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# The Patent

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du Bureau des brevets



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Canada



# THE CANADIAN PATENT OFFICE RECORD

## LA GAZETTE DU BUREAU DES BREVETS

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

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

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

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

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## Notices

## Avis

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

#### Dates

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

#### Code Numerals

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

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

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

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

#### Dates

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

#### Chiffres de code

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

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

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

## 2. Country Code

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

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

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

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

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

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

## 2. Code des pays

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

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

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

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

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

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

## 5. Advice on Making a Patent Application

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

## 6. Licensing of Patents

### Voluntary Licences

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

### Compulsory Licences

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

## 7. Patents Available for Licence or Sale

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

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

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

None

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

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

## 6. Octroi de licences en vertu des brevets

### Licences librement accordées

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

### Licences obligatoires

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

## 7. Brevets disponibles pour licence ou vente

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

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

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

Aucun

## 9. Applications Open to Public Inspection

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

## 10. Language of Published Documents

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

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

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

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

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

## 9. Demandes mises à la disponibilité du public

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

## 10. Langue du document publié

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

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

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

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

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

## 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.

### 4. Late payment fee

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

### Preliminary Examination

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

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

\* International fees will be reduced by:

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

## 12. PCT Notices

### Patent Cooperation Treaty (PCT)

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

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

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

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

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

### 4. Taxe pour paiement tardif

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

### Examen préliminaire

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

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

\* Les frais seront réduits de:

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

## 12. Avis PCT

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

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

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

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

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



### 13. Practice Notice

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

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

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

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

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

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

### 13. Énoncé de pratique

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

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

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

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

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

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

## 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>

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

## Notices

### 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



## Avis

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 December 14, 2021 contains applications open to public inspection from November 28, 2021 to December 4, 2021.

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

La *Gazette du bureau des brevets* du 14 décembre 2021 contient les demandes disponibles au public pour consultation pour la période du 28 novembre 2021 au 4 décembre 2021.

# Canadian Patents Issued

December 14, 2021

## Brevets canadiens délivrés

14 décembre 2021

---

[11] **2,623,268**  
[13] C  
[51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6813 (2018.01) C12Q 1/6827 (2018.01) C12M 1/34 (2006.01) C12N 15/10 (2006.01) G01N 33/557 (2006.01)**  
[25] EN  
[54] **MELTING CURVE ANALYSIS WITH EXPONENTIAL BACKGROUND SUBTRACTION**  
[54] **ANALYSE DE COURBE DE FUSION AVEC SOUSTRACTION DE FOND EXPONENTIELLE**  
[72] PALAIS, ROBERT ANDREW, US  
[72] WITTWER, CARL THOMAS, US  
[73] UNIVERSITY OF UTAH RESEARCH FOUNDATION, US  
[85] 2008-03-20  
[86] 2006-09-20 (PCT/US2006/036605)  
[87] (WO2007/035806)  
[30] US (60/719,250) 2005-09-20

---

[11] **2,706,550**  
[13] C  
[51] **Int.Cl. C07K 14/435 (2006.01)**  
[25] EN  
[54] **POLYPEPTIDES COMPRISING AN ICE-BINDING ACTIVITY**  
[54] **POLYPEPTIDES COMPRENANT UNE ACTIVITE DE LIAISON A LA GLACE**  
[72] RAMLOEV, HANS, DK  
[72] WILKENS, CASPER, DK  
[72] LOEBNER-OLESEN, ANDERS, DK  
[73] ROSKILDE UNIVERSITET, DK  
[85] 2010-05-21  
[86] 2008-11-21 (PCT/DK2008/050278)  
[87] (WO2009/065415)  
[30] DK (PA 2007 01656) 2007-11-21  
[30] US (61/003,979) 2007-11-21

---

[11] **2,784,807**  
[13] C  
[51] **Int.Cl. C07D 403/12 (2006.01) A61K 31/4965 (2006.01) A61K 31/497 (2006.01) A61P 35/00 (2006.01) C07D 241/20 (2006.01)**  
[25] EN  
[54] **TYPE II RAF KINASE INHIBITORS**  
[54] **INHIBITEURS DE KINASE RAF DE TYPE II**  
[72] GRAY, NATHANAEL S., US  
[73] DANA-FARBER CANCER INSTITUTE, INC., US  
[85] 2012-06-15  
[86] 2010-12-29 (PCT/US2010/062310)  
[87] (WO2011/090738)  
[30] US (61/290,884) 2009-12-29

---

[11] **2,789,051**  
[13] C  
[51] **Int.Cl. A61B 5/00 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR MULTI-SPECTRAL PHOTONIC IMAGING**  
[54] **METHODE ET DISPOSITIF D'IMAGERIE PHOTONIQUE MULTISPECTRALE**  
[72] NTZIACHRISTOS, VASILIS, DE  
[72] THEMELIS, GEORGE, DE  
[73] HELMHOLTZ ZENTRUM MUENCHEN DEUTSCHES FORSCHUNGSZENTRUM FUER GESUNDHEIT UND UMWELT (GMBH), DE  
[85] 2012-08-02  
[86] 2010-11-15 (PCT/EP2010/006937)  
[87] (WO2011/098101)  
[30] US (61/304,008) 2010-02-12  
[30] EP (10001478.6) 2010-02-12

---

[11] **2,801,579**  
[13] C  
[51] **Int.Cl. A61K 38/16 (2006.01) A61K 38/17 (2006.01) A61P 3/00 (2006.01) A61P 3/10 (2006.01) A61P 17/00 (2006.01)**  
[25] EN  
[54] **METHODS FOR TREATMENT OF NEPHROTIC SYNDROME AND RELATED CONDITIONS**  
[54] **METHODES DE TRAITEMENT DU SYNDROME NEPHROTIQUE ET ETATS APPARENTES**  
[72] CHUGH, SUMANT, US  
[73] CHUGH, SUMANT S., US  
[85] 2012-12-03  
[86] 2011-06-06 (PCT/US2011/039255)  
[87] (WO2011/153525)  
[30] US (61/351,866) 2010-06-05

---

[11] **2,805,223**  
[13] C  
[51] **Int.Cl. H04L 27/26 (2006.01) H04B 7/26 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR MULTIPLEXING ACKNOWLEDGEMENT SIGNALS AND SOUNDING REFERENCE SIGNALS**  
[54] **PROCEDE ET SYSTEME DE MULTIPLEXAGE DE SIGNAUX D'ACCUSE DE RECEPTION ET DE SIGNAUX DE REFERENCE DE SONDAGE**  
[72] NAM, YOUNG HAN, US  
[72] ZHANG, JIANZHONG, US  
[73] SAMSUNG ELECTRONICS CO., LTD., KR  
[85] 2013-01-11  
[86] 2011-07-14 (PCT/KR2011/005192)  
[87] (WO2012/008777)  
[30] US (61/365,272) 2010-07-16  
[30] US (61/382,396) 2010-09-13  
[30] US (13/175,656) 2011-07-01

**Brevets canadiens délivrés  
14 décembre 2021**

---

[11] **2,822,901**  
[13] C

[51] **Int.Cl. G06Q 30/00 (2012.01)**  
[25] EN  
[54] **DYNAMIC INTERACTIVE SEAT  
MAP**  
[54] **CARTE DE SIEGES INTERACTIVE  
DYNAMIQUE**  
[72] SALLES, BENJAMIN, US  
[73] STUBHUB, INC., US  
[85] 2013-06-21  
[86] 2011-12-27 (PCT/US2011/067410)  
[87] (WO2012/092287)  
[30] US (12/979,289) 2010-12-27

---

[11] **2,826,517**  
[13] C

[51] **Int.Cl. G06Q 20/32 (2012.01) H04W  
8/20 (2009.01) G06Q 30/06 (2012.01)  
H04W 4/021 (2018.01) B60S 3/04  
(2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR  
FACILITATING PURCHASES AT  
A GAS STATION VIA MOBILE  
COMMERCE**  
[54] **SYSTEMES ET METHODES  
FACILITANT LES ACHATS PAR  
TRANSACTION MOBILE A UN  
POSTE D'ESSENCE**  
[72] SANCHEZ, J. SCOTT, US  
[72] ROYYURU, VIJAY KUMAR, US  
[72] ADKISSON, BRENT DEWAYNE, US  
[73] FIRST DATA CORPORATION, US  
[86] (2826517)  
[87] (2826517)  
[22] 2013-09-11  
[30] US (61/699,728) 2012-09-11  
[30] US (61/799,676) 2013-03-15

---

[11] **2,836,398**  
[13] C

[51] **Int.Cl. A61K 9/00 (2006.01) A61K  
9/06 (2006.01) A61K 31/568 (2006.01)  
A61P 5/26 (2006.01)**  
[25] EN  
[54] **INTRANASAL TESTOSTERONE  
BIO-ADHESIVE GEL  
FORMULATIONS AND USE  
THEREOF FOR TREATING MALE  
HYPOGONADISM**  
[54] **FORMULATIONS INTRANASALES  
BIO-ADHESIVES DE GEL DE  
TESTOSTERONE ET LEUR  
UTILISATION POUR TRAITER  
L'HYPOGONADISME CHEZ LES  
HOMMES**  
[72] KREPPNER, WAYNE, CA  
[72] FOGARTY, SIOBHAN, IE  
[72] OBEREGGER, WERNER, CA  
[72] MAES, PAUL JOSE PIERRE MARIE,  
BE  
[73] ACERUS BIOPHARMA INC., CA  
[85] 2013-11-15  
[86] 2012-05-15 (PCT/IB2012/001112)  
[87] (WO2012/156820)  
[30] US (61/486,324) 2011-05-15  
[30] US (61/486,634) 2011-05-16

---

[11] **2,837,324**  
[13] C

[51] **Int.Cl. G09B 19/00 (2006.01) A61B  
50/30 (2016.01) A61B 50/33 (2016.01)  
A61B 90/90 (2016.01) B42D 15/02  
(2006.01) G09B 19/24 (2006.01) G09F  
1/04 (2006.01)**  
[25] EN  
[54] **MEDICAL KIT, PACKAGING  
SYSTEM, INSTRUCTION INSERT,  
AND ASSOCIATED METHODS**  
[54] **TROUSSE MEDICALE, SYSTEME  
D'EMBALLAGE, INSERT  
D'INSTRUCTIONS ET PROCEDES  
ASSOCIES**  
[72] MACINNES, SUSAN E., US  
[72] TOMES, JENNIFER E., US  
[72] ZYBURT, SARAH, US  
[73] MEDLINE INUDSTRIES, LP, US  
[85] 2013-11-25  
[86] 2012-05-24 (PCT/US2012/039311)  
[87] (WO2012/166506)  
[30] US (13/153,300) 2011-06-03

---

[11] **2,837,634**  
[13] C

[51] **Int.Cl. C12N 15/63 (2006.01) C12N  
15/90 (2006.01)**  
[25] EN  
[54] **POLYCISTRONIC EXPRESSION  
SYSTEM FOR BACTERIA**  
[54] **SYSTEME D'EXPRESSION  
POLYCISTRONIQUE POUR DES  
BACTERIES**  
[72] VANDENBROUCKE, KLAAS, BE  
[72] VAN HUYNEM, KAROLIEN, BE  
[72] STEIDLER, LOTHAR, BE  
[73] INTREXON ACTOBIOTICS NV, BE  
[85] 2013-11-28  
[86] 2012-06-01 (PCT/EP2012/060431)  
[87] (WO2012/164083)  
[30] EP (11168495.7) 2011-06-01  
[30] EP (11173588.2) 2011-07-12

---

[11] **2,838,538**  
[13] C

[51] **Int.Cl. A41F 17/00 (2006.01) A41D  
11/00 (2006.01) A41D 19/00 (2006.01)  
A41F 1/06 (2006.01)**  
[25] EN  
[54] **HAND WEAR RETENTION  
SYSTEM**  
[54] **SYSTEME D'ATTACHE DE GANTS  
OU MITAINES**  
[72] ELLIOTT, VICKI, CA  
[73] ELLIOTT, VICKI, CA  
[86] (2838538)  
[87] (2838538)  
[22] 2014-01-08

---

[11] **2,840,537**  
[13] C

[51] **Int.Cl. C07K 16/28 (2006.01)**  
[25] EN  
[54] **ANTIBODIES TO ADP-RIBOSYL  
CYCLASE 2**  
[54] **ANTICORPS D'ADP-RIBOSYL  
CYCLASE 2**  
[72] ROHLFF, CHRISTIAN, GB  
[72] TERRETT, JONATHAN  
ALEXANDER, US  
[73] OXFORD BIOTHERAPEUTICS LTD.,  
GB  
[85] 2013-12-24  
[86] 2012-06-28 (PCT/US2012/044703)  
[87] (WO2013/003625)  
[30] US (61/502,167) 2011-06-28  
[30] US (PCT/US2012/044451) 2012-06-27

**Canadian Patents Issued  
December 14, 2021**

---

[11] **2,843,190**  
[13] C

[51] **Int.Cl. C10L 1/14 (2006.01) C10L 1/238 (2006.01) C10L 1/2383 (2006.01) C10L 10/18 (2006.01)**

[25] EN

[54] **FUEL COMPOSITION COMPRISING A QUATERNARY AMMONIUM SALT AND A MANNICH REACTION PRODUCT**

[54] **COMPOSITION DE CARBURANT DE SELS D'AMMONIUM QUATERNAIRE ET PRODUIT DE REACTION DE MANNICH**

[72] REID, JACQUELINE, GB

[73] INNOSPEC LIMITED, GB

[85] 2014-01-27

[86] 2012-08-02 (PCT/GB2012/051875)

[87] (WO2013/017884)

[30] GB (1113390.7) 2011-08-03

---

[11] **2,845,937**  
[13] C

[51] **Int.Cl. B01D 35/30 (2006.01) B01D 27/08 (2006.01) B01D 29/11 (2006.01) B01D 46/42 (2006.01)**

[25] EN

[54] **ENHANCED FILTER SUPPORT BASKET**

[54] **PANIER DE SUPPORT DE FILTRE AMELIORE**

[72] BURNS, DAVID J., US

[72] CLOUD, DANIEL M., US

[72] BOSWELL, TYLER GLENN, US

[72] JONES, ARTIMUS CHARLES, US

[73] PARKER-HANNIFIN CORPORATION, US

[85] 2014-02-19

[86] 2012-09-13 (PCT/US2012/055104)

[87] (WO2013/040173)

[30] US (13/231,304) 2011-09-13

---

[11] **2,846,490**  
[13] C

[51] **Int.Cl. A61B 18/12 (2006.01) A61B 18/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR POWER CONTROL OF ELECTROSURGICAL RESONANT INVERTERS**

[54] **SYSTEME ET PROCEDE POUR COMMANDE DE PUISSANCE D'ONDULEURS A RESONANCE ELECTROCHIRURGICAUX**

[72] GILBERT, JAMES A., US

[72] JOHNSON, JOSHUA H., US

[72] LARSON, ERIC J., US

[72] ROBERTS, BRIAN L., US

[72] VAN SLYKE, BRADDON M., US

[73] COVIDIEN LP, US

[86] (2846490)

[87] (2846490)

[22] 2014-03-12

[30] US (61/789,005) 2013-03-15

[30] US (14/190,895) 2014-02-26

---

[11] **2,851,055**  
[13] C

[51] **Int.Cl. B60K 28/06 (2006.01) G08B 21/06 (2006.01) G08G 1/16 (2006.01)**

[25] EN

[54] **OPERATOR DROWSINESS DETECTION IN MINES**

[54] **SYSTEME DE DETECTION DE LA SOMNOLENCE DES OPERATEURS DANS LES MINES**

[72] MADER, URBAN, CH

[72] ROTHACHER, URS MARTIN, CH

[72] STEGMAIER, PETER ARNOLD, CH

[73] SAFEMINE AG, CH

[86] (2851055)

[87] (2851055)

[22] 2014-05-06

[30] AU (2013205745) 2013-05-07

---

[11] **2,853,292**  
[13] C

[51] **Int.Cl. A01K 67/027 (2006.01) C07K 14/47 (2006.01) C12N 5/10 (2006.01) C12N 15/12 (2006.01) C12N 15/85 (2006.01) C12Q 1/00 (2006.01) G01N 33/15 (2006.01)**

[25] EN

[54] **TRANSGENIC PIG MODELS OF CYSTIC FIBROSIS**

[54] **MODELES DE LA MUCOVISCIDOSE SUR COCHONS TRANSGENIQUES**

[72] WELSH, MICHAEL J., US

[72] STOLTZ, DAVID A., US

[73] UNIVERSITY OF IOWA RESEARCH FOUNDATION, US

[85] 2014-04-23

[86] 2012-11-02 (PCT/US2012/063291)

[87] (WO2013/067328)

[30] US (61/555,348) 2011-11-03

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[11] **2,860,173**  
[13] C

[51] **Int.Cl. A61K 38/17 (2006.01) A61P 31/00 (2006.01) A61P 31/04 (2006.01) G01N 33/48 (2006.01)**

[25] EN

[54] **DETERMINING PLASMA GELSOLIN LEVEL TO PREDICT RISK OF DEVELOPING INFECTION**

[54] **DETERMINATION DU NIVEAU DE GELSOLINE DANS LE PLASMA EN VUE DE PREDIRE LE RISQUE DE DEVELOPPEMENT D'UNE INFECTION**

[72] STOSSEL, THOMAS P., US

[72] LEE, PO-SHUN, US

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

[86] (2860173)

[87] (2860173)

[22] 2005-05-12

[62] 2,607,686

[30] US (60/570,233) 2004-05-12

**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **2,860,957**  
[13] C

[51] **Int.Cl. E06B 9/262 (2006.01) A47H 3/00 (2006.01) E06B 9/38 (2006.01)**  
[25] EN  
[54] **DEVICE FOR ADJUSTING FABRIC ANGLE OF DOUBLE FABRIC BLINDS**  
[54] **DISPOSITIF POUR AJUSTER L'ANGLE DU TISSU DE STORES A DOUBLE TISSU**  
[72] KWAK, JAE SUK, KR  
[73] COMFORTEX WINDOW FASHIONS, US  
[86] (2860957)  
[87] (2860957)  
[22] 2014-08-27  
[30] KR (10-2013-0101429) 2013-08-27

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[11] **2,861,127**  
[13] C

[51] **Int.Cl. A61B 18/00 (2006.01) A61B 5/01 (2006.01) A61B 18/12 (2006.01) A61B 18/14 (2006.01) A61B 18/18 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR ESTIMATING TISSUE PARAMETERS USING SURGICAL DEVICES**  
[54] **SYSTEMES ET PROCEDES POUR ESTIMER DES PARAMETRES DE TISSUS AU MOYEN DE DISPOSITIFS CHIRURGICAUX**  
[72] WHAM, ROBERT H., US  
[73] COVIDIEN LP, US  
[86] (2861127)  
[87] (2861127)  
[22] 2014-08-29  
[30] US (61/882,675) 2013-09-26  
[30] US (14/297,771) 2014-06-06

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[11] **2,863,257**  
[13] C

[51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6813 (2018.01) C12Q 1/6862 (2018.01) C12Q 1/6876 (2018.01) C07H 21/00 (2006.01) C40B 30/04 (2006.01) C40B 40/06 (2006.01)**  
[25] EN  
[54] **METHOD FOR RELATIVE QUANTIFICATION OF NUCLEIC ACID SEQUENCE, EXPRESSION, OR COPY CHANGES, USING COMBINED NUCLEASE, LIGATION, AND POLYMERASE REACTIONS**  
[54] **METHODE DE QUANTIFICATION RELATIVE D'UNE SEQUENCE D'ACIDES NUCLEIQUES, D'UNE EXPRESSION OU DE MODIFICATIONS DE COPIE, EN UTILISANT DES REACTIONS COMBINEES DE NUCLEASE, LIGATURE, E T POLYMERASE**  
[72] BARANY, FRANCIS, US  
[72] SPIER, EUGENE, US  
[72] MIR, ALAIN, US  
[73] CORNELL UNIVERSITY, US  
[85] 2014-07-29  
[86] 2013-02-14 (PCT/US2013/026180)  
[87] (WO2013/123220)  
[30] US (61/598,343) 2012-02-14  
[30] US (61/605,057) 2012-02-29  
[30] US (61/644,405) 2012-05-08

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[11] **2,864,653**  
[13] C

[51] **Int.Cl. B60R 11/04 (2006.01) G08B 21/02 (2006.01) G08G 1/017 (2006.01) G08G 1/052 (2006.01) G08G 1/054 (2006.01)**  
[25] EN  
[54] **STOP VIOLATION DETECTION SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDURE DE DETECTION POUR ARRET DE VIOLATION**  
[72] ARPIN, BILL, US  
[72] PIKKARAINEN, MARK, US  
[73] COMTROL CORPORATION, US  
[86] (2864653)  
[87] (2864653)  
[22] 2014-09-22  
[30] US (61/880966) 2013-09-22

---

[11] **2,864,943**  
[13] C

[51] **Int.Cl. B32B 5/26 (2006.01) B32B 27/12 (2006.01) B32B 27/30 (2006.01) F41H 5/04 (2006.01)**  
[25] EN  
[54] **COMPOSITE FOR PRODUCING OF AN ANTIBALLISTIC ARTICLE**  
[54] **MATERIAU COMPOSITE POUR LA FABRICATION D'UN ARTICLE ANTIBALISTIQUE**  
[72] GABRISCH, HANS-JOACHIM (DECEASED), DE  
[72] SABEL, THOMAS, DE  
[73] TEIJIN ARAMID GMBH, DE  
[85] 2014-08-19  
[86] 2013-02-05 (PCT/EP2013/052227)  
[87] (WO2013/124147)  
[30] EP (12156211.0) 2012-02-20

---

[11] **2,865,935**  
[13] C

[51] **Int.Cl. A61K 31/232 (2006.01) A61P 27/02 (2006.01)**  
[25] EN  
[54] **THERAPEUTIC REGIMENS AND METHODS FOR IMPROVING VISUAL FUNCTION IN VISUAL DISORDERS ASSOCIATED WITH AN ENDOGENOUS RETINOID DEFICIENCY**  
[54] **SCHEMAS ET PROCEDURE THERAPEUTIQUES UTILISES POUR AMELIORER LA FONCTION VISUELLE DANS LES TROUBLES DE LA VUE ASSOCIES A UNE CARENCE EN RETINOIDES ENDOGENES**  
[72] CADDEN, SUZANNE, CA  
[73] RETINAGENIX THERAPEUTICS, INC., US  
[85] 2014-08-29  
[86] 2013-03-01 (PCT/CA2013/050155)  
[87] (WO2013/134867)  
[30] US (61/605,729) 2012-03-01  
[30] US (61/642,212) 2012-05-03  
[30] US (61/644,360) 2012-05-08

**Canadian Patents Issued  
December 14, 2021**

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[11] **2,867,770**  
[13] C

[51] **Int.Cl. A61N 2/04 (2006.01)**  
[25] EN  
[54] **RTMS AT HARMONICS OF BIOLOGICAL SIGNALS**  
[54] **RTMS A DES NIVEAUX HARMONIQUES DE SIGNAUX BIOLOGIQUES**  
[72] JIN, YI, US  
[73] WAVE NEUROSCIENCE, INC., US  
[85] 2014-09-17  
[86] 2013-04-08 (PCT/US2013/035642)  
[87] (WO2013/152354)  
[30] US (61/621,423) 2012-04-06

---

[11] **2,868,721**  
[13] C

[51] **Int.Cl. F28D 7/10 (2006.01) A01B 39/00 (2006.01) F25B 39/02 (2006.01)**  
[25] EN  
[54] **AMMONIA HEAT EXCHANGER UNIT AND SYSTEM**  
[54] **SYSTEME ET DISPOSITIF D'ECHANGEUR DE CHALEUR A L'AMMONIAC**  
[72] JENSEN, STEVE S., US  
[72] HANSEN, PATRICK A., US  
[72] THOMPSON, WARREN L., US  
[72] MICHAEL, NICHOLAS O., US  
[73] RAVEN INDUSTRIES, INC., US  
[86] (2868721)  
[87] (2868721)  
[22] 2014-10-24  
[30] US (61/895,703) 2013-10-25

---

[11] **2,868,894**  
[13] C

[51] **Int.Cl. E04D 13/064 (2006.01)**  
[25] EN  
[54] **INSIDE CORNER PIECE FOR RAIN GUTTERS AND METHOD OF MANUFACTURE**  
[54] **BLOC D'ANGLE INTERIEUR POUR GOUTIERE ET PROCEDE DE FABRICATION**  
[72] JOLY, ROBERT E., US  
[72] BRAYMAN, ROBERT, US  
[73] JOLY, ROBERT E., US  
[73] BRAYMAN, ROBERT, US  
[86] (2868894)  
[87] (2868894)  
[22] 2014-10-23  
[30] US (14/156,598) 2014-01-16

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[11] **2,868,989**  
[13] C

[51] **Int.Cl. C07K 16/28 (2006.01) C07K 19/00 (2006.01) C12N 15/16 (2006.01) G01N 33/574 (2006.01) C07K 14/705 (2006.01)**  
[25] EN  
[54] **TEM-1 DIAGNOSTIC ANTIBODIES**  
[54] **ANTICORPS DE DIAGNOSTIC ANTI-TEM-1**  
[72] O'SHANNESSEY, DANIEL JOHN, US  
[73] EISAI R&D MANAGEMENT CO., LTD., JP  
[85] 2014-09-29  
[86] 2013-03-14 (PCT/US2013/031398)  
[87] (WO2013/148250)  
[30] US (61/618,235) 2012-03-30

---

[11] **2,870,627**  
[13] C

[51] **Int.Cl. E06B 9/24 (2006.01) G02F 1/15 (2019.01)**  
[25] EN  
[54] **CONTROLLING TRANSITIONS IN OPTICALLY SWITCHABLE DEVICES**  
[54] **CONTROLE DE TRANSITIONS DANS DES DISPOSITIFS OPTIQUEMENT COMMUTABLES**  
[72] BROWN, STEPHEN C., US  
[72] KHOWAL, DEEPIKA, US  
[72] VORA, NAMRATA, US  
[73] VIEW, INC., US  
[85] 2014-10-16  
[86] 2013-04-11 (PCT/US2013/036235)  
[87] (WO2013/158464)  
[30] US (13/449,235) 2012-04-17

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[11] **2,871,935**  
[13] C

[51] **Int.Cl. B65D 65/40 (2006.01)**  
[25] EN  
[54] **PEELABLE FILM FOR PACKAGING**  
[54] **FILM DECOLLABLE POUR EMBALLAGE**  
[72] JOHNSON, ERIC, US  
[72] WOLAK, PAUL Z, US  
[73] BERRY PLASTICS CORPORATION, US  
[85] 2014-10-28  
[86] 2013-05-10 (PCT/US2013/040630)  
[87] (WO2013/170199)  
[30] US (61/645,410) 2012-05-10

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[11] **2,874,680**  
[13] C

[51] **Int.Cl. H01B 7/17 (2006.01)**  
[25] EN  
[54] **CABLE HAVING A THIN FILM MATERIAL AND METHODS OF PREVENTING DISCOLORATION DAMAGE TO A CABLE HAVING A THIN FILM MATERIAL**  
[54] **CABLE COMPRENANT UN MATERIAU A FILM MINCE ET PROCEDES DE PREVENTION DE DOMMAGES PAR DECOLORATION D'UN CABLE COMPRENANT UN MATERIAU A FILM MINCE**  
[72] MAGNER, SCOTT, US  
[73] ROCKBESTOS SURPRENANT CABLE CORP., US  
[85] 2014-11-24  
[86] 2013-07-03 (PCT/US2013/049280)  
[87] (WO2014/011476)  
[30] US (61/671,361) 2012-07-13  
[30] US (13/933,284) 2013-07-02

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[11] **2,874,943**  
[13] C

[51] **Int.Cl. G05B 23/02 (2006.01) G06Q 50/30 (2012.01) G06Q 10/00 (2012.01)**  
[25] FR  
[54] **FORECASTING MAINTENANCE OPERATIONS TO BE APPLIED TO AN ENGINE**  
[54] **PREVISION D'OPERATIONS DE MAINTENANCE A APPLIQUER SUR UN MOTEUR**  
[72] ANFRANI, ALEXANDRE, FR  
[72] BRUN, CYRIL, FR  
[72] SEMPERE, JULIAN, FR  
[73] SNECMA, FR  
[85] 2014-11-27  
[86] 2013-06-07 (PCT/FR2013/051306)  
[87] (WO2013/182823)  
[30] FR (1255384) 2012-06-08

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**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **2,875,237**  
[13] C

[51] **Int.Cl. A01N 45/00 (2006.01) A01N 25/02 (2006.01) A01P 3/00 (2006.01) C08G 65/329 (2006.01)**

[25] EN

[54] **PENTACYCLIC TRITERPENE COMPOUNDS AND USES THEREOF**

[54] **COMPOSES DE TRITERPENE PENTACYCLIQUE ET UTILISATIONS CONNEXES**

[72] RILEY, JOHN G., CA

[72] BETHELL, RICHARD J., CA

[73] BIOVECTRA INC., CA

[86] (2875237)

[87] (2875237)

[22] 2014-12-15

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[11] **2,877,307**  
[13] C

[51] **Int.Cl. H02J 3/14 (2006.01) H02J 13/00 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR ACTIVELY MANAGING ELECTRIC POWER OVER AN ELECTRIC POWER GRID**

[54] **PROCEDE ET APPAREIL POUR GERER ACTIVEMENT DE L'ENERGIE ELECTRIQUE SUR UN RESEAU ELECTRIQUE**

[72] FORBES, JOSEPH W., JR., US

[73] CAUSAM ENERGY, INC., US

[85] 2014-12-18

[86] 2013-06-20 (PCT/US2013/046855)

[87] (WO2013/192432)

[30] US (13/528,596) 2012-06-20

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[11] **2,877,640**  
[13] C

[51] **Int.Cl. E21B 43/24 (2006.01) E21B 43/30 (2006.01)**

[25] EN

[54] **OIL RECOVERY WITH FISHBONE WELLS AND STEAM**

[54] **EXTRACTION DE PETROLE AU MOYEN DE Puits EN ARETE ET DE VAPEUR**

[72] STANECKI, JOHN A., US

[72] WHEELER, THOMAS J., US

[73] CONOCOPHILLIPS COMPANY, US

[86] (2877640)

[87] (2877640)

[22] 2015-01-13

[30] US (61/926659) 2014-01-13

[30] US (14/595614) 2015-01-13

---

[11] **2,877,914**  
[13] C

[51] **Int.Cl. E21B 19/16 (2006.01)**

[25] EN

[54] **CIRCUMFERENTIAL DISPLACEMENT SUCKER ROD TONG**

[54] **LANGUETTE DE TIGE DE POMPAGE A DEPLACEMENT EN CIRCONFERENCE**

[72] WRIGHT, MONTE NEIL, CA

[72] CARMELO, DONALD NICHOLAS, CA

[72] RICHARD, ANDREW DAVID, CA

[72] MILLER, HAROLD JAMES, CA

[72] RICHARD, DAVID LOUIS, CA

[73] AUTOMATED RIG TECHNOLOGIES LTD., CA

[86] (2877914)

[87] (2877914)

[22] 2015-01-13

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[11] **2,878,058**  
[13] C

[51] **Int.Cl. B23C 5/10 (2006.01) B23C 3/12 (2006.01)**

[25] EN

[54] **BEVELING / CHAMFERING TOOL - ROUTER HEAD FOR METAL**

[54] **OUTIL DE BISEAUTAGE / CHANFREINAGE - TETE DE MORTAISEUSE POUR METAL**

[72] DIECKILMAN, THOMAS M., US

[72] PARK, CHANG WOO, KR

[73] BEVEL TOOLS HOLDING B.V., NL

[85] 2014-12-29

[86] 2013-07-01 (PCT/NL2013/000038)

[87] (WO2014/007609)

[30] KR (10-2012-0073019) 2012-07-04

[30] US (61/956,558) 2013-06-11

---

[11] **2,879,928**  
[13] C

[51] **Int.Cl. B23C 5/02 (2006.01)**

[25] EN

[54] **CUTTING TOOL AND CORRESPONDING ASSEMBLY**

[54] **OUTIL DE COUPE ET ENSEMBLE CORRESPONDANT**

[72] ATABEY, FUAT, CA

[73] PRATT & WHITNEY CANADA CORP., CA

[86] (2879928)

[87] (2879928)

[22] 2015-01-26

[30] US (14/167,302) 2014-01-29

---

[11] **2,881,547**  
[13] C

[51] **Int.Cl. C12M 1/107 (2006.01) C12M 1/00 (2006.01) C12M 1/16 (2006.01)**

[25] FR

[54] **METHOD AND DEVICE FOR CONTINUOUS DRY METHANISATION**

[54] **PROCEDE ET DISPOSITIF DE METHANISATION CONTINUE EN VOIE SECHE**

[72] BONHOMME, MICHEL, FR

[73] BONHOMME, MICHEL, FR

[73] ARKOLIA ENERGIES, FR

[85] 2015-02-09

[86] 2013-08-13 (PCT/FR2013/051938)

