] EN  
[54] **ROTARY DIAPHRAGM IN VACUUM INTERRUPTER SWITCH**  
[54] **DIAPHRAGME ROTATIF DANS UN INTERRUPTEUR A VIDE**  
[72] CARO, LEO, US  
[72] DYER, THOMAS J., US  
[72] MARONEY, MICHAEL R., US  
[72] SENG, NICHOLAS, US  
[71] S&C ELECTRIC COMPANY, US  
[85] 2023-12-22  
[86] 2022-06-30 (PCT/US2022/035862)  
[87] (WO2023/283110)  
[30] US (63/220,287) 2021-07-09

[21] **3,225,476**  
[13] A1

[51] **Int.Cl. G16H 20/13 (2018.01) B65B 5/10 (2006.01)**  
[25] EN  
[54] **SMART PILL DISPENSER PRESCRIPTION TREATMENT SYSTEM**  
[54] **SYSTEME INTELLIGENT DE DISTRIBUTEUR DE PILULES POUR TRAITEMENT SUR ORDONNANCE**  
[72] KRUGER, FREDERICK ZACHARIAS, US  
[71] 10XBETA, US  
[85] 2023-12-22  
[86] 2022-07-06 (PCT/US2022/036173)  
[87] (WO2023/283214)  
[30] US (63/218,704) 2021-07-06

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[21] **3,225,479**  
[13] A1

[51] **Int.Cl. A61B 3/14 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR VISION TEST AND USES THEREOF**  
[54] **SYSTEMES ET PROCEDES DE TEST DE VISION ET LEURS UTILISATIONS**  
[72] GOLDBERG, DAVID H., US  
[72] DUFFY, TAYLOR ALEXANDRA, US  
[72] DESHAZER, DAVID J., US  
[71] WARBY PARKER INC., US  
[85] 2023-12-22  
[86] 2022-07-06 (PCT/US2022/036180)  
[87] (WO2023/283217)  
[30] US (63/219,327) 2021-07-07

[21] **3,225,487**  
[13] A1

[51] **Int.Cl. H01M 10/44 (2006.01) H01M 10/42 (2006.01) H02J 7/00 (2006.01) H02J 7/02 (2016.01)**  
[25] EN  
[54] **CHARGING DEVICE AND METHOD OF CHARGING AND REJUVENATING BATTERY**  
[54] **DISPOSITIF DE CHARGE ET PROCEDE DE CHARGE ET DE REGENERATION DE BATTERIE**  
[72] LIN, CHIH HUNG, US  
[72] CHEN, RONG-JIE, TW  
[71] LIN, CHIH HUNG, US  
[85] 2023-12-22  
[86] 2022-08-22 (PCT/US2022/041035)  
[87] (WO2022/272187)  
[30] US (17/357,764) 2021-06-24

[21] **3,225,538**  
[13] A1

[51] **Int.Cl. G06F 21/36 (2013.01) G06Q 20/32 (2012.01) G06F 21/60 (2013.01) G06F 3/12 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR SECURELY GENERATING AND PRINTING A DOCUMENT**  
[54] **SYSTEMES ET PROCEDES POUR GENERER ET IMPRIMER DE MANIERE SECURISEE UN DOCUMENT**  
[72] GARRETT, JADE, US  
[72] WURMFELD, DAVID KELLY, US  
[72] LITTLEJOHN, MICHAEL, US  
[72] LOUIE, MICHAEL, US  
[72] CANAVATCHEL, MICHAEL, US  
[72] CUTRELL, SPENCER, US  
[72] FALETTI, STEVE, US  
[72] LACY, REX, US  
[72] MEDEIROS, ALEXANDER, US  
[71] CAPITAL ONE SERVICES, LLC, US  
[85] 2023-12-22  
[86] 2022-06-14 (PCT/US2022/072923)  
[87] (WO2022/272218)  
[30] US (17/358,762) 2021-06-25  
[30] US (17/539,350) 2021-12-01  
[30] US (17/658,191) 2022-04-06

[21] **3,225,540**  
[13] A1

[51] **Int.Cl. H04L 65/1069 (2022.01) H04L 65/403 (2022.01) H04L 65/80 (2022.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR TELECONFERENCING USING COORDINATED MOBILE DEVICES**  
[54] **PROCEDE ET SYSTEME DE TELECONFERENCE UTILISANT DES DISPOSITIFS MOBILES COORDONNES**  
[72] SHAHMEER, MUHAMMAD, BM  
[72] AHMAD, KHUBAIB, BM  
[72] BASHIR, MUHAMMAD USMAN, BM  
[72] SAJJAD, MUHAMMAD ABDULLAH, BM  
[71] AFINITI, LTD., BM  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/US2022/073156)  
[87] (WO2022/272304)  
[30] US (63/202,796) 2021-06-24

[21] **3,225,543**  
[13] A1

[51] **Int.Cl. A23K 10/30 (2016.01) A23K 10/26 (2016.01) A23K 50/42 (2016.01)**  
[25] EN  
[54] **CORN COB PET CHEW**  
[54] **OS A MACHER EN RAFLE DE MAIS POUR ANIMAL DE COMPAGNIE**  
[72] AXELROD, GLEN S., US  
[72] GAJRIA, AJAY, US  
[71] IMS TRADING, LLC, US  
[85] 2023-12-22  
[86] 2022-07-21 (PCT/US2022/074012)  
[87] (WO2023/004388)  
[30] US (63/203,420) 2021-07-22

[21] **3,225,547**  
[13] A1

[51] **Int.Cl. B65G 1/137 (2006.01)**  
[25] EN  
[54] **METHOD FOR TRANSFERRING ARTICLES FROM A LONG-TERM STORE TO A SHORT-TERM BUFFER, AND STORAGE AND ORDER-PICKING SYSTEM THEREFOR**  
[54] **PROCEDE DE TRANSFERT D'ARTICLES D'UN STOCKAGE A LONG TERME A UN TAMPON A COURT TERME, ET SYSTEME DE STOCKAGE ET DE PREPARATION DE COMMANDES POUR CELUI-CI**  
[72] LINDLEY, TIMOTHY, DE  
[72] KETTLGRUBER, GERALD, AT  
[71] TGW LOGISTICS GROUP GMBH, AT  
[85] 2023-12-27  
[86] 2022-06-28 (PCT/AT2022/060223)  
[87] (WO2023/272321)  
[30] AT (A50541/2021) 2021-06-30

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[21] **3,225,548**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2023.01)**  
[25] EN  
[54] **IMPROVED METHOD FOR LOADING A TARGET LOADING AID, AND WAREHOUSE AND PICKING SYSTEM THEREFOR**  
[54] **PROCEDE AMELIORE DE CHARGEMENT D'UN AUXILIAIRE DE CHARGEMENT CIBLE, ET ENTREPOT ET SYSTEME DE PREPARATION ASSOCIES**  
[72] LINDLEY, TIMOTHY, DE  
[72] KETTLGRUBER, GERALD, AT  
[71] TGW LOGISTICS GROUP GMBH, AT  
[85] 2023-12-27  
[86] 2022-06-28 (PCT/AT2022/060225)  
[87] (WO2023/272323)  
[30] AT (A50543/2021) 2021-06-30

[21] **3,225,550**  
[13] A1

[51] **Int.Cl. B29C 45/73 (2006.01) B29C 45/27 (2006.01) B29C 45/28 (2006.01)**  
[25] EN  
[54] **HEATING DEVICE**  
[54] **DISPOSITIF DE CHAUFFAGE**  
[72] STRIEGEL, CHRISTIAN, DE  
[72] GREB, SCOTT, US  
[72] JOERG, ANTON, DE  
[71] INCOE CORPORATION, US  
[85] 2023-12-27  
[86] 2022-03-31 (PCT/US2022/022834)  
[87] (WO2023/282943)  
[30] EP (EP21184211.7) 2021-07-07  
[30] US (17/650,107) 2022-02-07

[21] **3,225,551**  
[13] A1

[51] **Int.Cl. A23P 20/20 (2016.01) A23L 5/10 (2016.01) A23P 20/10 (2016.01) A21D 13/24 (2017.01) A21D 13/28 (2017.01) A21D 13/32 (2017.01) A21D 15/02 (2006.01) A21D 17/00 (2006.01) A23D 7/005 (2006.01) A23D 7/04 (2006.01) A23L 3/365 (2006.01) B65B 11/00 (2006.01) B65D 65/20 (2006.01)**  
[25] EN  
[54] **REHEATABLE FOOD PRODUCT**  
[54] **PRODUIT ALIMENTAIRE POUVANT ETRE RECHAUFFE**  
[72] BERUSCH, ELANA, US  
[72] DARCY, JOHN, US  
[71] LILY'S TOASTERS GRILLS, LLC, US  
[85] 2023-12-27  
[86] 2022-05-24 (PCT/US2022/030679)  
[87] (WO2022/251180)  
[30] US (17/333,907) 2021-05-28

[21] **3,225,552**  
[13] A1

[51] **Int.Cl. B65D 5/72 (2006.01)**  
[25] EN  
[54] **SEAL ENDS BOX WITH HORIZONTAL SLIDE OPENINGS FOR DISPENSING**  
[54] **BOITE AUX EXTREMITES ETANCHES A OUVERTURES COULISSANTES HORIZONTALES POUR LA DISTRIBUTION**  
[72] HENGAMI, DAVID TODJAR, US  
[71] HENGAMI, DAVID TODJAR, US  
[85] 2023-12-27  
[86] 2022-06-23 (PCT/US2022/034764)  
[87] (WO2022/271971)  
[30] US (63/214,370) 2021-06-24

[21] **3,225,555**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61K 39/39 (2006.01) A61P 33/10 (2006.01) C07K 14/00 (2006.01)**  
[25] EN  
[54] **VETERINARY VACCINE COMPOSITION AGAINST HELMINTHS, METHOD FOR TREATMENT AND PREVENTION OF INFECTION CAUSED BY HELMINTHS AND USE**  
[54] **COMPOSITION DE VACCIN VETERINAIRE CONTRE LES HELMINTHES, METHODE DE TRAITEMENT ET DE PREVENTION D'UNE INFECTION CAUSEE PAR LES HELMINTHES, ET UTILISATION**  
[72] TENDLER, MIRIAM, BR  
[72] RAMOS, CELSO RAUL ROMERO, BR  
[72] SOUSA, GABRIEL LIMAVERDE SOARES COSTA, BR  
[71] FABP BIOTECH DESENVOLVIMENTO EM BIOTECNOLOGIA LTDA., BR  
[71] FUNDACAO OSWALDO CRUZ, BR  
[85] 2023-12-27  
[86] 2022-06-28 (PCT/BR2022/050243)  
[87] (WO2023/272370)  
[30] BR (1020210129530) 2021-06-29

[21] **3,225,556**  
[13] A1

[51] **Int.Cl. F16D 65/18 (2006.01) F16J 1/00 (2006.01)**  
[25] EN  
[54] **PISTON FOR A DISK BRAKE, DISK BRAKE HAVING AT LEAST ONE PISTON, AND SERIES OF PISTONS**  
[54] **PISTON POUR FREIN A DISQUE, FREIN A DISQUE DOTE D'AU MOINS UN PISTON, ET SERIE DE PISTONS**  
[72] HAHN, THOMAS, DE  
[72] BAUERSFELD, RICO, DE  
[72] ZEIBIG, UWE, DE  
[71] ERDRICH UMFORMTECHNIK GMBH, DE  
[85] 2023-12-27  
[86] 2022-12-16 (PCT/EP2022/086388)  
[87] (WO2023/160861)  
[30] DE (10 2022 104 388.6) 2022-02-24

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[21] **3,225,557**  
[13] A1

[51] **Int.Cl. H04W 12/033 (2021.01) G06F 21/31 (2013.01) G06F 21/62 (2013.01) G06F 16/93 (2019.01) G06Q 50/18 (2012.01) G16H 10/60 (2018.01) G06Q 40/00 (2023.01)**

[25] EN

[54] **ELECTRONIC RECORDS SYSTEM AND RELATED METHODS**

[54] **SYSTEME D'ENREGISTREMENT ELECTRONIQUE ET PROCEDES ASSOCIES**

[72] BESSETTE, LUC, CA  
[72] LEBORGNE, YVES, CA  
[71] BESSETTE, LUC, CA  
[85] 2023-12-27  
[86] 2022-07-04 (PCT/CA2022/051055)  
[87] (WO2023/279200)  
[30] US (63/218,022) 2021-07-02

[21] **3,225,558**  
[13] A1

[51] **Int.Cl. A61B 17/29 (2006.01) A61B 17/00 (2006.01)**

[25] EN

[54] **MEDICAL DEVICE HANDLES WITH MULTIPLE DEGREES OF FREEDOM**

[54] **POIGNEES DE DISPOSITIF MEDICAL A DEGRES DE LIBERTE MULTIPLES**

[72] BHOWMICK, NABARUN, IN  
[72] SHARMA, DEEPAK KUMAR, IN  
[72] RAUT, SHRIKANT VASANT, IN  
[71] BOSTON SCIENTIFIC MEDICAL DEVICE LIMITED, IE  
[85] 2023-12-27  
[86] 2022-06-29 (PCT/IB2022/056073)  
[87] (WO2023/275797)  
[30] US (63/216,650) 2021-06-30

[21] **3,225,559**  
[13] A1

[51] **Int.Cl. H02K 33/02 (2006.01) A61C 17/26 (2006.01) G01L 1/26 (2006.01)**

[25] EN

[54] **CLEAN-AND-CARE APPLIANCE AND TRANSDUCER DEVICE AND PRESSURE ALARM MECHANISM THEREFOR**

[54] **APPAREIL DE NETTOYAGE ET DE SOINS, ET DISPOSITIF TRANSDUCTEUR ET MECANISME D'ALARME DE PRESSION ASSOCIES**

[72] DAI, XIAOGUO, CN  
[72] XU, ZHENWU, CN  
[71] SHANGHAI SHIFT ELECTRICS CO., LTD., CN  
[85] 2023-12-27  
[86] 2022-06-28 (PCT/CN2022/101744)  
[87] (WO2023/274188)  
[30] CN (202110719558.5) 2021-06-28

[21] **3,225,560**  
[13] A1

[51] **Int.Cl. A61M 25/10 (2013.01) A61B 1/00 (2006.01) A61B 17/122 (2006.01)**

[25] EN

[54] **INDWELLING-TYPE MEDICAL DEVICE AND ENDOSCOPE SYSTEM USING THE SAME**

[54] **DISPOSITIF MEDICAL DE TYPE A D'UTILISANT**

[72] OHIGAWA, ATSUSHI, JP  
[71] CARDINAL HEALTH K.K., JP  
[85] 2023-12-27  
[86] 2022-06-17 (PCT/JP2022/024392)  
[87] (WO2023/276736)  
[30] JP (2021-108588) 2021-06-30

[21] **3,225,562**  
[13] A1

[51] **Int.Cl. C25B 3/25 (2021.01) C25B 9/23 (2021.01) C25B 11/052 (2021.01) C25B 11/053 (2021.01) C25B 11/061 (2021.01) C25B 11/067 (2021.01) C25B 11/075 (2021.01) C25B 11/089 (2021.01) C25B 1/04 (2021.01)**

[25] EN

[54] **ELECTROLYTIC CELL FOR POLYMER ELECTROLYTE MEMBRANE ELECTROLYSIS AND METHOD FOR PRODUCTION THEREOF**

[54] **CELLULE ELECTROLYTIQUE POUR ELECTROLYSE A MEMBRANE ELECTROLYTIQUE POLYMERE ET SON PROCEDE DE PRODUCTION**

[72] NEUBERT, HEINZ, DE  
[72] KLINGER, ANDRE, DE  
[72] MUSAYEV, YASHAR, DE  
[72] SCHMID, GUNTER, DE  
[71] SIEMENS ENERGY GLOBAL GMBH & CO. KG, DE  
[85] 2023-12-27  
[86] 2022-05-03 (PCT/EP2022/061776)  
[87] (WO2023/274601)  
[30] EP (21182692.0) 2021-06-30