[87] (WO2014/027165)

[30] FR (1257782) 2012-08-13

[30] FR (1262512) 2012-12-20

[30] FR (1262513) 2012-12-20

[30] FR (1262514) 2012-12-20

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[11] **2,882,930**  
[13] C

[51] **Int.Cl. G01M 15/14 (2006.01)**

[25] EN

[54] **ROTATING STALL DETECTION THROUGH RATIO METRIC MEASURE OF THE SUB-SYNCHRONOUS BAND SPECTRUM**

[54] **DETECTION DE DECROCHAGE TOURNANT A L'AIDE D'UNE MESURE RADIOMETRIQUE DE SPECTRE DE BANDE SUB-SYNCHRONE**

[72] LIU, LEI, US

[72] PAGE, RANDAL BRADLEY, US

[73] SIMMONDS PRECISION PRODUCTS, INC., US

[86] (2882930)

[87] (2882930)

[22] 2015-02-24

[30] US (14/275,339) 2014-05-12

**Canadian Patents Issued  
December 14, 2021**

[11] **2,883,222**  
[13] C

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C12N 5/10 (2006.01) C12N 15/13 (2006.01) C12P 21/08 (2006.01) G01N 33/483 (2006.01) G01N 33/53 (2006.01) G01N 33/543 (2006.01) G01N 33/566 (2006.01) G01N 33/574 (2006.01)**

[25] EN

[54] **DIAGNOSTIC ASSAYS AND KITS FOR DETECTION OF FOLATE RECEPTOR 1**

[54] **DOSAGES DIAGNOSTIQUES ET NECESSAIRES DE DETECTION DU RECEPTEUR-1 AUX FOLATES**

[72] TESTA, NATHAN E., US

[72] CARRIGAN, CHRISTINA N., US

[72] AB, OLGA, US

[72] TAVARES, DANIEL, US

[72] WOLF, BENI B., US

[73] IMMUNOGEN, INC., US

[85] 2015-02-25

[86] 2013-08-30 (PCT/US2013/057682)

[87] (WO2014/036495)

[30] US (61/695,791) 2012-08-31

[30] US (61/756,254) 2013-01-24

[11] **2,884,381**  
[13] C

[51] **Int.Cl. C09K 5/20 (2006.01)**

[25] EN

[54] **HEAT TRANSFER FLUIDS AND CORROSION INHIBITOR FORMULATIONS FOR USE THEREOF**

[54] **FLUIDES DE TRANSFERT THERMIQUE ET FORMULATIONS D'INHIBITEUR DE CORROSION POUR UNE UTILISATION CORRESPONDANTE**

[72] YANG, BO, US

[72] GERSHUN, ALEKSEI, US

[72] WOYCIESJES, PETER M., US

[73] PRESTONE PRODUCTS CORPORATION, US

[85] 2015-03-06

[86] 2013-08-22 (PCT/US2013/056267)

[87] (WO2014/039283)

[30] US (13/606,516) 2012-09-07

[11] **2,884,585**  
[13] C

[51] **Int.Cl. C07K 14/18 (2006.01) A61K 39/00 (2006.01) A61K 39/12 (2006.01) A61K 39/295 (2006.01) C12N 7/04 (2006.01) C12N 15/86 (2006.01)**

[25] EN

[54] **RECOMBINANT MEASLES VIRUS EXPRESSING CHIKUNGUNYA VIRUS POLYPEPTIDES AND THEIR APPLICATIONS**

[54] **VIRUS DE LA ROUGEOLE RECOMBINANT EXPRIMANT DES POLYPEPTIDES DU VIRUS CHIKUNGUNYA ET SES APPLICATIONS**

[72] TANGY, FREDERIC, FR

[72] BRANDLER, SAMANTHA, FR

[72] DESPRES, PHILIPPE, FR

[72] HABEL, ANDRE, AT

[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR

[73] INSTITUT PASTEUR, FR

[73] THEMIS BIOSCIENCE GMBH, AT

[85] 2015-03-10

[86] 2013-09-26 (PCT/EP2013/070137)

[87] (WO2014/049094)

[30] EP (12306176.4) 2012-09-27

[11] **2,884,970**  
[13] C

[51] **Int.Cl. G06F 21/62 (2013.01) H04L 9/08 (2006.01)**

[25] EN

[54] **CONTROLLING ACCESS TO CLINICAL DATA ANALYZED BY REMOTE COMPUTING RESOURCES**

[54] **CONTROLE DE L'ACCES A DES DONNEES CLINIQUES ANALYSEES PAR DES RESSOURCES INFORMATIQUES A DISTANCE**

[72] GROSS, BRIAN DAVID, NL

[73] KONINKLIJKE PHILIPS N.V., NL

[85] 2015-03-13

[86] 2013-09-13 (PCT/IB2013/058520)

[87] (WO2014/045173)

[30] US (61/702,437) 2012-09-18

[11] **2,885,069**  
[13] C

[51] **Int.Cl. B60B 35/12 (2006.01)**

[25] EN

[54] **AXLE SHAFT**

[54] **ARBRE D'ESSIEU**

[72] MALED, PATRICK T., US

[72] STRAUB, STEPHEN W., US

[72] PETSCHKE, THOMAS A., US

[72] MASCHING, JOSEPH RANDOLPH, US

[72] EBLEN, DAVID MICHAEL, US

[72] YAKSIC, MATTHEW, US

[72] RODRIGUEZ, ALBERTO FABIAN VILLALOBOS, MX

[72] GUIA, JOSE MEDINA, MX

[72] MORALES, OSCAR REYES, MX

[73] SYPRIS TECHNOLOGIES, INC., US

[86] (2885069)

[87] (2885069)

[22] 2015-03-13

[30] US (14/220,485) 2014-03-20

[11] **2,886,278**  
[13] C

[51] **Int.Cl. B65F 3/00 (2006.01) B60P 1/54 (2006.01) B60P 3/025 (2006.01) B60P 3/35 (2006.01) B60P 3/36 (2006.01) B65F 9/00 (2006.01)**

[25] EN

[54] **PORTABLE MOBILE RECYCLING CENTER**

[54] **CENTRE DE RECYCLAGE MOBILE PORTABLE**

[72] COLLINS, JEFF L., US

[73] COLLINS, JEFF L., US

[86] (2886278)

[87] (2886278)

[22] 2015-03-27

**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **2,887,475**  
[13] C

[51] **Int.Cl. G01N 33/68 (2006.01) G01N 21/31 (2006.01) G01N 33/50 (2006.01) G01R 33/46 (2006.01)**

[25] EN

[54] **NMR QUANTIFICATION OF BRANCHED CHAIN AMINO ACIDS**

[54] **QUANTIFICATION PAR NMR D'ACIDES AMINES A CHAINE RAMIFIEE**

[72] O'CONNELL, THOMAS M., US  
[72] MERCIER, KELLY A., US  
[72] SHALAUROVA, IRINA Y., US  
[72] OTVOS, JAMES D., US  
[73] LIPOSCIENCE, INC., US  
[85] 2015-04-07  
[86] 2013-10-09 (PCT/US2013/064142)  
[87] (WO2014/059025)  
[30] US (61/711,471) 2012-10-09  
[30] US (13/801,604) 2013-03-13  
[30] US (13/830,784) 2013-03-14  
[30] US (13/830,199) 2013-03-14  
[30] US (PCT/US2013/041274) 2013-05-16  
[30] US (PCT/US2013/043343) 2013-05-30  
[30] US (61/831,353) 2013-06-05  
[30] US (PCT/US2013/044679) 2013-06-07

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[11] **2,887,981**  
[13] C

[51] **Int.Cl. G02C 7/10 (2006.01) G02B 5/28 (2006.01)**

[25] FR

[54] **PHOTOCHROMIC OPHTHALMIC LENS**

[54] **LENTILLE OPHTALMIQUE PHOTOCHROMIQUE**

[72] KUDLA, AMELIE, FR  
[72] MAURY, HELENE, FR  
[73] ESSILOR INTERNATIONAL, FR  
[85] 2015-04-09  
[86] 2013-10-10 (PCT/FR2013/052426)  
[87] (WO2014/057226)  
[30] FR (1259714) 2012-10-11

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[11] **2,890,176**  
[13] C

[51] **Int.Cl. A61K 39/395 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01)**

[25] EN

[54] **COMBINATION OF ANTI-CD20 ANTIBODY AND PI3 KINASE SELECTIVE INHIBITOR**

[54] **ASSOCIATION D'UN ANTICORPS ANTI-CD20 ET D'UN INHIBITEUR SELECTIF DE LA PI3 KINASE**

[72] WEISS, MICHAEL, US  
[72] MISKIN, HARI, US  
[72] SPORTELLI, PETER, US  
[72] VAKKALANKA, SWAROOP K.V.S., CH  
[73] TG THERAPEUTICS, INC., US  
[73] LABORATOIRE FRANCAIS DU FRACTIONNEMENT ET DES BIOTECHNOLOGIES, FR  
[73] RHIZEN PHARMACEUTICALS SA, CH  
[85] 2015-04-30  
[86] 2013-11-01 (PCT/US2013/067956)  
[87] (WO2014/071125)  
[30] IN (4595/CHE/2012) 2012-11-02  
[30] US (61/771,812) 2013-03-02

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[11] **2,890,312**  
[13] C

[51] **Int.Cl. F23C 10/20 (2006.01)**

[25] EN

[54] **AIR NOZZLE ARRANGEMENT IN A FLUIDIZED BED BOILER, GRATE FOR A FLUIDIZED BED BOILER, AND A FLUIDIZED BED BOILER**

[54] **AGENCEMENT DE BUSE D'AIR DANS UNE CHAUDIERE A LIT FLUIDISE, GRILLE POUR UNE CHAUDIERE A LIT FLUIDISE ET CHAUDIERE A LIT FLUIDISE**

[72] KAINU, VESA, FI  
[72] LEPPALA, JUKKA-PEKKA, FI  
[73] VALMET TECHNOLOGIES OY, FI  
[85] 2015-05-01  
[86] 2013-11-07 (PCT/FI2013/051049)  
[87] (WO2014/076365)  
[30] FI (20126187) 2012-11-13

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[11] **2,891,542**  
[13] C

[51] **Int.Cl. C12N 5/071 (2010.01)**

[25] EN

[54] **PANCREATIC PROGENITOR CELLS EXPRESSING BETATROPHIN AND INSULIN**

[54] **CELLULES PROGENITRICES PANCREATIQUES EXPRIMANT DE LA BETATROPHINE ET DE L'INSULINE**

[72] LEE, JAU-NAN, TW  
[72] LEE, TONY TUNG-YIN, US  
[72] LEE, YUTA, TW  
[73] ACCELERATED BIOSCIENCES CORP., US  
[85] 2015-05-15  
[86] 2013-11-26 (PCT/US2013/072073)  
[87] (WO2014/085493)  
[30] US (61/732,162) 2012-11-30  
[30] US (61/877,156) 2013-09-12

---

[11] **2,894,316**  
[13] C

[51] **Int.Cl. G06F 21/53 (2013.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR ACCESSING AND UPDATING SECURED DATA**

[54] **SYSTEME ET PROCEDE POUR ACCEDER A DES DONNEES SECURISEES ET LES METTRE A JOUR**

[72] WILLIS, EDWARD SNOW, CA  
[72] LESPINASSE, JEAN-PHILIPPE, CA  
[72] LEROUX, FRANCOIS, CA  
[72] JHAJ, JASVIR, CA  
[72] ASOKAN, PRAVEENA, CA  
[72] WIKKERINK, EARL JOHN, CA  
[72] FALLOON, ALAN EDWARD, CA  
[72] GEUE, ALAN, CA  
[72] INGLIS, DAVID ALAN, CA  
[72] LAM, BENTON HEI WAH, CA  
[72] TRAVERS, CHRISTOPHER SCOTT, CA  
[72] LOGAN, ADRIAN MICHAEL, CA  
[72] CASSIDY, JOHN WILLIAM, CA  
[73] BLACKBERRY LIMITED, CA  
[86] (2894316)  
[87] (2894316)  
[22] 2015-06-10  
[30] US (14/302,541) 2014-06-12

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**Canadian Patents Issued  
December 14, 2021**

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[11] **2,894,750**  
[13] C

[51] **Int.Cl. A61F 2/30 (2006.01) A61L 27/36 (2006.01)**  
[25] EN  
[54] **CARTILAGE MOSAIC COMPOSITIONS AND METHODS**  
[54] **COMPOSITIONS DE MOSAIQUE DE CARTILAGE ET PROCEDES AFFERENTS**  
[72] BARRETT, CAROLYN, US  
[72] SHI, YALING, US  
[73] ALLOSOURCE, US  
[85] 2015-06-10  
[86] 2014-02-21 (PCT/US2014/017816)  
[87] (WO2014/130883)  
[30] US (61/768,190) 2013-02-22

---

[11] **2,897,437**  
[13] C

[51] **Int.Cl. C07D 403/12 (2006.01) A61K 31/53 (2006.01) A61K 51/04 (2006.01) A61P 35/00 (2006.01) C07D 401/14 (2006.01) C07D 403/14 (2006.01)**  
[25] EN  
[54] **TRIAZINE BASED RADIOPHARMACEUTICALS AND RADIOIMAGING AGENTS**  
[54] **PRODUITS RADIOPHARMACEUTIQUES A BASE DE TRIAZINE ET AGENTS DE RADIO-IMAGERIE**  
[72] BABICH, JOHN W., US  
[72] ZIMMERMAN, CRAIG, US  
[72] JOYAL, JOHN L., US  
[72] LU, GENLIANG, US  
[73] MOLECULAR INSIGHT PHARMACEUTICALS, INC., US  
[85] 2015-07-07  
[86] 2014-01-10 (PCT/US2014/011047)  
[87] (WO2014/110372)  
[30] US (61/752,350) 2013-01-14  
[30] US (61/785,788) 2013-03-14

---

[11] **2,900,733**  
[13] C

[51] **Int.Cl. H01L 31/0236 (2006.01) H01L 31/042 (2014.01)**  
[25] FR  
[54] **PHOTOVOLTAIC STRUCTURE FOR A ROADWAY**  
[54] **STRUCTURE PHOTOVOLTAIQUE POUR CHAUSSEE**  
[72] BARRUEL, FRANCK, FR  
[72] COUELLE, ERIC, FR  
[72] GAUTIER, JEAN-LUC, FR  
[72] PILAT, ERIC, FR  
[73] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, FR  
[73] COLAS, FR  
[85] 2015-08-07  
[86] 2014-02-11 (PCT/IB2014/058908)  
[87] (WO2014/125415)  
[30] FR (13 51191) 2013-02-12

---

[11] **2,903,050**  
[13] C

[51] **Int.Cl. H02M 7/00 (2006.01) H05K 7/14 (2006.01) H05K 7/20 (2006.01)**  
[25] EN  
[54] **POWER POLE INVERTER**  
[54] **ONDULEUR DE COLONNE D'ALIMENTATION**  
[72] CROUCH, JONATHAN, US  
[72] JOHNSON, WESLEY BYRON, US  
[72] GIBBS, IRVING, US  
[72] SHUENEMAN, RON, US  
[73] EATON INTELLIGENT POWER LIMITED, IE  
[85] 2015-08-27  
[86] 2014-02-10 (PCT/US2014/015513)  
[87] (WO2014/149233)  
[30] US (13/834,332) 2013-03-15

---

[11] **2,903,566**  
[13] C

[51] **Int.Cl. B01J 2/06 (2006.01)**  
[25] EN  
[54] **EQUIPMENT ASSEMBLY AND METHOD OF PROCESSING PARTICLES**  
[54] **ENSEMBLE EQUIPEMENT ET PROCEDE POUR TRAITER DES PARTICULES**  
[72] JOHNSON, GREG S., US  
[72] SUBRAMANIAM, BALA, US  
[72] NIU, FENGHUI, US  
[72] DECEDUE, CHARLES J., US  
[72] CLAPP, GARY E., US  
[72] ESPINOSA, JAHNA C., US  
[72] SITTENAUER, JACOB M., US  
[73] CRITITECH, INC., US  
[85] 2015-09-01  
[86] 2014-03-14 (PCT/US2014/028507)  
[87] (WO2014/152978)  
[30] US (61/783,682) 2013-03-14  
[30] US (13/911,700) 2013-06-06

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[11] **2,904,930**  
[13] C

[51] **Int.Cl. B65G 45/02 (2006.01)**  
[25] EN  
[54] **LUBRICATION OF TRANSFER PLATES USING AN OIL OR OIL IN WATER EMULSIONS**  
[54] **LUBRIFICATION DE PLAQUES DE TRANSFERT UTILISANT UNE HUILE OU DES EMULSIONS D'HUILE DANS L'EAU**  
[72] MORRISON, ERIC D., US  
[72] THOMPSON, CHAD A., US  
[73] ECOLAB USA INC., US  
[85] 2015-09-09  
[86] 2014-03-10 (PCT/US2014/022504)  
[87] (WO2014/164468)  
[30] US (61/776,049) 2013-03-11

**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **2,904,974**  
[13] C

[51] **Int.Cl. B66D 1/48 (2006.01) B66D 1/40 (2006.01) B66D 3/00 (2006.01)**

[25] EN

[54] **PROGRAMMABLE CONTROLS FOR A WINCH**

[54] **COMMANDES PROGRAMMABLES POUR UN TREUIL**

[72] AVERILL, BRYAN, US  
[72] FRETZ, DARREN, US  
[72] TALMADGE, KEVIN, US  
[72] WENDLER, IAN, US  
[73] WARN INDUSTRIES, INC., US  
[86] (2904974)  
[87] (2904974)  
[22] 2015-09-17  
[30] US (62/060296) 2014-10-06  
[30] US (14/852298) 2015-09-11

---

[11] **2,905,239**  
[13] C

[51] **Int.Cl. D21C 3/02 (2006.01) D21C 3/06 (2006.01) D21C 3/14 (2006.01) D21C 5/00 (2006.01) D21C 11/00 (2006.01)**

[25] EN

[54] **TREATMENT OF LIGNOCELLULOSIC BIOMASS WITH IONIC LIQUID**

[54] **TRAITEMENT D'UNE BIOMASSE LIGNOCELLULOSIQUE AVEC UN LIQUIDE IONIQUE**

[72] HALLETT, JASON P., GB  
[72] WELTON, TOM, GB  
[72] BRANDT, AGNIESZKA, GB  
[73] IP2IPO INNOVATIONS LIMITED, GB  
[85] 2015-09-10  
[86] 2014-03-14 (PCT/GB2014/050824)  
[87] (WO2014/140643)  
[30] GB (1304872.3) 2013-03-15

---

[11] **2,906,605**  
[13] C

[51] **Int.Cl. B64C 39/02 (2006.01) B64F 1/08 (2006.01) B64F 3/00 (2006.01)**

[25] EN

[54] **SPOOLER FOR UNMANNED AERIAL VEHICLE SYSTEM**

[54] **BOBINOIR POUR UN SYSTEME DE VEHICULE AERIEN SANS PILOTE**

[72] WALKER, JASON S., US  
[72] WARE, JOHN W., US  
[72] JOHNSON, SAMUEL A., US  
[72] SHEIN, ANDREW M., US  
[73] FLIR DETECTION, INC., US  
[85] 2015-09-14  
[86] 2014-03-14 (PCT/US2014/027019)  
[87] (WO2014/152159)  
[30] US (13/838,399) 2013-03-15

---

[11] **2,909,717**  
[13] C

[51] **Int.Cl. A61F 9/009 (2006.01) A61B 3/107 (2006.01)**

[25] EN

[54] **CORNEAL TOPOGRAPHY MEASUREMENT AND ALIGNMENT OF CORNEAL SURGICAL PROCEDURES**

[54] **MESURE DE TOPOGRAPHIE DE LA CORNEE ET ALIGNEMENT DES PROCEDURES CHIRURGICALES DE LA CORNEE**

[72] SCOTT, DAVID D., US  
[72] GONZALEZ, JAVIER, US  
[72] DEWEY, DAVID, US  
[72] BAREKET, NOAH, US  
[72] SCHUELE, GEORG, US  
[73] AMO DEVELOPMENT, LLC, US  
[85] 2015-10-16  
[86] 2014-04-18 (PCT/US2014/034628)  
[87] (WO2014/172621)  
[30] US (61/813,613) 2013-04-18  
[30] US (61/873,071) 2013-09-03

---

[11] **2,909,814**  
[13] C

[51] **Int.Cl. G01N 33/48 (2006.01) G01N 30/72 (2006.01) G01N 33/84 (2006.01) G01N 21/80 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS TO DETERMINE BODY DRUG CONCENTRATION FROM AN ORAL FLUID**

[54] **SYSTEMES ET METHODES DE DETERMINATION DE LA CONCENTRATION D'UNE DROGUE DANS L'ORGANISME A PARTIR D'UN PRELEVEMENT BUCCAL**

[72] STRIPP, RICHARD, US  
[73] CORDANT RESEARCH SOLUTIONS, LLC, US  
[85] 2015-10-19  
[86] 2014-04-21 (PCT/US2014/034810)  
[87] (WO2014/176167)  
[30] US (61/815,205) 2013-04-23

---

[11] **2,910,929**  
[13] C

[51] **Int.Cl. H04W 12/06 (2021.01) G06F 21/36 (2013.01) H04W 12/77 (2021.01) H04L 9/32 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR AUTHENTICATING USER IDENTITY BASED ON USER-DEFINED IMAGE DATA**

[54] **SYSTEMES ET METHODES D'AUTHENTIFICATION DE L'IDENTITE UTILISATEUR FONDEE SUR DES DONNEES IMAGES DEFINIES PAR L'UTILISATEUR**

[72] SALAMA, HISHAM I., US  
[72] CHAN, PAUL MON-WAH, CA  
[72] D'AGOSTINO, DINO, CA  
[72] DEL VECCHIO, ORIN, CA  
[73] THE TORONTO-DOMINION BANK, CA  
[86] (2910929)  
[87] (2910929)  
[22] 2015-11-02  
[30] US (62/073,881) 2014-10-31  
[30] US (14/928,500) 2015-10-30

**Canadian Patents Issued  
December 14, 2021**

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[11] **2,911,617**  
[13] C

[51] **Int.Cl. C01B 3/38 (2006.01)**  
[25] EN  
[54] **METHOD FOR STARTING UP A PREREFORMING STAGE**  
[54] **PROCEDE DE DEMARRAGE D'UN ETAGE DE PRE-REFORMAGE**  
[72] GRONEMANN, VERONIKA, DE  
[72] OTT, JORG, DE  
[72] OHLHAVER, THEIS, DE  
[72] KRIMLOWSKI, PAUL, DE  
[73] L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, FR  
[85] 2015-11-05  
[86] 2014-05-05 (PCT/EP2014/059050)  
[87] (WO2014/184022)  
[30] DE (10 2013 104 893.5) 2013-05-13

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[11] **2,912,052**  
[13] C

[51] **Int.Cl. C12Q 1/02 (2006.01) C12N 5/09 (2010.01) A23L 33/115 (2016.01) A23L 33/125 (2016.01) A23L 33/17 (2016.01) A61K 31/20 (2006.01) C12Q 1/00 (2006.01) G01N 33/48 (2006.01)**  
[25] EN  
[54] **LIPID SCAVENGING IN RAS CANCERS**  
[54] **CAPTAGE DES LIPIDES DANS DES CANCERS ASSOCIES A RAS**  
[72] RABINOWITZ, JOSHUA, US  
[72] KAMPHORST, JURRE, GB  
[72] CROSS, JUSTIN, US  
[72] THOMPSON, CRAIG, US  
[73] MEMORIAL SLOAN KETTERING CANCER CENTER, US  
[73] THE TRUSTEES OF PRINCETON UNIVERSITY, US  
[85] 2015-11-09  
[86] 2014-05-09 (PCT/US2014/037514)  
[87] (WO2014/183047)  
[30] US (61/822,095) 2013-05-10

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[11] **2,912,140**  
[13] C

[51] **Int.Cl. E02F 5/02 (2006.01) E02F 3/18 (2006.01)**  
[25] EN  
[54] **ROTARY DITCHER ATTACHMENT FOR AN EXCAVATOR**  
[54] **ACCESSOIRE ROTATIF POUR UNE EXCAVATRICE**  
[72] THOMPSON, MARK C., CA  
[73] ELMER'S WELDING & MANUFACTURING LTD., CA  
[86] (2912140)  
[87] (2912140)  
[22] 2015-11-17  
[30] US (62/080,614) 2014-11-17

---

[11] **2,912,231**  
[13] C

[51] **Int.Cl. F25D 3/08 (2006.01) B65D 81/38 (2006.01)**  
[25] EN  
[54] **PHASE CHANGE MATERIAL BLADDER FOR USE IN A TEMPERATURE CONTROLLED PRODUCT SHIPPER**  
[54] **VESSIE EN MATERIAU A CHANGEMENT DE PHASE DEVANT ETRE UTILISEE DANS UN EMBALLAGE D'EXPEDITION DE PRODUIT**  
[72] BLEZARD, WILLIAM C., US  
[72] HATCH, GEORGE, US  
[73] PACKAGING TECHNOLOGY GROUP, INC., US  
[85] 2015-11-10  
[86] 2014-05-09 (PCT/US2014/037473)  
[87] (WO2014/183019)  
[30] US (13/891,259) 2013-05-10

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[11] **2,912,520**  
[13] C

[51] **Int.Cl. D21H 13/06 (2006.01) C08B 5/00 (2006.01) C08B 16/00 (2006.01) D01F 2/02 (2006.01)**  
[25] EN  
[54] **PHOSPHORIC ACID-ESTERIFIED FINE CELLULOSE FIBER AND METHOD FOR PRODUCING THE SAME**  
[54] **FIBRES DE CELLULOSE ESTERIFIEE PAR L'ACIDE PHOSPHORIQUE ET LEUR PROCEDE DE FABRICATION**  
[72] NOGUCHI, YUICHI, JP  
[72] NOISHIKI, YASUTOMO, JP  
[72] HOMMA, IKUE, JP  
[73] OJI HOLDINGS CORPORATION, JP  
[85] 2015-11-13  
[86] 2014-05-16 (PCT/JP2014/063024)  
[87] (WO2014/185505)  
[30] JP (2013-103626) 2013-05-16

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[11] **2,912,536**  
[13] C

[51] **Int.Cl. C09D 5/10 (2006.01) C09D 151/08 (2006.01) C09D 167/00 (2006.01)**  
[25] EN  
[54] **POLYMER COMPOSITIONS AND COATINGS FOR FOOD AND BEVERAGE PACKAGING**  
[54] **COMPOSITIONS POLYMERES ET REVETEMENTS POUR DES EMBALLAGES ALIMENTAIRES ET DE BOISSON**  
[72] YOU, XIAORONG, US  
[72] SHI, YU, US  
[72] LIU, LINDA HSIAOHUA, US  
[73] THE COCA-COLA COMPANY, US  
[85] 2015-11-13  
[86] 2014-05-12 (PCT/US2014/037692)  
[87] (WO2014/186285)  
[30] US (61/824,084) 2013-05-16

**Brevets canadiens délivrés  
14 décembre 2021**

[11] **2,914,518**  
[13] C

- [51] **Int.Cl. A61B 17/34 (2006.01) A61B 10/02 (2006.01) A61B 17/22 (2006.01)**  
[25] EN  
[54] **PERFORATING TROCAR**  
[54] **TROCARD**  
[72] FUMEX, LAURENT, US  
[72] MASSEGLIA, THIERRY, FR  
[73] MERIT MEDICAL SYSTEMS, INC., US  
[85] 2015-12-04  
[86] 2014-06-05 (PCT/FR2014/051346)  
[87] (WO2015/001211)  
[30] FR (1356391) 2013-07-01

[11] **2,914,625**  
[13] C

- [51] **Int.Cl. A61M 5/31 (2006.01) A61M 9/007 (2006.01) A61M 5/20 (2006.01)**  
[25] EN  
[54] **GAS SYRINGE FILLING DEVICE AND METHODS FOR MAKING AND USING THEM**  
[54] **DISPOSITIF DE REMPLISSAGE DE SERINGUE A GAZ ET PROCEDES DE FABRICATION ET D'UTILISATION DE CELUI-CI**  
[72] AULD, JACK R., US  
[72] HUCULAK, JOHN C., US  
[72] MCCOLLAM, CHRISTOPHER L., US  
[72] LESCOULIE, JAMES, US  
[73] ALCON INC., US  
[85] 2015-12-04  
[86] 2014-05-02 (PCT/US2014/036706)  
[87] (WO2014/179779)  
[30] US (61/819,452) 2013-05-03

[11] **2,915,618**  
[13] C

- [51] **Int.Cl. B64C 13/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR DETERMINING A STATE OF A COMPONENT IN A HIGH LIFT SYSTEM OF AN AIRCRAFT**  
[54] **PROCEDE POUR DETERMINER L'ETAT D'UN COMPOSANT DANS UN SYSTEME HYPERSUSTENTATEUR D'UN AERONEF**  
[72] VAN BRUGGEN, JAN-AREND, DE  
[72] NEB, EUGEN, DE  
[72] BRADY, MICHAEL, DE  
[72] HARTWIG, WOLFGANG, DE  
[72] CRIOU, OLIVIER, DE  
[72] LATZEL, STEFAN, DE  
[72] HEINTJES, MARK, DE  
[73] AIRBUS OPERATIONS GMBH, DE  
[86] (2915618)  
[87] (2915618)  
[22] 2015-12-16  
[30] EP (14 199 907.8) 2014-12-22

[11] **2,915,729**  
[13] C

- [51] **Int.Cl. H04W 4/30 (2018.01) G06K 7/10 (2006.01)**  
[25] FR  
[54] **METHOD FOR COMMUNICATING INFORMATION FROM RADIO FREQUENCY PERIPHERAL IDENTIFIERS**  
[54] **PROCEDE DE COMMUNICATION D'INFORMATION A PARTIR D'IDENTIFIANTS DE PERIPHERIQUES RADIOFREQUENCES**  
[72] ROBIN, FRANCOIS, FR  
[72] BOTTINE, PHILIPPE, FR  
[73] STORE ELECTRONIC SYSTEMS, FR  
[85] 2015-12-16  
[86] 2014-07-03 (PCT/EP2014/064223)  
[87] (WO2015/001039)  
[30] FR (1356499) 2013-07-03

[11] **2,917,184**  
[13] C

- [51] **Int.Cl. B05B 1/18 (2006.01)**  
[25] EN  
[54] **SHOWER HEAD ASSEMBLY**  
[54] **ENSEMBLE DE POMME DE DOUCHE**  
[72] SUNSHINE, STEVE, US  
[73] SUNSHINE, STEVE, US  
[85] 2015-12-31  
[86] 2014-06-02 (PCT/US2014/040498)  
[87] (WO2015/002713)  
[30] US (61/842,941) 2013-07-03

[11] **2,917,263**  
[13] C

- [51] **Int.Cl. E21B 43/24 (2006.01) E21B 43/22 (2006.01) E21B 43/30 (2006.01)**  
[25] EN  
[54] **SOLVENT ADDITION TO IMPROVE EFFICIENCY OF HYDROCARBON PRODUCTION**  
[54] **ADDITION DE SOLVANT POUR AMELIORER LE RENDEMENT DE PRODUCTION D'HYDROCARBURE**  
[72] AL-MURAYRI, MOHAMMED TAHA, CA  
[72] HARDING, THOMAS, CA  
[72] MAINI, BRIJ BHOOSHAN, CA  
[72] OSKOUEI, JAVAD, CA  
[73] CNOOC PETROLEUM NORTH AMERICA ULC, CA  
[85] 2016-01-04  
[86] 2014-07-07 (PCT/CA2014/000547)  
[87] (WO2015/000066)  
[30] US (61/843,191) 2013-07-05  
[30] US (61/843,202) 2013-07-05  
[30] US (61/843,208) 2013-07-05

[11] **2,917,301**  
[13] C

- [51] **Int.Cl. C08J 5/18 (2006.01) B29C 48/08 (2019.01) B32B 7/028 (2019.01) B29C 55/02 (2006.01) B32B 27/32 (2006.01) C08L 45/00 (2006.01)**  
[25] EN  
[54] **HEAT ACTIVATED SHRINK FILMS**  
[54] **FILMS THERMORETRACTABLES**  
[72] PHAM, HOANG T., US  
[72] XUE, ANLE, US  
[72] PATIL, YATIN, US  
[73] AVERY DENNISON CORPORATION, US  
[85] 2016-01-04  
[86] 2014-07-02 (PCT/US2014/045288)  
[87] (WO2015/003077)  
[30] US (61/842,305) 2013-07-02

**Canadian Patents Issued  
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[11] **2,917,719**  
[13] C

[51] **Int.Cl. H04N 19/40 (2014.01) H04N 21/2343 (2011.01) H04L 12/16 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR TRANSMISSION OF DATA STREAMS**

[54] **SYSTEMES ET PROCEDES DE TRANSMISSION DE FLUX DE DONNEES**

[72] FRUSINA, BOGDAN, CA  
[72] GILHULY, BARRY, CA  
[72] HUDDA, ARIF, CA  
[72] SCHNEIDER, ANTHONY TODD, CA  
[72] SMITH, CAMERON KENNETH, CA  
[72] SZE, DAVID PUI KEUNG, CA  
[73] DEJERO LABS INC., CA  
[85] 2016-01-08  
[86] 2014-07-11 (PCT/CA2014/000563)  
[87] (WO2015/003250)  
[30] US (61/845,195) 2013-07-11

---

[11] **2,918,085**  
[13] C

[51] **Int.Cl. F24F 11/72 (2018.01) F24F 11/65 (2018.01) F24F 7/003 (2021.01) F24F 8/10 (2021.01)**

[25] EN

[54] **AN HVAC SYSTEM AND AN HVAC CONTROLLER CONFIGURED TO OPERATE THE HVAC SYSTEM BASED ON AIR POLLUTANT DATA AND USER COMFORT**

[54] **UN SYSTEME CVCA ET UN CONTROLEUR CVCA CONFIGURE POUR FAIRE FONCTIONNER LE SYSTEME CVCA EN FONCTION DES DONNEES RELATIVES AUX POLLUANTS ATMOSPHERIQUES ET DU CONFORT DE L'UTILISATEUR**

[72] LYONS, KEVIN, US  
[72] HREJSA, PETER, US  
[72] GOLDEN, KYLE, US  
[72] DOUGLAS, JONATHAN, US  
[72] WOLOWICZ, THOMAS, US  
[72] MANOHAR, SHAILESH, US  
[73] LENNOX INDUSTRIES INC., US  
[86] (2918085)  
[87] (2918085)  
[22] 2016-01-18  
[30] US (62/104,937) 2015-01-19  
[30] US (14/993,539) 2016-01-12

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[11] **2,918,363**  
[13] C

[51] **Int.Cl. A61K 38/19 (2006.01) A61K 39/395 (2006.01)**

[25] EN

[54] **TARGETED MODIFIED TNF FAMILY MEMBERS**

[54] **MEMBRES MODIFIES ET CIBLES DE LA FAMILLE DU TNF**

[72] TAVERNIER, JAN, BE  
[72] BULTINCK, JENNYFER, BE  
[72] PEELMAN, FRANK, BE  
[72] UZE, GILLES, FR  
[73] CENTRE HOSPITALIER REGIONAL UNIVERSITAIRE DE MONTPELLIER, FR  
[73] VIB VZW, BE  
[73] UNIVERSITEIT GENT, BE  
[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[73] UNIVERSITE DE MONTPELLIER, FR  
[85] 2016-01-14  
[86] 2014-07-18 (PCT/EP2014/065554)  
[87] (WO2015/007903)  
[30] EP (13306046.7) 2013-07-19

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[11] **2,918,591**  
[13] C

[51] **Int.Cl. G05D 16/10 (2006.01)**

[25] EN

[54] **ENCAPSULATED VALVE WITH LEVER ACTION**

[54] **SOUPAPE ENCAPSULEE A ACTION DE LEVIER**

[72] JOVANOVIC, RADOSLAV, ZA  
[73] AFRICAN OXYGEN LIMITED, ZA  
[85] 2016-01-18  
[86] 2014-07-18 (PCT/IB2014/063212)  
[87] (WO2015/008257)  
[30] ZA (2013/05482) 2013-07-19  
[30] ZA (2013/06652) 2013-09-04

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[11] **2,918,949**  
[13] C

[51] **Int.Cl. C08G 71/04 (2006.01) C08G 65/333 (2006.01)**

[25] EN

[54] **PROCESS FOR PREPARING POLYCARBAMATE AND REACTION PRODUCT THEREOF**

[54] **PROCEDE DE PREPARATION DE POLYCARBAMATE ET PRODUIT REACTIONNEL DE CELUI-CI**

[72] YU, XINRUI, US  
[72] HE, YIYONG, US  
[72] HULL, JOHN W., JR., US  
[72] FOLEY, PAUL, US  
[73] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2016-01-20  
[86] 2014-07-28 (PCT/US2014/048347)  
[87] (WO2015/017297)  
[30] US (13/955,507) 2013-07-31

---

[11] **2,919,913**  
[13] C

[51] **Int.Cl. B65G 21/12 (2006.01) B02C 21/02 (2006.01)**

[25] EN

[54] **MOBILE BULK MATERIAL PROCESSING APPARATUS WITH SLEWING CONVEYOR**

[54] **DISPOSITIF MOBILE DE TRAITEMENT DE MATIERES EN VRAC A CONVOYEUR ORIENTABLE**

[72] MCDEVITT, TERRY, IE  
[73] SANDVIK INTELLECTUAL PROPERTY AB, SE  
[85] 2016-01-29  
[86] 2014-06-26 (PCT/EP2014/063528)  
[87] (WO2015/022111)  
[30] EP (13180378.5) 2013-08-14



**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **2,919,970**  
[13] C

[51] **Int.Cl. H04N 21/236 (2011.01) H04H 20/28 (2009.01) H04H 60/07 (2009.01) H04N 21/2389 (2011.01) H04N 21/4385 (2011.01)**

[25] EN

[54] **TRANSMITTING APPARATUS, TRANSMITTING METHOD, RECEIVING APPARATUS AND RECEIVING METHOD**

[54] **APPAREIL DE TRANSMISSION, PROCEDE DE TRANSMISSION, APPAREIL DE RECEPTION ET PROCEDE DE RECEPTION**

[72] KITAZATO, NAOHISA, JP

[73] SONY CORPORATION, JP

[85] 2016-01-29

[86] 2014-07-11 (PCT/JP2014/068644)

[87] (WO2015/022827)

[30] JP (2013-167605) 2013-08-12

---

[11] **2,919,971**  
[13] C

[51] **Int.Cl. A61K 9/127 (2006.01) A61K 47/69 (2017.01) A61K 8/14 (2006.01) A61K 8/18 (2006.01) A61P 29/00 (2006.01) A61Q 19/00 (2006.01)**

[25] EN

[54] **VESICULAR FORMULATIONS FOR TOPICAL ADMINISTRATION**

[54] **FORMULATIONS VESICULEUSES AUX FINS D'ADMINISTRATION TOPIQUE**

[72] GARRAWAY, RICHARD WOLF, GB

[72] HENRY, WILLIAM, GB

[73] SEQUESSOME TECHNOLOGY HOLDINGS LIMITED, MT

[85] 2016-01-29

[86] 2014-07-31 (PCT/EP2014/066545)

[87] (WO2015/014965)

[30] GB (1313734.4) 2013-07-31

[30] GB (1313735.1) 2013-07-31

---

[11] **2,921,017**  
[13] C

[51] **Int.Cl. H04W 24/10 (2009.01) H04W 16/28 (2009.01) H04W 80/02 (2009.01) H04B 7/04 (2017.01) H04J 11/00 (2006.01)**

[25] EN

[54] **MULTI-USER MULTIPLE-INPUT MULTIPLE-OUTPUT (MU-MIMO) FEEDBACK PROTOCOL**

[54] **PROTOCOLE D'INFORMATIONS EN RETOUR MU-MIMO (MULTIPLES UTILISATEURS MULTIPLES ENTREES MULTIPLES SORTIES)**

[72] VERMANI, SAMEER, US

[72] TIAN, BIN, US

[72] TANDRA, RAHUL, US

[72] MERLIN, SIMONE, US

[73] QUALCOMM INCORPORATED, US

[85] 2016-02-10

[86] 2014-08-18 (PCT/US2014/051466)

[87] (WO2015/038285)

[30] US (61/876,031) 2013-09-10

[30] US (14/460,485) 2014-08-15

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[11] **2,921,398**  
[13] C

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

[25] EN

[54] **ANTIBODIES FOR INHIBITING FRIZZLED RECEPTORS AND PHARMACEUTICAL COMPOSITIONS CONTAINING ANTIBODIES FOR INHIBITING FRIZZLED RECEPTORS**

[54] **ANTICORPS PERMETTANT D'INHIBER DES RECEPTEURS FRIZZLED ET COMPOSITIONS PHARMACEUTIQUES CONTENANT DES ANTICORPS PERMETTANT D'INHIBER DES RECEPTEURS FRIZZLED**

[72] GAKHAL, AMANDEEP, US

[72] SIDHU, SACHDEV, CA

[72] PAN, GUOHUA, CA

[72] MOFFAT, JASON, CA

[72] ROBITAILLE, MELANIE, CA

[72] ANGERS, STEPHANE, CA

[73] MODMAB THERAPEUTICS CORPORATION, US

[85] 2016-02-12

[86] 2014-08-14 (PCT/US2014/051070)

[87] (WO2015/023851)

[30] US (61/865,668) 2013-08-14

---

[11] **2,921,520**  
[13] C

[51] **Int.Cl. H01F 7/123 (2006.01) H01F 7/16 (2006.01)**

[25] EN

[54] **SOLENOID INCLUDING A DUAL COIL ARRANGEMENT TO CONTROL LEAKAGE FLUX**

[54] **SOLENOIDE COMPRENANT UN AGENCEMENT A DEUX ENROULEMENTS POUR COMMANDER UN FLUX DE FUTES**

[72] AGARWAL, ARCHIT, IN

[72] WYATT, CHRISTOPHER KENNETH, US

[73] LABINAL, LLC, US

[85] 2016-02-16

[86] 2014-09-10 (PCT/US2014/054935)

[87] (WO2015/038600)

[30] US (61/876,814) 2013-09-12

---

[11] **2,921,979**  
[13] C

[51] **Int.Cl. G02B 21/00 (2006.01)**

[25] EN

[54] **AUTOFOCUS APPARATUS**

[54] **APPAREIL DE MISE AU POINT AUTOMATIQUE**

[72] BROOKER, JEFFREY S., US

[73] THORLABS, INC., US

[85] 2016-02-19

[86] 2014-08-22 (PCT/US2014/052291)

[87] (WO2015/027153)

[30] US (61/868,881) 2013-08-22

---

[11] **2,922,669**  
[13] C

[51] **Int.Cl. A61B 5/145 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR DISPLAY TYPE DETECTION OF A HANDHELD MEDICAL DEVICE**

[54] **SYSTEME ET PROCEDE POUR LA DETECTION DU TYPE D'AFFICHAGE D'UN DISPOSITIF MEDICAL A MAIN**

[72] BLACKBURN, MICHAEL J., US

[72] MANLOVE, NATHAN E., US

[72] RUTKOWSKI, PAUL S., US

[73] F. HOFFMANN-LA ROCHE AG, CH

[85] 2016-02-26

[86] 2014-10-23 (PCT/EP2014/072734)

[87] (WO2015/059221)

[30] US (14/062,922) 2013-10-25

**Canadian Patents Issued  
December 14, 2021**

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[11] **2,922,865**  
[13] C

[51] **Int.Cl. G21F 5/005 (2006.01) G21F 5/08 (2006.01) G21F 5/12 (2006.01)**

[25] FR

[54] **PACKAGE COMPRISING IMPROVED MEANS FOR SHOCK ABSORBANCE BETWEEN AN ASSEMBLY CONTAINING RADIOACTIVE MATERIALS AND THE COVER OF THE PACKAGING**

[54] **COLIS COMPRENANT DES MOYENS AMELIORES D'AMORTISSEMENT DE CHOC ENTRE UN ENSEMBLE RENFERMANT DES MATIERES RADIOACTIVES ET LE COUVERCLE DE L'EMBALLAGE**

[72] BABINET, CYRIL, FR

[72] PONTET, PIERRE-OLIVIER, FR

[73] TN INTERNATIONAL, FR

[73] GNS GESELLSCHAFT FUR NUKLEAR-SERVICE MBH, DE

[85] 2016-02-29

[86] 2014-09-04 (PCT/EP2014/068815)

[87] (WO2015/032848)

[30] FR (13 58506) 2013-09-05

---

[11] **2,924,448**  
[13] C

[51] **Int.Cl. G01N 33/15 (2006.01) C07K 16/00 (2006.01)**

[25] EN

[54] **ANTIBODY SELECTION APPARATUS AND METHODS**

[54] **APPAREIL ET PROCEDES DE SELECTION D'ANTICORPS**

[72] SHARMA, VIKAS K., US

[72] SWARTZ, TREVOR E., US

[72] PATAPOFF, THOMAS W., US

[73] GENENTECH, INC., US

[85] 2016-03-14

[86] 2014-11-26 (PCT/US2014/067580)

[87] (WO2015/081176)

[30] US (61/910,200) 2013-11-29

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[11] **2,924,640**  
[13] C

[51] **Int.Cl. C09K 8/04 (2006.01) C09K 8/524 (2006.01) E21B 37/06 (2006.01)**

[25] EN

[54] **DRILLING FLUID COMPOSITION AND METHOD USEFUL FOR REDUCING ACCRETION OF BITUMIN ON DRILL COMPONENTS**

[54] **COMPOSITION DE FLUIDE DE FORAGE ET PROCEDE UTILE POUR REDUIRE L'ACCRETION DE BITUME SUR LES COMPOSANTS DE FORAGE**

[72] YU, WANGLIN, US

[72] SINGH, HARPREET, US

[73] DOW GLOBAL TECHNOLOGIES LLC, US

[85] 2016-03-16

[86] 2014-09-23 (PCT/US2014/056940)

[87] (WO2015/047998)

[30] US (61/882,666) 2013-09-26

---

[11] **2,924,786**  
[13] C

[51] **Int.Cl. A01G 31/00 (2018.01) A01G 7/00 (2006.01)**

[25] EN

[54] **HYDROPONIC METHOD UTILIZING BENEFICIAL MICRO-ORGANISMS**

[54] **PROCEDE HYDROPONIQUE UTILISANT DES MICRO-ORGANISMES BENEFIQUES**

[72] ISHII, TAKAAKI, JP

[73] SASSOH INDUSTRIES CO., LTD., JP

[85] 2016-03-18

[86] 2014-09-19 (PCT/JP2014/074898)

[87] (WO2015/041336)

[30] JP (2013-194309) 2013-09-19

[30] JP (2014-062680) 2014-03-25

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[11] **2,925,287**  
[13] C

[51] **Int.Cl. A23P 30/40 (2016.01) A23K 10/00 (2016.01) A23K 40/00 (2016.01) A23L 29/00 (2016.01) A23L 29/20 (2016.01) A23L 29/269 (2016.01) A23L 33/00 (2016.01) A23P 10/40 (2016.01) A23C 9/152 (2006.01) A23F 5/00 (2006.01) A23L 2/40 (2006.01) A23L 2/54 (2006.01)**

[25] EN

[54] **POWDER COMPOSITION FOR AN AERATED FOOD PRODUCT**

[54] **COMPOSITION EN POUDRE POUR PRODUIT ALIMENTAIRE AERE**

[72] POORTINGA, ALBERT THIJS, NL

[72] VAN SEEVENTER, PAUL BASTIAAN, NL

[72] ARNAUDOV, LUBEN NIKOLAEV, NL

[72] STOYANOV, SIMEON DOBREV, NL

[73] FRIESLANDCAMPINA NEDERLAND B.V., NL

[85] 2016-03-23

[86] 2014-10-07 (PCT/NL2014/050696)

[87] (WO2015/053623)

[30] EP (13187767.2) 2013-10-08

---

[11] **2,925,394**  
[13] C

[51] **Int.Cl. G02B 3/14 (2006.01) G02C 7/08 (2006.01)**

[25] EN

[54] **IMPROVEMENTS IN OR RELATING TO DEFORMABLE MEMBRANE ASSEMBLIES**

[54] **AMELIORATIONS D'ASSEMBLAGES DE MEMBRANES DEFORMABLES OU RELATIVES A CEUX-CI**

[72] HOLLAND, BENJAMIN THOMAS TRISTRAM, GB

[72] RHODES, DANIEL PAUL, GB

[72] BRIODY, CONOR, GB

[72] JACOBY, THOMAS NORMAN LLYN, GB

[72] NISPER, JON, GB

[72] STEVENS, ROBERT EDWARD, GB

[73] ADLENS LIMITED, GB

[85] 2016-03-24

[86] 2014-09-25 (PCT/EP2014/070473)

[87] (WO2015/044260)

[30] GB (1317216.8) 2013-09-27

**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **2,925,398**  
[13] C

[51] **Int.Cl. B65D 47/20 (2006.01) G01F 19/00 (2006.01)**  
[25] EN  
[54] **CLOSURE ASSEMBLY FOR A CONTAINER AND A CONTAINER COMPRISING THE SAME**  
[54] **ENSEMBLE FERMETURE POUR UN RECIPIENT ET RECIPIENT COMPRENANT CE DERNIER**  
[72] BRISTOW, JAMES TIMOTHY, CN  
[73] ROTAM AGROCHEM INTERNATIONAL COMPANY LIMITED, CN  
[85] 2016-03-24  
[86] 2014-10-13 (PCT/CN2014/088454)  
[87] (WO2015/058629)  
[30] GB (1318808.1) 2013-10-24

---

[11] **2,925,455**  
[13] C

[51] **Int.Cl. H04N 21/6405 (2011.01) H04N 21/6437 (2011.01) G06F 13/00 (2006.01)**  
[25] EN  
[54] **CONTENT SUPPLYING APPARATUS, CONTENT SUPPLYING METHOD, PROGRAM, TERMINAL DEVICE, AND CONTENT SUPPLYING SYSTEM**  
[54] **APPAREIL DE LIVRAISON DE CONTENU, METHODE DE LIVRAISON DE CONTENU, PROGRAMME, APPAREIL TERMINAL ET SYSTEME DE LIVRAISON DE CONTENU**  
[72] YAMAGISHI, YASUAKI, JP  
[73] SONY CORPORATION, JP  
[85] 2016-03-24  
[86] 2014-09-12 (PCT/JP2014/074247)  
[87] (WO2015/045917)  
[30] JP (2013-202440) 2013-09-27

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[11] **2,925,685**  
[13] C

[51] **Int.Cl. B65D 81/34 (2006.01)**  
[25] EN  
[54] **CONTAINER BOTTOM HEATER**  
[54] **APPAREIL DE CHAUFFAGE DE FOND DE CONTENANT**  
[72] LAMIE, RANDY JOHN, US  
[73] DART CONTAINER CORPORATION, US  
[86] (2925685)  
[87] (2925685)  
[22] 2016-03-30  
[30] US (14/676,087) 2015-04-01

---

[11] **2,925,732**  
[13] C

[51] **Int.Cl. E21B 33/038 (2006.01) E21B 17/08 (2006.01) F16L 1/26 (2006.01)**  
[25] EN  
[54] **CONNECTOR**  
[54] **RACCORD**  
[72] TENNANT, ALAN, GB  
[72] TAYLOR, KEITH, GB  
[72] CHARLES, SCOTT, US  
[72] MITCHELL, CRAIG, GB  
[73] EXPRO NORTH SEA LIMITED, GB  
[85] 2016-03-30  
[86] 2014-10-07 (PCT/GB2014/053013)  
[87] (WO2015/052500)  
[30] GB (1317788.6) 2013-10-08

---

[11] **2,926,310**  
[13] C

[51] **Int.Cl. F16B 13/12 (2006.01) F16B 25/00 (2006.01)**  
[25] EN  
[54] **ANCHORING SYSTEM WITH A SLEEVE ELEMENT AND AN EXPANSION ELEMENT**  
[54] **SYSTEME D'ANCRAGE DOTE D'UN ELEMENT DE MANCHON ET D'UN ELEMENT D'EXPANSION**  
[72] HETTICH, ULRICH, DE  
[73] LUDWIG HETTICH HOLDING GMBH & CO. KG, DE  
[85] 2016-04-04  
[86] 2014-09-05 (PCT/EP2014/068934)  
[87] (WO2015/055350)  
[30] DE (10 2013 111 390.7) 2013-10-15  
[30] DE (10 2013 114 653.8) 2013-12-20

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[11] **2,927,086**  
[13] C

[51] **Int.Cl. A61B 34/10 (2016.01) A61B 17/90 (2006.01) A61F 2/30 (2006.01) A61F 2/46 (2006.01)**  
[25] EN  
[54] **METHODS, SYSTEMS AND DEVICES FOR PRE-OPERATIVELY PLANNED SHOULDER SURGERY GUIDES AND IMPLANTS**  
[54] **PROCEDES, SYSTEMES ET DISPOSITIFS POUR DES GUIDES ET IMPLANTS EN CHIRURGIE DE L'EPAULE PLANIFIES DE MANIERE PRE-OPERATOIRE**  
[72] CHAOUI, JEAN, FR  
[72] WALCH, GILLES, FR  
[73] IMASCAP SAS, FR  
[85] 2016-04-11  
[86] 2014-10-10 (PCT/IB2014/002819)  
[87] (WO2015/052586)  
[30] US (61/889,213) 2013-10-10

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[11] **2,927,143**  
[13] C

[51] **Int.Cl. A01J 5/08 (2006.01)**  
[25] EN  
[54] **TEATCUP LINER WITH ENHANCED TEAT MASSAGE AND METHOD OF MASSAGING A TEAT**  
[54] **MANCHON-TRAYEUR AVEC MASSAGE DE MAMELLE AMELIORE ET METHODE DE MASSAGE DE MAMELLE**  
[72] ALVEBY, NILS, SE  
[73] DELAVAL HOLDING AB, SE  
[85] 2016-04-12  
[86] 2014-10-27 (PCT/SE2014/051264)  
[87] (WO2015/065274)  
[30] SE (1351277-7) 2013-10-28  
[30] US (14/064,624) 2013-10-28

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December 14, 2021**

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[11] **2,927,322**  
[13] C

[51] **Int.Cl. C22B 3/02 (2006.01) B01J 19/26 (2006.01) C22B 3/04 (2006.01) B03D 1/14 (2006.01) C22B 11/08 (2006.01)**

[25] EN

[54] **FLUID TREATMENT APPARATUS AND PROCESS**

[54] **APPAREIL ET PROCÉDE DE TRAITEMENT DE FLUIDE**

[72] SINGH, ASHOK ADRIAN, ZA

[73] SINGH, ASHOK ADRIAN, ZA

[85] 2016-04-13

[86] 2014-10-14 (PCT/IB2014/065286)

[87] (WO2015/056159)

[30] ZA (2013/07734) 2013-10-17

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[11] **2,928,848**  
[13] C

[51] **Int.Cl. B41J 2/175 (2006.01) G03G 15/06 (2006.01) G03G 21/00 (2006.01)**

[25] EN

[54] **SYSTEMS, METHODS AND APPARATUSES FOR AUTHORIZED USE AND REFILL OF A PRINTER CARTRIDGE**

[54] **SYSTEMES, METHODES ET APPAREILS POUR UTILISATION AUTORISEE ET RECHARGE D'UNE CARTOUCHE D'IMPRIMANTE**

[72] IGNATCHENKO, SERGEY, LI

[72] IVANCHYKHIN, DMYTRO, LI

[73] OLOGN TECHNOLOGIES AG, LI

[86] (2928848)

[87] (2928848)

[22] 2014-03-13

[62] 2,907,017

[30] US (61/794,413) 2013-03-15

[30] US (61/858,868) 2013-07-26

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[11] **2,928,940**  
[13] C

[51] **Int.Cl. C12N 9/10 (2006.01) A23L 27/30 (2016.01) C07H 15/256 (2006.01) C12N 15/54 (2006.01) C12P 19/56 (2006.01)**

[25] EN

[54] **RECOMBINANT PRODUCTION OF STEVIOL GLYCOSIDES**

[54] **PRODUCTION PAR RECOMBINAISON DE GLYCOSIDES DE STEVIOL**

[72] MAO, GUOHONG, US

[72] YU, XIAODAN, US

[73] CONAGEN INC., US

[85] 2016-04-27

[86] 2014-10-03 (PCT/US2014/059081)

[87] (WO2015/065650)

[30] US (61/898,571) 2013-11-01

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[11] **2,929,100**  
[13] C

[51] **Int.Cl. B31D 1/04 (2006.01)**

[25] EN

[54] **DURABLE CREPED TISSUE**

[54] **MOUCHOIR EN PAPIER CREPE DURABLE**

[72] BRADLEY, ELIZABETH ORIEL, US

[72] SATORI, CHRISTOPHER LEE, US

[72] WERNER, JOHN ALEXANDER, IV, US

[72] ZWICK, KENNETH JOHN, US

[73] KIMBERLY-CLARK WORLDWIDE, INC., US

[85] 2016-04-28

[86] 2014-10-28 (PCT/US2014/062666)

[87] (WO2015/066036)

[30] US (61/897,965) 2013-10-31

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[11] **2,929,143**  
[13] C

[51] **Int.Cl. B65B 7/18 (2006.01) B31B 50/28 (2017.01)**

[25] EN

[54] **IMPROVEMENTS IN OR RELATING TO PACKAGING**

[54] **PERFECTIONNEMENTS APPORTES OU SE RAPPORTANT A UN EMBALLAGE**

[72] WIESER, MARTIN KURT, NO

[73] ELOPAK AS, NO

[85] 2016-04-29

[86] 2014-11-05 (PCT/EP2014/073823)

[87] (WO2015/067661)

[30] GB (1319551.6) 2013-11-05

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[11] **2,929,268**  
[13] C

[51] **Int.Cl. C12N 5/07 (2010.01) A61K 35/14 (2015.01) B01D 21/00 (2006.01) C12N 15/10 (2006.01) C12Q 1/00 (2006.01)**

[25] EN

[54] **METHODS FOR EXTRACELLULAR VESICLE ISOLATION AND SELECTIVE REMOVAL**

[54] **METHODES D'ISOLATION DE VESICULE EXTRACELLULAIRE ET D'EXTRACTION SELECTIVE**

[72] HAJ-AHMAD, YOUSEF, CA

[73] NORGEN BIOTEK CORP., CA

[86] (2929268)

[87] (2929268)

[22] 2016-05-09

[30] US (62/160,647) 2015-05-13

[30] US (15/147,969) 2016-05-06

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[11] **2,929,276**  
[13] C

[51] **Int.Cl. A47J 31/40 (2006.01)**

[25] EN

[54] **BEVERAGE PREPARATION ASSEMBLY**

[54] **ENSEMBLE DE PREPARATION DE BOISSON**

[72] DUBIEF, FLAVIEN, CH

[72] SCORRANO, LUCIO, CH

[72] BAUDET, LARRY, CH

[72] JAMOLLI, KEVIN, CH

[73] SOCIETE DES PRODUITS NESTLE S.A., CH

[85] 2016-04-29

[86] 2014-12-10 (PCT/EP2014/077194)

[87] (WO2015/091143)

[30] EP (13198958.4) 2013-12-20

**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **2,929,431**  
[13] C

[51] **Int.Cl. B22F 9/24 (2006.01)**  
[25] EN  
[54] **A PROCESS FOR THE PREPARATION OF METAL NANOPARTICLES**  
[54] **PROCEDE DE PREPARATION DE NANOPARTICULES METALLIQUES**  
[72] VINOD AGARWAL, SANKALP, IN  
[72] SUNDER REDDY, SHYAM, IN  
[72] MARSHAL, IN  
[73] COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, IN  
[85] 2016-05-02  
[86] 2014-10-31 (PCT/IN2014/000695)  
[87] (WO2015/063794)  
[30] IN (3245/DEL/2013) 2013-11-01

---

[11] **2,930,511**  
[13] C

[51] **Int.Cl. G01N 21/35 (2014.01) G01N 1/28 (2006.01)**  
[25] EN  
[54] **OPTICAL ANALYZER, OPTICAL ANALYZING METHOD AND SAMPLE PREPARATION DEVICE**  
[54] **ANALYSEUR OPTIQUE, PROCEDE D'ANALYSE OPTIQUE ET DISPOSITIF DE PREPARATION D'ECHANTILLON**  
[72] MARBACH, RALF, FI  
[73] GRAINSENSE OY, FI  
[85] 2016-05-12  
[86] 2013-11-14 (PCT/IB2013/060139)  
[87] (WO2015/071706)

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[11] **2,932,637**  
[13] C

[51] **Int.Cl. F04B 35/04 (2006.01) F04B 41/02 (2006.01) F04B 49/06 (2006.01) F04B 49/08 (2006.01) F04B 49/20 (2006.01) F04C 28/08 (2006.01) F04D 25/06 (2006.01) F04D 27/00 (2006.01)**  
[25] EN  
[54] **COMPRESSOR SYSTEM AND METHOD FOR OPERATING THE COMPRESSOR SYSTEM IN DEPENDENCE ON THE OPERATING STATE OF THE RAIL VEHICLE**  
[54] **SYSTEME DE COMPRESSEUR ET PROCEDE DE COMMANDE DU SYSTEME DE COMPRESSEUR EN FONCTION D'UN ETAT DE FONCTIONNEMENT DU VEHICULE FERROVIAIRE**  
[72] ASSMANN, GERT, DE  
[72] KIPP, THOMAS, DE  
[72] MERKEL, THOMAS, DE  
[72] HERING, KARL, DE  
[72] FRANK, ROBERT, DE  
[72] MUELLER, CLAUS, DE  
[73] KNORR-BREMSE SYSTEME FUR SCHIENENFAHRZEUGE GMBH, DE  
[85] 2016-06-03  
[86] 2014-12-02 (PCT/EP2014/076164)  
[87] (WO2015/082430)  
[30] DE (10 2013 113 555.2) 2013-12-05

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[11] **2,933,577**  
[13] C

[51] **Int.Cl. B65G 47/24 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD WITH DRAG CONVEYOR FOR HIGH RATE PRODUCTION WELDING**  
[54] **SYSTEME ET PROCEDE ASSOCIE A UN TRANSPORTEUR A RACLETTES POUR SOUDAGE DE PRODUCTION A HAUT DEBIT**  
[72] BRANOFF, MATT, CA  
[72] HEUCHAN, GREGORY I., CA  
[72] KOSCIELSKI, LARRY, CA  
[72] MICHAUD, ERIC, CA  
[72] RENAUD, DARCEY D., CA  
[73] DOBEN LIMITED, CA  
[85] 2016-06-13  
[86] 2015-07-02 (PCT/CA2015/050613)  
[87] (WO2016/000076)  
[30] US (62/020,064) 2014-07-02

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[11] **2,934,253**  
[13] C

[51] **Int.Cl. C08K 5/32 (2006.01)**  
[25] EN  
[54] **AN AQUEOUS FLOW IMPROVER FORMULATION FOR REFINED PRODUCTS**  
[54] **FORMULATION AQUEUSE AMELIORANT L'ECOULEMENT DE PRODUITS RAFFINES**  
[72] SUN, LU, US  
[73] LIQUIDPOWER SPECIALTY PRODUCTS INC., US  
[85] 2016-06-16  
[86] 2014-12-09 (PCT/US2014/069195)  
[87] (WO2015/094783)  
[30] US (61/917,369) 2013-12-18

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[11] **2,935,615**  
[13] C

[51] **Int.Cl. B01D 53/04 (2006.01) A01G 9/18 (2006.01) B01D 53/62 (2006.01) B01D 53/96 (2006.01) B01J 20/04 (2006.01)**  
[25] EN  
[54] **MOISTURE SWING CARBON DIOXIDE ENRICHMENT PROCESS**  
[54] **PROCEDE D'ENRICHISSEMENT DU DIOXYDE DE CARBONE PAR VARIATION D'HUMIDITE**  
[72] BIJL, ANTONIE, NL  
[72] ROESTENBERG, TIMO, NL  
[72] RODRIQUEZ MOSQUEDA, RAFAEL, NL  
[72] BREM, GERRIT, NL  
[72] O'CONNOR, PAUL, NL  
[73] CLIMEWORKS AG, CH  
[85] 2016-06-30  
[86] 2014-12-03 (PCT/EP2014/076462)  
[87] (WO2015/082567)  
[30] US (61/910,977) 2013-12-03

**Canadian Patents Issued  
December 14, 2021**

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[11] **2,935,716**  
[13] C

[51] **Int.Cl. A47J 31/40 (2006.01) A47J 31/44 (2006.01) A47J 31/52 (2006.01)**  
[25] EN  
[54] **METHOD FOR TAKING INTO USE AN EXCHANGEABLE SUPPLY PACK IN A BEVERAGE DISPENSING MACHINE AND SYSTEM COMPRISING AN EXCHANGEABLE SUPPLY PACK AND COMPUTER PROGRAM PRODUCT**

[54] **PROCEDE DE MISE EN UTILISATION D'UNE RECHARGE AMOVIBLE DANS UNE MACHINE DE DISTRIBUTION DE BOISSON ET SYSTEME COMPRENANT UNE RECHARGE AMOVIBLE ET PROGICIEL**