[21] **3,225,563**  
[13] A1

[51] **Int.Cl. A61M 15/00 (2006.01) A61B 5/087 (2006.01) G09B 23/28 (2006.01)**

[25] EN

[54] **DEVICES AND A SYSTEM FOR DETECTION AND ANALYSIS OF INHALER USE**

[54] **DISPOSITIFS ET SYSTEME DE DETECTION ET D'ANALYSE D'UTILISATION D'INHALATEUR**

[72] SELBY, ROBERT, GB  
[72] PETRUS, ANDREI, GB  
[72] KOHUT, PAVEL, GB  
[72] HORNE, DAVID, GB  
[72] SAVOV, SVILEN, GB  
[71] ASTRAZENECA AB, SE  
[85] 2023-12-27  
[86] 2022-06-27 (PCT/EP2022/067611)  
[87] (WO2023/280622)  
[30] US (63/219,401) 2021-07-08

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[21] **3,225,564**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01) C12N 5/071 (2010.01) C12N 7/01 (2006.01) C12N 15/38 (2006.01) C12N 15/39 (2006.01) C12N 15/44 (2006.01) C12N 15/49 (2006.01)**

[25] EN

[54] **METHOD OF PRODUCING NEGATIVE-STRAND RNA VIRUS VECTOR AND PRODUCED NEGATIVE-STRAND RNA VIRUS VECTOR**

[54] **PROCEDE DE PRODUCTION D'UN VECTEUR DE VIRUS A ARN A BRIN NEGATIF ET VECTEUR DE VIRUS A ARN A BRIN NEGATIF PRODUIT**

[72] SAEKI, KOICHI, JP  
[71] REPLI-TECH CO., LTD., JP  
[85] 2023-12-27  
[86] 2022-06-29 (PCT/JP2022/025983)  
[87] (WO2023/277069)  
[30] JP (2021-108757) 2021-06-30

[21] **3,225,566**  
[13] A1

[51] **Int.Cl. C02F 11/13 (2019.01) B01F 27/80 (2022.01) B01F 33/25 (2022.01) B02C 17/16 (2006.01) F26B 3/04 (2006.01) F26B 11/14 (2006.01)**

[25] EN

[54] **METHOD FOR DRYING PREFERABLY BIOGENIC RESIDUES, AND BIOREACTOR FOR CARRYING OUT THE METHOD**

[54] **PROCEDE DE SECHAGE DE RESIDUS DE PREFERENCE BIOGENIQUES ET BIOREACTEUR POUR LA MISE EN OEUVRE DUDIT PROCEDE**

[72] COMES, UDO, DE  
[72] MARKGRAF, KARL, DE  
[71] MUTEK MARKGRAF GMBH, DE  
[85] 2023-12-27  
[86] 2022-07-01 (PCT/EP2022/068321)  
[87] (WO2023/275377)  
[30] DE (10 2021 116 025.1) 2021-07-02  
[30] DE (10 2021 122 391.1) 2021-08-30  
[30] DE (10 2021 123 157.4) 2021-09-07

[21] **3,225,567**  
[13] A1

[51] **Int.Cl. A24B 15/14 (2006.01) A24B 15/16 (2020.01) A24B 15/28 (2006.01) A24B 15/42 (2006.01)**

[25] EN

[54] **AEROSOL-FORMING SUBSTRATE WITH IMPROVED THERMAL CONDUCTIVITY**

[54] **SUBSTRAT DE FORMATION D'AEROSOL A CONDUCTIVITE THERMIQUE AMELIOREE**

[72] DE PALO, DAMIEN, CH  
[72] HUANG, HOXUE, CH  
[72] FEDELI, FRANCESCO, CH  
[71] PHILIP MORRIS PRODUCTS S.A., CH  
[85] 2023-12-27  
[86] 2022-07-07 (PCT/EP2022/068941)  
[87] (WO2023/280991)  
[30] EP (21184365.1) 2021-07-07

[21] **3,225,570**  
[13] A1

[51] **Int.Cl. B01D 63/02 (2006.01) B01D 53/22 (2006.01) B01D 63/04 (2006.01)**

[25] EN

[54] **HOLLOW FIBER MEMBRANE MODULE**

[54] **MODULE DE MEMBRANE A FIBRES CREUSES**

[72] ITO, YOSUKE, JP  
[71] NOK CORPORATION, JP  
[85] 2023-12-27  
[86] 2022-07-07 (PCT/JP2022/026917)  
[87] (WO2023/058284)  
[30] JP (2021-164475) 2021-10-06

[21] **3,225,571**  
[13] A1

[51] **Int.Cl. A61F 2/95 (2013.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR COLLAPSING AND LOADING A PROSTHETIC DEVICE**

[54] **SYSTEMES ET METHODES DE PLIAGE ET DE CHARGEMENT D'UN DISPOSITIF PROTHETIQUE**

[72] GIORDANO, GIOVANNI, IT  
[72] ACHILUZZI, MONICA FRANCESCA, IT  
[71] CORCYM S.R.L., IT  
[85] 2023-12-27  
[86] 2021-07-29 (PCT/IB2021/056942)  
[87] (WO2023/007228)

[21] **3,225,574**  
[13] A1

[51] **Int.Cl. A61F 2/12 (2006.01) A61L 27/28 (2006.01) A61L 27/58 (2006.01)**

[25] EN

[54] **METHODS AND IMPLANTABLE PROSTHESIS FOR RECONSTRUCTION AND/OR AUGMENTATION OF AN ANATOMICAL SHAPE**

[54] **METHODES ET PROTHESE IMPLANTABLE POUR LA RECONSTRUCTION ET/OU L'AUGMENTATION D'UNE FORME ANATOMIQUE**

[72] PARKER, IAN K., US  
[72] REHNKE, ROBERT D., US  
[72] CONNELLI, ALICE M., US  
[72] GRAY, EVAN, US  
[72] PINE, THOMAS, US  
[72] MARCHESSAULT, KERRI, US  
[71] DAVOL INC., US  
[85] 2023-12-27  
[86] 2022-06-27 (PCT/US2022/035059)  
[87] (WO2023/278290)  
[30] US (63/217,105) 2021-06-30  
[30] US (63/217,054) 2021-06-30  
[30] US (63/217,170) 2021-06-30  
[30] US (63/217,075) 2021-06-30  
[30] US (63/217,089) 2021-06-30

[21] **3,225,576**  
[13] A1

[51] **Int.Cl. G01N 33/58 (2006.01) C07K 16/00 (2006.01)**

[25] EN

[54] **METHODS, COMPOSITIONS, AND KITS FOR ASSAY SIGNAL AMPLIFICATION**

[54] **PROCEDES, COMPOSITIONS ET KITS POUR L'AMPLIFICATION DE SIGNAL DE DOSAGE**

[72] KENTEN, JOHN, US  
[72] SIGAL, GEORGE, US  
[72] TUCKER-SCHWARTZ, ALEXANDER K., US  
[71] MESO SCALE TECHNOLOGIES, LLC., US  
[85] 2023-12-27  
[86] 2022-06-27 (PCT/US2022/035068)  
[87] (WO2023/278293)  
[30] US (63/215,660) 2021-06-28

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[21] **3,225,577**  
[13] A1

[51] **Int.Cl. H01M 50/204 (2021.01) H01M 50/276 (2021.01) H01M 50/282 (2021.01) C23C 2/06 (2006.01) C23C 2/40 (2006.01)**

[25] EN

[54] **STEEL SHEET FOR TOP COVER OF BATTERY PACK AND ITS MANUFACTURING METHOD**

[54] **TOLE D'ACIER POUR COUVERCLE SUPERIEUR DE BLOC-BATTERIE ET SON PROCEDE DE FABRICATION**

[72] SANZEY, PASCALE, FR

[72] MACHADO AMORIM, TIAGO, FR

[72] KRIM, TAREK, FR

[72] DOSDAT, LAURENCE, FR

[72] BESSON, AURELIE, FR

[71] ARCELORMITTAL, LU

[85] 2023-12-27

[86] 2022-06-21 (PCT/IB2022/055751)

[87] (WO2023/012537)

[30] IB (PCT/IB2021/057035) 2021-08-02

[21] **3,225,578**  
[13] A1

[51] **Int.Cl. H04W 12/80 (2021.01) H04L 9/40 (2022.01) H04W 12/72 (2021.01) H04W 12/76 (2021.01)**

[25] EN

[54] **5G NAS DECIPHERING ENHANCE RATE OF CONVERGENCE MECHANISM**

[54] **RENDEMENT DE DECHIFFREMENT DE NAS 5G AMELIORANT LE TAUX DE MECANISME DE CONVERGENCE**

[72] LIUBINSKAS, TAURAS, US

[72] MUTHUCHAMY, SUBAPPRIYA, US

[72] PRASAD, SANDEEP, US

[72] SARASWATI, ABHISHEK, US

[72] PINELLI, ALESSANDRO, US

[72] AHERRAO, PRITISH VIJAY, US

[72] DI RESTA, LORETO, US

[72] BASS, BRANDON, US

[71] NETSCOUT SYSTEMS, INC., US

[85] 2023-12-27

[86] 2022-06-28 (PCT/US2022/035283)

[87] (WO2023/278418)

[30] IN (202141029412) 2021-06-30

[30] US (17/409,196) 2021-08-23

[21] **3,225,580**  
[13] A1

[51] **Int.Cl. C12Q 1/6806 (2018.01) G16H 50/30 (2018.01) C12N 15/10 (2006.01)**

[25] EN

[54] **METHODS AND COMPOSITIONS FOR NUCLEIC ACID ANALYSIS**

[54] **PROCEDES ET COMPOSITIONS POUR L'ANALYSE D'ACIDE NUCLEIQUE**

[72] GODFREY, TONY, US

[72] KUGLER, CATHERINE, US

[72] MELTZER, ROBERT, US

[71] FLUENT BIOSCIENCES INC., US

[85] 2023-12-27

[86] 2022-06-29 (PCT/US2022/035468)

[87] (WO2023/278537)

[30] US (63/216,961) 2021-06-30

[21] **3,225,581**  
[13] A1

[51] **Int.Cl. G16B 20/10 (2019.01) G16B 40/20 (2019.01)**

[25] EN

[54] **CHROMOSOMAL AND SUB-CHROMOSOMAL COPY NUMBER VARIATION DETECTION**

[54] **DETECTION DE VARIATION DU NOMBRE DE COPIES CHROMOSOMIQUES ET SOUS-CHROMOSOMIQUES**

[72] ZENG, QIANDONG, US

[72] XIN, WINNIE, US

[72] RUSSELL, NEIL, US

[72] XU, CHEN, US

[72] PHILLIPS, KENNETH, US

[71] LABORATORY CORPORATION OF AMERICA HOLDINGS, US

[85] 2023-12-27

[86] 2022-06-30 (PCT/US2022/035763)

[87] (WO2023/278724)

[30] US (63/216,926) 2021-06-30

[21] **3,225,582**  
[13] A1

[51] **Int.Cl. A61M 5/30 (2006.01) B05B 1/02 (2006.01) C12M 1/42 (2006.01)**

[25] EN

[54] **SPRAY NOZZLE**

[54] **BUSE DE PULVERISATION**

[72] PEARSON, ALAN PATRICK, IE

[72] FINNEGAN, SHANE, IE

[72] COX, SIMON PETER, GB

[72] JOBANPUTRA, RISHI DHANVANTRAY, GB

[72] TAYLOR, DONAL JOSEPH, GB

[72] RUBICONI, FRANCK JOSEPH DORIEEN, GB

[71] AVECTAS LIMITED, IE

[85] 2023-12-27

[86] 2022-06-24 (PCT/IB2022/055905)

[87] (WO2022/269570)

[30] US (63/214,307) 2021-06-24

[21] **3,225,583**  
[13] A1

[51] **Int.Cl. H04H 20/26 (2009.01) H04H 20/61 (2009.01) H04H 20/67 (2009.01) H04H 20/06 (2009.01) H04H 20/18 (2009.01) H04H 60/13 (2009.01) H04H 60/19 (2009.01) H04W 4/06 (2009.01)**

[25] EN

[54] **ZONE CASTING LINKED TO SMART DEVICES WITH PUSH NOTIFICATION FUNCTIONALITY**

[54] **DIFFUSION SUR ZONES LIEE A DES DISPOSITIFS INTELLIGENTS ET A FONCTIONNALITE DE NOTIFICATION DE PUSSEE**

[72] DEVINE, CHRIS, US

[72] GROSSPIETSCH, JOHN, US

[72] BIRCHLER, MARK, US

[72] ROBERSON, DENNIS, US

[72] DUCEY, RICK, US

[71] LAZER ADDS, LLC, US

[85] 2023-12-27

[86] 2022-06-30 (PCT/US2022/035774)

[87] (WO2023/278733)

[30] US (63/217,253) 2021-06-30

[30] US (63/217,248) 2021-06-30

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[21] **3,225,585**  
[13] A1

[51] **Int.Cl. G06Q 10/10 (2023.01) G06F 17/00 (2019.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR DEVELOPMENT AND MANAGEMENT OF ENTERTAINMENT PROJECTS**  
[54] **SYSTEME ET PROCEDE DE DEVELOPPEMENT ET DE GESTION DE PROJETS DE DIVERTISSEMENT**  
[72] SHREM, YUVAL, US  
[71] FABLE ENTERTAINMENT, INC., US  
[85] 2023-12-27  
[86] 2022-07-14 (PCT/US2022/037217)  
[87] (WO2023/288025)  
[30] US (63/222,845) 2021-07-16

[21] **3,225,586**  
[13] A1

[51] **Int.Cl. A61F 9/007 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR IRRIGATION INTO THE LACRIMAL PUNCTA**  
[54] **PROCEDE ET DISPOSITIF D'IRRIGATION DANS LE POINT LACRYMAL**  
[72] REICH, CARY, US  
[71] VISANT MEDICAL, INC., US  
[85] 2023-12-27  
[86] 2021-06-29 (PCT/US2021/039677)  
[87] (WO2023/277887)

[21] **3,225,588**  
[13] A1

[51] **Int.Cl. G06F 30/34 (2020.01)**  
[25] EN  
[54] **COMPUTER-IMPLEMENTED METHODS AND SYSTEMS FOR STRENGTHENING VIOLATED INEQUALITIES**  
[54] **PROCEDES ET SYSTEMES MIS EN ŒUVRE PAR ORDINATEUR POUR RENFORCER DES INEGALITES VIOLEES**  
[72] WARME, DAVID MICHAEL, US  
[71] WARME, DAVID MICHAEL, US  
[85] 2023-12-27  
[86] 2022-07-22 (PCT/US2022/038039)  
[87] (WO2023/004129)  
[30] US (63/225,111) 2021-07-23  
[30] US (63/245,326) 2021-09-17

[21] **3,225,589**  
[13] A1

[51] **Int.Cl. F16G 1/28 (2006.01) B29D 29/08 (2006.01)**  
[25] EN  
[54] **TOOTHED BELT AND MANUFACTURING METHOD THEREFOR**  
[54] **COURROIE CRANTEE ET SON PROCEDE DE FABRICATION**  
[72] OSAKI, SUSUMU, JP  
[72] HEMMI, YUSUKE, JP  
[72] MIZUMOTO, TAKUMI, JP  
[71] MITSUBOSHI BELTING LTD., JP  
[85] 2023-12-27  
[86] 2022-07-22 (PCT/JP2022/028486)  
[87] (WO2023/008332)  
[30] JP (2021-122815) 2021-07-27  
[30] JP (2022-041284) 2022-03-16  
[30] JP (2022-107110) 2022-07-01