[72] STANDAAR, KOEN, NL  
[72] JONES, STUART MICHAEL RUAN, NL  
[72] NELSON, CRAIG HARVEY, NL  
[72] LLOYD, CARYS ELERI, NL  
[72] DEES, HENDRIK JOHAN, NL  
[72] NIJLAND, WOUTER PLECHELMUS BERNARDUS, NL  
[72] GIESEN, LEONARDUS HENRICUS WILHELMUS, NL  
[72] KLABBERS, BRAM, NL  
[73] KONINKLIJKE DOUWE EGBERTS B.V., NL  
[85] 2016-06-30  
[86] 2015-01-02 (PCT/NL2015/050001)  
[87] (WO2015/102492)  
[30] NL (2012044) 2014-01-03

---

[11] **2,935,893**  
[13] C

[51] **Int.Cl. E05D 7/00 (2006.01) E05D 7/08 (2006.01) E05D 11/00 (2006.01) E05F 3/10 (2006.01) E05F 3/20 (2006.01)**  
[25] EN  
[54] **LOW-BULKINESS HYDRAULIC HINGE**

[54] **CHARNIERE HYDRAULIQUE A FAIBLE ENCOMBREMENT**

[72] BACCHETTI, LUCIANO, IT  
[73] IN & TEC S.R.L., IT  
[85] 2016-07-05  
[86] 2015-01-27 (PCT/IB2015/050603)  
[87] (WO2015/111027)  
[30] IT (VI2014A000021) 2014-01-27

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[11] **2,936,176**  
[13] C

[51] **Int.Cl. H04N 21/2343 (2011.01) H04N 21/236 (2011.01) H04N 19/70 (2014.01) G08B 13/196 (2006.01)**  
[25] EN  
[54] **STREAMING MULTIPLE ENCODINGS ENCODED USING DIFFERENT ENCODING PARAMETERS**

[54] **LECTURE EN FLUX CONTINU DE CODAGES MULTIPLES CODES AVEC DIFFERENTS PARAMETRES DE CODAGE**

[72] MARLATT, SHAUN P., CA  
[72] SHIR, OREN, CA  
[72] NEUFELD, PETER W., CA  
[72] NGUYEN, VAN C., CA  
[72] AFROOZE, SINA, CA  
[73] AVIGILON CORPORATION, CA  
[85] 2016-07-07  
[86] 2014-12-19 (PCT/US2014/071735)  
[87] (WO2015/108672)  
[30] US (61/927,952) 2014-01-15  
[30] US (14/568,081) 2014-12-11

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[11] **2,936,502**  
[13] C

[51] **Int.Cl. E21B 33/12 (2006.01)**  
[25] EN  
[54] **DOWNHOLE PACKER AND ASSOCIATED METHODS**

[54] **GARNITURE D'ETANCHEITE DE FOND DE TROU ET PROCEDES ASSOCIES**

[72] ANDERSON, NEIL, GB  
[72] MACKIE, COLIN, GB  
[73] SWELLFIX B.V., NL  
[85] 2016-07-11  
[86] 2015-01-21 (PCT/EP2015/051143)  
[87] (WO2015/110471)  
[30] GB (1400975.7) 2014-01-21

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[11] **2,936,701**  
[13] C

[51] **Int.Cl. G06Q 30/02 (2012.01)**  
[25] EN  
[54] **METHODS AND APPARATUS TO COMPENSATE IMPRESSION DATA FOR MISATTRIBUTION AND/OR NON-COVERAGE BY A DATABASE PROPRIETOR**

[54] **PROCEDES ET APPAREIL POUR COMPENSER L'ATTRIBUTION INCORRECTE ET/OU LE DEFAUT DE COUVERTURE DE DONNEES D'IMPRESSIION PAR LE PROPRIETAIRE D'UNE BASE DE DONNEES**

[72] RAO, KUMAR NAGARAJA, US  
[72] LUO, TIANJUE, US  
[72] PEREZ, ALBERT RONALD, US  
[72] BELL, STEPHEN S., US  
[72] ZHANG, MIMI, US  
[72] HASKELL, JENNIFER, US  
[72] WONG, DAVID, US  
[73] THE NIELSEN COMPANY (US), LLC, US  
[85] 2016-07-12  
[86] 2014-12-04 (PCT/US2014/068623)  
[87] (WO2015/138016)  
[30] US (61/952,726) 2014-03-13  
[30] US (61/979,391) 2014-04-14  
[30] US (61/986,784) 2014-04-30  
[30] US (61/991,286) 2014-05-09  
[30] US (62/014,659) 2014-06-19  
[30] US (62/023,675) 2014-07-11  
[30] US (62/030,571) 2014-07-29

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[11] **2,936,721**  
[13] C

[51] **Int.Cl. A61K 9/08 (2006.01) A61J 3/00 (2006.01) A61K 9/19 (2006.01)**  
[25] EN  
[54] **PROCESS FOR RECONSTITUTION OF A SOLID FORM OF A PHARMACEUTICAL COMPOSITION**

[54] **PROCEDE POUR LA RECONSTITUTION D'UNE FORME SOLIDE D'UNE COMPOSITION PHARMACEUTIQUE**

[72] PAYET-BURIN, XAVIER, FR  
[73] EVEON, FR  
[73] UCB BIOPHARMA SPRL, BE  
[85] 2016-07-13  
[86] 2015-01-20 (PCT/EP2015/050988)  
[87] (WO2015/107214)  
[30] EP (14305070.6) 2014-01-20

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14 décembre 2021**

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[11] **2,937,491**  
[13] C

[51] **Int.Cl. F01D 17/10 (2006.01) F02C 9/18 (2006.01)**  
[25] FR  
[54] **TURBOMACHINE WITH COLLECTION OF A COMPRESSED AIR FLOW**  
[54] **TURBOMACHINE A PRELEVEMENT DE FLUX D'AIR COMPRI**

[72] BENYAHIA, ABDELKADER, FR  
[72] BOITEUX, JEAN-MICHEL, FR  
[72] DELABRIERE, MAXIME, FR  
[72] FIACK, MATTHIEU, FR  
[72] FONTANEL, EDDY STEPHANE JOEL, FR  
[72] MARTIN MATOS, ALBERTO, FR  
[72] ORSI, HELENE, FR  
[72] REMBRY, PHILIPPE, FR  
[72] RENON, OLIVIER, FR  
[72] ROSSI, GIULIANA ELISA, FR  
[73] SNECMA, FR  
[85] 2016-07-20  
[86] 2015-01-20 (PCT/FR2015/050131)  
[87] (WO2015/110748)  
[30] FR (1450491) 2014-01-21

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[11] **2,938,016**  
[13] C

[51] **Int.Cl. H04W 16/06 (2009.01)**  
[25] EN  
[54] **CHANNEL MONITORING METHOD AND DEVICE**  
[54] **DISPOSITIF ET PROCEDE DE SURVEILLANCE DE CANAL**

[72] LI, BINGZHAO, CN  
[72] QUAN, WEI, CN  
[72] YANG, XIAODONG, CN  
[72] ZHANG, JIAN, CN  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2016-07-26  
[86] 2014-01-28 (PCT/CN2014/071697)  
[87] (WO2015/113223)

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[11] **2,938,151**  
[13] C

[51] **Int.Cl. E21B 44/06 (2006.01) B25D 17/24 (2006.01) B25D 9/26 (2006.01)**  
[25] EN  
[54] **DAMPING DEVICE FOR A PERCUSSION DEVICE, PERCUSSION DEVICE AND ROCK DRILLING MACHINE**  
[54] **DISPOSITIF D'AMORTISSEMENT POUR DISPOSITIF DE PERCUSSION, DISPOSITIF DE PERCUSSION, ET PERFORATRICE DE ROCHES**

[72] PETTERSSON, MARIA, SE  
[73] EPIROC ROCK DRILLS AKTIEBOLAG, SE  
[85] 2016-07-27  
[86] 2015-01-16 (PCT/SE2015/050035)  
[87] (WO2015/122824)  
[30] SE (1450172-0) 2014-02-14

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[11] **2,939,033**  
[13] C

[51] **Int.Cl. C09K 21/04 (2006.01) C23F 11/02 (2006.01) C23F 11/08 (2006.01)**  
[25] EN  
[54] **AMMONIUM POLYPHOSPHATE BASED FIRE-RETARDANT COMPOSITIONS**  
[54] **COMPOSITIONS IGNIFUGEANTES A BASE DE POLYPHOSPHATE D'AMMONIUM**

[72] GARNER, ANDREW, CA  
[72] KENNEDY, TERRENCE, CA  
[72] ROBERGE, MIKE, CA  
[73] X'AAN INNOVATIONS INC., CA  
[85] 2016-08-08  
[86] 2014-02-06 (PCT/CA2014/050082)  
[87] (WO2014/121398)  
[30] US (61/761,615) 2013-02-06

---

[11] **2,941,787**  
[13] C

[51] **Int.Cl. E05B 19/18 (2006.01) E05B 19/00 (2006.01) E05B 35/00 (2006.01)**  
[25] EN  
[54] **LOCKING SYSTEM HAVING CONTACT SURFACES**  
[54] **SYSTEME DE VERROUILLAGE AVEC SURFACES DE CONTACT**

[72] HAAKE, ANDRE, DE  
[72] HAAKE, OLIVER, DE  
[72] HAAKE, PATRICK, DE  
[73] HAAKE, ANDRE, DE  
[73] HAAKE, OLIVER, DE  
[73] HAAKE, PATRICK, DE  
[85] 2016-09-07  
[86] 2015-03-09 (PCT/EP2015/054830)  
[87] (WO2015/132413)  
[30] DE (10 2014 103 070.2) 2014-03-07

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[11] **2,942,276**  
[13] C

[51] **Int.Cl. C10G 29/24 (2006.01) C10L 3/10 (2006.01)**  
[25] EN  
[54] **COMPOSITION FOR REMOVAL OF SULFUR-CONTAINING COMPOUNDS**  
[54] **COMPOSITE POUR ELIMINER DES COMPOSES CONTENANT DU SOUFRE**

[72] FUJI, JUNICHI, JP  
[72] MIYAZAKI, RYOKO, JP  
[72] SUZUKI, TAKAHIRO, JP  
[73] KURARAY CO., LTD., JP  
[85] 2016-09-09  
[86] 2015-03-11 (PCT/JP2015/057114)  
[87] (WO2015/141535)  
[30] JP (2014-053181) 2014-03-17

---

[11] **2,945,338**  
[13] C

[51] **Int.Cl. E06B 3/66 (2006.01)**  
[25] EN  
[54] **DUTCHY WITH INTEGRATED PRESSURE INDICATOR**  
[54] **BEIGNET A INDICATEUR DE PRESSION INTEGRE**

[72] KOSTER, NORMAN, CA  
[73] STOUFFVILLE GLASS INC., CA  
[86] (2945338)  
[87] (2945338)  
[22] 2016-10-14

**Canadian Patents Issued  
December 14, 2021**

---

[11] **2,945,668**  
[13] C

[51] **Int.Cl. E21B 7/24 (2006.01) E21B 1/14 (2006.01) E21B 4/14 (2006.01) E21B 4/16 (2006.01) E21B 7/18 (2006.01) E21B 21/14 (2006.01)**

[25] EN  
[54] **FLUID PULSE APPARATUS**  
[54] **APPAREIL A IMPULSIONS DE FLUIDE**

[72] KETTELS, TREVOR DAVID, AU  
[73] SJM DESIGNS PTY LTD, AU  
[85] 2016-07-27  
[86] 2015-01-27 (PCT/AU2015/000032)  
[87] (WO2015/109364)  
[30] AU (AU2014900239) 2014-01-27  
[30] AU (AU2014902054) 2014-05-29

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[11] **2,945,890**  
[13] C

[51] **Int.Cl. F04C 2/08 (2006.01) F02C 7/236 (2006.01) F04C 11/00 (2006.01) F04C 15/00 (2006.01)**

[25] FR  
[54] **FUEL GEAR PUMP INTENDED, IN PARTICULAR, AS A HIGH-PRESSURE PUMP**  
[54] **POMPE A ENGRENAGES A CARBURANT, PREVUE NOTAMMENT COMME POMPE A HAUTE PRESSION**

[72] VERTENOEUIL, PHILIPPE, FR  
[72] WAISSI, BELLAL, FR  
[73] SNECMA, FR  
[85] 2016-10-14  
[86] 2015-04-14 (PCT/FR2015/051001)  
[87] (WO2015/159018)  
[30] FR (1453372) 2014-04-15

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[11] **2,945,993**  
[13] C

[51] **Int.Cl. G05B 19/00 (2006.01) G08B 19/00 (2006.01)**

[25] EN  
[54] **ENCLOSURE DIAGNOSTIC AND CONTROL SYSTEMS**  
[54] **SYSTEMES DE DIAGNOSTIC ET DE COMMANDE D'ENCEINTE**

[72] MANAHAN, JOSEPH MICHAEL, US  
[72] IANNCE, STEPHEN P., US  
[72] ROTHENBERGER, RICHARD E., US  
[72] BONACCIO, JOHN M., US  
[72] FREER, BENJAMIN AVERY, US  
[73] EATON INTELLIGENT POWER LIMITED, IE  
[85] 2016-10-14  
[86] 2015-05-21 (PCT/US2015/031909)  
[87] (WO2015/179604)  
[30] US (62/001,167) 2014-05-21

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[11] **2,946,131**  
[13] C

[51] **Int.Cl. B23D 47/02 (2006.01) B23D 47/04 (2006.01)**

[25] EN  
[54] **MITER SAW**  
[54] **SCIE A ONGLET**

[72] TENNANT, C. SCOTT, US  
[72] HART, MICHAEL, US  
[72] KNIGHT, WALTER, US  
[72] IPATENCO, ALEK, US  
[73] AC (MACAO COMMERCIAL OFFSHORE) LIMITED, CN  
[86] (2946131)  
[87] (2946131)  
[22] 2016-10-21  
[30] US (14/930,006) 2015-11-02

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[11] **2,946,699**  
[13] C

[51] **Int.Cl. A61M 25/01 (2006.01) A61L 2/26 (2006.01) A61L 31/00 (2006.01) A61M 25/00 (2006.01) A61M 25/06 (2006.01) A61M 39/02 (2006.01) A61M 39/20 (2006.01)**

[25] EN  
[54] **ANTIMICROBIAL OBTURATOR FOR USE WITH VASCULAR ACCESS DEVICES**  
[54] **OBTURATEUR ANTIMICROBIEN UTILISE AVEC DES DISPOSITIFS D'ACCES VASCULAIRE**

[72] BURKHOLZ, JONATHAN KARL, US  
[72] SHEVGOOR, SIDDARTH K., US  
[73] BECTON, DICKINSON AND COMPANY, US  
[85] 2016-10-19  
[86] 2015-04-14 (PCT/US2015/025797)  
[87] (WO2015/164133)  
[30] US (14/260,071) 2014-04-23

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[11] **2,948,353**  
[13] C

[51] **Int.Cl. G01N 21/64 (2006.01) G01N 21/65 (2006.01)**

[25] EN  
[54] **A PLASMONIC CHIP AND A DIAGNOSTIC METHOD FOR OBSERVATION OF A FLUORESCENCE IMAGE AND RAMAN SPECTROSCOPY OF CANCER-RELATED SUBSTANCE ON THE PLASMONIC CHIPS**  
[54] **PUCE PLASMONIQUE, ET PROCEDES DE DIAGNOSTIC DU CANCER UTILISANT RESPECTIVEMENT UNE IMAGE FLUORESCENTE ET LA SPECTROSCOPIE RAMAN ET LEUR UTILISATION**

[72] HASEGAWA, YUKI, JP  
[72] HASEGAWA, KATSUYUKI, JP  
[73] MYTECH CO., LTD., JP  
[85] 2016-11-07  
[86] 2015-05-07 (PCT/JP2015/063219)  
[87] (WO2015/170711)  
[30] JP (PCT/JP2014/062318) 2014-05-08  
[30] JP (2015-036645) 2015-02-26

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[11] **2,948,717**  
[13] C

[51] **Int.Cl. B27K 3/34 (2006.01) B27K 3/02 (2006.01)**

[25] EN  
[54] **METHOD FOR THE MODIFICATION OF WOOD**  
[54] **PROCEDE DE MODIFICATION DE BOIS**

[72] TURNBULL, NEIL, GB  
[72] KAPPEN, THEODORUS GERARDUS MARINUS MARIA, GB  
[73] TRICOYA TECHNOLOGIES LTD, GB  
[85] 2016-11-10  
[86] 2015-05-12 (PCT/EP2015/060449)  
[87] (WO2015/173226)  
[30] EP (14168076.9) 2014-05-13



**Brevets canadiens délivrés  
14 décembre 2021**

[11] **2,949,424**

[13] C

- [51] **Int.Cl. E21B 7/00 (2006.01)**  
[25] EN  
[54] **WIRELIN DRILLING SYSTEMS**  
[54] **SYSTEME DE FORAGE PAR TIGES**  
[72] UPMEIER, THORSTEN, DE  
[72] KRUSE, CHRISTOF, DE  
[72] WREDE, STEFAN, DE  
[72] MAENNEL, RENE, DE  
[73] LONGYEAR TM, INC., US  
[85] 2016-11-16  
[86] 2015-05-20 (PCT/US2015/031752)  
[87] (WO2015/179504)  
[30] US (62/000,725) 2014-05-20

[11] **2,949,691**

[13] C

- [51] **Int.Cl. C08L 71/10 (2006.01) C08J 5/04 (2006.01) C08J 5/24 (2006.01) C08L 63/00 (2006.01) C08L 79/04 (2006.01)**  
[25] EN  
[54] **FUNCTIONALIZED POLYMER PARTICLES FOR USE AS TOUGHENING AGENT**  
[54] **PARTICULES DE POLYMERES FONCTIONNALISEES DESTINEES A ETRE UTILISEES COMME MODIFIANT CHOC**  
[72] PRATTE, JAMES FRANCIS, US  
[72] MASKELL, ROBIN K., US  
[72] GRIFFIN, JAMES MARTIN, US  
[72] ELDER, JUDITH ANNE, GB  
[73] CYTEC INDUSTRIES INC., US  
[85] 2016-11-18  
[86] 2015-05-21 (PCT/US2015/031937)  
[87] (WO2015/179618)  
[30] US (62/001,829) 2014-05-22

[11] **2,950,825**

[13] C

- [51] **Int.Cl. A61C 1/08 (2006.01)**  
[25] EN  
[54] **METHOD OF MAKING A DENTAL DRILLING TEMPLATE**  
[54] **METHODE DE FABRICATION D'UN MODELE DE FORAGE DENTAIRE**  
[72] SCHEFFER, AXEL, DE  
[73] MED.DENT.MINDS GMBH, DE  
[85] 2016-11-30  
[86] 2015-06-01 (PCT/EP2015/001110)  
[87] (WO2015/185205)  
[30] DE (102014007870.1) 2014-06-03

[11] **2,952,925**

[13] C

- [51] **Int.Cl. G01N 27/82 (2006.01)**  
[25] EN  
[54] **MICRO-MAGNETIC DETECTING METHOD AND MICRO-MAGNETIC DETECTING DEVICE**  
[54] **METHODE DE DETECTION MICROMAGNETIQUE ET DISPOSITIF DE DETECTION MICROMAGNETIQUE**  
[72] YU, RUNQIAO, CN  
[72] ZHANG, BIN, CN  
[72] HU, BO, CN  
[72] XIA, GUI SUO, CN  
[72] CHENG, DONGFANG, CN  
[72] CHENG, QIANGQIANG, CN  
[73] NINGBO YINZHOU CITAI ELECTRONIC TECHNOLOGY CO., LTD, CN  
[85] 2016-12-14  
[86] 2016-06-24 (PCT/CN2016/087008)  
[87] (WO2017/008621)  
[30] CN (2015104226815) 2015-07-16

[11] **2,954,608**

[13] C

- [51] **Int.Cl. G01N 21/31 (2006.01)**  
[25] EN  
[54] **ABSORPTION ANALYZER**  
[54] **ANALYSEUR A ABSORPTION**  
[72] STROGANOV, ALEXANDER ANATOLEVICH, RU  
[72] SHOLUPOV, SERGEY EVGENEVICH, RU  
[72] POGAREV, SERGEY EVGENEVICH, RU  
[72] GANEEV, ALEXANDER AHATOVICH, RU  
[72] RYZHOV, VLADIMIR VENIAMINOVICH, RU  
[73] STROGANOV, ALEXANDER ANATOLEVICH, RU  
[73] SHOLUPOV, SERGEY EVGENEVICH, RU  
[73] POGAREV, SERGEY EVGENEVICH, RU  
[73] GANEEV, ALEXANDER AHATOVICH, RU  
[73] RYZHOV, VLADIMIR VENIAMINOVICH, RU  
[85] 2017-01-09  
[86] 2015-07-03 (PCT/RU2015/000417)  
[87] (WO2016/007048)  
[30] RU (2014128237) 2014-07-09

[11] **2,955,310**

[13] C

- [51] **Int.Cl. C04B 7/19 (2006.01) C04B 28/04 (2006.01) C04B 28/08 (2006.01)**  
[25] EN  
[54] **DRY CEMENT MIXTURE**  
[54] **MELANGE DE CIMENT SEC**  
[72] HOORNAERT, THOMAS, FR  
[72] GONICHON, STEPHANE, FR  
[72] VRAU, DELPHINE, FR  
[72] MAHOUCHE, HUBERT, FR  
[72] BAALBAKI, MOUSSA, CH  
[72] BABAYAN, DAVID, CH  
[73] HOLCIM TECHNOLOGY LTD, CH  
[85] 2017-01-16  
[86] 2015-06-23 (PCT/IB2015/001017)  
[87] (WO2016/009257)  
[30] AT (A 567/2014) 2014-07-17  
[30] AT (A 10/2015) 2015-01-08

[11] **2,956,491**

[13] C

- [51] **Int.Cl. C08K 3/04 (2006.01) C01B 32/182 (2017.01) C01B 32/19 (2017.01) C08J 3/20 (2006.01) C08K 7/00 (2006.01) C08L 77/00 (2006.01) C09C 1/44 (2006.01)**  
[25] EN  
[54] **GRAPHENE-REINFORCED POLYMER MATRIX COMPOSITES**  
[54] **COMPOSITES A MATRICE POLYMERE RENFORCEE PAR DU GRAPHENE**  
[72] NOSKER, THOMAS, US  
[72] LYNCH, JENNIFER, US  
[72] KEAR, BERNARD, US  
[72] HENDRIX, JUSTIN, US  
[72] CHIU, GORDON, US  
[73] RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY, US  
[85] 2017-01-26  
[86] 2015-07-29 (PCT/US2015/042623)  
[87] (WO2016/018995)  
[30] US (62/030,799) 2014-07-30

**Canadian Patents Issued  
December 14, 2021**

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[11] **2,957,866**  
[13] C

[51] **Int.Cl. B65D 90/58 (2006.01) E04B 7/16 (2006.01)**  
[25] EN  
[54] **MECHANICAL ROLLING ROOF**  
[54] **TOIT ROULANT MECANIQUE**  
[72] HAAG, LINDSAY, CA  
[73] ENVIRONMENTAL METAL WORKS LTD., CA  
[86] (2957866)  
[87] (2957866)  
[22] 2014-11-03  
[62] 2,869,262

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[11] **2,957,878**  
[13] C

[51] **Int.Cl. B65D 90/58 (2006.01) B65F 1/16 (2006.01)**  
[25] EN  
[54] **MECHANICAL ROLLING ROOF**  
[54] **TOIT ROULANT MECANIQUE**  
[72] HAAG, LINDSAY, CA  
[73] ENVIRONMENTAL METAL WORKS LTD., CA  
[86] (2957878)  
[87] (2957878)  
[22] 2014-11-03  
[62] 2,869,262

---

[11] **2,960,977**  
[13] C

[51] **Int.Cl. G01S 5/00 (2006.01) G01C 21/36 (2006.01) G01D 4/02 (2006.01)**  
[25] EN  
[54] **METHODS AND APPARATUS TO LOCATE UTILITY METER ENDPOINTS OF INTEREST**  
[54] **PROCEDES ET APPAREILS POUR LOCALISER LES POINTS D'EXTREMITE INTERESSANTS DE COMPTEUR DE RESEAU DE DISTRIBUTION**  
[72] CORNWALL, MARK, US  
[72] LAUGHTON, ASA JAY, US  
[73] ITRON, INC., US  
[85] 2017-03-10  
[86] 2015-09-04 (PCT/US2015/048622)  
[87] (WO2016/040175)  
[30] US (14/483,901) 2014-09-11

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[11] **2,962,336**  
[13] C

[51] **Int.Cl. A01G 13/00 (2006.01) E01C 9/00 (2006.01)**  
[25] EN  
[54] **TREE ROOT PROTECTION PANEL**  
[54] **PANNEAU DE PROTECTION POUR LES RACINES D'ARBRE**  
[72] BOWIE, DEAN, GB  
[73] GREENBLUE URBAN LIMITED, GB  
[85] 2017-03-23  
[86] 2014-09-26 (PCT/GB2014/052924)  
[87] (WO2015/044676)  
[30] GB (1317174.9) 2013-09-27

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[11] **2,962,348**  
[13] C

[51] **Int.Cl. B62D 29/00 (2006.01) B62D 25/20 (2006.01)**  
[25] EN  
[54] **VEHICLE UNDERBODY STRUCTURE AND VEHICLE BODY**  
[54] **STRUCTURE DE BAS DE CAISSE DE VEHICULE ET CAISSE DE VEHICULE**  
[72] SCHNEIDER, NICOLAS, FR  
[72] DROUADAIN, YVES, FR  
[73] ARCELORMITTAL, LU  
[85] 2017-03-23  
[86] 2014-09-22 (PCT/IB2014/064733)  
[87] (WO2016/046592)

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[11] **2,962,931**  
[13] C

[51] **Int.Cl. G01N 33/483 (2006.01) A61M 1/34 (2006.01) B01D 61/00 (2006.01) G01N 33/50 (2006.01) G01N 33/72 (2006.01) G01N 33/84 (2006.01)**  
[25] EN  
[54] **HEMOLYSIS DETECTION DEVICE, SYSTEM AND METHOD**  
[54] **DISPOSITIF, SYSTEME ET PROCEDE DE DETECTION D'HEMOLYSE**  
[72] BAXTER, ANDREW JOHN, GB  
[72] COTTON, PAUL WILLIAM, GB  
[73] SIEMENS HEALTHCARE DIAGNOSTICS INC., US  
[85] 2017-03-28  
[86] 2015-09-29 (PCT/US2015/052926)  
[87] (WO2016/054030)  
[30] US (62/057,452) 2014-09-30

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[11] **2,963,967**  
[13] C

[51] **Int.Cl. B23K 9/09 (2006.01) B23K 9/095 (2006.01) B23K 9/10 (2006.01) B23K 9/12 (2006.01) B23K 9/173 (2006.01)**  
[25] EN  
[54] **SHORT CIRCUIT ARC WELDING METHOD**  
[54] **PROCEDE DE SOUDAGE A L'ARC PAR COURTS-CIRCUITS**  
[72] DAVIDSON, ROBERT R., US  
[72] MEHN, PETER DONALD, US  
[72] SCHUH, RICHARD J., US  
[73] ILLINOIS TOOL WORKS INC., US  
[85] 2017-04-06  
[86] 2015-10-10 (PCT/US2015/055040)  
[87] (WO2016/085576)  
[30] US (14/554,508) 2014-11-26

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[11] **2,964,391**  
[13] C

[51] **Int.Cl. G06Q 50/18 (2012.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR AUTOMATIC IDENTIFICATION OF POTENTIAL MATERIAL FACTS IN DOCUMENTS**  
[54] **SYSTEMES ET PROCEDES D'IDENTIFICATION AUTOMATIQUE DE FAITS IMPORTANTS POTENTIELS DANS DES DOCUMENTS**  
[72] PENDYALA, MAHESH, US  
[72] OSGOOD, GENE, US  
[72] MYERS, JACOB AARON, US  
[73] RELX INC., US  
[85] 2017-04-11  
[86] 2015-11-19 (PCT/US2015/061539)  
[87] (WO2016/081707)  
[30] US (62/081,786) 2014-11-19

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**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **2,965,377**  
[13] C

[51] **Int.Cl. C12N 15/84 (2006.01) A01H 5/00 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12N 15/87 (2006.01)**

[25] EN

[54] **VECTOR AND METHOD FOR SINGLE COPY TRANSGENE INTEGRATION AND ABSENCE OF VECTOR BACKBONE IN A TRANSGENIC PLANT CELL**

[54] **VECTEUR ET METHODE D'INTEGRATION DE TRANSGENES EN COPIE UNIQUE ET ABSENCE DE SQUELETTE DE VECTEUR DANS UNE CELLULE VEGETALE TRANSGENIQUE**

[72] GILBERTSON, LARRY A., US  
[72] PETERSON, MICHAEL W., US  
[72] YE, XUDONG, US  
[73] MONSANTO TECHNOLOGY LLC, US

[86] (2965377)  
[87] (2965377)  
[22] 2006-09-06  
[62] 2,621,394  
[30] US (60/714,501) 2005-09-06

---

[11] **2,966,112**  
[13] C

[51] **Int.Cl. H02M 3/155 (2006.01) H02M 7/48 (2007.01)**

[25] EN

[54] **ELECTRIC POWER CONVERTER AND POWER AMPLIFIER**

[54] **CONVERTISSEUR DE PUISSANCE**

[72] IMAI, TAKASHI, JP  
[72] HASEGAWA, HIROAKI, JP  
[72] KAKIZAKI, NOBUO, JP  
[72] HIRAOKA, KAZUTAKA, JP  
[72] TAKAHASHI, SHINJI, JP  
[73] IKS CO., LTD., JP  
[73] JGC CORPORATION, JP

[85] 2017-04-27  
[86] 2015-10-26 (PCT/JP2015/080631)  
[87] (WO2016/068265)  
[30] JP (2014-220147) 2014-10-29

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[11] **2,967,316**  
[13] C

[51] **Int.Cl. C07D 417/04 (2006.01) A61K 31/427 (2006.01) A61P 31/12 (2006.01) C07D 217/02 (2006.01) C07D 241/36 (2006.01) C07D 413/04 (2006.01) C07D 417/14 (2006.01) C07D 491/052 (2006.01)**

[25] EN

[54] **ANTI-HCMV COMPOSITIONS AND METHODS**

[54] **COMPOSITIONS ANTI-HCMV ET PROCEDES**

[72] REMISZEWSKI, STACY, US  
[72] KOYUNCU, EMRE, US  
[72] SUN, QUN, US  
[72] CHIANG, LILLIAN, US  
[73] EVRYS BIO, LLC, US

[85] 2017-05-10  
[86] 2015-11-09 (PCT/US2015/059746)  
[87] (WO2016/077232)  
[30] US (62/077,804) 2014-11-10

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[11] **2,967,674**  
[13] C

[51] **Int.Cl. A61F 7/00 (2006.01) A61F 5/042 (2006.01) A61H 1/02 (2006.01) A61H 15/00 (2006.01)**

[25] EN

[54] **METHODS FOR TREATING INFLAMMATORY SYMPTOMS ASSOCIATED WITH PLANTAR FASCITIS**

[54] **PROCEDES POUR TRAITER LES SYMPTOMES INFLAMMATOIRES ASSOCIES A LA FASCITE PLANTAIRE**

[72] NIELSEN, SUSAN V., CA  
[73] THERMAWEDGE ENTERPRISES INC., CA

[85] 2017-05-12  
[86] 2014-10-24 (PCT/CA2014/000761)  
[87] (WO2015/070315)  
[30] US (61/903,702) 2013-11-13

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[11] **2,968,791**  
[13] C

[51] **Int.Cl. H01F 27/24 (2006.01) H01F 30/10 (2006.01) H01F 30/12 (2006.01) H01F 41/02 (2006.01)**

[25] FR

[54] **BASIC MODULE FOR MAGNETIC CORE OF AN ELECTRICAL TRANSFORMER, MAGNETIC CORE COMPRISING SAID BASIC MODULE, METHOD FOR MANUFACTURING SAID MAGNETIC CORE, AND TRANSFORMER COMPRISING SAID MAGNETIC CORE**

[54] **MODULE ELEMENTAIRE DE NOYAU MAGNETIQUE DE TRANSFORMATEUR ELECTRIQUE, NOYAU MAGNETIQUE LE COMPORTANT ET SON PROCEDE DE FABRICATION, ET TRANSFORMATEUR LE COMPORTANT**

[72] WAECKERLE, THIERRY, FR  
[72] DEMIER, ALAIN, FR  
[73] APERAM, LU

[85] 2017-05-24  
[86] 2014-11-25 (PCT/IB2014/066322)  
[87] (WO2016/083866)

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[11] **2,969,002**  
[13] C

[51] **Int.Cl. C08L 23/06 (2006.01) C08J 9/00 (2006.01) H01B 3/30 (2006.01)**

[25] EN

[54] **PROCESS FOR FOAMING POLYOLEFIN COMPOSITIONS USING A FLUORORESIN AS A NUCLEATING AGENT**

[54] **PROCEDE POUR LE MOUSSAGE DE COMPOSITIONS DE POLYOLEFINE AU MOYEN D'UNE FLUORORESINE EN TANT QU'AGENT DE NUCLEATION**