[21] **3,225,590**  
[13] A1

[51] **Int.Cl. G06F 16/735 (2019.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR GENERATING A PLAYLIST OF CONTENT ITEMS AND CONTENT ITEM SEGMENTS**  
[54] **PROCEDES ET SYSTEMES DE GENERATION D'UNE LISTE DE LECTURE D'ELEMENTS DE CONTENU ET DE SEGMENTS D'ELEMENT DE CONTENU**  
[72] CHANDRASHEKAR, PADMASSRI, IN  
[72] EMMANUEL, DAINA, IN  
[72] HARB, REDA, US  
[71] ROVI GUIDES, INC., US  
[85] 2023-12-27  
[86] 2021-12-16 (PCT/US2021/063894)  
[87] (WO2023/277944)  
[30] US (17/362,518) 2021-06-29

[21] **3,225,591**  
[13] A1

[51] **Int.Cl. G06Q 10/0635 (2023.01) G06N 20/00 (2019.01)**  
[25] EN  
[54] **AI-AUGMENTED AUDITING PLATFORM INCLUDING TECHNIQUES FOR APPLYING A COMPOSABLE ASSURANCE INTEGRITY FRAMEWORK**  
[54] **PLATEFORME DE VERIFICATION A INTELLIGENCE ARTIFICIELLE AUGMENTEE COMPRENANT DES TECHNIQUES D'APPLICATION D'UNE STRUCTURE D'INTEGRITE D'ASSURANCE COMPOSABLE**  
[72] LI, CHUNG-SHENG, US  
[72] CHENG, WINNIE, US  
[72] FLAVELL, MARK JOHN, US  
[72] HALLMARK, LORI MARIE, US  
[72] LIZOTTE, NANCY ALAYNE, US  
[72] LEONG, KEVIN MA, US  
[71] PWC PRODUCT SALES LLC, US  
[85] 2023-12-27  
[86] 2022-06-30 (PCT/US2022/073280)  
[87] (WO2023/279039)  
[30] US (63/217,131) 2021-06-30  
[30] US (63/217,119) 2021-06-30  
[30] US (63/217,123) 2021-06-30  
[30] US (63/217,127) 2021-06-30  
[30] US (63/217,134) 2021-06-30

[21] **3,225,592**  
[13] A1

[51] **Int.Cl. H04L 65/612 (2022.01) H04N 21/218 (2011.01) H04N 21/231 (2011.01) H04L 65/80 (2022.01) H04L 67/02 (2022.01) H04L 67/568 (2022.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR SELECTING A DATA DELIVERY NETWORK**  
[54] **SYSTEMES ET PROCEDES POUR LA SELECTION D'UN RESEAU DE DISTRIBUTION DE DONNEES**  
[72] CHANDRASHEKAR, PADMASSRI, IN  
[72] HARB, REDA, US  
[71] ROVI GUIDES, INC., US  
[85] 2023-12-27  
[86] 2021-12-20 (PCT/US2021/064283)  
[87] (WO2023/277946)  
[30] US (17/362,335) 2021-06-29



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[21] **3,225,594**  
[13] A1

[51] **Int.Cl. H04L 65/612 (2022.01) H04N 21/234 (2011.01) H04N 21/235 (2011.01) H04N 21/6373 (2011.01) H04N 21/6377 (2011.01) H04L 65/613 (2022.01) H04L 65/80 (2022.01) H04L 67/02 (2022.01)**

[25] EN

[54] **ADAPTIVE CONTENT STREAMING BASED ON BANDWIDTH**

[54] **DIFFUSION EN CONTINU DE CONTENU ADAPTATIF BASEE SUR LA LARGEUR DE BANDE**

[72] CHANDRASHEKAR, PADMASSRI, IN

[72] EMMANUEL, DAINA, IN

[72] HARB, REDA, US

[71] ROVI GUIDES, INC., US

[85] 2023-12-27

[86] 2021-12-20 (PCT/US2021/064287)

[87] (WO2023/277947)

[30] US (17/362,058) 2021-06-29

[21] **3,225,596**  
[13] A1

[51] **Int.Cl. C07D 401/06 (2006.01) A61K 31/506 (2006.01) A61P 35/00 (2006.01) C07D 401/14 (2006.01) C07D 413/14 (2006.01) C07D 417/14 (2006.01) C07D 471/04 (2006.01) C07D 487/04 (2006.01) C07D 491/052 (2006.01) C07D 513/04 (2006.01)**

[25] EN

[54] **INHIBITORS TARGETING UBIQUITIN SPECIFIC PROTEASE 7 (USP7)**

[54] **INHIBITEURS CIBLANT LA PROTEASE SPECIFIQUE DE L'UBIQUITINE 7 (USP7)**

[72] BUHRLAGE, SARA, US

[72] LIU, XIAOXI, US

[72] SCHOENFELD, RYAN C., US

[71] DANA-FARBER CANCER INSTITUE, INC., US

[85] 2023-12-27

[86] 2022-07-20 (PCT/US2022/037756)

[87] (WO2023/003973)

[30] US (63/223,788) 2021-07-20

[21] **3,225,615**  
[13] A1

[51] **Int.Cl. A01N 25/04 (2006.01) A01C 1/08 (2006.01) A01N 25/00 (2006.01) A01N 43/80 (2006.01) A01P 3/00 (2006.01)**

[25] EN

[54] **AQUEOUS SUSPENSION AGROCHEMICAL COMPOSITION, METHOD FOR PREVENTING CROP DAMAGE, AND USEFUL PLANT SEEDS**

[54] **COMPOSITION AGROCHIMIQUE EN SUSPENSION AQUEUSE, PROCEDE DE PREVENTION DES PERTES DE RECOLTE, ET GRAINES DE PLANTES UTILES**

[72] AMANO, NARUKI, JP

[71] KUMIAI CHEMICAL INDUSTRY CO., LTD., JP

[85] 2023-12-27

[86] 2022-10-12 (PCT/JP2022/038050)

[87] (WO2023/074370)

[30] JP (2021-177426) 2021-10-29

[21] **3,225,595**  
[13] A1

[51] **Int.Cl. G01N 33/53 (2006.01) G01N 33/84 (2006.01)**

[25] EN

[54] **ASSESSMENT OF AN ANALYTE FROM A BIOLOGICAL SAMPLE DISPOSED ON A SUPPORT**

[54] **EVALUATION D'UN ANALYTE A PARTIR D'UN ECHANTILLON BIOLOGIQUE DISPOSE SUR UN SUPPORT**

[72] SMITH, SARA, US

[72] FOX, ERICA, US

[71] REVVITY OMICS, INC., US

[85] 2023-12-27

[86] 2022-06-24 (PCT/US2022/034904)

[87] (WO2023/278267)

[30] US (17/359,858) 2021-06-28

[21] **3,225,614**  
[13] A1

[51] **Int.Cl. C22B 3/10 (2006.01) B09B 3/70 (2022.01) C22B 1/02 (2006.01) C22B 3/16 (2006.01) C22B 7/00 (2006.01) C22B 26/12 (2006.01) H01M 10/54 (2006.01)**

[25] EN

[54] **METHOD FOR DISSOLVING BATTERY POWDER IN HYDROCHLORIC ACID**

[54] **PROCEDE DE DISSOLUTION DE POUVRE DE BATTERIE DANS DE L'ACIDE CHLORHYDRIQUE**

[72] YAMADA, KEITA, JP

[72] SAKUMA, YUKIO, JP

[72] HIRAOKA, TARO, JP

[72] NAKAZAWA, JUN, JP

[72] INOUE, HIROTO, JP

[71] ASAKA RIKEN CO., LTD., JP

[85] 2023-12-27

[86] 2022-09-29 (PCT/JP2022/036529)

[87] (WO2023/054618)

[30] JP (2021-161135) 2021-09-30

[21] **3,225,616**  
[13] A1

[51] **Int.Cl. A01D 34/00 (2006.01)**

[25] EN

[54] **RIDING MOWING DEVICE**

[54] **TONDEUSE AUTOPORTEE**

[72] LI, LI, CN

[72] WEI, TIANFANG, CN

[72] GAO, FAN, CN

[72] CHEN, LIANG, CN

[72] XU, HAISHEN, CN

[72] GAO, MING, CN

[72] ZHANG, MIN, CN

[72] ZHANG, TAO, CN

[72] HUANG, JIAJUN, CN

[72] GAO, YUNFEI, CN

[71] NANJING CHERVON INDUSTRY CO., LTD., CN

[85] 2023-12-28

[86] 2022-08-25 (PCT/CN2022/114756)

[87] (WO2023/082770)

[30] CN (202111338153.3) 2021-11-12

[30] CN (202111338145.9) 2021-11-12

[30] CN (202111338143.X) 2021-11-12

[30] CN (202111338560.4) 2021-11-12

[30] CN (202111338576.5) 2021-11-12

[30] CN (202111338541.1) 2021-11-12

[30] CN (202111338141.0) 2021-11-12

[30] CN (202111338504.0) 2021-11-12

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[21] **3,225,617**  
[13] A1

[51] **Int.Cl. H01M 50/244 (2021.01) H01M 50/202 (2021.01) H01M 50/204 (2021.01) H01M 50/317 (2021.01) H01M 50/383 (2021.01) H01M 10/04 (2006.01)**

[25] EN

[54] **BATTERY TEST APPARATUS**

[54] **DISPOSITIF DE TEST DE BATTERIE**

[72] OMORI, JUN, JP

[72] YAMANUBE, KENJI, JP

[72] SHOJI, HIDEKI, JP

[71] TOYO SYSTEM CO., LTD., JP

[85] 2023-12-27

[86] 2022-11-22 (PCT/JP2022/043241)

[87] (WO2023/162376)

[30] JP (2022-029217) 2022-02-28

[21] **3,225,620**  
[13] A1

[51] **Int.Cl. A61K 35/28 (2015.01) C12N 5/0775 (2010.01) A61K 35/17 (2015.01) A61K 8/98 (2006.01) A61P 17/00 (2006.01) A61Q 19/00 (2006.01)**

[25] EN

[54] **COMBINED ADMINISTRATION COMPOSITION FOR PREVENTING OR TREATING ATOPIC DERMATITIS, COMPRISING FUNCTION-ENHANCED STEM CELLS AND REGULATORY T CELLS**

[54] **COMPOSITION D'ADMINISTRATION COMBINEE POUR LA PREVENTION OU LE TRAITEMENT DE LA DERMATITE ATOPIQUE, COMPRENANT DES CELLULES SOUCHES A FONCTION AMELIOREE ET DES LYMPHOCYTES T REGUL ATEURS**

[72] SONG, SUN UK, KR

[72] KIM, SI NA, KR

[72] MOON, JEONG HYUN, KR

[72] YOON, JEONG HEON, US

[72] BYUN, NA RI, US

[71] SCM LIFESCIENCE CO., LTD., KR

[71] TERAIMMUNE, LLC, US

[85] 2023-12-27

[86] 2022-05-30 (PCT/KR2022/007696)

[87] (WO2022/255759)

[30] KR (10-2021-0070810) 2021-06-01

[21] **3,225,621**  
[13] A1

[51] **Int.Cl. G06F 16/14 (2019.01) G06F 16/10 (2019.01) G06F 16/18 (2019.01) G06F 16/93 (2019.01)**

[25] EN

[54] **AI-AUGMENTED AUDITING PLATFORM INCLUDING TECHNIQUES FOR AUTOMATED DOCUMENT PROCESSING**

[54] **PLATE-FORME DE VERIFICATION AUGMENTEE PAR LA COMPRENANT DES TECHNIQUES DE TRAITEMENT AUTOMATISE DE DOCUMENTS**

[72] LI, CHUNG-SHENG, US

[72] CHENG, WINNIE, US

[72] FLAVELL, MARK JOHN, US

[72] HALLMARK, LORI MARIE, US

[72] LIZOTTE, NANCY ALAYNE, US

[72] RAO, ANAND SRINIVASA, US

[72] LEONG, KEVIN MA, US

[72] ZHU, DI, US

[72] DELILLE, TIMOTHY, US

[72] RAMIREZ, MARIA JESUS PEREZ, US

[72] WAN, YUAN, US

[72] SINGH, RATNA RAJ, US

[72] BANSAL, VISHAKHA, US

[72] HODA, SHAZ, US

[72] SINGH, AMITJ, US

[72] ZANJ, SIDDHESH SHIVAJI, US

[71] PWC PRODUCT SALES LLC, US

[85] 2023-12-27

[86] 2022-06-30 (PCT/US2022/073290)

[87] (WO2023/279045)

[30] US (63/217,119) 2021-06-30

[30] US (63/217,123) 2021-06-30

[30] US (63/217,127) 2021-06-30

[30] US (63/217,131) 2021-06-30

[30] US (63/217,134) 2021-06-30

[21] **3,225,622**  
[13] A1

[51] **Int.Cl. A61B 5/103 (2006.01) A61B 6/04 (2006.01)**

[25] EN

[54] **METHOD FOR RECOGNIZING POSTURE OF HUMAN BODY PARTS TO BE DETECTED BASED ON PHOTOGRAMMETRY**

[54] **PROCEDE DE RECONNAISSANCE DE POSTURE DE PARTIES DE CORPS HUMAIN DEVANT ETRE DETECTEES SUR LA BASE D'UNE PHOTOGRAMMETRIE**

[72] ZOU, YIFENG, CN

[72] MA, CHUAN, CN

[71] MIREYE IMAGING INC., CA

[85] 2023-12-28

[86] 2021-11-23 (PCT/CA2021/051667)

[87] (WO2023/272372)

[30] CN (202110740006.2) 2021-07-01

[21] **3,225,624**  
[13] A1

[51] **Int.Cl. A61K 31/353 (2006.01) A61K 31/05 (2006.01) A61K 36/53 (2006.01) A61P 3/10 (2006.01) A61P 17/02 (2006.01)**

[25] EN

[54] **METHODS FOR PREPARATION OF PLECTRANTHUS AMBOINICUS EXTRACTS**

[54] **PROCEDES DE PREPARATION D'EXTRAITS DE PLECTRANTHUS AMBOINICUS**

[72] WANG, YUEH-JU, CN

[72] LU, KUNG-MING, CN

[71] ONENESS BIOTECH CO., LTD., CN

[85] 2023-12-28

[86] 2022-06-27 (PCT/CN2022/101441)

[87] (WO2023/274123)

[30] US (63/215,697) 2021-06-28

[21] **3,225,624**  
[13] A1

[51] **Int.Cl. A61K 31/353 (2006.01) A61K 31/05 (2006.01) A61K 36/53 (2006.01) A61P 3/10 (2006.01) A61P 17/02 (2006.01)**

[25] EN

[54] **METHODS FOR PREPARATION OF PLECTRANTHUS AMBOINICUS EXTRACTS**

[54] **PROCEDES DE PREPARATION D'EXTRAITS DE PLECTRANTHUS AMBOINICUS**

[72] WANG, YUEH-JU, CN

[72] LU, KUNG-MING, CN

[71] ONENESS BIOTECH CO., LTD., CN

[85] 2023-12-28

[86] 2022-06-27 (PCT/CN2022/101441)

[87] (WO2023/274123)

[30] US (63/215,697) 2021-06-28

## Demandes PCT entrant en phase nationale

[21] **3,225,629**  
[13] A1

[51] **Int.Cl. C07K 16/18 (2006.01) A61K 39/395 (2006.01) A61P 37/00 (2006.01) C07K 16/40 (2006.01)**

[25] EN

[54] **NOVEL ANTI-MASP-2 ANTIBODIES**

[54] **NOUVEAUX ANTICORPS ANTI-MASP-2**

[72] QIAN, XUEMING, CN

[72] LI, HONGJUN, CN

[72] GU, YI, CN

[72] TENG, FEI, CN

[72] SUN, DI, CN

[71] SUZHOU TRANSCENTA THERAPEUTICS CO., LTD., CN

[85] 2023-12-28

[86] 2022-06-30 (PCT/CN2022/102611)

[87] (WO2023/274340)

[30] CN (PCT/CN2021/103715) 2021-06-30

[21] **3,225,632**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 47/54 (2017.01) A61K 31/713 (2006.01) A61P 1/16 (2006.01)**

[25] EN

[54] **NUCLEIC ACID LIGAND AND CONJUGATE THEREOF, AND PREPARATION METHOD THEREFOR AND USE THEREOF**

[54] **LIGAND D'ACIDE NUCLEIQUE ET SON CONJUGUE, SON PROCEDE DE PREPARATION ET SON UTILISATION**

[72] HUANG, JINYU, CN

[72] LUO, MIN, CN

[72] YIN, KE, CN

[72] HOU, ZHE, CN

[72] LI, YUNFEI, CN

[71] TUOJIE BIOTECH (SHANGHAI) CO., LTD., CN

[85] 2023-12-28

[86] 2022-07-01 (PCT/CN2022/103275)

[87] (WO2023/274395)

[30] CN (202110753225.4) 2021-07-02

[21] **3,225,634**  
[13] A1

[51] **Int.Cl. C07K 7/06 (2006.01) A61K 38/08 (2019.01)**

[25] EN

[54] **CASPASE-2 INHIBITOR COMPOUNDS**

[54] **COMPOSES INHIBITEURS DE CASPASE-2**

[72] HERRERO MOLINA, MARIA DEL CARMEN, ES

[72] CUSACHS FARRARO, MARC, ES

[72] DRAG, MARCIN, PL

[72] POREBA, MARCIN, PL

[72] AVILA ZARAGOZA, MATIAS, ES

[72] GARCIA FERNANDEZ-BARRENA, MAITE, ES

[71] KINTSUGI THERAPEUTICS S.L., ES

[85] 2023-12-28

[86] 2022-07-01 (PCT/EP2022/068263)

[87] (WO2023/275357)

[30] EP (21382587.0) 2021-07-01

[21] **3,225,636**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61K 47/55 (2017.01) A61K 47/68 (2017.01) C07K 16/30 (2006.01) C07K 16/44 (2006.01) G01N 33/53 (2006.01) G01N 33/573 (2006.01)**

[25] EN

[54] **ANTI-PROTAC ANTIBODIES AND COMPLEXES**

[54] **ANTICORPS ET COMPLEXES ANTI-PROTAC**

[72] RIEKER, MARCEL, DE

[72] JAEGER, SEBASTIAN, DE

[72] RASCHE, NICOLAS, DE

[72] KOENNING, DOREEN, DE

[72] SCHROETER, CHRISTIAN, DE

[72] SCHNEIDER, HENDRIK, DE

[71] MERCK PATENT GMBH, DE

[85] 2023-12-28

[86] 2022-07-01 (PCT/EP2022/068347)

[87] (WO2023/275394)

[30] EP (21183460.1) 2021-07-02

[21] **3,225,643**  
[13] A1

[25] EN

[54] **NON-DESTRUCTIVE TESTING OF COMPOSITE COMPONENTS**

[54] **ESSAI NON DESTRUCTIF DE COMPOSANTS COMPOSITES**

[72] MCBRAYER, ISABEL, US

[72] BARSOUM, FADY F., US

[72] NAGLE, DALLAS, US

[72] STANFORD, BENJAMIN, US

[71] DELTA ENGINEERING CORPORATION, US

[85] 2024-01-11

[86] 2022-07-07 (PCT/US2022/036332)

[87] (WO2023/283319)

[30] US (63/219,718) 2021-07-08

[21] **3,225,644**  
[13] A1

[51] **Int.Cl. A61K 31/197 (2006.01) A61K 31/428 (2006.01) A61P 25/04 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL COMPOSITION AND USE THEREOF**

[54] **COMPOSITION PHARMACEUTIQUE ET SON UTILISATION**

[72] LI, FULONG, CN

[72] ZHANG, ZHENGPING, CN

[72] FANG, FANG, CN

[72] YANG, WEIDONG, CN

[72] CHEN, RONG, CN

[72] YANG, SHIBAO, CN

[71] NEURODAWN PHARMACEUTICAL CO., LTD., CN

[85] 2024-01-11

[86] 2022-06-27 (PCT/CN2022/101423)

[87] (WO2023/274117)

[30] CN (202110742036.7) 2021-07-01

[21] **3,225,646**  
[13] A1

[51] **Int.Cl. A61B 17/00 (2006.01)**

[25] EN

[54] **TREATMENT OF GERD**

[54] **TRAITEMENT D'UNE MALADIE DE REFLUX GASTRO-OESOPHAGIEN**

[72] FORSELL, PETER, SE

[71] IMPLANTICA PATENT LTD, SE

[85] 2023-12-28

[86] 2022-07-05 (PCT/EP2022/068597)

[87] (WO2023/280858)

[30] US (17/367,656) 2021-07-06

[30] SE (2151027-6) 2021-08-30

[30] SE (2250227-2) 2022-02-18

## PCT Applications Entering the National Phase

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[21] **3,225,648**

[13] A1

[51] **Int.Cl. A01G 18/70 (2018.01) A01D  
46/24 (2006.01)**

[25] EN

[54] **METHOD, APPARATUS AND  
SYSTEM FOR MUSHROOM  
PICKING**

[54] **PROCEDE, APPAREIL ET  
SYSTEME DE CUEILLETTE DE  
CHAMPIGNONS**

[72] AL-DIRI, BASHIR IBRAHIM, GB

[72] ELGENEIDY, KHALED AHMED, GB

[72] BURGON, JASON GRANT, GB

[72] PEARSON, SIMON, GB

[71] UNIVERSITY OF LINCOLN, GB

[85] 2023-12-28

[86] 2022-07-18 (PCT/GB2022/051850)

[87] (WO2023/002166)

[30] GB (2110415.3) 2021-07-20

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[21] **3,225,652**

[13] A1

[51] **Int.Cl. G01F 1/05 (2006.01) A01M  
7/00 (2006.01) G01F 1/115 (2006.01)**

[25] EN

[54] **SPRAY FLOW SENSING WITH  
MAGNETIC CARRIER**

[54] **DETECTION DE DEBIT DE  
PULVERISATION AVEC  
SUPPORT MAGNETIQUE**

[72] MAURER, GARRETT, US

[72] JEE, JUSTIN, US

[72] BJERTNESS, DAN, US

[72] EICKHOFF, ROSS, US

[71] INTELLIGENT AGRICULTURAL  
SOLUTIONS, LLC, US

[85] 2023-12-28

[86] 2022-05-20 (PCT/IB2022/054761)

[87] (WO2023/002264)

[30] US (63/224,206) 2021-07-21

# 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

[21] <b>3,222,582</b> [13] A1	[21] <b>3,224,526</b> [13] A1	[21] <b>3,224,537</b> [13] A1
<p>[25] EN</p> <p>[54] <b>SYSTEMS AND METHODS FOR COMMUNICATIONS NODE UPGRADE AND SELECTION</b></p> <p>[54] <b>SYSTEMES ET PROCEDES DE MISE A NIVEAU ET DE SELECTION DE N.U.S DE COMMUNICATIONS</b></p> <p>[72] GRAY, WILLIAM, US</p> <p>[72] SAYRE, JAMES, US</p> <p>[72] LIMBURG, STEPHEN, US</p> <p>[71] LEVEL 3 COMMUNICATIONS, LLC, US</p> <p>[22] 2020-02-19</p> <p>[41] 2020-08-27</p> <p>[62] 3,130,892</p> <p>[30] US (62/808,183) 2019-02-20</p> <p>[30] US (62/808,189) 2019-02-20</p>	<p>[51] <b>Int.Cl. A61K 31/519 (2006.01) A61P 35/00 (2006.01) G01N 33/68 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>EXON 18 AND/OR EXON 21 MUTANT EGFR SELECTIVE INHIBITOR</b></p> <p>[54] <b>INHIBITEUR SELECTIF DE L'EGFR MUTE SUR L'EXON 18 ET/OU SUR L'EXON 21</b></p> <p>[72] ABE, NAOMI, JP</p> <p>[72] HASAKO, SHINICHI, JP</p> <p>[71] TAIHO PHARMACEUTICAL CO., LTD., JP</p> <p>[22] 2018-08-31</p> <p>[41] 2019-03-07</p> <p>[62] 3,074,418</p> <p>[30] JP (2017-168606) 2017-09-01</p>	<p>[51] <b>Int.Cl. A61K 31/445 (2006.01) A61P 3/00 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>METHODS OF TREATING FABRY PATIENTS HAVING RENAL IMPAIRMENT</b></p> <p>[54] <b>METHODES DE TRAITEMENT DE PATIENTS ATTEINTS DE LA MALADIE DE FABRY SOUFFRANT D'UNE INSUFFISANCE RENALE</b></p> <p>[72] CASTELLI, JEFF, US</p> <p>[71] AMICUS THERAPEUTICS, INC., US</p> <p>[22] 2018-05-30</p> <p>[41] 2018-12-06</p> <p>[62] 3,065,298</p> <p>[30] US (62/512,458) 2017-05-30</p> <p>[30] US (62/626,953) 2018-02-06</p> <p>[30] US (15/992,336) 2018-05-30</p>
[21] <b>3,223,455</b> [13] A1	[21] <b>3,224,529</b> [13] A1	[21] <b>3,224,729</b> [13] A1
<p>[25] FR</p> <p>[54] <b>ELECTRODE MATERIALS IN THE FORM OF LITHIUM-BASED ALLOY AND METHODS FOR MANUFACTURING SAME</b></p> <p>[54] <b>MATERIAUX D'ELECTRODE SOUS FORME D'ALLIAGE A BASE DE LITHIUM ET LEURS PROCEDES DE FABRICATION</b></p> <p>[72] ZAGHIB, KARIM, CA</p> <p>[72] ARMAND, MICHEL, FR</p> <p>[72] BOUCHARD, PATRICK, CA</p> <p>[72] VERREAULT, SERGE, CA</p> <p>[72] TURCOTTE, NANCY, CA</p> <p>[72] LEBLANC, DOMINIC, CA</p> <p>[72] AMOUZEGAR, KAMYAB, CA</p> <p>[71] HYDRO-QUEBEC, CA</p> <p>[22] 2018-08-15</p> <p>[41] 2019-02-21</p> <p>[62] 3,073,099</p> <p>[30] CA (2976241) 2017-08-15</p>	<p>[25] EN</p> <p>[54] <b>METHODS OF TREATING FABRY PATIENTS HAVING RENAL IMPAIRMENT</b></p> <p>[54] <b>METHODES DE TRAITEMENT DE PATIENTS ATTEINTS DE LA MALADIE DE FABRY SOUFFRANT D'UNE INSUFFISANCE RENALE</b></p> <p>[72] CASTELLI, JEFF, US</p> <p>[71] AMICUS THERAPEUTICS, INC., US</p> <p>[22] 2018-05-30</p> <p>[41] 2018-12-06</p> <p>[62] 3,065,298</p> <p>[30] US (62/512,458) 2017-05-30</p> <p>[30] US (62/626,953) 2018-02-06</p> <p>[30] US (15/992,336) 2018-05-30</p>	<p>[51] <b>Int.Cl. A01N 1/02 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>LYOPHILIZATION LOADING TRAY ASSEMBLY AND SYSTEM</b></p> <p>[54] <b>ENSEMBLE ET SYSTEME DE PLATEAU DE CHARGEMENT POUR LYOPHILISATION</b></p> <p>[72] JOHNSON, NATHANIEL T., US</p> <p>[72] BRIDGES, DENNIS A., US</p> <p>[72] NGUYEN, ALEXANDER DU, US</p> <p>[72] KWIAT, MARGARET V., US</p> <p>[72] PARAKININKAS, KESTAS P., US</p> <p>[72] SUMMIT, RYLAN A., US</p> <p>[71] TERUMO BCT BIOTECHNOLOGIES, LLC, US</p> <p>[22] 2020-03-11</p> <p>[41] 2020-09-17</p> <p>[62] 3,130,670</p> <p>[30] US (62/818,214) 2019-03-14</p> <p>[30] US (62/952,752) 2019-12-23</p> <p>[30] US (62/971,072) 2020-02-06</p>

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

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[21] **3,224,762**  
[13] A1

[25] EN  
[54] **LOW POWER DUAL-SENSITIVITY FG-MOSFET SENSOR FOR A WIRELESS RADIATION DOSIMETER**  
[54] **CAPTEUR MOSFET A GRILLE FLOTTANTE, FAIBLE PUISSANCE ET A DOUBLE SENSIBILITE POUR UN DOSIMETRE SANS FIL**  
[72] YADEGARI, BEHZAD, CA  
[72] MCGARRY, STEVEN, CA  
[72] ROY, LANGIS, CA  
[71] BEST THERATRONICS LTD., CA  
[22] 2020-09-15  
[41] 2021-03-26  
[62] 3,093,726  
[30] US (62/906,526) 2019-09-26  
[30] US (17/008,143) 2020-08-31

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[21] **3,224,815**  
[13] A1

[25] EN  
[54] **PLUG LOAD RECEPTACLE PRISE POUR CHARGE A FICHE**  
[72] ABUGHAZALEH, SHADI ALEX, US  
[72] PECK, DAVID, US  
[72] DUPUIS, JOE, US  
[71] HUBBELL INCORPORATED, US  
[22] 2016-09-22  
[41] 2017-03-30  
[62] 2,999,142  
[30] US (62/222,148) 2015-09-22

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[21] **3,224,820**  
[13] A1

[51] **Int.Cl. C07C 237/52 (2006.01) C07C 271/22 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PREPARING A GIP/GLP1 DUAL AGONIST**  
[54] **PROCEDE DE PREPARATION D'UN AGONISTE DOUBLE GIP/GLP1**  
[72] COFFIN, STEPHANIE RUTH, US  
[72] FREDERICK, MICHAEL OLIVER, US  
[72] JALAN, ANKUR, US  
[72] KALLMAN, NEIL JOHN, US  
[72] KOPACH, MICHAEL EUGENE, US  
[72] SEIBERT, KEVIN DALE, US  
[72] TSUKANOV, SERGEY VLADIMIROVICH, US  
[71] ELI LILLY AND COMPANY, US  
[22] 2020-01-28  
[41] 2020-08-06  
[62] 3,128,023  
[30] US (62/797,963) 2019-01-29  
[30] US (62/815,053) 2019-03-07  
[30] US (62/818,342) 2019-03-14

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[21] **3,224,830**  
[13] A1

[25] EN  
[54] **AGONISTIC TNF RECEPTOR BINDING AGENTS**  
[54] **AGENTS AGONISTES SE LIANT AUX RECEPTES DU TNF**  
[72] SAHIN, UGUR, DE  
[72] GIESEKE, FRIEDERIKE, DE  
[72] ALTINTAS, ISIL, NL  
[72] SATIJN, DAVID, NL  
[72] PARREN, PAUL, NL  
[71] BIONTECH AG, DE  
[71] GENMAB A/S, DK  
[22] 2016-01-08  
[41] 2016-07-14  
[62] 2,969,888  
[30] EP (PCT/EP2015/050255) 2015-01-08

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[21] **3,224,872**  
[13] A1