[72] SUN, GANGWEI, CN  
[72] ESSEGHIR, MOHAMED, US  
[72] KMIEC, CHESTER J., US  
[72] YING, LEI, CN  
[72] SUN, YABIN, CN  
[72] XU, XIAN MIN, CN  
[73] DOW GLOBAL TECHNOLOGIES LLC, US

[85] 2017-05-26  
[86] 2014-11-28 (PCT/CN2014/092555)  
[87] (WO2016/082210)

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**Canadian Patents Issued  
December 14, 2021**

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[11] **2,969,005**  
[13] C

[51] **Int.Cl. H01B 3/44 (2006.01) C08L 23/06 (2006.01) C08L 27/18 (2006.01)**

[25] EN

[54] **PROCESS FOR FOAMING POLYOLEFIN COMPOSITIONS USING FLUORORESIN/CITRATE MIXTURE AS NUCLEATING AGENT**

[54] **PROCEDE DE MOUSSAGE DE COMPOSITIONS POLYOLEFINIQUES FAISANT INTERVENIR UN MELANGE DE RESINE FLUOREE ET DE CITRATE COMME AGENT DE NUCLEATION**

[72] SUN, GANGWEI, CN  
[72] ESSEGHIR, MOHAMED, US  
[72] XU, XIAN MIN, CN  
[72] KMIEC, CHESTER J., US  
[73] DOW GLOBAL TECHNOLOGIES LLC, US

[85] 2017-05-26  
[86] 2014-11-28 (PCT/CN2014/092558)  
[87] (WO2016/082212)

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[11] **2,971,814**  
[13] C

[51] **Int.Cl. H02M 11/00 (2006.01) A47J 37/06 (2006.01) A47J 37/07 (2006.01) F24C 7/08 (2006.01) H02J 3/00 (2006.01)**

[25] EN

[54] **DIGITAL POWER SUPPLY ALIMENTATION NUMERIQUE**

[72] KNAPPENBERGER, ERIC, US  
[72] ZULETA, JULIO C., US  
[72] LERCH, MATTHEW, US  
[72] EMMERICH, JEFFERY C., US  
[73] WEBER-STEPHEN PRODUCTS LLC, US

[86] (2971814)  
[87] (2971814)  
[22] 2017-06-23  
[30] US (15/200,759) 2016-07-01

---

[11] **2,973,525**  
[13] C

[51] **Int.Cl. C07K 19/00 (2006.01) C12N 5/0783 (2010.01) A61K 35/17 (2015.01) A61P 35/00 (2006.01) C07K 14/705 (2006.01) C07K 16/28 (2006.01) C12N 5/10 (2006.01) C12N 15/62 (2006.01)**

[25] EN

[54] **ANTI-CLL1 SPECIFIC SINGLE-CHAIN CHIMERIC ANTIGEN RECEPTORS (SCCARS) FOR CANCER IMMUNOTHERAPY**

[54] **RECEPTEURS D'ANTIGENES CHIMERIQUES MONOCATENAIRES SPECIFIQUES ANTI-CLL1 (SCCAR) POUR UNE IMMUNOTHERAPIE ANTICANCEREUSE**

[72] SMITH, JULIANNE, FR  
[72] VALTON, JULIEN, US  
[72] JUILLERAT, ALEXANDRE, US  
[72] DUCHATEAU, PHILIPPE, FR  
[72] SASU, BARBRA JOHNSON, US  
[72] RAJPAL, ARVIND, US  
[73] CELLECTIS, FR

[85] 2017-07-11  
[86] 2016-01-25 (PCT/EP2016/051469)  
[87] (WO2016/120218)  
[30] DK (PA201570044) 2015-01-26

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[11] **2,973,669**  
[13] C

[51] **Int.Cl. A47K 5/12 (2006.01) B05B 1/30 (2006.01) B05B 11/00 (2006.01) B65D 47/20 (2006.01)**

[25] EN

[54] **A PUMP FOR A SYSTEM FOR DISPENSING A LIQUID AS A SPRAY, A SPRAY NOZZLE UNIT, A SYSTEM FOR DISPENSING A LIQUID AS A SPRAY AND A METHOD FOR DISPENSING A LIQUID AS A SPRAY**

[54] **POMPE POUR UN SYSTEME DE DISTRIBUTION D'UN LIQUIDE SOUS LA FORME DE FINES GOUTTELETTES, UNITE DE BUSE DE PULVERISATION, SYSTEME DE DISTRIBUTION D'UN LIQUIDE SOUS LA FORME DE FINES GOUTTELETTES ET PROCEDE POUR DISTRIBUER UN LIQUIDE SOUS LA FORME DE FINES GOUTTELETTES**

[72] NILSSON, HUGO, SE  
[72] BERGMAN, PETER, SE  
[73] ESSITY HYGIENE AND HEALTH AKTIEBOLAG, SE

[85] 2017-07-12  
[86] 2015-01-12 (PCT/SE2015/050010)  
[87] (WO2016/114689)

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[11] **2,973,913**  
[13] C

[51] **Int.Cl. A61K 31/4545 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **ANTI-HISTAMINE FOR USE IN TREATMENT OF BREAST CANCER**

[54] **ANTI-HISTAMINIQUE UTILISE DANS LE TRAITEMENT DU CANCER DU SEIN**

[72] OLSSON, HAKAN, SE  
[72] EINEFORS, RICKARD, SE  
[73] BELINA PHARMA AB, SE

[85] 2017-07-14  
[86] 2016-01-19 (PCT/EP2016/051000)  
[87] (WO2016/116438)  
[30] SE (1550036-6) 2015-01-19

**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **2,974,281**  
[13] C

[51] **Int.Cl. B65G 1/137 (2006.01) B62B 3/06 (2006.01) B65G 1/00 (2006.01) B65G 1/02 (2006.01)**

[25] EN

[54] **APPARATUS FOR POSITIONING AN AUTOMATED LIFTING STORAGE CART AND RELATED METHODS**

[54] **APPAREIL DE POSITIONNEMENT D'UN CHARIOT DE STOCKAGE ELEVATEUR AUTOMATISE ET PROCEDES ASSOCIES**

[72] TERRILL, MIKE, US

[72] RAMANKUTTY, MOHAN, US

[72] BRUMM, CHRISTOPHER, US

[72] MITCHELL, PAT, US

[72] TIPTON, RODNEY, US

[73] SWISSLOG LOGISTICS, INC., US

[85] 2017-07-18

[86] 2015-01-22 (PCT/US2015/012366)

[87] (WO2015/112665)

[30] US (61/931,416) 2014-01-24

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[11] **2,976,761**  
[13] C

[51] **Int.Cl. C08L 23/10 (2006.01) C08K 3/01 (2018.01) C08J 9/12 (2006.01) C08J 9/14 (2006.01) C08K 3/22 (2006.01) C08K 3/26 (2006.01) C08K 5/098 (2006.01)**

[25] EN

[54] **POLYMER FOAMS**

[54] **MOUSSES POLYMERES**

[72] CORTES, LEONARDO, US

[72] LI, FENGKUI, US

[72] TIPPET, JON, US

[72] BLACKMON, KENNETH, US

[72] MYHALL, MARC, US

[72] DANIELS, LELAND, US

[72] ASHBAUGH, JOHN, US

[73] FINA TECHNOLOGY, INC., US

[85] 2017-08-15

[86] 2015-02-16 (PCT/US2015/016000)

[87] (WO2016/114802)

[30] US (14/622,964) 2015-02-16

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[11] **2,977,429**  
[13] C

[51] **Int.Cl. G16H 50/20 (2018.01) G06N 20/00 (2019.01) A61B 3/113 (2006.01) A61B 5/16 (2006.01) G06F 3/01 (2006.01)**

[25] EN

[54] **METHOD OF AND SYSTEM FOR PROCESSING SIGNALS SENSED FROM A USER**

[54] **PROCEDE ET SYSTEME PERMETTANT DE TRAITER DES SIGNAUX DETECTES A PARTIR D'UN UTILISATEUR**

[72] COURTEMANCHE, FRANCOIS, CA

[72] FREDETTE, MARC, CA

[72] SENEAL, SYLVAIN, CA

[72] LEGER, PIERRE-MAJORIQUE, CA

[72] DUFRESNE, AUDE, CA

[72] GEORGES, VANESSA, CA

[72] LABONTE-LEMOYNE, ELISE, CA

[73] VALORISATION-RECHERCHE, LIMITED PARTNERSHIP, CA

[73] VALORISATION GESTION, LIMITED PARTNERSHIP, CA

[85] 2017-08-22

[86] 2016-02-25 (PCT/IB2016/051028)

[87] (WO2016/135661)

[30] US (62/121,552) 2015-02-27

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[11] **2,977,473**  
[13] C

[51] **Int.Cl. H01M 8/16 (2006.01) H01M 8/04082 (2016.01) H01M 8/04313 (2016.01)**

[25] EN

[54] **SYSTEMS AND DEVICES FOR TREATING AND MONITORING WATER, WASTEWATER AND OTHER BIODEGRADABLE MATTER**

[54] **SYSTEMES ET DISPOSITIFS POUR TRAITER ET SURVEILLER DE L'EAU, DES EAUX USEES ET AUTRES MATIERES BIODEGRADABLES**

[72] SILVER, MATTHEW, US

[72] BUCK, JUSTIN, US

[72] TAYLOR, NOAH, US

[73] CAMBRIAN INNOVATION, INC., US

[86] (2977473)

[87] (2977473)

[22] 2010-02-24

[62] 2,765,767

[30] US (61/187,469) 2009-06-16

[30] US (61/245,085) 2009-09-23

[30] US (61/267,594) 2009-12-08

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[11] **2,978,891**  
[13] C

[51] **Int.Cl. B29C 70/68 (2006.01) A01F 12/60 (2006.01) A01F 25/14 (2006.01)**

[25] EN

[54] **GRAIN BIN SENSOR CABLE FORMING METHOD AND APPARATUS**

[54] **APPAREIL ET PROCEDE DE FORMATION DE CABLE DE CAPTEUR DE CELLULE A GRAIN**

[72] BLOEMENDAAL, BRENT J., US

[73] CTB, INC., US

[86] (2978891)

[87] (2978891)

[22] 2014-02-28

[62] 2,844,695

[30] US (13/791,917) 2013-03-09

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[11] **2,979,017**  
[13] C

[51] **Int.Cl. F16M 13/02 (2006.01) A47G 23/02 (2006.01) A61G 5/10 (2006.01)**

[25] EN

[54] **CUP HOLDER**

[54] **PORTE-GOBELET**

[72] STIGAS, CHRIS, CA

[73] STIGAS, CHRIS, CA

[86] (2979017)

[87] (2979017)

[22] 2017-09-12

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[11] **2,979,577**  
[13] C

[51] **Int.Cl. F16K 3/12 (2006.01) F16K 3/30 (2006.01) F16K 31/50 (2006.01) F16K 41/14 (2006.01)**

[25] EN

[54] **A VALVE**

[54] **VANNE**

[72] FREUDENDAHL, ERLING ARNUM, DK

[73] AVK HOLDING A/S, DK

[85] 2017-09-13

[86] 2015-03-16 (PCT/DK2015/050052)

[87] (WO2016/146124)

**Canadian Patents Issued  
December 14, 2021**

[11] **2,981,068**  
[13] C

[51] **Int.Cl. A61K 31/5025 (2006.01) C12N 5/09 (2010.01) C12N 15/113 (2010.01) A61K 31/7088 (2006.01) A61P 35/00 (2006.01) C07J 71/00 (2006.01) C07K 16/28 (2006.01) G01N 33/48 (2006.01) G01N 33/483 (2006.01) G01N 33/574 (2006.01)**

[25] EN  
[54] **THERAPY FOR MALIGNANT DISEASE COMPRISING THE INHIBITION OF HUMAN EPIDIDYMAL SECRETORY PROTEIN E4 AND IMMUNE CHECKPOINT INHIBITORS**

[54] **THERAPIE CONTRE LES AFFECTIONS MALIGNES COMPRENANT L'INHIBITION DE LA PROTEINE SECRETEE DE L'EPIDIDYME HUMAIN E4 ET INHIBITEURS DES POINTS DE CONTROLE IMMUNITAIRES**

[72] MOORE, RICHARD G., US  
[72] SINGH, RAKESH K., US  
[72] YANO, NAHIRO, US  
[73] UNIVERSITY OF ROCHESTER, US  
[85] 2017-09-26  
[86] 2016-03-28 (PCT/US2016/024566)  
[87] (WO2016/154629)  
[30] US (62/138,836) 2015-03-26

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[11] **2,982,554**  
[13] C

[51] **Int.Cl. H04J 14/06 (2006.01) H04B 10/532 (2013.01) H04J 14/04 (2006.01)**

[25] EN  
[54] **POLARIZATION MULTIPLEXING OPTICAL TRANSMISSION CIRCUIT AND POLARIZATION MULTIPLEXING OPTICAL TRANSMISSION AND RECEPTION CIRCUIT**

[54] **CIRCUIT DE TRANSMISSION OPTIQUE A MULTIPLEXAGE EN POLARISATION ET CIRCUIT DE TRANSMISSION ET RECEPTION OPTIQUES A MULTIPLEXAGE EN POLARISATION**

[72] KAMEI, SHIN, JP  
[72] JIZODO, MAKOTO, JP  
[72] FUKUDA, HIROSHI, JP  
[72] KIKUCHI, KIYOFUMI, JP  
[72] TSUZUKI, KEN, JP  
[73] NIPPON TELEGRAPH AND TELEPHONE CORPORATION, JP  
[85] 2017-10-12  
[86] 2016-04-12 (PCT/JP2016/001991)  
[87] (WO2016/166971)  
[30] JP (2015-082081) 2015-04-13

[11] **2,982,582**  
[13] C

[51] **Int.Cl. B08B 17/04 (2006.01) B01D 1/00 (2006.01) B05D 7/22 (2006.01) B08B 7/00 (2006.01) F28F 19/02 (2006.01)**

[25] EN  
[54] **METHOD OF CLEANING AN EVAPORATOR**

[54] **PROCEDE DE NETTOYAGE D'UN EVAPORATEUR**

[72] EFRAT, TOMER, IL  
[72] HITE, ITAMAR, IL  
[73] IDE TECHNOLOGIES LTD, IL  
[85] 2017-10-12  
[86] 2016-04-13 (PCT/IB2016/052099)  
[87] (WO2016/166676)  
[30] GB (1506376.1) 2015-04-15

---

[11] **2,983,071**  
[13] C

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) G01N 33/574 (2006.01) G01N 33/68 (2006.01)**

[25] EN  
[54] **IGF-1R ANTIBODY AND ITS USE FOR THE DIAGNOSIS OF CANCER**

[54] **ANTICORPS ANTI-IGF-1R ET SON UTILISATION POUR LE DIAGNOSTIC DU CANCER**

[72] JOUHANNEAUD, ALEXANDRA, FR  
[73] PIERRE FABRE MEDICAMENT, FR  
[85] 2017-10-16  
[86] 2016-04-27 (PCT/EP2016/059336)  
[87] (WO2016/174051)  
[30] EP (15305644.5) 2015-04-27

[11] **2,983,548**  
[13] C

[51] **Int.Cl. C07K 16/28 (2006.01) G01N 33/574 (2006.01) G01N 33/68 (2006.01)**

[25] EN  
[54] **IGF-1R ANTIBODY AND ITS USE FOR THE DIAGNOSIS OF CANCER**

[54] **ANTICORPS ANTI-IGF-1R ET SON UTILISATION POUR LE DIAGNOSTIC DU CANCER**

[72] JOUHANNEAUD, ALEXANDRA, FR  
[73] PIERRE FABRE MEDICAMENT, FR  
[85] 2017-10-20  
[86] 2016-04-27 (PCT/EP2016/059338)  
[87] (WO2016/174053)  
[30] EP (15305642.9) 2015-04-27

[11] **2,984,176**  
[13] C

[51] **Int.Cl. B01J 4/02 (2006.01) B01J 8/00 (2006.01)**

[25] EN  
[54] **LOADING VERTICAL TUBES WITH PARTICULATE MATERIAL**

[54] **CHARGEMENT DE MATIERE PARTICULAIRE DANS DES TUBES VERTICAUX**

[72] MCNAUGHTON, MICHAEL D., US  
[73] CLPROS, LLC, US  
[85] 2017-10-26  
[86] 2016-04-29 (PCT/US2016/030182)  
[87] (WO2016/176604)  
[30] US (62/154,427) 2015-04-29

[11] **2,984,445**  
[13] C

[51] **Int.Cl. A61N 1/36 (2006.01)**

[25] EN  
[54] **METHODS AND APPARATUS TO DELIVER THERAPEUTIC NON-ULTRAVIOLET ELECTROMAGNETIC RADIATION FOR AN ENDOTRACHEAL TUBE**

[54] **PROCEDES ET APPAREIL POUR ADMINISTRER UN RAYONNEMENT ELECTROMAGNETIQUE THERAPEUTIQUE NON-ULTRAVIOLET POUR UN TUBE TRACHEAL**

[72] BARNECK, MITCHELL D., US  
[72] RHODES, NATHANIEL L., US  
[72] DE LA PRESA, MARTIN, US  
[72] POURSARD, ARASH E., US  
[73] LIGHT LINE MEDICAL, INC., US  
[85] 2017-10-30  
[86] 2016-04-29 (PCT/US2016/030187)  
[87] (WO2016/176608)  
[30] US (62/154,789) 2015-04-30  
[30] US (62/292,028) 2016-02-05  
[30] US (15/141,511) 2016-04-28

**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **2,986,654**  
[13] C

[51] **Int.Cl. D21C 1/00 (2006.01) C07G 1/00 (2011.01)**  
[25] EN  
[54] **A METHOD AND AN APPARATUS FOR FORMING A LIGNIN FRACTION, A LIGNIN COMPOSITION, AND ITS USE**  
[54] **PROCEDE ET APPAREIL DE FORMATION D'UNE FRACTION DE LIGNINE, COMPOSITION DE LIGNINE ET SON UTILISATION**  
[72] MIETTINEN, MAUNO, FI  
[73] UPM-KYMMENE CORPORATION, FI  
[85] 2017-11-21  
[86] 2016-05-26 (PCT/FI2016/050362)  
[87] (WO2016/193535)  
[30] FI (20155411) 2015-05-29

---

[11] **2,989,654**  
[13] C

[51] **Int.Cl. G05B 19/042 (2006.01) G06F 8/65 (2018.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR MODIFYING BEHAVIOR OF CODE FOR A CONTROLLER-BASED DEVICE**  
[54] **PROCEDE ET APPAREIL DE MODIFICATION DE COMPORTEMENT DE CODE D'UN DISPOSITIF BASE SUR UN CONTROLEUR**  
[72] LEONELLI, JEAN-BAPTISTE, FR  
[72] CHANDARIA, TRISALA, US  
[73] CIAMBELLA LTD., VG  
[85] 2017-12-14  
[86] 2016-07-08 (PCT/US2016/041573)  
[87] (WO2017/008036)  
[30] US (62/190,408) 2015-07-09  
[30] US (62/270,107) 2015-12-21  
[30] US (15/063,764) 2016-03-08  
[30] US (PCT/US2016/031217) 2016-05-06

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[11] **2,989,799**  
[13] C

[51] **Int.Cl. H04M 3/523 (2006.01) G06Q 30/00 (2012.01) H04M 3/22 (2006.01) H04M 3/51 (2006.01)**  
[25] EN  
[54] **FLOW DESIGNER FOR CONTACT CENTERS**  
[54] **CONCEPTEUR DE FLUX POUR DES CENTRES DE CONTACT**  
[72] VYMENETS, LEONID, US  
[72] KUMAR, PRAPHUL, US  
[72] RISTOCK, HERBERT WILLI ARTUR, US  
[72] ZHAKOV, VYACHESLAV, US  
[73] GREENEDEN U.S. HOLDINGS II, LLC, US  
[85] 2017-12-15  
[86] 2016-05-27 (PCT/US2016/034866)  
[87] (WO2016/191749)  
[30] US (14/723,428) 2015-05-27  
[30] US (14/723,429) 2015-05-27  
[30] US (14/723,431) 2015-05-27

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[11] **2,990,045**  
[13] C

[51] **Int.Cl. H04L 12/00 (2006.01) H04L 12/28 (2006.01)**  
[25] EN  
[54] **SYSTEM, APPARATUS AND METHOD FOR PROVIDING A VIRTUAL NETWORK EDGE AND OVERLAY**  
[54] **SYSTEME, APPAREIL, ET PROCEDE POUR LA FOURNITURE D'UN RESEAU VIRTUEL EDGE OU OVERLAY**  
[72] SAAVEDRA, PATRICIO HUMBERTO, CA  
[73] ADAPTIV NETWORKS INC., CA  
[85] 2017-12-19  
[86] 2016-06-30 (PCT/CA2016/000185)  
[87] (WO2017/004693)  
[30] US (14/791311) 2015-07-03

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[11] **2,992,020**  
[13] C

[51] **Int.Cl. B29B 11/08 (2006.01)**  
[25] EN  
[54] **A PREFORM, A MOLD STACK FOR PRODUCING THE PREFORM, AND A PREFORM HANDLING APPARATUS FOR HANDLING THE PREFORM**  
[54] **PREFORME, EMPILEMENT DE MOULES POUR PRODUIRE LA PREFORME, ET APPAREIL DE MANIPULATION DE PREFORME POUR MANIPULER LA PREFORME**  
[72] WITZ, JEAN-CHRISTOPHE, FR  
[72] FISCH, RALF WALTER, DE  
[72] BECK, CHRISTOPHE SIMON PIERRE, FR  
[73] HUSKY INJECTION MOLDING SYSTEMS LTD., CA  
[85] 2018-01-09  
[86] 2016-06-16 (PCT/CA2016/050701)  
[87] (WO2017/020116)  
[30] US (62/199,296) 2015-07-31  
[30] US (62/315,396) 2016-03-30

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[11] **2,993,898**  
[13] C

[51] **Int.Cl. G01S 13/90 (2006.01)**  
[25] EN  
[54] **SYNTHETIC-APERTURE INTERFEROMETRIC RADAR WITH AN ANTENNA SLIDING ALONG A ROTATING ARM**  
[54] **RADAR INTERFEROMETRIQUE A SYNTHESE D'OUVERTURE COMPORTANT UNE ANTENNE COULISSANT LE LONG D'UN BRAS ROTATIF**  
[72] PIERACCINI, MASSIMILIANO, IT  
[73] UNIVERSITA' DEGLI STUDI DI FIRENZE, IT  
[85] 2018-01-26  
[86] 2016-07-22 (PCT/IB2016/001039)  
[87] (WO2017/055901)  
[30] IT (102015000038489) 2015-07-27

**Canadian Patents Issued  
December 14, 2021**

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[11] **2,996,074**  
[13] C

[51] **Int.Cl. B02C 13/284 (2006.01)**  
[25] EN  
[54] **HIGH EFFICIENCY CONICAL MILLS**  
[54] **BROYEURS CONIQUES A HAUTE EFFICACITE**  
[72] SANGUESA, WILF, CA  
[72] WATSON, BARRY, CA  
[72] VERBERNE, JEFF, CA  
[72] WATSON, SEAN, CA  
[73] QUADRO ENGINEERING, CA  
[85] 2018-02-20  
[86] 2016-07-12 (PCT/IB2016/001130)  
[87] (WO2017/033050)  
[30] US (62/208,281) 2015-08-21

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[11] **2,996,471**  
[13] C

[51] **Int.Cl. A63B 21/00 (2006.01) A63B 21/005 (2006.01) A63B 21/062 (2006.01) A63B 24/00 (2006.01)**  
[25] EN  
[54] **WEIGHTS SYSTEM**  
[54] **SYSTEME DE POIDS**  
[72] LACEY, RAYMOND, GB  
[73] FLAK LIMITED, GB  
[85] 2018-02-23  
[86] 2016-08-04 (PCT/GB2016/052396)  
[87] (WO2017/037411)  
[30] GB (1515323.2) 2015-08-28

---

[11] **2,996,895**  
[13] C

[51] **Int.Cl. E21B 17/03 (2006.01) E21B 17/02 (2006.01) E21B 3/02 (2006.01)**  
[25] EN  
[54] **COMBINED MULTI-COUPLER WITH ROTATING FIXATIONS FOR TOP DRIVE**  
[54] **MULTI RACCORD COMBINE A DES FIXATIONS ROTATIVES DESTINE A UN ENTRAINEMENT SUPERIEUR**  
[72] SCHOKNECHT, CHRISTIAN, DE  
[72] THEESEN, FOLKE, DE  
[72] BRENT, JEFFREY GORDON, US  
[73] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US  
[86] (2996895)  
[87] (2996895)  
[22] 2018-02-28  
[30] US (15/447,926) 2017-03-02

---

[11] **2,998,153**  
[13] C

[51] **Int.Cl. B01D 69/12 (2006.01) B01D 53/26 (2006.01)**  
[25] EN  
[54] **SELECTIVELY PERMEABLE GRAPHENE OXIDE/ POLYVINYL ALCOHOL MEMBRANE FOR DEHYDRATION**  
[54] **MEMBRANE D'ALCOOL POLYVINYLIQUE/D'OXYDE DE GRAPHENE A PERMEABILITE SELECTIVE POUR LA DESHYDRATATION**  
[72] ZHENG, SHIJUN, US  
[72] WANG, PENG, US  
[72] LIN, WEIPING, US  
[72] ROMERO, REBECCA, US  
[72] KITAHARA, ISAMU, US  
[73] NITTO DENKO CORPORATION, JP  
[85] 2018-03-08  
[86] 2016-09-09 (PCT/US2016/051101)  
[87] (WO2017/044845)  
[30] US (62/216,938) 2015-09-10  
[30] US (62/292,136) 2016-02-05

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[11] **3,001,054**  
[13] C

[51] **Int.Cl. A61K 38/17 (2006.01) A61K 47/69 (2017.01) A61K 9/127 (2006.01) A61K 9/14 (2006.01) A61P 35/00 (2006.01) C07K 14/47 (2006.01) C12N 15/12 (2006.01)**  
[25] EN  
[54] **ELEPHANT P53 PROTEINS AND NULEIC ACIDS ENCODING THE SAME FOR PREVENTING OR TREATING CANCER**  
[54] **PROTEINES DU GENE P53 DE L'ELEPHANT ACIDES NUCLEIQUES CODANT LEDIT GENE POUR PREVENIR OU TRAITER LE CANCER**  
[72] SCHIFFMAN, JOSHUA, US  
[72] SCHROEDER, AVI, IL  
[72] ABEGGLEN, LISA, US  
[73] UNIVERSITY OF UTAH RESEARCH FOUNDATION, US  
[73] TECHNION RESEARCH & DEVELOPMENT FOUNDATION LIMITED, IL  
[85] 2018-04-04  
[86] 2016-10-07 (PCT/US2016/055921)  
[87] (WO2017/062726)  
[30] US (62/239,103) 2015-10-08  
[30] US (62/379,179) 2016-08-24

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[11] **3,001,497**  
[13] C

[51] **Int.Cl. H05K 1/02 (2006.01) B81B 7/00 (2006.01) G01P 1/00 (2006.01) H01L 23/498 (2006.01) H05K 1/14 (2006.01) H05K 1/18 (2006.01) H05K 3/20 (2006.01)**  
[25] EN  
[54] **CONDUCTOR PATH STRUCTURE HAVING A COMPONENT RECEIVED IN A VIBRATION-DAMPED MANNER**  
[54] **STRUCTURE DE PISTES CONDUCTRICES AVEC UN COMPOSANT LOGE AVEC AMORTISSEMENT DES VIBRATIONS**  
[72] KURZEJA, DIETMAR, DE  
[72] MORGENTHALER, FREDERIC, DE  
[73] POSSEHL ELECTRONICS DEUTSCHLAND GMBH, DE  
[85] 2018-04-10  
[86] 2016-11-10 (PCT/EP2016/001870)  
[87] (WO2017/080657)  
[30] DE (10 2015 014 593.2) 2015-11-12  
[30] DE (20 2015 007 798.6) 2015-11-12

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[11] **3,003,298**  
[13] C

[51] **Int.Cl. G01S 19/53 (2010.01) G01C 21/00 (2006.01) G01C 25/00 (2006.01)**  
[25] EN  
[54] **GNSS AND INERTIAL NAVIGATION SYSTEM UTILIZING RELATIVE YAW AS AN OBSERVABLE FOR AN INS FILTER**  
[54] **GNSS ET SYSTEME DE NAVIGATION INERTIEL UTILISANT LE LACET RELATIF COMME VARIABLE OBSERVABLE POUR UN FILTRE INS**  
[72] BOBYE, MICHAEL, CA  
[73] NOVATEL INC., CA  
[85] 2018-04-26  
[86] 2016-10-06 (PCT/CA2016/051161)  
[87] (WO2017/127912)  
[30] US (15/007,866) 2016-01-27



**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **3,004,502**  
[13] C

[51] **Int.Cl. B07B 1/46 (2006.01) B23P 15/28 (2006.01) B28D 1/18 (2006.01)**

[25] EN

[54] **TOOL FOR FASTENING ON A MACHINE**

[54] **OUTIL A FIXER SUR UNE MACHINE**

[72] KRAEMER, ULRICH, DE

[72] SMEETS, FLORIAN, DE

[72] MOOSMANN, BERNHARD, DE

[72] KERN, JOCHEN, DE

[73] BETEK GMBH & CO. KG, DE

[85] 2018-05-07

[86] 2016-10-28 (PCT/EP2016/076025)

[87] (WO2017/076760)

[30] DE (10 2015 119 125.3) 2015-11-06

---

[11] **3,006,562**  
[13] C

[51] **Int.Cl. B23K 9/095 (2006.01) B23K 9/12 (2006.01)**

[25] EN

[54] **SMART HUB FOR A WELDING ELECTRODE FEEDER**

[54] **MOYEU INTELLIGENT DESTINE A UN DISPOSITIF D'ALIMENTATION D'ELECTRODE DE SOUDURE**

[72] BARHORST, STEVEN EDWARD, US

[72] HSU, CHRISTOPHER, US

[73] HOBART BROTHERS COMPANY, US

[85] 2018-05-28

[86] 2016-12-13 (PCT/US2016/066325)

[87] (WO2017/106162)

[30] US (14/968,452) 2015-12-14

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[11] **3,007,395**  
[13] C

[51] **Int.Cl. E03C 1/04 (2006.01) F16K 11/02 (2006.01) F16K 31/02 (2006.01)**

[25] EN

[54] **EXPOSED HOSE FAUCET**

[54] **ROBINET DE TUYAU EXPOSE**

[72] FOURMAN, TERENCE LEE, US

[72] MOORE, JEFFREY LEE, US

[72] SCHNEIDER, RANDY L., US

[72] NELSON, ALFRED CHARLES, US

[72] THOMAS, KURT JUDSON, US

[73] DELTA FAUCET COMPANY, US

[86] (3007395)

[87] (3007395)

[22] 2018-06-06

[30] US (15/639,414) 2017-06-30

---

[11] **3,007,692**  
[13] C

[51] **Int.Cl. H04M 3/436 (2006.01) H04W 4/16 (2009.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR PROVIDING CONTEXTUAL INFORMATION TO CALL PARTIES**

[54] **SYSTEMES ET METHODES POUR FOURNIR DES RENSEIGNEMENTS CONTEXTUELS A DES APPELANTS**

[72] WELDON, KIM ANDREW, US

[72] CHARLESWORTH, AARON, US

[72] MEYERS, KEITH, US

[73] VONAGE BUSINESS INC., US

[86] (3007692)

[87] (3007692)

[22] 2018-06-08

[30] US (15/618858) 2017-06-09

---

[11] **3,009,951**  
[13] C

[51] **Int.Cl. A62B 11/00 (2006.01) A01G 9/24 (2006.01) F24F 3/12 (2006.01) F24F 5/00 (2006.01)**

[25] EN

[54] **LIVING ATMOSPHERE CONTROL SYSTEM**

[54] **SYSTEME DE COMMANDE DE L'ATMOSPHERE VIVANTE**

[72] REID, BRAD A., CA

[73] REID, BRAD A., CA

[86] (3009951)

[87] (3009951)

[22] 2018-06-27

[30] US (16014127) 2018-06-21

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[11] **3,011,195**  
[13] C

[51] **Int.Cl. H04W 48/18 (2009.01) H04W 8/08 (2009.01) H04W 48/00 (2009.01)**

[25] EN

[54] **ENHANCEMENTS TO SERVING A USER EQUIPMENT IN A VISITED COUNTRY IN A MOBILE COMMUNICATION SYSTEM**

[54] **AMELIORATIONS DU SERVICE OFFERT A UN EQUIPEMENT UTILISATEUR DANS UN PAYS VISITE DANS UN SYSTEME DE COMMUNICATION MOBILE**