[51] **Int.Cl. A61K 31/166 (2006.01) A61K 9/08 (2006.01) A61K 47/12 (2006.01) A61K 47/18 (2017.01)**  
[25] EN  
[54] **NASAL FORMULATIONS OF METOCLOPRAMIDE**  
[54] **FORMULATIONS NASALES DE METOCLOPRAMIDE**  
[72] D'ONOFRIO, MATTHEW J., US  
[72] GONYER, DAVID A., US  
[72] SHAH, SHIRISH A., US  
[72] MADDEN, STUART J., US  
[71] EVOKE PHARMA, INC., US  
[22] 2009-12-22  
[41] 2010-07-01  
[62] 3,155,873  
[30] US (61/140034) 2008-12-22

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[21] **3,224,873**  
[13] A1

[25] EN  
[54] **A METHOD OF MANAGEMENT OF REMOTE OPERATIONS**  
[54] **PROCEDE DE GESTION D'OPERATIONS A DISTANCE**  
[72] WILLIAMS, DAVID, GB  
[72] CHILDE, BARRY, GB  
[72] BESTWICK, DAVID, GB  
[72] YEOMANS, ANDREW JAMES VICTOR, GB  
[72] IQBAL, OMAR, GB  
[71] ARQIT LIMITED, GB  
[22] 2020-11-06  
[41] 2021-05-14  
[62] 3,157,135  
[30] GB (1916309.6) 2019-11-08  
[30] GB (1916309.6) 2019-11-08

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[21] **3,224,889**  
[13] A1

[25] EN  
[54] **OPTICAL COUPLER FOR LIDAR SENSOR**  
[54] **COUPLEUR OPTIQUE POUR CAPTEUR LIDAR**  
[72] LIN, SEN, US  
[72] MICHAELS, ANDREW STEIL, US  
[71] AURORA OPERATIONS, INC., US  
[22] 2021-11-22  
[41] 2022-05-27  
[62] 3,199,916  
[30] US (63/117,316) 2020-11-23  
[30] US (17/531,029) 2021-11-19

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,224,932**  
[13] A1

[51] **Int.Cl. G01N 33/38 (2006.01)**  
[25] EN  
[54] **SYSTEMS, APPARATUS AND METHODS FOR OBTAINING MEASUREMENTS CONCERNING THE STRENGTH AND PERFORMANCE OF CONCRETE MIXTURES**  
[54] **SYSTEMES, APPAREIL ET PROCEDES D'OBTENTION DE MESURES CONCERNANT LA RESISTANCE ET LA PERFORMANCE DE PATES DE BETON**  
[72] RADJY, FARROKH F., US  
[71] QUIPIP, LLC, US  
[22] 2017-01-24  
[41] 2017-08-03  
[62] 3,011,989  
[30] US (62/287,072) 2016-01-26  
[30] US (62/343,587) 2016-05-31  
[30] US (62/356,354) 2016-06-29

[21] **3,224,933**  
[13] A1

[25] EN  
[54] **STORING HAZARDOUS MATERIAL IN A SUBTERRANEAN FORMATION**  
[54] **STOCKAGE DE MATIERES DANGEREUSES DANS UNE FORMATION SOUTERRAINE**  
[72] MULLER, RICHARD A., US  
[72] MULLER, ELIZABETH, US  
[71] DEEP ISOLATION, INC., US  
[22] 2016-12-14  
[41] 2017-06-29  
[62] 3,009,660  
[30] US (14/998,232) 2015-12-24

[21] **3,224,936**  
[13] A1

[25] EN  
[54] **CLEANING METHOD FOR JET ENGINE**  
[54] **PROCEDE DE NETTOYAGE POUR MOTEUR A REACTION**  
[72] SAENZ, JORGE IVAN, US  
[71] AEROCORE TECHNOLOGIES LLC, US  
[22] 2014-10-02  
[41] 2015-04-09  
[62] 3,167,660  
[30] US (61/885,777) 2013-10-02  
[30] US (61/900,749) 2013-11-06

[21] **3,224,940**  
[13] A1

[25] EN  
[54] **MEDICAL DELIVERY DEVICE WITH AXIALLY EXPANDABLE DRIVE RIBBON**  
[54] **DISPOSITIF D'ADMINISTRATION MEDICALE MUNI D'UN RUBAN D'ENTRAINEMENT EXTENSIBLE AXIALEMENT**  
[72] JUDSON, JARED ALDEN, US  
[72] MOULTON, TIMOTHY LEE, US  
[72] PERKINS, RUSSELL WAYNE, US  
[71] ELI LILLY AND COMPANY, US  
[22] 2018-11-30  
[41] 2019-06-13  
[62] 3,083,278  
[30] US (62/596,167) 2017-12-08

[21] **3,224,945**  
[13] A1

[51] **Int.Cl. A61K 31/415 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **SPRAY-DRIED DISPERSIONS, FORMULATIONS, AND POLYMORPHS OF (S)-5-AMINO-3-(4-((5-FLUORO-2-METHOXYBENZAMIDO)METHYL)PHENYL)-1-(1,1,1-TRIFLUOROPROPAN-2-YL)-1H-PYRAZOLE-4-CARBOXAMIDE**  
[54] **DISPERSIONS SECHES PAR PULVERISATION, FORMULATIONS ET POLYMORPHES DE (S)-5-AMINO-3-(4-((5 FLUORO-2-METHOXYBENZAMIDO)METHYL)PHENYL)(1,1,1-TRIFLUOROPROPAN-2-YL)-1H-PYRAZOLE-4-CARBOXAMIDE**  
[72] BRANDHUBER, BARBARA J., US  
[72] BRENT, LAUREN T., US  
[72] EARY, CHARLES TODD, US  
[72] KENNA, ANDREW, US  
[72] KHAN, FIRAS, US  
[72] RENSCHAW, VIVIAN F. H., US  
[72] SPENCER, STACEY RENEE, US  
[71] LOXO ONCOLOGY, INC., US  
[22] 2019-07-29  
[41] 2020-02-06  
[62] 3,108,065  
[30] US (62/712,861) 2018-07-31  
[30] US (62/729,855) 2018-09-11  
[30] US (62/769,308) 2018-11-19

[21] **3,224,948**  
[13] A1

[25] EN  
[54] **LOW POWER NON-VOLATILE NON-CHARGE-BASED VARIABLE SUPPLY RFID TAG MEMORY**  
[54] **MEMOIRE DE BALISE RFID FAIBLE PUISSANCE NON VOLATILE INDEPENDANTE DE LA CHARGE A ALIMENTATION VARIABLE**  
[72] YADEGARI, BEHZAD, CA  
[72] MCGARRY, STEVEN, CA  
[72] ROY, LANGIS, CA  
[71] BEST THERATRONICS LTD., CA  
[22] 2020-09-16  
[41] 2021-03-26  
[62] 3,093,264  
[30] US (62/906,702) 2019-09-26

[21] **3,224,949**  
[13] A1

[51] **Int.Cl. C07D 231/38 (2006.01)**  
[25] EN  
[54] **SPRAY-DRIED DISPERSIONS, FORMULATIONS, AND POLYMORPHS OF (S)-5-AMINO-3-(4-((5-FLUORO-2-METHOXYBENZAMIDO)METHYL)PHENYL)-1-(1,1,1-TRIFLUOROPROPAN-2-YL)-1H-PYRAZOLE-4-CARBOXAMIDE**  
[54] **DISPERSIONS SECHES PAR PULVERISATION, FORMULATIONS ET POLYMORPHES DE (S)-5-AMINO-3-(4-((5 FLUORO-2-METHOXYBENZAMIDO)METHYL)PHENYL)(1,1,1-TRIFLUOROPROPAN-2-YL)-1H-PYRAZOLE-4-CARBOXAMIDE**  
[72] BRANDHUBER, BARBARA J., US  
[72] BRENT, LAUREN T., US  
[72] EARY, CHARLES TODD, US  
[72] KENNA, ANDREW, US  
[72] KHAN, FIRAS, US  
[72] RENSCHAW, VIVIAN F. H., US  
[72] SPENCER, STACEY RENEE, US  
[72] GUISSOT, NICOLAS, US  
[71] LOXO ONCOLOGY, INC., US  
[22] 2019-07-29  
[41] 2020-02-06  
[62] 3,108,065  
[30] US (62/712,861) 2018-07-31  
[30] US (62/729,855) 2018-09-11  
[30] US (62/769,308) 2018-11-19

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

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[21] **3,224,952**  
[13] A1

[25] EN  
[54] **METHODS AND APPARATUS FOR ASPECTS OF A DOSE DETECTION SYSTEM**  
[54] **PROCEDES ET APPAREIL DESTINES A DES ASPECTS D'UN SYSTEME DE DETECTION DE DOSE**  
[72] CORTINOVIS, MARCO, US  
[72] KHANDAGALE, BHAKTI GIRISH, US  
[72] MASSARI, ROSSANO CLAUDIO, US  
[71] ELI LILLY AND COMPANY, US  
[22] 2020-08-19  
[41] 2021-02-25  
[62] 3,148,184  
[30] US (62/889,813) 2019-08-21

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[21] **3,224,953**  
[13] A1

[25] EN  
[54] **DIATOMACEOUS ENERGY STORAGE DEVICES**  
[54] **DISPOSITIFS DE STOCKAGE D'ENERGIE DE DIATOMEES**  
[72] LOCKETT, VERA N., US  
[72] GUSTAFSON, JOHN G., US  
[72] RAY, WILLIAM J., US  
[72] SALAH, YASSER, US  
[71] PRINTED ENERGY PTY LTD, AU  
[22] 2016-06-13  
[41] 2016-12-29  
[62] 2,989,811  
[30] US (14/745,709) 2015-06-22

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[21] **3,224,954**  
[13] A1

[25] EN  
[54] **COMPACT UTILITY LOADER**  
[54] **CHARGEUR UTILITAIRE COMPACT**  
[72] CARLSON, JASON, US  
[72] TAKEMURA, TOSHIHIKO, US  
[72] RELPH, JOHN, US  
[72] SHOBE, MATTHEW, US  
[72] WELSH, JEFF, US  
[71] GREAT PLAINS MANUFACTURING, INC., US  
[22] 2020-07-29  
[41] 2021-02-04  
[62] 3,148,815  
[30] US (62/879,796) 2019-07-29  
[30] US (62/984,476) 2020-03-03

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[21] **3,224,959**  
[13] A1

[51] **Int.Cl. B62D 55/08 (2006.01) B62D 55/06 (2006.01) E02F 3/34 (2006.01) E02F 9/08 (2006.01) E02F 9/20 (2006.01) E02F 9/26 (2006.01)**  
[25] EN  
[54] **COMPACT UTILITY LOADER**  
[54] **CHARGEUR UTILITAIRE COMPACT**  
[72] CARLSON, JASON, US  
[72] TAKEMURA, TOSHIHIKO, US  
[72] RELPH, JOHN, US  
[72] SHOBE, MATTHEW, US  
[72] WELSH, JEFF, US  
[71] GREAT PLAINS MANUFACTURING, INC., US  
[22] 2020-07-29  
[41] 2021-02-04  
[62] 3,148,815  
[30] US (62/879,796) 2019-07-29  
[30] US (62/984,476) 2020-03-03

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[21] **3,224,960**  
[13] A1

[25] EN  
[54] **BACTERIAL ENDOTOXIN READER VERIFICATION PLATES AND METHODS OF USE**  
[54] **PLAQUES DE VERIFICATION DE LECTEUR D'ENDOTOXINES BACTERIENNES ET LEURS PROCEDES D'UTILISATION**  
[72] CLAY, BRIAN, US  
[72] NEEDLE, STAN, US  
[72] FRANASZCZUK, KRZYSZTOF, US  
[71] BL TECHNOLOGIES, INC., US  
[22] 2020-11-18  
[41] 2021-05-27  
[62] 3,158,725  
[30] US (62/936,883) 2019-11-18

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[21] **3,224,965**  
[13] A1

[25] EN  
[54] **TRACKED ALL-TERRAIN VEHICLE**  
[54] **VEHICULE TOUT TERRAIN A CHENILLES**  
[72] BORUD, ERIC J., US  
[72] SAFRANSKI, BRIAN M., US  
[72] BRACHT, BRADLEY A., US  
[71] POLARIS INDUSTRIES INC., US  
[22] 2017-06-20  
[41] 2017-12-28  
[62] 3,146,348  
[30] US (15/187,368) 2016-06-20

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[21] **3,224,977**  
[13] A1

[51] **Int.Cl. A61K 31/55 (2006.01) A61P 31/04 (2006.01) A61P 31/12 (2006.01) A61P 31/18 (2006.01)**  
[25] EN  
[54] **AGENTS AND METHODS FOR MODULATING PATHOGEN ACTIVITY USING LIGANDS OF COMPLEMENT RECEPTOR 3**  
[54] **AGENTS ET METHODES POUR MODULER L'ACTIVITE DE PATHOGENIE AU MOYEN DE LIANTS DU RECEPTEUR DE COMPLEMENT 3**  
[72] JENNINGS, MICHAEL P., AU  
[72] EDWARDS, JENNIFER L., US  
[72] DAY, CHRISTOPHER J., AU  
[72] MAK, JOHNSON, AU  
[71] GRIFFITH UNIVERSITY, AU  
[71] RESEARCH INSTITUTE AT NATIONWIDE CHILDREN'S HOSPITAL, US  
[22] 2019-09-30  
[41] 2020-04-02  
[62] 3,115,048  
[30] US (62/739,025) 2018-09-28



**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] <b>3,224,985</b> [13] A1	[21] <b>3,224,992</b> [13] A1	[21] <b>3,225,012</b> [13] A1
<p>[25] EN</p> <p>[54] <b>SPRAY-DRIED DISPERSIONS, FORMULATIONS, AND POLYMORPHS OF (S)-5-AMINO-3-(4-((5-FLUORO-2-METHOXYBENZAMIDO)METHYL)PHENYL)-1-(1,1,1-TRIFLUOROPROPAN-2-YL)-1H-PYRAZOLE-4-CARBOXAMIDE</b></p> <p>[54] <b>DISPERSIONS SECHEES PAR PULVERISATION, FORMULATIONS ET POLYMORPHIES DE (S)-5-AMINO-3-(4-((5 FLUORO-2-METHOXYBENZAMIDO)METHYL)PHENYL)(1,1,1-TRIFLUOROPROPAN-2-YL)-1H-PYRAZOLE-4-CARBOXAMIDE</b></p> <p>[72] BRANDHUBER, BARBARA J., US</p> <p>[72] BRENT, LAUREN T., US</p> <p>[72] EARY, CHARLES TODD, US</p> <p>[72] KENNA, ANDREW, US</p> <p>[72] KHAN, FIRAS, US</p> <p>[72] RENSCHAW, VIVIAN F. H., US</p> <p>[72] SPENCER, STACEY RENEE, US</p> <p>[71] LOXO ONCOLOGY, INC., US</p> <p>[22] 2019-07-29</p> <p>[41] 2020-02-06</p> <p>[62] 3,108,065</p> <p>[30] US (62/712,861) 2018-07-31</p> <p>[30] US (62/729,855) 2018-09-11</p> <p>[30] US (62/769,308) 2018-11-19</p>	<p>[25] EN</p> <p>[54] <b>DISPENSING ASSEMBLY TO FACILITATE DISPENSING OF FLUID FROM A SAMPLE CYLINDER AND RELATED METHODS</b></p> <p>[54] <b>ASSEMBLAGE DE DISTRIBUTION POUR FACILITER LA DISTRIBUTION DE FLUIDE D'UN CYLINDRE D'ECHANTILLON ET METHODES CONNEXES</b></p> <p>[72] MITZEL, DONALD J., US</p> <p>[72] BENDER IV, GREGORY D., US</p> <p>[72] ANDERSON, ANTHONY D., US</p> <p>[72] MARKINS, ALEX M., US</p> <p>[72] LANGENFELD, JOHN J., US</p> <p>[72] JUSTICE, TAYLER M., US</p> <p>[72] CHAUVIN, JASON M., US</p> <p>[72] FAUCHAUX, MICHAEL, US</p> <p>[72] STEIB, RONALD, US</p> <p>[71] MARATHON PETROLEUM COMPANY LP, US</p> <p>[22] 2022-06-20</p> <p>[41] 2023-03-23</p> <p>[62] 3,164,313</p> <p>[30] US (63/261,566) 2021-09-23</p> <p>[30] US (63/261,874) 2021-09-30</p> <p>[30] US (17/841,992) 2022-06-16</p>	<p>[25] EN</p> <p>[54] <b>COMPACT UTILITY LOADER</b></p> <p>[54] <b>CHARGEUR UTILITAIRE COMPACT</b></p> <p>[72] CARLSON, JASON, US</p> <p>[72] TAKEMURA, TOSHIHIKO, US</p> <p>[72] RELPH, JOHN, US</p> <p>[72] SHOBE, MATTHEW, US</p> <p>[72] WELSH, JEFF, US</p> <p>[71] GREAT PLAINS MANUFACTURING, INC., US</p> <p>[22] 2020-07-29</p> <p>[41] 2021-02-04</p> <p>[62] 3,148,815</p> <p>[30] US (62/879,796) 2019-07-29</p> <p>[30] US (62/984,476) 2020-03-03</p>
[21] <b>3,224,991</b> [13] A1	[21] <b>3,225,003</b> [13] A1	[21] <b>3,225,013</b> [13] A1
<p>[25] EN</p> <p>[54] <b>COMPACT UTILITY LOADER</b></p> <p>[54] <b>CHARGEUR UTILITAIRE COMPACT</b></p> <p>[72] CARLSON, JASON, US</p> <p>[72] TAKEMURA, TOSHIHIKO, US</p> <p>[72] RELPH, JOHN, US</p> <p>[72] SHOBE, MATTHEW, US</p> <p>[72] WELSH, JEFF, US</p> <p>[71] GREAT PLAINS MANUFACTURING, INC., US</p> <p>[22] 2020-07-29</p> <p>[41] 2021-02-04</p> <p>[62] 3,148,815</p> <p>[30] US (62/879,796) 2019-07-29</p> <p>[30] US (62/984,476) 2020-03-03</p>	<p>[51] <b>Int.Cl. B01D 27/08 (2006.01) B01D 46/10 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>SYSTEM AND METHOD FOR CONCENTRATING GAS</b></p> <p>[54] <b>SYSTEME ET PROCEDE DE CONCENTRATION DE GAZ</b></p> <p>[72] YEHYA, HANEEN Y., US</p> <p>[72] VALENTINE, ALEX P., US</p> <p>[72] BUDINGER, MICHAEL J., US</p> <p>[71] VENTEC LIFE SYSTEMS, INC., US</p> <p>[22] 2020-05-19</p> <p>[41] 2020-12-03</p> <p>[62] 3,141,833</p> <p>[30] US (62/853,402) 2019-05-28</p>	<p>[25] EN</p> <p>[54] <b>CONDITIONALLY ACTIVE PROTEINS</b></p> <p>[54] <b>PROTEINES CONDITIONNELLEMENT ACTIVES</b></p> <p>[72] SHORT, JAY M., US</p> <p>[72] CHANG, HWAI WEN, US</p> <p>[72] FREY, GERHARD, US</p> <p>[71] BIOATLA, LLC, US</p> <p>[22] 2016-02-24</p> <p>[41] 2016-09-01</p> <p>[62] 2,977,687</p> <p>[30] US (62/120,312) 2015-02-24</p> <p>[30] US (62/249,907) 2015-11-02</p>
[21] <b>3,225,021</b> [13] A1	[21] <b>3,225,021</b> [13] A1	[21] <b>3,225,021</b> [13] A1
<p>[51] <b>Int.Cl. C01B 32/182 (2017.01) C01B 32/20 (2017.01)</b></p> <p>[25] EN</p> <p>[54] <b>GRAPHENE AND THE PRODUCTION OF GRAPHENE</b></p> <p>[54] <b>GRAPHENE ET PRODUCTION DE GRAPHENE</b></p> <p>[72] HOFFMAN, RENE, DE</p> <p>[72] NEBEL, CHRISTOPH E., DE</p> <p>[72] ROSCHER, SARAH, DE</p> <p>[71] AVADAIN, LLC, US</p> <p>[22] 2016-09-30</p> <p>[41] 2017-08-17</p> <p>[62] 3,013,381</p> <p>[30] DE (10 2016 202 202.4) 2016-02-12</p>	<p>[51] <b>Int.Cl. C01B 32/182 (2017.01) C01B 32/20 (2017.01)</b></p> <p>[25] EN</p> <p>[54] <b>GRAPHENE AND THE PRODUCTION OF GRAPHENE</b></p> <p>[54] <b>GRAPHENE ET PRODUCTION DE GRAPHENE</b></p> <p>[72] HOFFMAN, RENE, DE</p> <p>[72] NEBEL, CHRISTOPH E., DE</p> <p>[72] ROSCHER, SARAH, DE</p> <p>[71] AVADAIN, LLC, US</p> <p>[22] 2016-09-30</p> <p>[41] 2017-08-17</p> <p>[62] 3,013,381</p> <p>[30] DE (10 2016 202 202.4) 2016-02-12</p>	<p>[51] <b>Int.Cl. C01B 32/182 (2017.01) C01B 32/20 (2017.01)</b></p> <p>[25] EN</p> <p>[54] <b>GRAPHENE AND THE PRODUCTION OF GRAPHENE</b></p> <p>[54] <b>GRAPHENE ET PRODUCTION DE GRAPHENE</b></p> <p>[72] HOFFMAN, RENE, DE</p> <p>[72] NEBEL, CHRISTOPH E., DE</p> <p>[72] ROSCHER, SARAH, DE</p> <p>[71] AVADAIN, LLC, US</p> <p>[22] 2016-09-30</p> <p>[41] 2017-08-17</p> <p>[62] 3,013,381</p> <p>[30] DE (10 2016 202 202.4) 2016-02-12</p>

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

[21] **3,225,024**  
[13] A1

[25] EN  
[54] **COMPACT UTILITY LOADER**  
[54] **CHARGEUR UTILITAIRE COMPACT**  
[72] CARLSON, JASON, US  
[72] TAKEMURA, TOSHIHIKO, US  
[72] RELPH, JOHN, US  
[72] SHOBE, MATTHEW, US  
[72] WELSH, JEFF, US  
[71] GREAT PLAINS MANUFACTURING, INC., US  
[22] 2020-07-29  
[41] 2021-02-04  
[62] 3,148,815  
[30] US (62/879,796) 2019-07-29  
[30] US (62/984,476) 2020-03-03

[21] **3,225,026**  
[13] A1

[51] **Int.Cl. G01S 17/08 (2006.01) G01S 17/931 (2020.01) G05D 1/227 (2024.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR SIDELOBE SUPPRESSION IN PHASE ENCODED DOPPLER LIDAR**  
[54] **PROCEDE ET SYSTEME DE SUPPRESSION DE LOBE LATERAL DANS UN LIDAR A EFFET DOPPLER CODE EN PHASE**  
[72] BARBER, ZEB WILLIAM, US  
[72] CROUCH, STEPHEN C., US  
[72] KADLEC, EMIL A., US  
[71] AURORA OPERATIONS, INC., US  
[22] 2020-07-14  
[41] 2021-03-25  
[62] 3,146,414  
[30] US (62/874,351) 2019-07-15

[21] **3,225,027**  
[13] A1

[51] **Int.Cl. A01N 1/02 (2006.01) B01F 35/52 (2022.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR CRYOPRESERVATION AND RESUSPENSION OF BODY FLUIDS**  
[54] **PROCEDES ET SYSTEMES DE CRYOCONSERVATION ET DE REMISE EN SUSPENSION DE LIQUIDES ORGANIQUES**  
[72] DUMONT, LARRY J., US  
[71] VITALANT, US  
[22] 2019-05-28  
[41] 2019-12-05  
[62] 3,101,939  
[30] US (62/678,765) 2018-05-31

[21] **3,225,032**  
[13] A1

[51] **Int.Cl. G01G 19/10 (2006.01)**  
[25] EN  
[54] **BALL MOUNT FOR MEASURING TONGUE WEIGHT OF A TRAILER**  
[54] **SUPPORT A ROTULE POUR MESURER LE POIDS DU TIMON D'UNE REMORQUE**  
[72] MCALLISTER, KEVIN, US  
[71] MCALLISTER, KEVIN, US  
[22] 2015-03-05  
[41] 2015-09-11  
[62] 2,941,614  
[30] US (61/948,487) 2014-03-05  
[30] US (61/948,456) 2014-03-05  
[30] US (14/639,987) 2015-03-05

[21] **3,225,044**  
[13] A1

[51] **Int.Cl. E02D 27/12 (2006.01) E02D 7/22 (2006.01) E02D 27/10 (2006.01) F16B 2/06 (2006.01) F16L 3/10 (2006.01)**  
[25] EN  
[54] **LOAD BEARING CLAMP FOR TRANSMITTING LOADS TO A SHAFT**  
[54] **PINCE PORTE-CHARGE POUR TRANSMETTRE DES CHARGES A UN ARBRE**  
[72] DOWNEY, SHAWN DAVID, US  
[72] KEMP, TIMOTHY MICHAEL, US  
[71] HUBBELL INCORPORATED, US  
[22] 2017-06-13  
[41] 2017-12-21  
[62] 3,027,539  
[30] US (62/349,335) 2016-06-13

[21] **3,225,057**  
[13] A1

[51] **Int.Cl. A61K 47/18 (2017.01) A61K 48/00 (2006.01) A61P 11/00 (2006.01) G01N 33/84 (2006.01)**  
[25] EN  
[54] **TREATMENT OF CILIOPATHIES**  
[54] **TRAITEMENT DE CILIOPATHIE**  
[72] RUDOLPH, CARSTEN, DE  
[72] MUMMERT, VERENA, DE  
[72] KUBISCH-DOHMEN, REBEKKA, DE  
[72] DOHMEN, CHRISTIAN, DE  
[72] GEIGER, JOHANNES, DE  
[72] ANEJA, MANISH, DE  
[72] WEISS, LUDWIG, DE  
[72] OMRAN, HEYMUT, DE  
[72] PENNEKAMP, PETRA, DE  
[72] WOHLGEMUTH, KAI, DE  
[72] CINDRIC, SANDRA, DE  
[72] LOGES, NIKI TOMAS, DE  
[72] RAIDT, JOHANNA, DE  
[72] TER STEEGE, ADRIAN, DE  
[71] ETHRIS GMBH, DE  
[22] 2020-02-13  
[41] 2020-08-20  
[62] 3,129,912  
[30] EP (19 15 7210.6) 2019-02-14

[21] **3,225,087**  
[13] A1

[25] EN  
[54] **COMBUSTION-GAS SUPPLY SYSTEM AND METHOD THEREOF, DEVICE EQUIPPED WITH TURBINE ENGINE, AND FRACTURING SYSTEM**  
[54] **SYSTEME D'ALIMENTATION DE GAZ DE COMBUSTION ET METHODE CONNEXE, DISPOSITIF DOTE D'UNE TURBINE A GAZ ET SYSTEME DE FRACTURATION**  
[72] ZHANG, PENG, CN  
[72] ZHANG, RIKUI, CN  
[72] WANG, JIANWEI, CN  
[72] JI, XIAOLEI, CN  
[72] MAO, ZHUQING, CN  
[71] YANTAI JEREH PETROLEUM EQUIPMENT & TECHNOLOGIES CO., LTD., CN  
[22] 2022-05-26  
[41] 2023-05-09  
[62] 3,160,674  
[30] CN (202111317278.8) 2021-11-09  
[30] CN (202122726296.3) 2021-11-09

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,225,089**  
[13] A1

[25] EN  
[54] **FABRIC NETWORK**  
[54]  
[72] LOGUE, JAY D., US  
[72] ERICKSON, GRANT M., US  
[72] SMITH, ZACHARY B., US  
[72] HARDISON, OSBORNE B., US  
[72] SCHULTZ, RICHARD J., US  
[72] GUJJARU, SUNNY P., US  
[72] NEELEY, MATTHEW G., US  
[71] GOOGLE LLC, US  
[22] 2014-06-23  
[41] 2014-12-31  
[62] 3,131,902  
[30] US (13/926,302) 2013-06-25

[21] **3,225,091**  
[13] A1

[51] **Int.Cl. A01K 67/0275 (2024.01) C07K 14/47 (2006.01) C12N 15/09 (2006.01) C12N 15/12 (2006.01) C12N 15/90 (2006.01) C12Q 1/00 (2006.01)**  
[25] EN  
[54] **HUMANIZED C5 AND C3 ANIMALS**  
[54] **ANIMAUX PORTEURS DES SEQUENCES C5 ET C3 HUMANISEES**  
[72] HU, YING, US  
[72] LATUSZEK, ADRIANNA, US  
[72] CAO, JINGTAI, US  
[72] MUJICA, ALEXANDER, US  
[72] WIEGAND, STANLEY, US  
[72] MCWHIRTER, JOHN, US  
[72] MURPHY, ANDREW, US  
[72] MACDONALD, LYNN, US  
[72] MEAGHER, KAROLINA, US  
[71] REGENERON PHARMACEUTICALS, INC., US  
[22] 2015-05-04  
[41] 2015-11-12  
[62] 2,946,412  
[30] US (61/988,581) 2014-05-05  
[30] US (62/067,836) 2014-10-23

[21] **3,225,136**  
[13] A1

[25] EN  
[54] **METHODS OF CULTURING A MAMMALIAN CELL**  
[54] **PROCEDES DE CULTURE D'UNE CELLULE DE MAMMIFERE**  
[72] HWANG, CHRISTOPHER, US  
[72] JOHNSON, TIMOTHY, US  
[72] WALTHER, JASON, US  
[72] CHENG, CHENG, US  
[72] WANG, JONATHAN, US  
[72] SHAH, NEHA, US  
[72] BAE, SEUL-A, US  
[71] GENZYME CORPORATION, US  
[22] 2015-12-21  
[41] 2016-06-30  
[62] 2,971,861  
[30] US (62/095,734) 2014-12-22

[21] **3,225,148**  
[13] A1

[25] EN  
[54] **APPARATUS, SYSTEM AND METHOD FOR DETECTING AND MONITORING INHALATIONS**  
[54] **APPAREIL, SYSTEME ET PROCEDE POUR DETECTER ET SURVEILLER DES INHALATIONS**  
[72] POCREVA III, JOHN J., US  
[72] ADAMO, BENOIT, US  
[72] LAURENZI, BRENDAN, US  
[72] SMUTNEY, CHAD C., US  
[72] KINSEY, P. SPENCER, US  
[71] MANNKIND CORPORATION, US  
[22] 2017-05-19  
[41] 2017-11-23  
[62] 3,024,721  
[30] US (62/338,971) 2016-05-19

[21] **3,225,151**  
[13] A1

[51] **Int.Cl. G03G 15/04 (2006.01)**  
[25] EN  
[54] **PHOTOSENSITIVE MEMBER UNIT, CARTRIDGE AND ELECTROPHOTOGRAPHIC IMAGE FORMING APPARATUS**  
[54] **UNITE D'ELEMENT PHOTOSENSIBLE, CARTOUCHE ET APPAREIL DE FORMAGE D'IMAGES ELECTROPHOTOGRAPHIQUES**  
[72] MURAKAMI, RYUTA, JP  
[72] HAYASHIDA, MAKOTO, JP  
[72] HAMADA, TAKATOSHI, JP  
[72] NIIKAWA, YUSUKE, JP  
[72] HIRAYAMA, AKINOBU, JP  
[72] FUJINO, TOSHIKI, JP  
[72] KAWAI, TACHIO, JP  
[72] SASAKI, TERUHIKO, JP  
[71] CANON KABUSHIKI KAISHA, JP  
[22] 2021-08-31  
[41] 2022-03-03  
[62] 3,163,571  
[30] JP (2020-145892) 2020-08-31