[72] DREVON, NICOLAS, FR

[72] THIEBAUT, LAURENT, FR

[72] LANDAIS, BRUNO, FR

[73] NOKIA TECHNOLOGIES OY, FI

[85] 2018-07-11

[86] 2017-01-12 (PCT/EP2017/050587)

[87] (WO2017/121812)

[30] EP (16305032.1) 2016-01-14

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[11] **3,012,360**  
[13] C

[51] **Int.Cl. G06T 7/40 (2017.01) A61B 5/00 (2006.01)**

[25] EN

[54] **IMPROVED IMAGE ANALYSIS ALGORITHMS USING CONTROL SLIDES**

[54] **ALGORITHMES D'ANALYSE D'IMAGE AMELIORES AU MOYEN DE LAMES DE CONTROLE**

[72] SARKAR, ANINDYA, US

[73] VENTANA MEDICAL SYSTEMS, INC., US

[85] 2018-07-23

[86] 2017-03-01 (PCT/US2017/020245)

[87] (WO2017/151799)

[30] US (62/302,062) 2016-03-01

[30] US (62/464,972) 2017-02-28

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[11] **3,016,213**  
[13] C

[25] EN  
[54] **SYSTEM, APPARATUS AND METHOD FOR PROVIDING IMPROVED PERFORMANCE OF AGGREGATED/BONDED NETWORK CONNECTIONS WITH CLOUD PROVISIONING**  
[54] **SYSTEME, APPAREIL ET PROCEDE POUR FOURNIR DES PERFORMANCES AMELIOREES DE CONNEXIONS DE RESEAU AGREGES/LIEES AVEC UNE FOURNITURE DE NUAGE**  
[72] SAAVEDRA, PATRICIO HUMBERTO, CA  
[73] ADAPTIV NETWORKS INC., CA  
[85] 2018-08-30  
[86] 2016-03-04 (PCT/CA2016/000060)  
[87] (WO2016/138576)  
[30] US (14/638,267) 2015-03-04

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[11] **3,021,102**  
[13] C

[51] **Int.Cl. F16L 13/00 (2006.01) F16L 13/02 (2006.01) F16L 23/00 (2006.01) F16L 23/02 (2006.01) F16L 23/024 (2006.01) F16L 23/026 (2006.01) F16L 23/16 (2006.01) F16L 23/18 (2006.01) F16L 58/00 (2006.01)**  
[25] EN  
[54] **DEVICE FOR WELDED JOINTS IN PIPELINES**  
[54] **DISPOSITIF POUR ASSEMBLAGES SOUDES DE CONDUITES**  
[72] SIDGMAN SAITUA, RENE EDUARDO, CL  
[73] SIDGMAN SAITUA, RENE EDUARDO, CL  
[85] 2018-09-21  
[86] 2016-08-23 (PCT/CL2016/000048)  
[87] (WO2018/035623)

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[11] **3,021,447**  
[13] C

[51] **Int.Cl. G06F 9/46 (2006.01) G06F 9/38 (2018.01)**  
[25] EN  
[54] **SCHEDULING TASKS IN A MULTI-THREADED PROCESSOR**  
[54] **PRODUCTION DE CALENDRIER DE TACHES DANS UN PROCESSEUR MULTIFILIERE**  
[72] KNOWLES, SIMON CHRISTIAN, GB  
[73] GRAPHCORE LIMITED, GB  
[86] (3021447)  
[87] (3021447)  
[22] 2018-10-19  
[30] GB (1717303.0) 2017-10-20  
[30] US (15/885,925) 2018-02-01  
[30] GB (1816891.4) 2018-10-17

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[11] **3,021,449**  
[13] C

[51] **Int.Cl. G01N 33/53 (2006.01) G01N 33/543 (2006.01)**  
[25] EN  
[54] **DIAGNOSIS OF LIVER PATHOLOGY THROUGH ASSESSMENT OF PROTEIN GLYCOSYLATION**  
[54] **DIAGNOSTIC DES MALADIES DU FOIE AU MOYEN DE L'EVALUATION DE LA GLYCOSYLATION DES PROTEINES**  
[72] BLOCK, TIMOTHY M., US  
[72] MEHTA, ANAND, US  
[72] COMUNALE, MARY ANN, US  
[73] DREXEL UNIVERSITY, US  
[86] (3021449)  
[87] (3021449)  
[22] 2006-05-05  
[62] 2,607,285  
[30] US (60/677,941) 2005-05-05

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[11] **3,022,193**  
[13] C

[51] **Int.Cl. H01F 27/08 (2006.01)**  
[25] EN  
[54] **TRANSFORMER WITH HINGED COOLING MODULE**  
[54] **TRANSFORMATEUR EQUIPE D'UN MODULE DE REFROIDISSEMENT FIXE PAR CROCHET**  
[72] Ettl, Christian, AT  
[73] SIEMENS ENERGY AUSTRIA GMBH, AT  
[85] 2018-10-25  
[86] 2017-04-26 (PCT/EP2017/059844)  
[87] (WO2017/186750)  
[30] DE (10 2016 207 390.7) 2016-04-29

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[11] **3,025,192**  
[13] C

[51] **Int.Cl. D21H 21/14 (2006.01) D21H 17/33 (2006.01)**  
[25] EN  
[54] **SURFACE-MODIFIED CELLULOSIC MATERIALS AND METHODS OF PRODUCING THE SAME**  
[54] **MATIERES CELLULOSIQUES MODIFIEES EN SURFACE ET LEURS PROCEDES DE PRODUCTION**  
[72] MINHAS, GURMINDER, CA  
[72] GOURLAY, KEITH, CA  
[73] PERFORMANCE BIOFILAMENTS INC., CA  
[85] 2018-11-22  
[86] 2017-06-22 (PCT/CA2017/050764)  
[87] (WO2017/219145)  
[30] US (62/353,504) 2016-06-22

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14 décembre 2021**

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[11] **3,025,621**  
[13] C

[51] **Int.Cl. C08J 5/08 (2006.01) C03C 25/24 (2018.01) C03C 27/10 (2006.01) C08K 7/14 (2006.01) C08L 33/00 (2006.01) C08L 75/04 (2006.01)**

[25] EN

[54] **METHOD FOR FORMING A FIRE-RESISTANT AND THERMAL-RESISTANT GLASS FIBER PRODUCT, AND ASSOCIATED APPARATUS**

[54] **PROCEDE DE FABRICATION D'UN PRODUIT DE FIBRES DE VERRE IGNIFUGE ET THERMORESISTANT, ET APPAREIL ASSOCIE**

[72] BAROUX, DANIEL, CA

[73] BLH TECHNOLOGIES INC., CA

[86] (3025621)

[87] (3025621)

[22] 2013-01-30

[62] 2,863,074

[30] US (61/592,369) 2012-01-30

---

[11] **3,027,367**  
[13] C

[51] **Int.Cl. B60K 6/48 (2007.10) B60K 6/383 (2007.10) B60K 6/442 (2007.10)**

[25] EN

[54] **HYBRID UTILITY VEHICLE**

[54] **VEHICULE UTILITAIRE HYBRIDE**

[72] BORUD, ERIC J., US

[72] MATKO, CHRISTOPHER P., US

[72] BUEHLER, DAVID F., CH

[72] VAN BATAVIA, BRIAN L., US

[72] COMANA, BENJAMIN M., CH

[73] POLARIS INDUSTRIES, INC., US

[85] 2018-12-11

[86] 2017-06-05 (PCT/US2017/035939)

[87] (WO2017/218225)

[30] US (62/349,998) 2016-06-14

[30] US (15/613,483) 2017-06-05

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[11] **3,027,663**  
[13] C

[51] **Int.Cl. G08G 1/13 (2006.01) G08G 1/052 (2006.01) G01C 21/28 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DISPLAYING MOVEMENT OF VEHICLE ON MAP**

[54] **SYSTEMES ET METHODES DE PRESENTATION DU MOUVEMENT D'UN VEHICULE SUR UNE CARTE**

[72] CHEN, QIAO, CN

[72] LI, PENGXUAN, CN

[72] XU, YINGCHUAN, CN

[72] WANG, KEGANG, CN

[72] LIU, CHAO, CN

[72] YE, CHAO, CN

[72] MU, QIAN, CN

[72] QIAO, YONG, CN

[72] YANG, ZHENLIN, CN

[73] BEIJING DIDI INFINITY TECHNOLOGY AND DEVELOPMENT CO., LTD., CN

[85] 2018-12-14

[86] 2018-06-19 (PCT/CN2018/091824)

[87] (WO2018/233602)

[30] CN (201710466200.X) 2017-06-19

[30] CN (201710471851.8) 2017-06-20

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[11] **3,028,825**  
[13] C

[51] **Int.Cl. E21B 7/02 (2006.01) E21B 15/04 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR POSITIONING ROCK DRILLING RIG**

[54] **APPAREIL ET PROCEDE POUR POSITIONNER UN APPAREIL DE FORAGE DE ROCHE**

[72] HAVERINEN, EEMELI, FI

[72] LASSILA, JUHA, FI

[72] TAPOLA, HEIKKI, FI

[72] AVELIN, MERVI, FI

[72] HIRSIKANGAS, TUOMO, FI

[73] SANDVIK MINING AND CONSTRUCTION OY, FI

[85] 2018-12-20

[86] 2016-07-01 (PCT/EP2016/065475)

[87] (WO2018/001506)

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[11] **3,030,597**  
[13] C

[51] **Int.Cl. H04L 5/00 (2006.01)**

[25] EN

[54] **COMMUNICATION METHOD, NETWORK DEVICE AND USER EQUIPMENT**

[54] **PROCEDE DE COMMUNICATION, DISPOSITIF DE RESEAU ET EQUIPEMENT UTILISATEUR**

[72] TANG, HAI, CN

[73] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN

[85] 2019-01-11

[86] 2016-08-12 (PCT/CN2016/094818)

[87] (WO2018/010243)

[30] CN (PCT/CN2016/090024) 2016-07-14

---

[11] **3,031,753**  
[13] C

[51] **Int.Cl. B60C 25/02 (2006.01)**

[25] EN

[54] **TIRE LEVER**

[54] **DEMONTE-PNEU**

[72] BENDORF, SCOTT A., US

[73] SNAP-ON INCORPORATED, US

[86] (3031753)

[87] (3031753)

[22] 2019-01-29

[30] US (16/028,782) 2018-07-06

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[11] **3,032,242**  
[13] C

[51] **Int.Cl. C08J 11/14 (2006.01)**

[25] EN

[54] **CATALYTIC MICROWAVE DEPOLYMERISATION OF PLASTIC FOR PRODUCTION OF MONOMER AND WAXES**

[54] **DEPOLYMERISATION CATALYTIQUE PAR MICRO-ONDES D'UN PLASTIQUE POUR LA FABRICATION DE MONOMERES ET DE CIRES**

[72] DOUCET, JOCELYN, CA

[72] LAVIOLETTE, JEAN-PHILIPPE, CA

[73] PYROWAVE INC., CA

[85] 2019-01-28

[86] 2017-07-28 (PCT/CA2017/050905)

[87] (WO2018/018153)

[30] US (62/368,315) 2016-07-29

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[11] **3,033,013**  
[13] C

[51] **Int.Cl. A61L 9/012 (2006.01) A41D 13/11 (2006.01) A61L 2/16 (2006.01) A61L 2/232 (2006.01)**

[25] EN

[54] **MATERIAL, DEVICE, AND METHOD FOR DEACTIVATING PATHOGEN IN AEROSOL, AND METHODS FOR MANUFACTURING THEREOF**

[54] **MATERIAU, DISPOSITIF ET PROCEDURE DE DESACTIVATION D'UN AGENT PATHOGENE DANS UN AEROSOL, ET LEURS PROCEDES DE FABRICATION**

[72] CHOI, HYO-JICK, CA

[73] CHOI, HYO-JICK, CA

[85] 2019-02-05

[86] 2017-08-18 (PCT/IB2017/001143)

[87] (WO2018/033793)

[30] US (62/377,209) 2016-08-19

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[11] **3,033,056**  
[13] C

[51] **Int.Cl. C12G 3/02 (2019.01) C12G 3/08 (2006.01)**

[25] EN

[54] **BACTERIAL, FUNGAL, AND YEAST GROWTH INHIBITOR CONTAINING ALLULOSE**

[54] **INHIBITEUR DE CROISSANCE BACTERIENNE, FONGIQUE OU DE LEVURE CONTENANT DE L'ALLULOSE**

[72] CHOI, JONG MIN, KR

[72] KIM, SU-JEONG, KR

[72] BAK, YOUN-KYUNG, KR

[72] PARK, JUNG GYU, KR

[72] BYUN, SUNG BAE, KR

[72] SHIM, DONG SEOK, KR

[72] LEE, IN, KR

[72] PARK, SEUNG WON, KR

[72] JUNG, DONG CHUL, KR

[73] CJ CHEILJEDANG CORPORATION, KR

[85] 2019-02-05

[86] 2017-09-28 (PCT/KR2017/010821)

[87] (WO2018/066890)

[30] KR (10-2016-0128949) 2016-10-06

---

[11] **3,033,166**  
[13] C

[51] **Int.Cl. B01D 11/02 (2006.01) B01D 1/00 (2006.01)**

[25] EN

[54] **MOBILE SUPERCRITICAL EXTRACTOR SYSTEM WITH EVAPORATOR CHAMBER HAVING CONES AND RELATED METHODS**

[54] **SYSTEME EXTRACTEUR SUPERCRITIQUE MOBILE A CHAMBRE D'EVAPORATION MUNIE DE CONES ET PROCEDES ASSOCIES**

[72] PARKER, DAVID L., US

[72] DELARVIN, SCOTT, US

[73] AG EQUIPMENT IP HOLDING COMPANY, INC., US

[85] 2019-02-06

[86] 2017-04-18 (PCT/US2017/028082)

[87] (WO2018/089042)

[30] US (62/421,552) 2016-11-14

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[11] **3,034,284**  
[13] C

[51] **Int.Cl. B61D 5/00 (2006.01) B60P 3/24 (2006.01)**

[25] EN

[54] **DRY BULK TANK WITH COMPARTMENTS AND AN AIR PIPING SYSTEM FOR EQUALIZING AIR PRESSURE IN THE COMPARTMENTS**

[54] **RESERVOIR DE VRAC SEC DOTE DE COMPARTIMENTS ET D'UN SYSTEME DE TUYAUTERIE A AIR SERVANT A EGALISER LA PRESSION DANS LES COMPARTIMENTS**

[72] KIBLER, SCOTT A., US

[73] MAC TRAILER MANUFACTURING, INC., US

[86] (3034284)

[87] (3034284)

[22] 2019-02-20

[30] US (62/648,694) 2018-03-27

[30] US (15/979,721) 2018-05-15

---

[11] **3,034,285**  
[13] C

[51] **Int.Cl. B65G 53/28 (2006.01) B65D 88/72 (2006.01) B65G 3/04 (2006.01) B65G 53/50 (2006.01) E04H 7/22 (2006.01)**

[25] EN

[54] **METHOD OF LOADING DRY BULK MATERIALS IN A DRY BULK TANK**

[54] **METHODE DE CHARGEMENT DE MATERIAUX SECS EN VRAC DANS UN RESERVOIR DE VRAC SEC**

[72] KIBLER, SCOTT A., US

[72] GORDON, ALLEN, US

[73] MAC TRAILER MANUFACTURING, INC., US

[86] (3034285)

[87] (3034285)

[22] 2019-02-20

[30] US (62/648,694) 2018-03-27

[30] US (15/979,565) 2018-05-15

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[11] **3,034,299**  
[13] C

[51] **Int.Cl. B60P 3/24 (2006.01) B61D 5/00 (2006.01) B65D 88/54 (2006.01) B65D 88/72 (2006.01) B65G 3/04 (2006.01)**

[25] EN

[54] **DRY BULK TANK**

[54] **RESERVOIR DE VRAC SEC**

[72] KIBLER, SCOTT A., US

[73] MAC TRAILER MANUFACTURING, INC., US

[86] (3034299)

[87] (3034299)

[22] 2019-02-20

[30] US (62/648,694) 2018-03-27

[30] US (15/979,837) 2018-05-15

**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **3,035,162**  
[13] C

[51] **Int.Cl. C22C 38/54 (2006.01) C22C 30/00 (2006.01) C22C 38/02 (2006.01) C22C 38/04 (2006.01) C22C 38/06 (2006.01) C22C 38/44 (2006.01) C22C 38/48 (2006.01) C22C 38/58 (2006.01)**

[25] EN

[54] **AUSTENITIC STAINLESS STEEL**

[54] **ACIER INOXYDABLE AUSTENITIQUE**

[72] OKADA, HIROKAZU, JP

[72] KURIHARA, SHINNOSUKE, JP

[72] DAN, ETSUO, JP

[72] SETO, MASAHIRO, JP

[72] OSUKI, TAKAHIRO, JP

[73] NIPPON STEEL CORPORATION, JP

[85] 2019-02-26

[86] 2017-08-30 (PCT/JP2017/031157)

[87] (WO2018/043565)

[30] JP (2016-168596) 2016-08-30

---

[11] **3,037,118**  
[13] C

[51] **Int.Cl. C07D 211/70 (2006.01) A61K 31/4418 (2006.01) C07D 401/10 (2006.01)**

[25] EN

[54] **TETRAHYDROPYRIDINE DERIVATIVES AND THEIR USE AS ANTIBACTERIAL AGENTS**

[54] **DERIVES DE TETRAHYDROPYRIDINE ET LEUR UTILISATION EN TANT QU'AGENTS ANTIBACTERIENS**

[72] CHOI, SUN-HO, KR

[72] IM, WEON-BIN, KR

[72] CHOI, SUNG-HAK, KR

[72] CHO, CHONG-HWAN, KR

[72] MOON, HO-SANG, KR

[72] PARK, JUNG-SANG, KR

[72] LEE, MIN-JUNG, KR

[72] SUNG, HYUN-JUNG, KR

[72] MOON, JUN-HWAN, KR

[72] SONG, SEUNG-HYUN, KR

[72] LEE, HYUNG-KEUN, KR

[72] CHOI, JI-HOON, KR

[72] PARK, CHEON-HYOUNG, KR

[72] KIM, YOON-JUNG, KR

[72] KIM, JIN-HYUK, KR

[73] DONG-A ST CO., LTD., KR

[85] 2019-03-15

[86] 2017-09-28 (PCT/KR2017/010896)

[87] (WO2018/062924)

[30] US (62/400,694) 2016-09-28

---

[11] **3,037,574**  
[13] C

[51] **Int.Cl. D21H 27/00 (2006.01)**

[25] EN

[54] **FIBROUS STRUCTURE-CONTAINING ARTICLES THAT EXHIBIT CONSUMER RELEVANT PROPERTIES**

[54] **ARTICLES CONTENANT DES STRUCTURES FIBREUSES DOTES DE PROPRIETES PERTINENTES POUR LES CONSOMMATEURS**

[72] YOUNG, CHRISTOPHER MICHAEL, US

[72] STELLJES, MICHAEL GOMER, US

[72] SUER, MICHAEL DONALD, US

[72] KLAWITTER, TIMOTHY JAMES, US

[72] DENBOW, JAMES ROY, US

[72] BARNHOLTZ, STEVEN LEE, US

[72] SHEEHAN, JEFFREY GLEN, US

[72] TROKHAN, PAUL DENNIS, US

[73] THE PROCTER & GAMBLE COMPANY, US

[85] 2019-03-19

[86] 2017-10-17 (PCT/US2017/056977)

[87] (WO2018/075515)

[30] US (62/409,202) 2016-10-17

---

[11] **3,039,626**  
[13] C

[51] **Int.Cl. A61K 9/107 (2006.01) A61K 9/72 (2006.01) A61K 31/08 (2006.01) A61K 47/14 (2017.01) A61K 47/18 (2017.01) A61M 16/10 (2006.01) A61M 16/18 (2006.01) A61P 23/00 (2006.01)**

[25] EN

[54] **DISPERSION ANAESTHETIC DEVICE**

[54] **DISPOSITIF ANESTHESIQUE PAR DISPERSION**

[72] HALL, JUDITH, GB

[72] PAUL, ALISON, GB

[72] WILKES, ANTONY, GB

[73] UNIVERSITY COLLEGE CARDIFF CONSULTANTS LIMITED, GB

[86] (3039626)

[87] (3039626)

[22] 2012-09-18

[62] 2,847,033

[30] GB (1116271.6) 2011-09-21

---

[11] **3,040,413**  
[13] C

[51] **Int.Cl. C01B 23/00 (2006.01) B01D 53/02 (2006.01) B01D 53/22 (2006.01)**

[25] EN

[54] **SEPARATION PROCESS AND APPARATUS FOR LIGHT NOBLE GAS**

[54] **PROCESSUS ET APPAREIL DE SEPARATION DE GAZ RARE LEGER**

[72] SANDERSON, CORY E., US

[72] PLOEGER, JASON MICHAEL, US

[72] CAO, JIN, US

[72] WHITLEY, ROGER DEAN, US

[72] BHADRA, SHUBHRA JYOTI, US

[73] AIR PRODUCTS AND CHEMICALS, INC., US

[86] (3040413)

[87] (3040413)

[22] 2019-04-16

[30] US (16/251,594) 2019-01-18

---

[11] **3,040,502**  
[13] C

[51] **Int.Cl. A47D 13/02 (2006.01) A45F 3/04 (2006.01)**

[25] EN

[54] **CHILD CARRIER**

[54] **PORTE-BEBE**

[72] FAN, MEIFENG, CN

[73] WONDERLAND SWITZERLAND AG, CH

[86] (3040502)

[87] (3040502)

[22] 2019-04-16

[30] CN (201810355370.5) 2018-04-19

[30] CN (201810549110.1) 2018-05-31

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[11] **3,040,583**  
[13] C

[51] **Int.Cl. H03K 3/38 (2006.01)**

[25] EN

[54] **SUPERCONDUCTING TRANSMISSION DRIVER SYSTEM**

[54] **SYSTEME DE DISPOSITIF DE COMMANDE DE TRANSMISSION SUPRACONDUCTEUR**

[72] HERR, QUENTIN P., US

[72] RUDMAN, EDWARD, US

[72] EGAN, JONATHAN D., US

[72] TALANOV, VLADIMIR V., US

[73] NORTHROP GRUMMAN SYSTEMS CORPORATION, US

[85] 2019-04-12

[86] 2017-10-26 (PCT/US2017/058497)

[87] (WO2018/093545)

[30] US (15/356,049) 2016-11-18

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[11] **3,041,140**  
[13] C

[51] **Int.Cl. G06T 7/143 (2017.01) G06T 1/40 (2006.01) A61B 5/055 (2006.01) A61B 6/00 (2006.01) A61B 8/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR SEGMENTING AN IMAGE**

[54] **PROCEDES ET SYSTEMES DE SEGMENTATION D'UNE IMAGE**

[72] GATTI, ANTHONY, CA

[73] NEURALSEG LTD., CA

[86] (3041140)

[87] (3041140)

[22] 2019-04-25

[30] US (62/662,898) 2018-04-26

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[11] **3,041,155**  
[13] C

[51] **Int.Cl. C07D 471/14 (2006.01) A61K 31/551 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01) C07D 487/04 (2006.01) C07D 491/08 (2006.01) C07D 519/00 (2006.01)**

[25] EN

[54] **MULTI-KINASE INHIBITOR COMPOUND, AND CRYSTAL FORM AND USE THEREOF**

[54] **COMPOSE INHIBITEUR MULTI-KINASE, FORME CRISTALLINE ET UTILISATION ASSOCIEE**

[72] WU, FRANK, CN

[73] NANJING TRANSTHERA BIOSCIENCES CO. LTD., CN

[85] 2019-04-18

[86] 2017-12-12 (PCT/CN2017/115698)

[87] (WO2018/108079)

[30] CN (201611174146.3) 2016-12-13

[30] CN (201710426594.6) 2017-06-08

[30] CN (201710593933.X) 2017-07-20

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[11] **3,041,518**  
[13] C

[51] **Int.Cl. G16H 20/10 (2018.01) A61B 5/07 (2006.01)**

[25] EN

[54] **PHARMA-INFORMATICS SYSTEM**

[54] **SYSTEME PHARMA-INFORMATIQUE**

[72] ZDEBLICK, MARK, US

[72] HAFEZI, HOOMAN, US

[72] PIKELNY, ALEKSANDR, US

[72] ROBERTSON, TIMOTHY, US

[73] OTSUKA PHARMACEUTICAL CO., LTD., JP

[86] (3041518)

[87] (3041518)

[22] 2006-04-28

[62] 2,953,847

[30] US (60/790,335) 2005-04-07

[30] US (60/676,145) 2005-04-28

[30] US (60/694,078) 2005-06-24

[30] US (60/713,680) 2005-09-01

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[11] **3,041,632**  
[13] C

[51] **Int.Cl. A01B 59/00 (2006.01) A01B 59/06 (2006.01)**

[25] EN

[54] **FAST ATTACH IMPLEMENT STRUCTURE**

[54] **STRUCTURE DE DISPOSITIF A FIXATION RAPIDE**

[72] BORSHOV, ALEX, DE

[72] BIGGE, WILLIAM, US

[72] HOBRATH, GERALD, US

[73] MTD PRODUCTS INC, US

[85] 2019-04-24

[86] 2017-09-21 (PCT/US2017/052826)

[87] (WO2018/057816)

[30] US (62/397,569) 2016-09-21

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[11] **3,041,734**  
[13] C

[51] **Int.Cl. H01H 33/662 (2006.01) H02B 1/044 (2006.01)**

[25] EN

[54] **POLE PART FOR MEDIUM VOLTAGE SWITCHGEAR**

[54] **PIECE POLAIRE POUR APPAREILLAGE DE COMMUTATION MOYENNE TENSION**

[72] GENTSCH, DIETMAR, DE

[73] ABB SCHWEIZ AG, CH

[85] 2019-04-25

[86] 2017-10-24 (PCT/EP2017/077070)

[87] (WO2018/077832)

[30] EP (16195478.9) 2016-10-25

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[11] **3,042,232**  
[13] C

[51] **Int.Cl. H04R 1/02 (2006.01) H04R 1/20 (2006.01) H05K 5/02 (2006.01)**

[25] EN

[54] **AN ENCLOSURE FOR AN AUDIO SPEAKER**

[54] **ENCEINTE POUR HAUT-PARLEUR AUDIO**

[72] SHATFORD, MICHAEL, NZ

[73] TRANSVERSE TECHNOLOGY LIMITED, NZ

[85] 2019-04-29

[86] 2016-05-20 (PCT/NZ2016/050082)

[87] (WO2017/074200)

[30] NZ (713814) 2015-10-30

[30] NZ (720385) 2016-05-20

---

[11] **3,042,567**  
[13] C

[51] **Int.Cl. E21B 43/28 (2006.01) E21B 43/22 (2006.01)**

[25] EN

[54] **METHODS AND COMPOSITIONS RELATED TO GELLED LAYERS IN OIL AND/OR GAS WELLS**

[54] **METHODES ET COMPOSITIONS ASSOCIEES AUX COUCHES GELIFIEES DANS LES Puits DE PETROLE OU DE GAZ**

[72] FURDSON-WELSH, ANGUS, US

[72] SILAS, JAMES, US

[72] GONZALEZ-ROLDAN, MONICA, US

[73] FLOTEK CHEMISTRY, LLC, US

[86] (3042567)

[87] (3042567)

[22] 2015-07-28

[62] 2,898,770

[30] US (62/030,049) 2014-07-28

[30] US (62/074,229) 2014-11-03

**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **3,042,732**  
[13] C

[51] **Int.Cl. A61G 1/02 (2006.01) A61G 1/00 (2006.01) A61G 1/06 (2006.01)**  
[25] EN  
[54] **ROBOTIC SURGICAL SYSTEM TO REDUCE UNWANTED VIBRATION**  
[54] **SYSTEME CHIRURGICAL ROBOTIQUE POUR REDUIRE LES VIBRATIONS NON SOUHAITEES**  
[72] TIMM, RICHARD WILLIAM, US  
[72] SOUNDARARAJAN, VIJAY, US  
[72] CAGLE, DAVID JAMES, US  
[73] VERB SURGICAL INC., US  
[85] 2019-05-02  
[86] 2017-11-27 (PCT/US2017/063311)  
[87] (WO2018/098444)  
[30] US (62/426,966) 2016-11-28  
[30] US (62/443,393) 2017-01-06  
[30] US (62/483,060) 2017-04-07

---

[11] **3,043,225**  
[13] C

[51] **Int.Cl. B60B 27/02 (2006.01)**  
[25] EN  
[54] **HUB FOR HEAVY-DUTY VEHICLE**  
[54] **MOYEU POUR VEHICULE UTILITAIRE LOURD**  
[72] ANDLER, JASON, US  
[72] GREGG, DANE, US  
[72] ERNENWEIN, KEITH, US  
[72] WITTLINGER, JEFF, US  
[72] KAKARLA, SRI SATYA TEJA, US  
[73] HENDRICKSON USA, L.L.C., US  
[85] 2019-05-07  
[86] 2017-11-29 (PCT/US2017/063616)  
[87] (WO2018/106491)  
[30] US (62/430,057) 2016-12-05

---

[11] **3,044,105**  
[13] C

[51] **Int.Cl. G01N 29/04 (2006.01) G01N 29/11 (2006.01) G01N 29/22 (2006.01) G01N 29/24 (2006.01) G01N 29/34 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR CHECKING AN OBJECT FOR FLAWS**  
[54] **PROCEDE ET DISPOSITIF DE CONTROLE D'UN OBJET QUANT A DES ZONES DEFECTUEUSES**  
[72] WERLE, MICHAEL, IE  
[72] HENNIG, THOMAS, IE  
[72] HABERL, PETER, IE  
[73] NDT GLOBAL CORPORATE LTD. IRELAND, IE  
[85] 2019-05-16  
[86] 2017-11-15 (PCT/EP2017/079354)  
[87] (WO2018/091548)  
[30] DE (10 2016 122 230.5) 2016-11-18

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[11] **3,044,522**  
[13] C

[51] **Int.Cl. C30B 25/02 (2006.01) C30B 29/04 (2006.01)**  
[25] EN  
[54] **SINGLE CRYSTAL SYNTHETIC DIAMOND MATERIAL VIA CHEMICAL VAPOUR DEPOSITION**  
[54] **MATERIAU DE DIAMANT SYNTHETIQUE MONOCRISTALLIN PAR DEPOT CHIMIQUE EN PHASE VAPEUR**  
[72] MARKHAM, MATTHEW LEE, GB  
[72] EDMONDS, ANDREW MARK, GB  
[72] DHILLON, HARPREET KAUR, GB  
[72] HARDEMAN, DAVID WILLIAM, GB  
[73] ELEMENT SIX TECHNOLOGIES LIMITED, GB  
[85] 2019-05-21  
[86] 2017-11-30 (PCT/EP2017/080901)  
[87] (WO2018/100023)  
[30] GB (1620415.8) 2016-12-01

---

[11] **3,044,873**  
[13] C

[51] **Int.Cl. G06Q 30/08 (2012.01) G06Q 40/04 (2012.01) G06Q 50/06 (2012.01)**  
[25] EN  
[54] **FORWARD-LOOKING TRANSACTIVE PRICING SCHEMES FOR USE IN A MARKET-BASED RESOURCE ALLOCATION SYSTEM**  
[54] **SCHEMAS TRANSACTIFS PROSPECTIFS D'ETABLISSEMENT DE PRIX A UTILISER DANS UN SYSTEME D'ALLOCATION DE RESSOURCES REPOSANT SUR LE MARCHE**  
[72] CHASSIN, DAVID P., US  
[72] FULLER, JASON C., US  
[72] PRATT, ROBERT G., US  
[72] KUMAR, NIRUPAMA PRAKASH, US  
[72] FISHER, ANDREW R., US  
[73] BATTLE MEMORIAL INSTITUTE, US  
[86] (3044873)  
[87] (3044873)  
[22] 2012-04-20  
[62] 2,834,085  
[30] US (13/096682) 2011-04-28

---

[11] **3,045,527**  
[13] C

[51] **Int.Cl. D21H 21/20 (2006.01) D21H 17/07 (2006.01) D21H 17/14 (2006.01) D21H 17/24 (2006.01) D21H 17/25 (2006.01) D21H 17/28 (2006.01) D21H 17/30 (2006.01) D21H 17/32 (2006.01) D21H 21/22 (2006.01)**  
[25] EN  
[54] **WET STRENGTH, FIBRE-CONTAINING SUBSTRATE WITH ADJUSTABLE WET STRENGTH AND MOISTURE STRENGTH, AND METHOD FOR PRODUCING SAME**  
[54] **SUBSTRAT RENFERMANT DES FIBRES, RESISTANT AU MOUILLE, A RESISTANCE AU MOUILLE ET RESISTANCE A L'HUMIDITE AJUSTABLES, ET METHODE DE PRODUCTION ASSOCIEE**  
[72] ECKL, JOSEF, DE  
[72] SENGEL, HANS, DE  
[72] BECK, HERBERT, DE  
[73] CHEM&P GMBH & CO. KG, DE  
[85] 2019-05-30  
[86] 2017-11-16 (PCT/EP2017/079386)  
[87] (WO2018/099724)  
[30] EP (16201550.7) 2016-11-30