[21] **3,225,153**  
[13] A1

[25] EN  
[54] **IMPROVEMENTS IN HISTOLOGICAL TISSUE SPECIMEN PROCESSING**  
[54] **AMELIORATIONS DANS LE TRAITEMENT DES SPECIMENS DE TISSUS HISTOLOGIQUES**  
[72] SEARS, GORDON, AU  
[72] DRUMMOND, MICHAEL HOUSTON, AU  
[72] OH-AINLE, DONNCHADH, AU  
[71] LEICA BIOSYSTEMS MELBOURNE PTY LTD, AU  
[22] 2018-08-22  
[41] 2019-02-28  
[62] 3,066,282  
[30] US (62/548,638) 2017-08-22

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[21] **3,225,168**  
[13] A1

[25] EN  
[54] **ELECTRONIC SPECTACLES**  
[54] **LUNETTES ELECTRONIQUES**  
[72] KNOLL, RALF, DE  
[71] INOPTEC LIMITED  
ZWEIGNIEDERLASSUNG  
DEUTSCHLAND, DE  
[22] 2015-05-28  
[41] 2015-12-03  
[62] 2,949,250  
[30] DE (10 2014 107 587.0) 2014-05-28  
[30] DE (10 2014 108 190.0) 2014-06-11

[21] **3,225,180**  
[13] A1

[51] **Int.Cl. C07C 2/82 (2006.01) C07C**  
**7/00 (2006.01) C10G 2/00 (2006.01)**  
[25] EN  
[54] **OXIDATIVE COUPLING OF**  
**METHANE IMPLEMENTATIONS**  
**FOR OLEFIN PRODUCTION**  
[54] **COUPLAGE OXYDATIF**  
**D'IMPLEMENTATIONS**  
**METHANIKES POUR LA**  
**PRODUCTION D'OLEFINES**  
[72] RAFIQUE, HUMERA A., US  
[72] VUDDAGIRI, SRINIVAS, US  
[72] HARRAZ, HATEM, US  
[72] RADAELLI, GUIDO, US  
[72] SCHER, ERIK C., US  
[72] MCCORMICK, JAROD, US  
[72] IYER, RAHUL, US  
[72] DUGGAL, SUCHIA, US  
[72] CIZERON, JOEL, US  
[72] HONG, JIN KI, US  
[71] LUMMUS TECHNOLOGY LLC, US  
[22] 2015-01-08  
[41] 2015-07-16  
[62] 3,148,421  
[30] US (61/925,627) 2014-01-09  
[30] US (61/955,112) 2014-03-18  
[30] US (61/996,789) 2014-05-14  
[30] US (62/050,720) 2014-09-15  
[30] US (62/073,478) 2014-10-31  
[30] US (62/086,650) 2014-12-02

[21] **3,225,226**  
[13] A1

[25] EN  
[54] **SYSTEM FOR MANAGING**  
**ONLINE TRANSACTIONS**  
**INVOLVING VOICE TALENT**  
[54] **SYSTEME DE GESTION DE**  
**TRANSACTIONS EN LIGNE**  
**IMPLIQUANT UN TALENT**  
**VOCAL**  
[72] CICCARELLI, DAVID, CA  
[71] VOICES.COM INC., CA  
[22] 2016-08-31  
[41] 2017-05-30  
[62] 2,941,577  
[30] US (14/954,990) 2015-11-30

[21] **3,225,230**  
[13] A1

[25] EN  
[54] **SYSTEM, METHOD AND NON-**  
**TRANSITORY COMPUTER-**  
**READABLE MEDIUM FOR**  
**CRYPTOCURRENCY MINING**  
[54]  
[72] FRESA, MARC, US  
[71] FRESA, MARC, US  
[22] 2022-04-28  
[41] 2023-02-05  
[62] 3,156,916  
[30] US (63/229,685) 2021-08-05  
[30] US (17/716,651) 2022-04-08

[21] **3,225,243**  
[13] A1

[25] EN  
[54] **REGENERATION OF A**  
**FUNCTIONAL PULMONARY**  
**VASCULAR BED**  
[54] **REGENERATION D'UN LIT**  
**VASCULAIRE PULMONAIRE**  
**FONCTIONNEL**  
[72] REN, XI, US  
[72] OTT, HARALD C., US  
[71] THE GENERAL HOSPITAL  
CORPORATION, US  
[22] 2016-09-09  
[41] 2017-03-16  
[62] 2,998,130  
[30] US (62/217,615) 2015-09-11

[21] **3,225,246**  
[13] A1

[25] EN  
[54] **BIOGENIC ACTIVATED CARBON**  
**AND METHODS OF MAKING AND**  
**USING SAME**  
[54] **CHARBON ACTIF BIOGENE ET**  
**SES PROCEDES DE**  
**FABRICATION ET**  
**D'UTILISATION**  
[72] MENNELL, JAMES A., US  
[72] DESPEN, DANIEL J., US  
[71] CARBON TECHNOLOGY  
HOLDINGS, LLC, US  
[22] 2013-05-07  
[41] 2013-11-14  
[62] 2,873,040  
[30] US (61/643,741) 2012-05-07  
[30] US (61/721,827) 2012-11-02  
[30] US (61/737,514) 2012-12-14

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,225,250**  
[13] A1

[51] **Int.Cl. H01M 50/204 (2021.01) H01M 50/296 (2021.01) H01M 50/298 (2021.01) H01M 50/543 (2021.01) H01M 10/44 (2006.01) H01M 10/46 (2006.01)**

[25] EN

[54] **BATTERY PACK, ELECTRICAL DEVICE USING BATTERY PACK, AND ELECTRICAL DEVICE SYSTEM**

[54] **BLOC-BATTERIE, DISPOSITIF ELECTRIQUE UTILISANT UN BLOC-BATTERIE ET SYSTEME DE DISPOSITIF ELECTRIQUE**

[72] HANAWA, HIROYUKI, JP  
[72] NISHIKAWA, TOMOMASA, JP  
[72] KANNO, SHOTA, JP  
[72] MIZOGUCHI, TOSHIO, JP  
[72] NAKANO, YASUSHI, JP  
[72] FUNABASHI, KAZUHIKO, JP  
[72] TERANISHI, TAKUYA, JP  
[72] WAKATABE, NAOTO, JP  
[72] WATANABE, SHINJI, JP  
[72] SATO, JUNPEI, JP  
[72] TAMURA, HIKARU, JP  
[72] TAKANO, NOBUHIRO, JP  
[72] KAWANOBE, OSAMU, JP  
[72] YAMAGUCHI, HAYATO, JP  
[72] MATSUSHITA, AKIRA, JP  
[72] HIRANO, MASARU, JP  
[72] MURAKAMI, TAKUHIRO, JP  
[72] OGURA, MASAYUKI, JP  
[72] FUNABIKI, YUSUKE, JP  
[72] TOUKAIRIN, JUNICHI, JP  
[72] TAKEUCHI, SHOTA, JP  
[71] KOKI HOLDINGS CO., LTD., JP  
[22] 2017-10-27  
[41] 2018-05-03  
[62] 3,042,164  
[30] JP (2016-213106) 2016-10-31  
[30] JP (2016-213100) 2016-10-31  
[30] JP (2016-213115) 2016-10-31  
[30] JP (2017-118558) 2017-06-16  
[30] JP (2017-141900) 2017-07-21  
[30] JP (2017-155368) 2017-08-10

[21] **3,225,251**  
[13] A1

[25] EN

[54] **HERMETICALLY SEALED HYDROPHONES WITH VERY LOW ACCELERATION SENSITIVITY**

[54] **HERMETHIQUES SCÉLÉES HERMETIQUEMENT A TRES FAIBLE SENSIBILITE A L'ACCELERATION**

[72] GOENNER, MATTHEW, US  
[72] MARIN, MIHAELA, US  
[71] AMPHENOL (MARYLAND), INC., US  
[22] 2016-11-08  
[41] 2017-05-16  
[62] 2,947,793  
[30] US (62/255,888) 2015-11-16

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[21] **3,225,260**  
[13] A1

[51] **Int.Cl. G08B 25/10 (2006.01)**

[25] EN

[54] **PROVIDING INTERNET ACCESS THROUGH A PROPERTY MONITORING SYSTEM**

[54] **FOURNITURE D'UN ACCES A INTERNET PAR L'INTERMEDIAIRE D'UN SYSTEME DE SURVEILLANCE DE PROPRIETE**

[72] MARTIN, JEAN-PAUL, US  
[71] ALARM.COM INCORPORATED, US  
[22] 2016-03-14  
[41] 2016-09-15  
[62] 2,979,411  
[30] US (62/132,452) 2015-03-12

[21] **3,225,288**  
[13] A1

[51] **Int.Cl. G06T 9/00 (2006.01)**

[25] EN

[54] **IMAGE ENCODING/DECODING METHOD AND DEVICE USING LOSSLESS COLOR TRANSFORM, AND METHOD FOR TRANSMITTING BITSTREAM**

[54] **PROCEDE ET DISPOSITIF DE CODAGE/DECODAGE D'IMAGE UTILISANT UNE TRANSFORMATION DE COULEUR SANS PERTE, ET PROCEDE DE TRANSMISSION DE TRAIN DE BITS**

[72] ZHAO, JIE, KR  
[72] KIM, SEUNG HWAN, KR  
[72] SALEHIFAR, MEHDI, KR  
[71] LG ELECTRONICS INC., KR  
[22] 2020-11-20  
[41] 2021-05-27  
[62] 3,162,583  
[30] US (62/939,530) 2019-11-22

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

	[21] 3,225,289 [13] A1	[21] 3,225,293 [13] A1	[21] 3,225,298 [13] A1
<p>[25] EN</p> <p>[54] <b>HOME MEDICAL DEVICE SYSTEMS AND METHODS FOR THERAPY PRESCRIPTION AND TRACKING, SERVICING AND INVENTORY</b></p> <p>[54] <b>SYSTEMES ET PROCEDES DE DISPOSITIF MEDICAL A DOMICILE POUR UNE PRESCRIPTION ET UN SUIVI, UN SERVICE ET UN INVENTAIRE DE THERAPIE</b></p> <p>[72] MILLER, JOSHUA JAMES, US</p> <p>[72] WIEBENSON, DEREK, CH</p> <p>[72] WILKERSON, DOUGLAS L., US</p> <p>[72] TIWARI, NEIL, US</p> <p>[72] ROBINSON, TIMOTHY G., US</p> <p>[72] MINKUS, MARC STEVEN, US</p> <p>[72] MULLER, MATTHEW R., US</p> <p>[72] WELLINGS, ANDERS J., US</p> <p>[72] HANSBRO, KATHRYN LOUISE, US</p> <p>[72] CIZMAN, BORUT, US</p> <p>[72] KUNZEMAN, BRIAN S., US</p> <p>[72] COOPER, ROBIN D., US</p> <p>[72] KUDELKA, TIMOTHY L., US</p> <p>[72] SARTO, ANGELO A., US</p> <p>[72] LINDO, STEVE JOSEPH, US</p> <p>[72] BAUSTAD, JOSTEIN, US</p> <p>[72] MOUNTS, DUSTON, US</p> <p>[72] HILL, SHAFALI, US</p> <p>[71] BAXTER HEALTHCARE SA, CH</p> <p>[71] BAXTER INTERNATIONAL INC., US</p> <p>[22] 2013-05-14</p> <p>[41] 2013-11-21</p> <p>[62] 3,062,217</p> <p>[30] US (61/647,340) 2012-05-15</p> <p>[30] US (13/828,900) 2013-03-14</p>	<p>[21] 3,225,289 [13] A1</p>	<p>[51] <b>Int.Cl. C07D 471/04 (2006.01) A61K 31/519 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>SOLID STATE FORMS</b></p> <p>[54] <b>CHAVES, MARY, US</b></p> <p>[72] LOPEZ, PATRICIA, US</p> <p>[72] AGARWAL, PRASHANT, US</p> <p>[72] AMEGADZIE, ALBERT, US</p> <p>[72] AZALI, STEPHANIE, US</p> <p>[72] SHIMANOVICH, ROMAN, US</p> <p>[72] KELLY, RON C., US</p> <p>[72] REID, DARREN LEONARD, US</p> <p>[71] AMGEN INC., US</p> <p>[22] 2020-05-20</p> <p>[41] 2020-11-26</p> <p>[62] 3,140,392</p> <p>[30] US (62/851,044) 2019-05-21</p>	<p>[25] EN</p> <p>[54] <b>SURFACE CLEANING APPARATUS</b></p> <p>[54] <b>APPAREIL DE NETTOYAGE DE SURFACE</b></p> <p>[72] CONRAD, WAYNE ERNEST, CA</p> <p>[71] OMACHRON INTELLECTUAL PROPERTY INC., CA</p> <p>[22] 2020-06-10</p> <p>[41] 2020-12-17</p> <p>[62] 3,162,847</p> <p>[30] US (16/440,725) 2019-06-13</p> <p>[30] US (16/440,701) 2019-06-13</p> <p>[30] US (16/440,657) 2019-06-13</p> <p>[30] US (16/440,590) 2019-06-13</p>
<p>[25] EN</p> <p>[54] <b>CONNECTOR SYSTEM FOR HAND-HELD SPRAY GUNS</b></p> <p>[54] <b>SYSTEME DE RACCORD POUR PISTOLETS DE PULVERISATION PORTABLES</b></p> <p>[72] EBERTOWSKI, ALEXANDER T., US</p> <p>[72] HENRY, ANDREW R., GB</p> <p>[72] JOSEPH, STEPHEN C. P., US</p> <p>[72] HEGDAHL, ANNA M., US</p> <p>[71] 3M INNOVATIVE PROPERTIES COMPANY, US</p> <p>[22] 2017-01-12</p> <p>[41] 2017-07-20</p> <p>[62] 3,011,430</p> <p>[30] US (62/279,619) 2016-01-15</p> <p>[30] US (62/322,492) 2016-04-14</p>	<p>[21] 3,225,295 [13] A1</p>	<p>[25] EN</p> <p>[54] <b>MACROPINOCYTOSING HUMAN ANTI-CD46 ANTIBODIES AND TARGETED CANCER THERAPEUTICS</b></p> <p>[54] <b>ANTICORPS ANTI-CD46 HUMAINS FORMANT DES MACROPI NOSOMES ET AGENTS THERAPEUTIQUES ANTI-CANCEREUX CIBLES</b></p> <p>[72] LIU, BIN, US</p> <p>[72] SU, YANG, US</p> <p>[72] BIDLINGMAIER, SCOTT, US</p> <p>[72] BEHRENS, CHRISTOPHER R., US</p> <p>[72] LEE, NAMKYUNG, US</p> <p>[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US</p> <p>[22] 2015-09-10</p> <p>[41] 2016-03-17</p> <p>[62] 2,960,282</p> <p>[30] US (62/049,973) 2014-09-12</p>	<p>[21] 3,225,300 [13] A1</p>
<p>[25] EN</p> <p>[54] <b>COMPOSITION OF CATALYSTS FOR CONVERSION OF ETHANOL TO N-BUTANOL AND HIGHER ALCOHOLS</b></p> <p>[54] <b>COMPOSITION DE CATALYSEURS POUR LA CONVERSION D'ETHANOL EN N-BUTANOL ET ALCOOLS A HAUT POIDS MOLECULAIRE</b></p> <p>[72] VINCENTE, BRIAN CHRISTOPHER, US</p> <p>[72] STOIMENOV, PETER K., US</p> <p>[71] VIRIDIS CHEMICAL, LLC, US</p> <p>[22] 2016-08-19</p> <p>[41] 2017-02-23</p> <p>[62] 2,994,846</p> <p>[30] US (62/207,157) 2015-08-19</p>	<p>[21] 3,225,290 [13] A1</p>	<p>[25] EN</p> <p>[54] <b>COMPOSITION OF CATALYSTS FOR CONVERSION OF ETHANOL TO N-BUTANOL AND HIGHER ALCOHOLS</b></p> <p>[54] <b>COMPOSITION DE CATALYSEURS POUR LA CONVERSION D'ETHANOL EN N-BUTANOL ET ALCOOLS A HAUT POIDS MOLECULAIRE</b></p> <p>[72] VINCENTE, BRIAN CHRISTOPHER, US</p> <p>[72] STOIMENOV, PETER K., US</p> <p>[71] VIRIDIS CHEMICAL, LLC, US</p> <p>[22] 2016-08-19</p> <p>[41] 2017-02-23</p> <p>[62] 2,994,846</p> <p>[30] US (62/207,157) 2015-08-19</p>	<p>[21] 3,225,290 [13] A1</p>