**Canadian Patents Issued  
December 14, 2021**

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[11] **3,047,494**  
[13] C

[51] **Int.Cl. B27B 1/00 (2006.01)**  
[25] EN  
[54] **COMPUTER-ASSISTED SHINGLE SAWING METHOD AND INSTALLATION**  
[54] **PROCEDE ET INSTALLATION DE SCIAGE DE BARDEAUX ASSISTE PAR ORDINATEUR**  
[72] MICHAUD, PIERRE, CA  
[73] CLAIR INDUSTRIAL DEVELOPMENT CORPORATION LTD., CA  
[86] (3047494)  
[87] (3047494)  
[22] 2019-06-20  
[30] US (62/763,642) 2018-06-27

---

[11] **3,049,745**  
[13] C

[51] **Int.Cl. A01N 25/08 (2006.01) A01N 59/00 (2006.01) C04B 40/00 (2006.01) C04B 41/50 (2006.01) C09D 5/14 (2006.01) C09D 5/33 (2006.01)**  
[25] EN  
[54] **A METAL FREE ANTIMICROBIAL AND UV PROTECTION ADDITIVE**  
[54] **ADDITIFS ANTIMICROBIENS ET DE PROTECTION CONTRE LE RAYONNEMENT (UV) EXEMPTES DE METAL**  
[72] KOSTJUKOV, JURIS, LV  
[72] KARASA, JULIJA, LV  
[72] KOSTJUKOVA, SOLVITA, LV  
[73] ALINA, SIA, LV  
[85] 2019-07-09  
[86] 2017-01-12 (PCT/IB2017/050159)  
[87] (WO2018/130880)  
[30] LV (P-17-02) 2017-01-10

---

[11] **3,049,831**  
[13] C

[51] **Int.Cl. G06F 16/21 (2019.01)**  
[25] EN  
[54] **DATABASE STATE DETERMINING METHOD AND DEVICE, AND CONSISTENCY VERIFYING METHOD AND DEVICE**  
[54] **PROCEDE ET DISPOSITIF DE DETERMINATION D'ETAT DE BASE DE DONNEES, ET PROCEDE ET DISPOSITIF DE VERIFICATION DE COHERENCE**  
[72] ZHAO, BORAN, CN  
[73] ADVANCED NEW TECHNOLOGIES CO., LTD., KY  
[85] 2019-07-10  
[86] 2018-05-23 (PCT/CN2018/087966)  
[87] (WO2018/214897)  
[30] CN (201710377721.8) 2017-05-25

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[11] **3,050,188**  
[13] C

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/4985 (2006.01) A61P 11/06 (2006.01) A61P 13/12 (2006.01) A61P 19/02 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) A61P 37/02 (2006.01)**  
[25] EN  
[54] **IMIDAZOPYRAZINE COMPOUNDS, PREPARATION METHODS AND USES THEREOF**  
[54] **COMPOSE IMIDAZOPYRAZINE, SON PROCEDE DE PREPARATION ET SON UTILISATION**  
[72] CAI, XIONG, CN  
[72] ZHONG, XIANBIN, CN  
[72] YE, CHUNQIANG, CN  
[72] HE, QIJIE, CN  
[72] QIN, SHIFENG, CN  
[72] QIAN, CHANGGENG, CN  
[73] DONGGUAN ZHENXING-BEITE MEDICINE TECHNOLOGY CO., LTD., CN  
[85] 2019-07-15  
[86] 2018-01-15 (PCT/CN2018/072581)  
[87] (WO2018/130213)  
[30] CN (201710028449.2) 2017-01-16

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[11] **3,051,026**  
[13] C

[51] **Int.Cl. C23C 2/06 (2006.01) C23C 2/40 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR CONTROLLING FLOW OF LIQUID ZINC IN ZINC POT FOR HOT-DIP GALVANIZATION**  
[54] **PROCEDE ET DISPOSITIF DESTINES A COMMANDER L'ECOULEMENT DE ZINC LIQUIDE DANS UN POT DE ZINC DESTINE A UNE GALVANISATION PAR IMMERSION A CHAUD**  
[72] HOU, XIAOQUANG, CN  
[72] QIAN, HONGWEI, CN  
[72] YU, LEI, CN  
[72] LI, SHANQING, CN  
[72] LU, YONG, CN  
[72] JIN, XINYAN, CN  
[72] ZHOU, YUEMING, CN  
[72] SHEN, JUN, CN  
[72] WANG, CUNBING, CN  
[72] YANG, BING, CN  
[72] WANG, HUI, CN  
[72] XU, HAO, CN  
[72] GU, TINGQUAN, CN  
[73] BAOSHAN IRON & STEEL CO., LTD., CN  
[85] 2019-07-19  
[86] 2018-03-16 (PCT/CN2018/079296)  
[87] (WO2018/223746)  
[30] CN (201710417938.7) 2017-06-06

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[11] **3,051,630**  
[13] C

[51] **Int.Cl. B66B 9/08 (2006.01)**  
[25] EN  
[54] **STAIRLIFT COMPRISING AN EMERGENCY MOVEMENT FUNCTION**  
[54] **MONTE-ESCALIER COMPORTANT UNE FONCTION DE MOUVEMENT D'URGENCE**  
[72] VAN EIJGEN, WILCO, NL  
[73] THYSSENKRUPP STAIRLIFTS B.V., NL  
[85] 2019-07-25  
[86] 2018-01-16 (PCT/EP2018/050988)  
[87] (WO2018/145862)  
[30] DE (10 2017 202 010.5) 2017-02-08



**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **3,051,752**  
[13] C

[51] **Int.Cl. F04D 7/06 (2006.01) F04D 29/22 (2006.01) F04D 29/62 (2006.01) C21C 7/00 (2006.01) C22B 9/02 (2006.01) C22B 9/05 (2006.01)**

[25] EN

[54] **MOLTEN METAL PUMP**

[54] **POMPE A METAL EN FUSION**

[72] MORANDO, JORGE A., US

[72] TIPTON, JON, US

[72] MORDUE, GEORGE, US

[72] BRIGHT, MARK, US

[72] LUTES, LENNARD, US

[72] HENDERSON, RICHARD S., US

[72] VILD, CHRIS T., US

[73] PYROTEK INC., US

[86] (3051752)

[87] (3051752)

[22] 2005-07-07

[62] 2,948,335

[30] US (60/586134) 2004-07-07

[30] US (60/607644) 2004-09-07

[30] US (60/675828) 2005-04-28

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[11] **3,051,966**  
[13] C

[51] **Int.Cl. G10L 19/06 (2013.01)**

[25] EN

[54] **DECODING AUDIO BITSTREAMS WITH ENHANCED SPECTRAL BAND REPLICATION METADATA IN AT LEAST ONE FILL ELEMENT**

[54] **DECODAGE DE TRAINS DE BITS AUDIO AVEC DES METADONNEES DE REPLICATION DE BANDE SPECTRALE AMELIOREE DANS AU MOINS UN ELEMENT DE REMPLISSAGE**

[72] VILLEMOES, LARS, SE

[72] PURNHAGEN, HEIKO, SE

[72] EKSTRAND, PER, SE

[73] DOLBY INTERNATIONAL AB, NL

[86] (3051966)

[87] (3051966)

[22] 2016-03-10

[62] 2,989,595

[30] EP (15159067.6) 2015-03-13

[30] US (62/133,800) 2015-03-16

---

[11] **3,051,967**  
[13] C

[51] **Int.Cl. A61M 16/16 (2006.01) A61M 16/10 (2006.01)**

[25] EN

[54] **CONTROL OF HUMIDIFIER CHAMBER TEMPERATURE FOR ACCURATE HUMIDITY CONTROL**

[54] **REGULATION DE LA TEMPERATURE DE CHAMBRE D'UN HUMIDIFICATEUR POUR UNE REGULATION PRECISE DE L'HUMIDITE**

[72] CRONE, CHRISTOPHER MALCOLM, NZ

[72] HAN, JAE CHUL, NZ

[72] HAWKINS, PETER, NZ

[72] O'DONNELL, KEVIN PETER, NZ

[72] SOMERVELL, ANDREW ROBERT DONALD, NZ

[72] TATKOV, STANISLAV, NZ

[73] FISHER & PAYKEL HEALTHCARE LIMITED, NZ

[86] (3051967)

[87] (3051967)

[22] 2009-05-27

[62] 2,726,116

[30] US (61/056,335) 2008-05-27

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[11] **3,052,080**  
[13] C

[51] **Int.Cl. F17C 1/00 (2006.01) F17C 13/02 (2006.01) F17C 13/06 (2006.01)**

[25] EN

[54] **A HYDROSTATICALLY COMPENSATED COMPRESSED GAS ENERGY STORAGE SYSTEM**

[54] **SYSTEME DE STOCKAGE D'ENERGIE A GAZ COMPRI ME AVEC COMPENSATION HYDROSTATIQUE**

[72] LEWIS, CAMERON, CA

[72] MCGILLIS, ANDREW, CA

[72] YOUNG, DAVIN, CA

[72] VANWALLEGHEM, CURTIS, CA

[73] HYDROSTOR INC., CA

[85] 2019-07-30

[86] 2018-01-31 (PCT/CA2018/050112)

[87] (WO2018/141057)

[30] US (62/453,278) 2017-02-01

[30] US (62/453,300) 2017-02-01

[30] US (62/453,306) 2017-02-01

[30] US (62/453,315) 2017-02-01

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[11] **3,052,421**  
[13] C

[51] **Int.Cl. C07D 261/04 (2006.01)**

[25] EN

[54] **METHOD FOR PREPARING 3-TRIFLUOROMETHYL CHALCONES**

[54] **PROCEDE DE PREPARATION DE 3-TRIFLUOROMETHYL CHALCONES**

[72] ANNIS, GARY DAVID, US

[73] E. I. DU PONT DE NEMOURS AND COMPANY, US

[86] (3052421)

[87] (3052421)

[22] 2009-04-08

[62] 2,954,596

[30] US (61/043,452) 2008-04-09

[30] US (61/080,437) 2008-07-14

---

[11] **3,052,899**  
[13] C

[51] **Int.Cl. H04B 1/74 (2006.01) H04B 7/08 (2006.01)**

[25] EN

[54] **METHOD AND DEVICE FOR TRANSMITTING DATA**

[54] **PROCEDE ET DISPOSITIF DE TRANSMISSION DE DONNEES**

[72] TANG, HAI, CN

[73] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN

[85] 2019-08-06

[86] 2017-02-07 (PCT/CN2017/073061)

[87] (WO2018/145247)

---

[11] **3,052,930**  
[13] C

[51] **Int.Cl. B65D 47/08 (2006.01)**

[25] EN

[54] **ONE-TOUCH OPENABLE CAP**

[54] **CAPUCHON OUVRABLE AU TOUCHER**

[72] SUZUKI, TAKUMI, JP

[72] FUJII, AKIHIRO, JP

[73] GC CORPORATION, JP

[85] 2019-08-07

[86] 2017-10-30 (PCT/JP2017/039182)

[87] (WO2018/146871)

[30] JP (2017-021364) 2017-02-08

**Canadian Patents Issued  
December 14, 2021**

[11] **3,053,536**  
[13] C

[51] **Int.Cl. G03B 17/55 (2021.01) F23M 11/04 (2006.01) F27D 21/02 (2006.01)**  
[25] EN  
[54] **HIGH TEMPERATURE CAMERA PROBE**  
[54] **SONDE POUR CAMERA HAUTE TEMPERATURE**  
[72] ZANGANEH, KOUROSH E., CA  
[72] SALVADOR, CARLOS, CA  
[73] HER MAJESTY THE QUEEN IN RIGHT OF CANADA AS REPRESENTED BY THE MINISTER OF NATURAL RESOURCES CANADA, CA  
[86] (3053536)  
[87] (3053536)  
[22] 2017-02-15  
[62] 2,958,002

[11] **3,055,505**  
[13] C

[51] **Int.Cl. F16L 15/04 (2006.01) E21B 17/042 (2006.01)**  
[25] EN  
[54] **THREADED CONNECTION FOR STEEL PIPE**  
[54] **RACCORD FILETE POUR TUYAU EN ACIER**  
[72] IWAMOTO, MICHIIHIKO, JP  
[72] TAKEDA, YUSUKE, JP  
[72] KOCHI, YASUHIRO, JP  
[72] MARUTA, SATOSHI, JP  
[72] TOYOTA, YUSUKE, JP  
[73] NIPPON STEEL CORPORATION, JP  
[85] 2019-09-05  
[86] 2018-03-02 (PCT/JP2018/008155)  
[87] (WO2018/180218)  
[30] JP (2017-070649) 2017-03-31

[11] **3,056,166**  
[13] C

[51] **Int.Cl. G02B 6/12 (2006.01)**  
[25] EN  
[54] **ARRAY-TYPE LIGHT SOURCE LIGHT-SPLITTING DEVICE, AND LIGHT-SPLITTING METHOD THEREOF**  
[54] **DISPOSITIF DE DIVISION DE LUMIERE DE RADAR LASER EN RESEAU ET SON PROCEDE DE DIVISION DE LUMIERE**  
[72] LU, KAIYUAN, CN  
[72] HUA, YIMIN, CN  
[73] O-NET COMMUNICATIONS (SHENZHEN) LIMITED, CN  
[85] 2019-09-11  
[86] 2017-11-03 (PCT/CN2017/109281)  
[87] (WO2018/171205)  
[30] CN (201710184407.8) 2017-03-24

[11] **3,054,663**  
[13] C

[51] **Int.Cl. E04F 13/08 (2006.01) E04F 13/24 (2006.01)**  
[25] EN  
[54] **FIXTURE AND WALL STRUCTURE FOR BUILDINGS**  
[54] **DISPOSITIF DE FIXATION ET STRUCTURE MURALE POUR BATIMENTS**  
[72] SAWADA, YOUHEI, JP  
[73] NICHIIHA CORPORATION, JP  
[85] 2019-08-26  
[86] 2018-06-25 (PCT/JP2018/024049)  
[87] (WO2019/004143)  
[30] JP (2017-128379) 2017-06-30

[11] **3,055,735**  
[13] C

[51] **Int.Cl. C12Q 1/68 (2018.01)**  
[25] EN  
[54] **SYSTEM FOR PREDICTING PROGNOSIS AND BENEFIT FROM ADJUVANT CHEMOTHERAPY FOR PATIENTS WITH STAGE II AND III GASTRIC CANCER**  
[54] **SYSTEME DE PREDICTION DE PRONOSTIC POST-CHIRURGIE OU DE COMPATIBILITE VIS-A-VIS DE MEDICAMENTS ANTICANCEREUX DE PATIENTS ATTEINTS D'UN CANCER GASTRIQUE AVANCE**  
[72] CHEONG, JAE HO, KR  
[72] NOH, SUNG HOON, KR  
[72] HUH, YONG MIN, KR  
[72] KIM, HYUN KI, KR  
[73] NOVOMICS CO., LTD., KR  
[85] 2019-09-06  
[86] 2017-08-11 (PCT/KR2017/008781)  
[87] (WO2018/169145)  
[30] KR (10-2017-0032027) 2017-03-14

[11] **3,056,677**  
[13] C

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 40/40 (2020.01) A24F 40/465 (2020.01) H05B 6/10 (2006.01) H05B 6/36 (2006.01)**  
[25] EN  
[54] **ARTICLE FOR USE WITH APPARATUS FOR HEATING SMOKABLE MATERIAL**  
[54] **ARTICLE DESTINE A ETRE UTILISE AVEC UN APPAREIL POUR CHAUFFER UNE SUBSTANCE A FUMER**  
[72] BLANDINO, THOMAS P., US  
[72] WILKE, ANDREW P., US  
[72] FRATER, JAMES J., US  
[72] PAPROCKI, BENJAMIN J., US  
[72] KAUFMAN, DUANE A., US  
[72] ROBEBY, RAYMOND J., US  
[72] MILLER, JOHN A., US  
[73] BRITISH AMERICAN TOBACCO (INVESTMENTS) LIMITED, GB  
[86] (3056677)  
[87] (3056677)  
[22] 2016-10-26  
[62] 3,003,519  
[30] US (14/927,551) 2015-10-30

[11] **3,055,436**  
[13] C

[51] **Int.Cl. H04N 13/307 (2018.01) H04N 13/305 (2018.01) H04N 13/31 (2018.01) H04N 13/351 (2018.01)**  
[25] EN  
[54] **PRECISION MULTI-VIEW DISPLAY**  
[54] **AFFICHAGE MULTI-VUES DE PRECISION**  
[72] NG, ALBERT HAN, US  
[72] DIETZ, PAUL HENRY, US  
[72] DUNCAN, WILLIAM JERRY, US  
[72] LATHROP, MATTHEW STEELE, US  
[72] THOMPSON, DAVID STEVEN, US  
[73] MISAPPLIED SCIENCES, INC., US  
[85] 2019-09-04  
[86] 2018-11-08 (PCT/US2018/059859)  
[87] (WO2019/094616)  
[30] US (15/809,147) 2017-11-10

**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **3,056,773**  
[13] C

[51] **Int.Cl. A62C 3/02 (2006.01) A62C 5/033 (2006.01) A62C 31/00 (2006.01) B64D 1/18 (2006.01)**

[25] EN

[54] **FIRE SUPPRESSION GEL BLENDER AND AIRBORNE DELIVERY SYSTEM**

[54] **MELANGEUR DE GEL D'EXTINCTION DES INCENDIES ET SYSTEME D'EPANDAGE AERIEN**

[72] DOTEN, LEONARD E., US

[73] DOTEN, LEONARD E., US

[86] (3056773)

[87] (3056773)

[22] 2010-05-07

[62] 3,008,869

[30] US (12/660,044) 2010-02-19

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[11] **3,057,046**  
[13] C

[51] **Int.Cl. H04W 24/02 (2009.01)**

[25] EN

[54] **METHOD AND DEVICE FOR DETERMINING DETECTION RANGE OF CONTROL CHANNEL IN MULTI-BEAM SYSTEM**

[54] **PROCEDE ET DISPOSITIF DE DETERMINATION DE PLAGE DE DETECTION D'UN CANAL DE COMMANDE DANS UN SYSTEME MULTIFAISCEAUX**

[72] TANG, HAI, CN

[72] XU, HUA, CA

[73] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN

[85] 2019-09-17

[86] 2017-03-23 (PCT/CN2017/077850)

[87] (WO2018/170826)

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[11] **3,057,047**  
[13] C

[51] **Int.Cl. G02F 1/01 (2006.01) H04B 10/516 (2013.01)**

[25] EN

[54] **IQ OPTICAL MODULATOR**

[54] **MODULATEUR OPTIQUE IQ**

[72] OGISO, YOSHIHIRO, JP

[72] OZAKI, JOSUKE, JP

[72] UEDA, YUTA, JP

[73] NIPPON TELEGRAPH AND TELEPHONE CORPORATION, JP

[85] 2019-09-18

[86] 2018-03-20 (PCT/JP2018/011156)

[87] (WO2018/174083)

[30] JP (2017-056626) 2017-03-22

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[11] **3,057,177**  
[13] C

[51] **Int.Cl. H04W 28/24 (2009.01)**

[25] EN

[54] **UPLINK TRANSMISSION METHOD, TERMINAL DEVICE AND NETWORK DEVICE**

[54] **PROCEDE DE TRANSMISSION EN LIAISON MONTANTE, DISPOSITIF DE TERMINAL ET DISPOSITIF DE RESEAU**

[72] TANG, HAI, CN

[73] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN

[85] 2019-09-19

[86] 2017-03-22 (PCT/CN2017/077741)

[87] (WO2018/170799)

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[11] **3,057,868**  
[13] C

[51] **Int.Cl. H04W 88/04 (2009.01)**

[25] EN

[54] **COMMUNICATION METHOD, TERMINAL APPARATUS, AND ACCESS NETWORK APPARATUS**

[54] **PROCEDE DE COMMUNICATION, APPAREIL TERMINAL ET APPAREIL DE RESEAU D'ACCES**

[72] LIU, JIANHUA, CN

[73] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN

[85] 2019-09-25

[86] 2017-03-31 (PCT/CN2017/078968)

[87] (WO2018/176372)

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[11] **3,058,307**  
[13] C

[51] **Int.Cl. C12N 5/04 (2006.01) A23L 7/00 (2016.01) A01H 6/46 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **MAIZE HYBRID X90M123**

[54] **MAIS HYBRIDE X90M123**

[72] COLEMAN, TRAVIS KORRY, US

[72] FABRIZIUS, MARTIN A., US

[72] GARCIA, GUSTAVO MARCELO, US

[72] WALCH, MATTHEW DAVID, US

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

[86] (3058307)

[87] (3058307)

[22] 2019-10-10

---

[11] **3,057,967**  
[13] C

[51] **Int.Cl. C22C 38/00 (2006.01) C21D 9/46 (2006.01) C22C 38/38 (2006.01) C22C 38/60 (2006.01) C23G 1/08 (2006.01)**

[25] EN

[54] **FERRITE-BASED STAINLESS STEEL SHEET HAVING LOW SPECIFIC GRAVITY AND PRODUCTION METHOD THEREFOR**

[54] **TOLE D'ACIER INOXYDABLE A BASE DE FERRITE AYANT UN FAIBLE POIDS SPECIFIQUE ET SON PROCEDE DE PRODUCTION**

[72] HAMADA, JUNICHI, JP

[72] ABE, MASATOSHI, JP

[72] HAYASHI, ATSUTAKA, JP

[73] NIPPON STEEL STAINLESS STEEL CORPORATION, JP

[85] 2019-09-25

[86] 2018-03-27 (PCT/JP2018/012311)

[87] (WO2018/181257)

[30] JP (2017-069142) 2017-03-30

---

[11] **3,058,307**  
[13] C

[51] **Int.Cl. C12N 5/04 (2006.01) A23L 7/00 (2016.01) A01H 6/46 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **MAIZE HYBRID X90M123**

[54] **MAIS HYBRIDE X90M123**

[72] COLEMAN, TRAVIS KORRY, US

[72] FABRIZIUS, MARTIN A., US

[72] GARCIA, GUSTAVO MARCELO, US

[72] WALCH, MATTHEW DAVID, US

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

[86] (3058307)

[87] (3058307)

[22] 2019-10-10

**Canadian Patents Issued  
December 14, 2021**

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[11] **3,058,895**  
[13] C

[51] **Int.Cl. B07C 7/00 (2006.01)**  
[25] EN  
[54] **IMPROVED CONVEYOR BELT ASSEMBLY FOR IDENTIFYING AN ASSET SORT LOCATION AND METHODS OF UTILIZING THE SAME**  
[54] **ENSEMBLE BANDE TRANSPORTEUSE AMELIORE POUR IDENTIFIER UN EMPLACEMENT DE TRI D'OBJETS ET PROCEDES D'UTILISATION DE CELUI-CI**  
[72] GIL, JULIO, NL  
[73] UNITED PARCEL SERVICE OF AMERICA, INC., US  
[85] 2019-10-02  
[86] 2018-01-17 (PCT/US2018/014006)  
[87] (WO2018/200048)  
[30] US (15/581,609) 2017-04-28

---

[11] **3,058,912**  
[13] C

[51] **Int.Cl. A46B 5/02 (2006.01) A46B 9/04 (2006.01)**  
[25] EN  
[54] **ORAL CARE IMPLEMENT AND METHOD FOR MANUFACTURING SUCH ORAL CARE IMPLEMENT**  
[54] **INSTRUMENT DE SOINS BUCCAUX ET PROCEDE DE FABRICATION D'UN TEL INSTRUMENT DE SOINS BUCCAUX**  
[72] TSCHOL, ARMIN, DE  
[72] HEIL, BENEDIKT, DE  
[72] SENTURK ANDERSSON, AYCAN, DE  
[72] VENZKE, STEPHANIE, DE  
[72] HUEBNER, MARLIS, DE  
[73] THE GILLETTE COMPANY LLC, US  
[85] 2019-10-02  
[86] 2018-04-10 (PCT/US2018/026786)  
[87] (WO2018/191197)  
[30] EP (17165719.0) 2017-04-10

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[11] **3,059,522**  
[13] C

[51] **Int.Cl. H04L 27/26 (2006.01)**  
[25] EN  
[54] **TRANSMITTER AND RECEIVER FOR TRANSMITTING AND RECEIVING SIGNALS HAVING PILOT SEQUENCES**  
[54] **EMETTEUR ET RECEPTEUR ET PROCEDES CORRESPONDANTS**  
[72] KNEISSL, JAKOB, DE  
[72] KILIAN, GERD, DE  
[72] BERNHARD, JOSEF, DE  
[72] ROBERT, JOERG, DE  
[72] WECHSLER, JOHANNES, DE  
[72] ERETH, STEFAN, DE  
[72] KOCH, WOLFGANG, DE  
[73] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[73] FRIEDRICH-ALEXANDER-UNIVERSITAET ERLANGEN-NUERNBERG, DE  
[85] 2019-10-09  
[86] 2018-04-09 (PCT/EP2018/025099)  
[87] (WO2018/188809)  
[30] DE (10 2017 206 259.2) 2017-04-11

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[11] **3,061,140**  
[13] C

[51] **Int.Cl. E04H 15/00 (2006.01) E04H 15/08 (2006.01) E04H 15/48 (2006.01) E04H 15/54 (2006.01)**  
[25] EN  
[54] **FOLDABLE VEHICLE ROOF TENT**  
[54] **TENTE DE TOIT DE VEHICULE PLIANTE**  
[72] ZHOU, NANQING, CN  
[72] MAO, MUHUA, CN  
[72] CHEN, MING, CN  
[73] Q-YIELD OUTDOOR GEAR LTD., CN  
[85] 2019-09-30  
[86] 2017-06-29 (PCT/CN2017/090765)  
[87] (WO2018/113238)

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[11] **3,061,259**  
[13] C

[51] **Int.Cl. G06F 17/00 (2019.01) G06F 16/90 (2019.01) G06F 7/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR GENERATING ENHANCED DATA METRICS**  
[54] **SYSTEME ET METHODE DE GENERATION DE DONNEES AMELIOREES**  
[72] VICK, EMMA N., GB  
[72] HILL, ANDREW J., GB  
[72] HOOPER, GARY D., GB  
[72] ADAMS, AMANDA J., GB  
[72] RHODES, PAUL A., GB  
[72] BOWLER, TIMOTHY J., GB  
[72] ABBOUD, CHARLES, GB  
[72] EVANS, THOMAS, GB  
[72] TSELIKAS, STELIOS E., GB  
[73] ICE BENCHMARK ADMINISTRATION LIMITED, GB  
[86] (3061259)  
[87] (3061259)  
[22] 2019-11-12  
[30] US (16/679,835) 2019-11-11  
[30] US (62/760,096) 2018-11-13

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[11] **3,061,766**  
[13] C

[51] **Int.Cl. F28D 20/02 (2006.01) C09K 5/06 (2006.01) F01K 23/02 (2006.01) F02G 1/04 (2006.01) F03G 6/06 (2006.01)**  
[25] EN  
[54] **THERMAL ENERGY STORAGE APPARATUS COMPRISING TAPERED SIDE WALLS**  
[54] **APPAREIL DE STOCKAGE D'ENERGIE THERMIQUE COMPRENANT DES PAROIS LATERALES CONIQUES**  
[72] WARBURTON, GRAHAM, AU  
[72] PARKINSON, NEIL, AU  
[73] CLIMATE CHANGE TECHNOLOGIES PTY LTD, AU  
[85] 2019-10-29  
[86] 2018-05-03 (PCT/AU2018/050405)  
[87] (WO2018/201193)  
[30] AU (2017901612) 2017-05-03

**Brevets canadiens délivrés  
14 décembre 2021**

[11] **3,061,771**  
[13] C

- [51] **Int.Cl. A47C 20/00 (2006.01) A47C 31/12 (2006.01) A47G 9/10 (2006.01)**  
[25] EN  
[54] **POSITION ADJUSTMENT MECHANISM FOR LIFTING BALANCE DEVICE**  
[54] **MECANISME DE REGLAGE DE POSITION POUR DISPOSITIF D'EQUILIBRAGE DE LEVAGE**  
[72] HUANG, HSIEN-TA, CN  
[73] HUANG, HSIEN-TA, CN  
[86] (3061771)  
[87] (3061771)  
[22] 2019-11-15  
[30] TW (107143878) 2018-12-05  
[30] TW (107143883) 2018-12-05

[11] **3,062,142**  
[13] C

- [51] **Int.Cl. C10G 33/04 (2006.01) B01D 53/48 (2006.01) C10G 1/04 (2006.01)**  
[25] EN  
[54] **TREATMENT OF TAILINGS WITH FLUE-GAS DESULFURIZATION SOLIDS**  
[54] **TRAITEMENT DES RESIDUS AVEC DES SOLIDES DE DESULFURATION DES GAZ DE COMBUSTION**  
[72] MIKULA, RANDY, CA  
[72] SPENCE, JONATHAN, CA  
[72] ZUBOT, WARREN, CA  
[72] BARA, BARRY, CA  
[72] LORENTZ, JAMES, CA  
[73] SYNCRUDE CANADA LTD. IN TRUST FOR THE OWNERS OF THE SYNCRUDE PROJECT AS SUCH OWNERS EXIST NOW AND IN THE FUTURE, CA  
[86] (3062142)  
[87] (3062142)  
[22] 2019-11-18  
[30] US (62/769,406) 2018-11-19

[11] **3,062,464**  
[13] C

- [51] **Int.Cl. F23M 9/06 (2006.01) F23B 80/04 (2006.01) F24B 1/02 (2006.01)**  
[25] EN  
[54] **WOOD-BURNING STOVE WITH INTERNAL BAFFLES FOR INCREASED BURN TIMES**  
[54] **POELE A BOIS AYANT DES CHICANES INTERNES POUR DES DUREES DE COMBUSTION ACCRUES**  
[72] SANDERS, CARROLL J., US  
[73] SANDERS, CARROLL J., US  
[86] (3062464)  
[87] (3062464)  
[22] 2019-11-22

[11] **3,062,785**  
[13] C

- [51] **Int.Cl. C10G 33/04 (2006.01) B01D 17/04 (2006.01)**  
[25] EN  
[54] **DEMULSIFIER OR WATER CLARIFIER ACTIVITY MODIFIERS**  
[54] **MODIFICATEURS D'ACTIVITE DE DESEMULSIONNEUR OU DE CLARIFICATEUR D'EAU**  
[72] BENNETT, GEOFF, CA  
[72] BEHLES, JACQUELINE, CA  
[72] STEWART, SEAN, CA  
[73] BAKER HUGHES, A GE COMPANY, LLC, US  
[85] 2019-11-07  
[86] 2018-05-09 (PCT/US2018/031805)  
[87] (WO2018/208918)  
[30] US (62/503,698) 2017-05-09  
[30] US (15/974,383) 2018-05-08

[11] **3,062,799**  
[13] C

- [51] **Int.Cl. E21B 37/02 (2006.01) F04B 47/12 (2006.01)**  
[25] EN  
[54] **APPARATUSES AND METHODS FOR SCRAPING**  
[54] **APPAREILS ET PROCEDES DE RACLAGE**  
[72] BOYD, GARRETT S., US  
[72] BOYD, MITCHELL A., US  
[73] FLOWCO PRODUCTION SOLUTIONS, LLC, US  
[86] (3062799)  
[87] (3062799)  
[22] 2019-11-26  
[30] US (62/876,155) 2019-07-19

[11] **3,062,955**  
[13] C

- [51] **Int.Cl. H02B 1/56 (2006.01) H02S 40/32 (2014.01) F25D 1/00 (2006.01) H01F 27/08 (2006.01) H02H 1/00 (2006.01)**  
[25] EN  
[54] **POWER CABINET, GRID-CONNECTED PHOTOVOLTAIC SYSTEM AND CONTAINER**  
[54] **ARMOIRE DE PUISSANCE, SYSTEME ET RECIPIENT PHOTOVOLTAIQUE CONNECTE AU RESEAU ELECTRIQUE**  
[72] ZHU, QIYAO, CN  
[72] TAN, JUN, CN  
[72] WAN, RUBIN, CN  
[72] ZHENG, HAO, CN  
[73] SUNGROW POWER SUPPLY CO., LTD., CN  
[86] (3062955)  
[87] (3062955)  
[22] 2019-11-28  
[30] CN (201811503861.6) 2018-12-10