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,225,313**  
[13] A1

[51] **Int.Cl. C09K 8/80 (2006.01) C04B 41/83 (2006.01)**

[25] EN

[54] **PROPPANT COMPOSITION COMPRISING A CHEMICAL TRACER AND USE THEREOF FOR HYDRAULIC FRACTURING**

[54] **COMPOSITION D'AGENT DE SOUTÈNEMENT COMPORTANT UN TRACEUR CHIMIQUE ET UTILISATION CONNEXE POUR LA FRACTURATION HYDRAULIQUE**

[72] DUENCKEL, ROBERT, US  
[72] CONNER, MARK, US  
[72] CANNAN, CHAD, US  
[72] CADY, DANIEL, US  
[72] LEASURE, JOSHUA, US  
[72] LIENG, THU, US  
[72] ROPER, TODD, US  
[72] READ, PETER A., GB  
[71] CARBO CERAMICS INC., US  
[22] 2014-03-14  
[41] 2014-09-18  
[62] 2,904,153  
[30] US (61/787,724) 2013-03-15  
[30] US (61/803,652) 2013-03-20  
[30] US (61/883,788) 2013-09-27  
[30] US (61/885,334) 2013-10-01  
[30] US (61/914,441) 2013-12-11  
[30] US (61/929,761) 2014-01-21

[21] **3,225,314**  
[13] A1

[51] **Int.Cl. A24D 1/04 (2006.01) A24D 1/20 (2020.01) A24D 3/02 (2006.01) A24F 47/00 (2020.01) A61M 11/04 (2006.01) A61M 15/06 (2006.01)**

[25] EN

[54] **AN AEROSOL GENERATING COMPONENT FOR A TOBACCO HEATING DEVICE AND A MOUTHPIECE THEREFOR**

[54] **COMPOSANT DE GENERATION D'AEROSOL POUR UN DISPOSITIF DE CHAUFFAGE DE TABAC ET EMBOUT BUCCAL ASSOCIE**

[72] HEPWORTH, RICHARD, GB  
[72] GOMEZ, PABLO JAVIER BALLESTEROS, GB  
[72] BRANTON, PETER JAMES, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[22] 2019-06-26  
[41] 2020-01-02  
[62] 3,104,420  
[30] GB (1810738.3) 2018-06-29

[21] **3,225,315**  
[13] A1

[51] **Int.Cl. G01J 3/443 (2006.01) G01N 21/63 (2006.01)**

[25] EN

[54] **INDEXING SIGNAL DETECTION MODULE**

[54] **MODULE DE DETECTION DE SIGNAUX D'INDEXATION**

[72] HAGEN, NORBERT D., US  
[72] OPALSKY, DAVID, US  
[71] GEN-PROBE INCORPORATED, US  
[22] 2014-03-07  
[41] 2014-10-02  
[62] 2,900,562  
[30] US (61/782,340) 2013-03-14

[21] **3,225,323**  
[13] A1

[25] EN

[54] **SYSTEMS AND METHODS FOR DYNAMIC SORTATION OF OBJECTS WITH RECIPROCATING CARRIAGES**

[54] **SYSTEMES ET PROCEDES DE TRI DYNAMIQUE D'OBJETS AVEC DES CHARIOTS A VA-ET-VIENT**

[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  
[71] BERKSHIRE GREY OPERATING COMPANY, INC., US  
[22] 2016-12-01  
[41] 2017-06-08  
[62] 3,139,152  
[30] US (62/263,050) 2015-12-04  
[30] US (62/265,181) 2015-12-09  
[30] US (15/241,779) 2016-08-19

[21] **3,225,369**  
[13] A1

[25] EN

[54] **LIQUID LEVEL SENSING DEVICE**

[54] **DISPOSITIF DE DETECTION DE NIVEAU DE LIQUIDE**

[72] BAKER, DAVID, US  
[71] LAT-LON LLC, US  
[22] 2016-09-28  
[41] 2017-03-30  
[62] 2,943,497  
[30] US (14/870,974) 2015-09-30

[21] **3,225,374**  
[13] A1

[25] EN

[54] **METHODS OF DIAGNOSING AND TREATING TOURETTE SYNDROME**

[54] **METHODES DE DIAGNOSTIC ET DE TRAITEMENT DU SYNDROME DE GILLES DE LA TOURETTE**

[72] HAKONARSON, HAKON, US  
[72] KAO, CHARILY, US  
[71] THE CHILDREN'S HOSPITAL OF PHILADELPHIA, US  
[22] 2016-09-07  
[41] 2017-03-16  
[62] 2,997,187  
[30] US (62/215,628) 2015-09-08  
[30] US (62/215,633) 2015-09-08  
[30] US (62/215,636) 2015-09-08  
[30] US (62/215,673) 2015-09-08

[21] **3,225,411**  
[13] A1

[25] EN

[54] **RADIO CHANNEL UTILIZATION**

[54] **UTILISATION DE CANAL RADIO**

[72] HASSAN, AMER A., US  
[72] MITCHELL, PAUL W. A., US  
[72] GARNETT, PAUL W., US  
[71] MICROSOFT TECHNOLOGY LICENSING, LLC, US  
[22] 2014-10-01  
[41] 2015-04-16  
[62] 2,924,502  
[30] US (14/049,129) 2013-10-08

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

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[21] **3,225,412**  
[13] A1

[25] EN  
[54] **IMPLANTABLE DEVICE FOR EXTERNAL URINARY CONTROL**  
[54] **DISPOSITIF IMPLANTABLE PERMETTANT DE MAITRISER LA MICTION DE FACON EXTERNE**  
[72] FORSELL, PETER, CH  
[71] IMPLANTICA PATENT LTD., MT  
[22] 2019-06-14  
[41] 2019-12-26  
[62] 3,104,442  
[30] US (16/015,861) 2018-06-22

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[21] **3,225,421**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR REPLACING A STORED VERSION OF MEDIA WITH A VERSION BETTER SUITED FOR A USER**  
[54] **SYSTEMES ET PROCEDES PERMETTANT DE REMPLACER UNE VERSION STOCKEE DE CONTENU MULTIMEDIA AVEC UNE VERSION MIEUX ADAPTEE A UN UTILISATEUR**  
[72] PANCHAKSHARAI AH, VISHWAS SHARADANAGAR, IN  
[72] DHARWA, ASHWINI, IN  
[71] ROVI GUIDES, INC., US  
[22] 2017-06-28  
[41] 2019-01-03  
[62] 3,065,108

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[21] **3,225,456**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01) A61K 35/12 (2015.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **HUMAN MESOTHELIN CHIMERIC ANTIGEN RECEPTORS AND USES THEREOF**  
[54] **RECEPTEURS ANTIGENIQUES CHIMERIQUES DE LA MESOTHELINE HUMAINE ET LEURS UTILISATIONS**  
[72] BEATTY, GREGORY, US  
[72] ENGELS, BORIS, US  
[72] IDAMAKANTI, NEERAJA, US  
[72] JUNE, CARL H., US  
[72] LOEW, ANDREAS, US  
[72] SONG, HUIJUAN, CN  
[72] WU, QILONG, US  
[71] NOVARTIS AG, CH  
[71] THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, US  
[22] 2014-12-19  
[41] 2015-06-25  
[62] 2,931,684  
[30] CN (PCT/CN2013/089979) 2013-12-19  
[30] CN (PCT/CN2014/082610) 2014-07-21  
[30] CN (PCT/CN2014/090509) 2014-11-06

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[21] **3,225,461**  
[13] A1

[25] EN  
[54] **NEUTRON IMAGING SYSTEMS AND METHODS**  
[54] **SYSTEMES ET METHODES D'IMAGERIE PAR NEUTRONS**  
[72] RADEL, ROSS, US  
[72] SENGBUSCH, EVAN, US  
[72] TAYLOR, MICHAEL, US  
[72] SEYFERT, CHRISTOPHER M., US  
[72] MOLL, ELI, US  
[72] JACOBSON, LUCAS, US  
[71] PHOENIX LLC, US  
[22] 2019-04-11  
[41] 2019-10-17  
[62] 3,096,470  
[30] US (62/655,928) 2018-04-11

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[21] **3,225,480**  
[13] A1

[25] EN  
[54] **HIGH SURFACE-AREA LYOPHILIZED COMPOSITIONS COMPRISING ARSENIC FOR ORAL ADMINISTRATION IN PATIENTS**  
[54] **COMPOSITIONS LYOPHILISEES A SURFACE SPECIFIQUE ELEVEE COMPRENANT DE L'ARSENIC DESTINEES A UNE ADMINISTRATION ORALE CHEZ DES PATIENTS**  
[72] KURUMADDALI, KUMAR, US  
[72] VADDI, KRISHNA, US  
[71] SYROS PHARMACEUTICALS, INC., US  
[22] 2016-02-01  
[41] 2016-08-04  
[62] 2,975,406  
[30] US (62/110,574) 2015-02-01  
[30] US (62/142,709) 2015-04-03

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[21] **3,225,485**  
[13] A1

[25] EN  
[54] **IMPROVED SUBBAND BLOCK BASED HARMONIC TRANSPOSITION**  
[54] **TRANSPOSITION 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] 3,200,142  
[30] US (61/296241) 2010-01-19  
[30] US (61/331545) 2010-05-05

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**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

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[21] **3,225,495**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 31/04 (2006.01) A61P 31/12 (2006.01) A61P 31/16 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR TARGETING OF THE SURFACTANT PROTEIN A RECEPTOR**

[54] **COMPOSITIONS ET PROCEDES DE CIBLAGE DU RECEPTEUR DE PROTEINE TENSIOACTIVE A**

[72] CHRONEOS, ZISSIS, US

[72] CHRISTENSEN, NEIL, US

[71] THE PENN STATE RESEARCH FOUNDATION, US

[22] 2015-07-14

[41] 2016-01-21

[62] 2,954,518

[30] US (62/024,314) 2014-07-14

[30] US (62/121,830) 2015-02-27

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[21] **3,225,501**  
[13] A1

[25] EN

[54] **SYSTEM AND METHOD FOR A HASH TABLE AND DATA STORAGE AND ACCESS USING THE SAME**

[54] **SYSTEME ET PROCEDE POUR UNE TABLE DE HACHAGE ET STOCKAGE DE DONNEES ET ACCES AUX DONNEES LES UTILISANT**

[72] HELLER, STEVE, US

[71] 2MISSES CORPORATION, US

[22] 2021-02-09

[41] 2021-08-19

[62] 3,167,185

[30] US (63/205,633) 2020-02-10

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[21] **3,225,524**  
[13] A1

[25] EN

[54] **DELIVERY MANAGEMENT SYSTEMS AND METHODS FOR ZERO-INVENTORY DISTRIBUTION**

[54] **SYSTEMES ET PROCEDES DE GESTION DE LIVRAISON POUR DISTRIBUTION POUR LA DISTRIBUTION SANS INVENTAIRE**

[72] LADDEN, DOUGLAS M., US

[72] MERIANS, RICHARD, US

[72] ANAVIM, ORI, US

[71] DELIVERIGHT LOGISTICS, INC., US

[22] 2015-11-20

[41] 2016-05-26

[62] 3,004,410

[30] US (62/082,961) 2014-11-21

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[21] **3,225,539**  
[13] A1

[25] EN

[54] **METHODS AND COMPOSITIONS FOR ASSESSING LUNG GRAFTS**

[54] **PROCEDES ET COMPOSITIONS POUR L'EVALUATION DE GREFFONS DE POUMON**

[72] KESHAVJEE, SHAFIQUE, CA

[72] LIU, MINGYAO, CA

[72] CYPEL, MARCELO, CA

[71] UNIVERSITY HEALTH NETWORK, CA

[22] 2014-02-20

[41] 2014-08-28

[62] 2,935,866

[30] US (61/766,862) 2013-02-20

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[21] **3,225,544**  
[13] A1

[51] **Int.Cl. B01J 3/04 (2006.01)**

[25] EN

[54] **DATA LOGGER FOR DENTAL OR MEDICAL AUTOCLAVE**

[54] **REGISTRE DE DONNEES D'UN AUTOCLAVE DENTAIRE OU MEDICAL**

[72] PEDERSEN, FRANK, CA

[71] ALPHA MICRO TECH INC., CA

[22] 2019-03-21

[41] 2019-09-22

[62] 3,037,519

[30] CA (2998927) 2018-03-22

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BAUER HOCKEY LTD.	3,206,434	CRIDLAND, BRADLEY	3,191,567	JR.	3,206,581
BEAUREGARD, MARCO	3,206,434	CUKADAR, BELGIN	3,206,071	GENEOMAT	3,205,395
BECKERS, FRANCIS	3,206,409	CUNNEY, KIERAN PATRICK	3,177,663	GENWIRE LLC	3,177,931
BEG, AZAM	3,200,414	CURTIS, CALEB	3,205,988	GEORG FISCHER	
BEKOSCKE, ROBERT A.	3,168,572	CUSON, ROBERT L.	3,168,572	ROHRLEITUNGSSYSTEM	
BEN ARI, TAL	3,200,033	DANIELSSON, ANTON	3,205,836	E AG	3,205,279
BLOOM ENERGY		DASHTAKI, MOHAMMAD		GILB, ANDREW	3,198,192
CORPORATION	3,205,914	GHADIR KHOSHKHOLGH	3,205,762	GILB, ANDREW	3,199,326
BMIC LLC	3,205,826	DAVIES, STEPHEN HARLOW	3,201,885	GOMEZ DEL VALLE, JAVIER	
BOLLOT, BENJAMIN		DAVINCI LOCK LLC	3,197,451	CARLOS	3,205,495
SAYSANA	3,218,714	DAVIS, BRETT ALLEN	3,206,581	GONTCHAROV, ALEXANDER	
BOMBARDIER INC.	3,205,794	DEERE & COMPANY	3,202,080	B.	3,194,794
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BORROWMAN, WAYNE	3,205,863	DESHPANDE, AJINKYA	3,206,072	SYSTEMS LIMITED	3,201,885
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TAKEMURA, TOSHIHIKO	3,224,991				
TAKEMURA, TOSHIHIKO	3,225,012				
TAKEMURA, TOSHIHIKO	3,225,024				
TAKEUCHI, SHOTA	3,225,250				
TAMURA, HIKARU	3,225,250				
TAYLOR, MICHAEL	3,225,461				