[11] **3,063,039**  
[13] C

- [51] **Int.Cl. A01K 27/00 (2006.01)**  
[25] EN  
[54] **RETRACTABLE LEASH**  
[54] **LAISSE RETRACTABLE**  
[72] SOYUZOV, ARTEM ANATOLIEVICH, CA  
[73] SOYUZOV, ARTEM ANATOLIEVICH, CA  
[85] 2019-11-08  
[86] 2017-05-15 (PCT/RU2017/000310)  
[87] (WO2018/212672)

**Canadian Patents Issued  
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[11] **3,063,780**  
[13] C

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **LOW PROFILE  
TRANSCATHETER HEART  
VALVE**  
[54] **VALVULE CARDIAQUE  
TRANSCATHETER DE FAIBLE  
PROFIL**  
[72] HARITON, LLIA, IL  
[72] BENICHO, NETANEL, IL  
[72] NITZAN, YAACOV, IL  
[72] FELSEN, BELLA, IL  
[72] LEVI, TAMIR, IL  
[72] NGUYEN-THIEN-NH, DIANA, US  
[72] KHANNA, RAJESH, US  
[72] NGUYEN, SOM, US  
[72] PELLE, ITAI, US  
[73] EDWARDS LIFESCIENCES  
CORPORATION, US  
[86] (3063780)  
[87] (3063780)  
[22] 2009-06-08  
[62] 3,041,490  
[30] US (61/059,656) 2008-06-06

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[11] **3,064,105**  
[13] C

[51] **Int.Cl. E21B 43/114 (2006.01) E21B  
23/00 (2006.01) E21B 37/00 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR  
ABRASIVE PERFORATING AND  
CLEAN-OUT**  
[54] **APPAREIL ET PROCEDE DE  
PERFORATION ET DE  
NETTOYAGE ABRASIF**  
[72] STANG, JONATHAN M., CA  
[72] MAGNER, DARYL E., US  
[73] STANG TECHNOLOGIES LTD., CA  
[86] (3064105)  
[87] (3064105)  
[22] 2019-12-06  
[30] US (16/698,858) 2019-11-27  
[30] US (62/939,341) 2019-11-22  
[30] US (16/686,955) 2019-11-18  
[30] US (62/902,471) 2019-09-19  
[30] US (16/280,364) 2019-02-20  
[30] US (62/778,384) 2018-12-12

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[11] **3,064,529**  
[13] C

[51] **Int.Cl. G16B 20/00 (2019.01) G16B  
25/10 (2019.01) G01N 33/53 (2006.01)  
G01N 33/564 (2006.01) C12Q 1/6809  
(2018.01)**  
[25] EN  
[54] **METHODS FOR ASSESSING  
MUCOSAL HEALING IN CROHN'S  
DISEASE PATIENTS**  
[54] **PROCEDES D'EVALUATION DE  
LA CICATRISATION DES  
MUQUEUSES CHEZ DES  
PATIENTS ATTEINTS DE LA  
MALADIE DE CROHN**  
[72] JAIN, ANJALI, CH  
[72] KONDRAGUNTA,  
VENKATESWARLU, CH  
[72] HALE, MICHAEL, CH  
[73] PROMETHEUS LABORATORIES,  
INC., US  
[85] 2019-11-21  
[86] 2018-05-31 (PCT/IB2018/053923)  
[87] (WO2018/220588)  
[30] US (62/512,947) 2017-05-31  
[30] US (62/561,459) 2017-09-21

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[11] **3,064,838**  
[13] C

[51] **Int.Cl. E21B 43/12 (2006.01) E21B  
33/12 (2006.01) E21B 34/06 (2006.01)**  
[25] EN  
[54] **APPARATUS WITH CROSSOVER  
ASSEMBLY TO CONTROL FLOW  
WITHIN A WELL**  
[54] **APPAREIL A ENSEMBLE DE  
CROISEMENT DESTINE A  
REGULER UN DEBIT A  
L'INTERIEUR D'UN Puits**  
[72] POUNDS, STEVE ROBERT JR., US  
[73] HALLIBURTON ENERGY  
SERVICES, INC., US  
[85] 2019-11-25  
[86] 2017-08-07 (PCT/US2017/045783)  
[87] (WO2019/032090)

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[11] **3,065,388**  
[13] C

[51] **Int.Cl. C09J 175/06 (2006.01) B27N  
3/00 (2006.01) C08L 75/04 (2006.01)  
C08L 75/06 (2006.01) C09J 175/04  
(2006.01)**  
[25] EN  
[54] **NO-ADDED FORMALDEHYDE  
BINDER FOR COMPOSITE WOOD  
PRODUCT AND THE COMPOSITE  
WOOD PRODUCT  
MANUFACTURED BY THE SAME**  
[54] **ADHESIF DE PANNEAU  
ARTIFICIEL EXEMPT  
D'ALDEHYDE ET PANNEAU  
ARTIFICIEL EXEMPT  
D'ALDEHYDE FABRIQUE PAR  
CELUI-CI**  
[72] TU, SONG, CN  
[72] QI, WANGSHUN, CN  
[72] LI, HOUYI, CN  
[72] SUN, WEIHUA, CN  
[72] ZHANG, ZIJUN, CN  
[72] LV, BING, CN  
[73] WANHUA CHEMICAL GROUP CO.,  
LTD., CN  
[85] 2019-11-28  
[86] 2017-06-20 (PCT/CN2017/089126)  
[87] (WO2018/227645)  
[30] CN (201710447741.8) 2017-06-14

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[11] **3,066,036**  
[13] C

[51] **Int.Cl. F01D 5/20 (2006.01)**  
[25] EN  
[54] **COMPRESSOR AEROFOIL**  
[54] **AUBE DE COMPRESSEUR**  
[72] BRUNI, GIUSEPPE, GB  
[72] KRISHNABABU, SENTHIL, GB  
[73] SIEMENS AKTIENGESELLSCHAFT,  
DE  
[85] 2019-12-03  
[86] 2018-06-14 (PCT/EP2018/065822)  
[87] (WO2019/001980)  
[30] EP (17177882.2) 2017-06-26

**Brevets canadiens délivrés  
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[11] **3,066,281**  
[13] C

[51] **Int.Cl. B60G 7/00 (2006.01) B60G 9/00 (2006.01)**  
[25] EN  
[54] **SUSPENSION ASSEMBLY WITH DISC BRAKE ACTUATOR PROTECTION**  
[54] **ENSEMBLE DE SUSPENSION AVEC PROTECTION D'ACTIONNEUR DE FREIN A DISQUE**  
[72] HESTER, DONALD R., US  
[72] NAPLES, BENEDETTO A., US  
[73] HENDRICKSON USA, L.L.C., US  
[85] 2019-12-04  
[86] 2018-08-13 (PCT/US2018/046472)  
[87] (WO2019/036354)  
[30] US (62/544,944) 2017-08-14

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[11] **3,066,477**  
[13] C

[51] **Int.Cl. G01N 1/28 (2006.01) C04B 35/626 (2006.01) G01N 1/44 (2006.01)**  
[25] EN  
[54] **PRODUCTION OF NANOPARTICULATE COMPRESSED TABLETS (PELLETS) FROM SYNTHETIC OR NATURAL MATERIALS USING A SPECIALLY DEVELOPED GRINDING AND COMPRESSING METHOD**  
[54] **FABRICATION DE COMPRIMES NANO-PARTICULAIRES (GRANULES) DE MATIERES SYNTHETIQUES OU NATURELLES SELON UN PROCEDE DE BROUAGE ET DE PRESSAGE DEVELOPPE SPECIALEMENT**  
[72] GARBE-SCHONBERG, CARL-DIETER, DE  
[72] MULLER, SAMUEL, DE  
[72] NORDSTAD, SIMON, DE  
[73] CHRISTIAN-ALBRECHTS-UNIVERSITAT ZU KIEL, DE  
[85] 2019-12-06  
[86] 2018-06-05 (PCT/DE2018/100533)  
[87] (WO2018/224092)  
[30] DE (10 2017 112 691.0) 2017-06-08

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[11] **3,066,589**  
[13] C

[51] **Int.Cl. G02B 6/36 (2006.01)**  
[25] EN  
[54] **CLEANING TOOL FOR OPTICAL CONNECTOR**  
[54] **DISPOSITIF DE NETTOYAGE POUR CONNECTEUR OPTIQUE**  
[72] NAKANE, JUNICHI, JP  
[73] FUJIKURA LTD., JP  
[85] 2019-12-06  
[86] 2018-02-16 (PCT/JP2018/005470)  
[87] (WO2018/230040)  
[30] JP (2017-117010) 2017-06-14

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[11] **3,067,076**  
[13] C

[51] **Int.Cl. B04B 13/00 (2006.01)**  
[25] EN  
[54] **CENTRIFUGAL SEPARATOR AND METHOD OF OPERATING A CENTRIFUGAL SEPARATOR**  
[54] **SEPARATEUR CENTRIFUGE ET PROCEDE DE FONCTIONNEMENT D'UN SEPARATEUR CENTRIFUGE**  
[72] LARSSON, PER-GUSTAF, SE  
[73] ALFA LAVAL CORPORATE AB, SE  
[85] 2019-12-12  
[86] 2018-06-11 (PCT/EP2018/065356)  
[87] (WO2018/228992)  
[30] EP (17176208.1) 2017-06-15

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[11] **3,068,207**  
[13] C

[51] **Int.Cl. A47C 7/70 (2006.01) A47B 39/00 (2006.01) A47B 83/02 (2006.01)**  
[25] EN  
[54] **UNIVERSAL TABLET ARM FOR CHAIRS**  
[54] **BRAS DE TABLETTE UNIVERSEL POUR FAUTEUILS**  
[72] GRIEPENTROG, DENNIS, US  
[73] KRUEGER INTERNATIONAL, INC., US  
[86] (3068207)  
[87] (3068207)  
[22] 2020-01-16  
[30] US (16/661,356) 2019-10-23

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[11] **3,068,224**  
[13] C

[51] **Int.Cl. B60G 9/00 (2006.01)**  
[25] EN  
[54] **MECHANICAL DOWN-STOP FOR AXLE/SUSPENSION SYSTEMS**  
[54] **ARRET MECANIQUE POUR SYSTEMES D'ESSIEU/SUSPENSION**  
[72] GIAMATI, NICHOLAS J., US  
[72] ANDREASEN, JACOB D., US  
[73] HENDRICKSON USA, L.L.C., US  
[85] 2019-12-20  
[86] 2017-08-30 (PCT/US2017/049249)  
[87] (WO2019/045700)

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[11] **3,068,700**  
[13] C

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 40/50 (2020.01) A24F 47/00 (2020.01) A61M 15/06 (2006.01)**  
[25] EN  
[54] **POWER SUPPLY UNIT FOR AEROSOL INHALER**  
[54] **BLOC D'ALIMENTATION POUR INHALATEUR D'AEROSOL**  
[72] AKAO, TAKESHI, JP  
[73] JAPAN TOBACCO, INC., JP  
[86] (3068700)  
[87] (3068700)  
[22] 2020-01-16  
[30] US (62/793,551) 2019-01-17  
[30] JP (2019-035984) 2019-02-28

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**Canadian Patents Issued  
December 14, 2021**

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[11] **3,071,494**  
[13] C

[51] **Int.Cl. C07K 14/47 (2006.01) A61K 47/66 (2017.01) A61K 38/17 (2006.01) A61P 35/00 (2006.01) C07K 7/08 (2006.01) C07K 14/00 (2006.01) C07K 17/00 (2006.01)**

[25] EN

[54] **PEPTIDE COMPOUNDS AND PEPTIDE CONJUGATES FOR THE TREATMENT OF CANCER THROUGH RECEPTOR-MEDIATED CHEMOTHERAPY**

[54] **COMPOSES PEPTIDIQUES ET CONJUGUES PEPTIDIQUES DESTINES AU TRAITEMENT DU CANCER PAR CHIMIOOTHERAPIE A MEDIATION PAR UN RECEPTEUR**

[72] BELIVEAU, RICHARD, CA  
[72] ANNABI, BORHANE, CA  
[72] DEMEULE, MICHEL, CA  
[72] LAROCQUE, ALAIN, CA  
[72] CURRIE, JEAN-CHRISTOPHE, CA  
[72] CHARFI, CYNDIA, CA  
[73] TRANSFERT PLUS, S.E.C., CA  
[86] (3071494)  
[87] (3071494)  
[22] 2016-11-24  
[62] 3,006,313  
[30] US (62/259,178) 2015-11-24

---

[11] **3,072,902**  
[13] C

[51] **Int.Cl. A01G 25/09 (2006.01) A01C 23/00 (2006.01) A01M 21/04 (2006.01)**

[25] EN

[54] **ROW CROP SPRAYER**

[54] **APPAREIL D'EPANDAGE AGRICOLE EN RANGEE**

[72] BEYEA, KYLE H., US  
[73] BEYEA, KYLE H., US  
[86] (3072902)  
[87] (3072902)  
[22] 2020-02-19

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[11] **3,075,002**  
[13] C

[51] **Int.Cl. G01V 1/40 (2006.01) E21B 47/107 (2012.01) E21B 47/14 (2006.01)**

[25] EN

[54] **COMPRESSING ULTRASOUND DATA IN A DOWNHOLE TOOL**

[54] **COMPRESSION DE DONNEES ULTRASONORES DANS UN OUTIL DE FOND DE Puits**

[72] WRINCH, STEVE, CA  
[73] DARKVISION TECHNOLOGIES INC, CA  
[86] (3075002)  
[87] (3075002)  
[22] 2020-03-09  
[30] GB (GB1903525.2) 2019-03-14

---

[11] **3,076,705**  
[13] C

[51] **Int.Cl. H01M 50/572 (2021.01) H01M 10/04 (2006.01)**

[25] EN

[54] **FLEXIBLE BATTERY**

[54] **BATTERIE SOUPLE**

[72] YANG, SZU-NAN, CN  
[73] PROLOGIUM TECHNOLOGY CO., LTD., CN  
[73] PROLOGIUM HOLDING INC., KY  
[85] 2020-03-09  
[86] 2018-08-15 (PCT/CN2018/100672)  
[87] (WO2019/062367)  
[30] CN (201710908077.2) 2017-09-29

---

[11] **3,076,789**  
[13] C

[51] **Int.Cl. A61F 2/16 (2006.01)**

[25] FR

[54] **ASSEMBLY CONSISTING OF A PAIR OF MULTIFOCAL OCULAR IMPLANTS**

[54] **ENSEMBLE CONSTITUE D'UNE PAIRE D'IMPLANTS OCULAIRES MULTIFOCAUX**

[72] CASTIGNOLES, FANNIE, FR  
[72] DELAGE, DENIS, FR  
[73] CRISTALENS INDUSTRIE, FR  
[85] 2020-03-23  
[86] 2018-10-01 (PCT/EP2018/076656)  
[87] (WO2019/068645)  
[30] FR (1759329) 2017-10-05

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[11] **3,076,895**  
[13] C

[51] **Int.Cl. B08B 1/00 (2006.01) G07D 11/00 (2019.01)**

[25] EN

[54] **CARD FOR CLEANING PRINTED MEDIA TRANSPORT SYSTEM AND METHOD OF USING SAME**

[54] **CARTE POUR LE NETTOYAGE D'UN SYSTEME DE TRANSPORT DE SUPPORTS IMPRIMES ET PROCEDE L'UTILISANT**

[72] BAILEY, GLEN, US  
[72] CARON, GEOFFREY SCOTT, US  
[72] MCCORMICK, IAN, US  
[72] CONDON, JOHN, US  
[72] KERN, BYRON MEHL II, US  
[72] PEDERSEN, KENNETH MONROE III, US  
[73] KICTEAM, INC., US  
[85] 2020-03-24  
[86] 2018-09-25 (PCT/US2018/052534)  
[87] (WO2019/060867)  
[30] US (62/562,640) 2017-09-25  
[30] US (15/896,336) 2018-02-14

---

[11] **3,077,195**  
[13] C

[51] **Int.Cl. B65B 43/58 (2006.01) B65B 1/02 (2006.01) B65B 11/02 (2006.01) B65B 11/04 (2006.01)**

[25] EN

[54] **SLIP FRAME FORMER DEVICE**

[54] **DISPOSITIF DE FORMATION DE CADRE COULISSANT**

[72] JUNTUNEN, SHARON B., US  
[72] OURS, DAVID C., US  
[73] KELLOGG COMPANY, US  
[86] (3077195)  
[87] (3077195)  
[22] 2011-12-01  
[62] 3,025,532  
[30] US (61/418,448) 2010-12-01



**Brevets canadiens délivrés  
14 décembre 2021**

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[11] **3,077,470**  
[13] C

[51] **Int.Cl. H04N 19/30 (2014.01) H04N 19/109 (2014.01) H04N 19/112 (2014.01) H04N 19/31 (2014.01)**

[25] EN

[54] **VIDEO ENCODING METHOD, VIDEO ENCODING DEVICE, VIDEO DECODING METHOD, VIDEO DECODING DEVICE, PROGRAM, AND VIDEO SYSTEM**

[54] **METHODE ET DISPOSITIF DE CODAGE VIDEO, METHODE ET DISPOSITIF DE DECODAGE VIDEO, PROGRAMME ET SYSTEME VIDEO**

[72] ISHIDA, TAKAYUKI, JP  
[72] CHONO, KEIICHI, JP  
[73] NEC CORPORATION, JP  
[86] (3077470)  
[87] (3077470)  
[22] 2016-11-14  
[62] 3,006,941  
[30] JP (2015-235525) 2015-12-02

---

[11] **3,077,702**  
[13] C

[51] **Int.Cl. G06F 16/27 (2019.01) G06F 21/62 (2013.01) H04L 1/00 (2006.01) H04L 9/30 (2006.01) H04L 12/16 (2006.01) G06Q 20/38 (2012.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR IDENTITY RESOLUTION ACROSS DISPARATE DISTRIBUTED IMMUTABLE LEDGER NETWORKS**

[54] **SYSTEME ET PROCEDE DE RESOLUTION D'IDENTITE SUR UN ENSEMBLE DE RESEAUX DISPARATES DE REGISTRES DISTRIBUES IMMUABLES**

[72] KHAN, SALEEM, US  
[72] GOSTYLO, JACOB CALEB, US  
[73] THE DUN & BRADSTREET CORPORATION, US  
[85] 2020-03-31  
[86] 2018-10-03 (PCT/US2018/054160)  
[87] (WO2019/070853)  
[30] US (62/568,128) 2017-10-04  
[30] US (62/651,369) 2018-04-02

---

[11] **3,077,938**  
[13] C

[51] **Int.Cl. C22F 1/10 (2006.01) B21B 3/00 (2006.01) B21B 15/00 (2006.01) B21C 1/00 (2006.01)**

[25] EN

[54] **THERMO-MECHANICAL PROCESSING OF NICKEL-TITANIUM ALLOYS**

[54] **TRAITEMENT THERMOMECHANIQUE D'ALLIAGES DE NICKEL-TITANE**

[72] VAN DOREN, BRIAN, US  
[72] SCHLEGEL, SCOTT, US  
[72] WISSMAN, JOSEPH, US  
[73] ATI PROPERTIES LLC, US  
[86] (3077938)  
[87] (3077938)  
[22] 2014-02-27  
[62] 2,884,552  
[30] US (13/843,748) 2013-03-15

---

[11] **3,077,946**  
[13] C

[51] **Int.Cl. B65G 59/06 (2006.01) B65G 1/08 (2006.01) B65G 47/90 (2006.01) B65G 57/20 (2006.01) B65G 61/00 (2006.01) B66F 9/02 (2006.01)**

[25] EN

[54] **PALLET DISPENSER AND METHOD THEREOF**

[54] **DISTRIBUTEUR DE PALETTES ET SON PROCEDE**

[72] REDMAN, PAUL, CA  
[73] REDMAN, PAUL, CA  
[86] (3077946)  
[87] (3077946)  
[22] 2014-03-07  
[62] 2,918,269  
[30] US (61/847,010) 2013-07-16

---

[11] **3,078,427**  
[13] C

[51] **Int.Cl. B61L 15/00 (2006.01)**

[25] EN

[54] **A DEVICE FOR PROCESSING DATA OF ROLLING STOCK**

[54] **DISPOSITIF DE TRAITEMENT DE DONNEES DE MATERIEL ROULANT**

[72] MOUSSET, CHARLES-HENRI, BE  
[73] RAILNOVA SA, BE  
[85] 2020-04-03  
[86] 2019-03-12 (PCT/EP2019/056113)  
[87] (WO2019/175144)  
[30] EP (18161338.1) 2018-03-12

---

[11] **3,081,514**  
[13] C

[51] **Int.Cl. C07K 16/38 (2006.01) A61K 39/395 (2006.01) A61P 7/04 (2006.01) C12N 15/13 (2006.01) C12P 21/08 (2006.01)**

[25] EN

[54] **MONOCLONAL ANTIBODIES AGAINST TISSUE FACTOR PATHWAY INHIBITOR (TFPI)**

[54] **ANTICORPS MONOCLONAUX CONTRE L'INHIBITEUR DE LA VOIE DU FACTEUR TISSULAIRE (TFPI)**

[72] WANG, ZHUOZHI, US  
[72] PAN, JUNLIANG, US  
[72] JIANG, HAIYAN, US  
[72] LIU, BING, US  
[72] MURPHY, JOHN E., US  
[73] BAYER HEALTHCARE LLC, US  
[86] (3081514)  
[87] (3081514)  
[22] 2009-08-04  
[62] 2,933,259  
[30] US (61/085,980) 2008-08-04

---

[11] **3,082,740**  
[13] C

[51] **Int.Cl. C12N 5/04 (2006.01) A01H 6/46 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **MAIZE INBRED PH42SH**

[54] **MAIS AUTOGAME PH42SH**

[72] SZALMA, STEPHEN JOSEPH, US  
[73] PIONEER HI-BRED INTERNATIONAL, INC., US  
[86] (3082740)  
[87] (3082740)  
[22] 2020-06-10  
[30] US (16/441,223) 2019-06-14

**Canadian Patents Issued  
December 14, 2021**

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[11] **3,082,760**  
[13] C

[51] **Int.Cl. C12N 5/04 (2006.01) A01H 6/46 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN  
[54] **MAIZE INBRED PH48YD**  
[54] **MAIS AUTOGAME PH48YD**  
[72] KING, STEVEN PAUL, US  
[72] WILLIAM, HARINDRA MANILAL, US  
[73] PIONEER HI-BRED INTERNATIONAL, INC., US  
[86] (3082760)  
[87] (3082760)  
[22] 2020-06-10  
[30] US (16/441,176) 2019-06-14

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[11] **3,082,796**  
[13] C

[51] **Int.Cl. C12N 5/04 (2006.01) A01H 6/46 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN  
[54] **MAIZE INBRED PH48J7**  
[54] **MAIS AUTOGAME PH48J7**  
[72] GROTE, EDWIN MICHAEL, US  
[73] PIONEER HI-BRED INTERNATIONAL, INC., US  
[86] (3082796)  
[87] (3082796)  
[22] 2020-06-10  
[30] US (16/441,317) 2019-06-14

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[11] **3,083,034**  
[13] C

[51] **Int.Cl. C12N 5/04 (2006.01) A01H 6/46 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN  
[54] **MAIZE INBRED PH47GA**  
[54] **MAIS AUTOGAME PH47GA**  
[72] HENKE, GARY EDWARD, US  
[73] PIONEER HI-BRED INTERNATIONAL, INC., US  
[86] (3083034)  
[87] (3083034)  
[22] 2020-06-10  
[30] US (16/441,277) 2019-06-14

---

[11] **3,083,074**  
[13] C

[51] **Int.Cl. C12N 5/04 (2006.01) A01H 6/46 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN  
[54] **MAIZE INBRED PH41A3**  
[54] **MAIS AUTOGAME PH41A3**  
[72] GADLAGE, MARK JACOB, US  
[72] LARSSON, SARA JOHANNA ELISABETH, US  
[72] SMALLEY, MATTHEW DAVID, US  
[73] PIONEER HI-BRED INTERNATIONAL, INC., US  
[86] (3083074)  
[87] (3083074)  
[22] 2020-06-10  
[30] US (16/441,374) 2019-06-14

---

[11] **3,083,785**  
[13] C

[51] **Int.Cl. C12N 5/04 (2006.01) A01H 6/46 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN  
[54] **MAIZE INBRED PH47CK**  
[54] **MAIS AUTOGAME PH47CK**  
[72] WARDYN, BRANDON MICHAEL, US  
[73] PIONEER HI-BRED INTERNATIONAL, INC., US  
[86] (3083785)  
[87] (3083785)  
[22] 2020-06-10  
[30] US (16/441,320) 2019-06-14

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[11] **3,085,497**  
[13] C

[51] **Int.Cl. B01D 46/52 (2006.01)**

[25] EN  
[54] **A COMBINED AIR FILTER ELEMENT FILTERING DEVICE**  
[54] **DISPOSITIF DE FILTRATION D'ELEMENT DE FILTRE A AIR COMBINE**  
[72] RAN, CHAO, CN  
[72] DUAN, WUJUN, CN  
[72] ZHAO, XIAODONG, CN  
[73] QAP FILTER (CHINA) LTD., CN  
[86] (3085497)  
[87] (3085497)  
[22] 2020-06-30  
[30] CN (201910809322.3) 2019-08-29

---

[11] **3,085,637**  
[13] C

[51] **Int.Cl. A61B 17/115 (2006.01)**

[25] EN  
[54] **HANDLE ASSEMBLY AND STAPLER INCLUDING THE SAME**  
[54] **ENSEMBLE POIGNEE ET AGRAFEUSE COMPRENANT CE DERNIER**  
[72] CHEN, ZHI, CN  
[72] GUO, YI, CN  
[72] LIN, JIANG, CN  
[72] XU, XIAOWEI, CN  
[73] TOUCHSTONE INTERNATIONAL MEDICAL SCIENCE CO., LTD., CN  
[85] 2020-06-12  
[86] 2018-12-12 (PCT/CN2018/120699)  
[87] (WO2019/128721)  
[30] CN (201721849603.4) 2017-12-26  
[30] CN (201721847008.7) 2017-12-26

---

[11] **3,089,619**  
[13] C

[51] **Int.Cl. G06Q 10/06 (2012.01) G06F 16/26 (2019.01) G06F 3/048 (2013.01)**

[25] EN  
[54] **SYSTEM AND METHOD FOR DYNAMIC AND CENTRALIZED INTERACTIVE RESOURCE MANAGEMENT**  
[54] **SYSTEME ET PROCEDE POUR UNE GESTION DE RESSOURCES INTERACTIVE DYNAMIQUE ET CENTRALISEE**  
[72] BOYLESS, NATHANIEL DAVID, US  
[72] KNAPP, DANTE LEE, US  
[73] METCALF ARCHAEOLOGICAL CONSULTANTS, INC., US  
[85] 2020-07-24  
[86] 2019-01-27 (PCT/US2019/015321)  
[87] (WO2019/148060)  
[30] US (62/623,341) 2018-01-29

**Brevets canadiens délivrés  
14 décembre 2021**

[11] **3,103,161**

[13] C

- [51] **Int.Cl. A61K 35/74 (2015.01) A61K 35/741 (2015.01) A61K 9/19 (2006.01) A61P 1/00 (2006.01) A61P 43/00 (2006.01)**
- [25] EN
- [54] **COMPOSITIONS COMPRISING BACTERIAL STRAINS**
- [54] **COMPOSITIONS COMPRENANT DES SOUCHES BACTERIENNES**
- [72] YUILLE, SAMANTHA, GB
- [72] REICHARDT, NICOLE, GB
- [72] REID, SARAH, GB
- [72] AHMED, SUAAD, GB
- [72] SAVIGNAC, HELENE, GB
- [72] MULDER, IMKE ELISABETH, GB
- [72] ETTORRE, ANNA, GB
- [73] 4D PHARMA RESEARCH LIMITED, GB
- [85] 2020-12-09
- [86] 2019-06-25 (PCT/EP2019/066905)
- [87] (WO2020/002370)
- [30] EP (18179641.8) 2018-06-25
- [30] GB (1814836.1) 2018-09-12
- [30] GB (1905000.4) 2019-04-09

[11] **3,108,789**

[13] C

- [51] **Int.Cl. G06F 16/61 (2019.01) G10K 15/06 (2006.01)**
- [25] EN
- [54] **SOUND SOURCE FILE STRUCTURE, RECORDING MEDIUM RECORDING THE SAME, AND METHOD OF PRODUCING SOUND SOURCE FILE**
- [54] **STRUCTURE D'UN FICHIER SONORE SOURCE, MOYEN D'ENREGISTREMENT ET METHODE DE PRODUCTION D'UN FICHIER SONORE SOURCE**
- [72] KIM, JIN-GAB, KR
- [72] KIM, MYEONG-HWAN, KR
- [73] KEUMYOUNG ENTERTAINMENT CO., LTD, KR
- [86] (3108789)
- [87] (3108789)
- [22] 2021-02-09
- [30] KR (10-2020-0058375) 2020-05-15

[11] **3,109,059**

[13] C

- [51] **Int.Cl. E04C 5/06 (2006.01) E04C 5/16 (2006.01) E04C 5/18 (2006.01)**
- [25] EN
- [54] **SPACER FOR MULTIPLE CAGE REINFORCEMENT WIRE MESH FOR CONCRETE PRODUCTS**
- [54] **SEPARATEUR POUR UN TREILLIS METALLIQUE DE RENFORT A CAGES MULTIPLES POUR DES PRODUITS DE BETON**
- [72] STRABALA, DAVE, US
- [73] HAWKEYEPEDERSHAAB CONCRETE TECHNOLOGIES, INC., US
- [86] (3109059)
- [87] (3109059)
- [22] 2021-02-17
- [30] US (62/977,962) 2020-02-18
- [30] US (16/884,572) 2020-05-27

[11] **3,111,048**

[13] C

- [51] **Int.Cl. G01L 17/00 (2006.01) B60C 23/04 (2006.01) G01L 19/04 (2006.01) G01L 19/06 (2006.01) G01L 19/14 (2006.01)**
- [25] FR
- [54] **ENCASED PRESSURE SENSOR**
- [54] **CAPTEUR DE PRESSION SOUS BOITIER**
- [72] RIOU, JEAN-CHRISTOPHE, FR
- [72] BAILLY, ERIC, FR
- [73] SAFRAN ELECTRONICS & DEFENSE, FR
- [73] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR
- [73] SAFRAN, FR
- [73] SAFRAN LANDING SYSTEMS, FR
- [85] 2021-02-25
- [86] 2019-08-27 (PCT/EP2019/072890)
- [87] (WO2020/043744)
- [30] FR (1857877) 2018-08-31

[11] **3,115,452**

[13] C

- [51] **Int.Cl. G01S 7/02 (2006.01) G01S 7/292 (2006.01)**
- [25] EN
- [54] **RADAR DEVICE AND SIGNAL PROCESSING METHOD**
- [54] **DISPOSITIF RADAR ET PROCEDE DE TRAITEMENT DE SIGNAL**
- [72] ISODA, KENTARO, JP
- [73] MITSUBISHI ELECTRIC CORPORATION, JP
- [85] 2021-04-06
- [86] 2018-12-03 (PCT/JP2018/044361)
- [87] (WO2020/115785)

[11] **3,119,633**

[13] C

- [51] **Int.Cl. G05B 19/418 (2006.01) A41H 3/00 (2006.01) A41H 43/00 (2006.01) B23K 26/00 (2014.01) B26D 5/00 (2006.01) B26F 1/38 (2006.01) B61B 13/00 (2006.01) B65G 35/00 (2006.01) D06H 7/00 (2006.01) G06K 15/02 (2006.01) G05B 19/401 (2006.01)**
- [25] EN
- [54] **SYSTEMS AND METHODS FOR CUTTING REGISTRATION**
- [54] **SYSTEMES ET METHODES D'INSCRIPTION DE COUPE**
- [72] PAGE, GRAHAM, US
- [72] PEREZ, ANTHONY, US
- [72] DIETZ, ANGELIQUE, US
- [72] ROGERS, CHARLES, US
- [72] AGHANOURI, ABOLFAZL, US
- [72] GOPARAJU, SUBRA, US
- [72] BALABANOV, DEMITRI, US
- [73] THE NORTH FACE APPAREL CORP., US
- [85] 2021-05-11
- [86] 2019-11-14 (PCT/US2019/061520)
- [87] (WO2020/102567)
- [30] US (62/768,506) 2018-11-16

**Canadian Patents Issued  
December 14, 2021**

---

[11] **3,120,218**  
[13] C

[51] **Int.Cl. G21F 1/10 (2006.01) G21F 1/06 (2006.01)**  
[25] EN  
[54] **MULTIFUNCTIONAL PAINTS AND CAULKS WITH CONTROLLABLE ELECTROMAGNETIC PROPERTIES**  
[54] **PEINTURES ET MASTICS MULTIFONCTIONNELS A PROPRIETES ELECTROMAGNETIQUES REGLABLES**  
[72] HANSEN, GEORGE CLAYTON, US  
[73] HANSEN, GEORGE CLAYTON, US  
[85] 2021-05-14  
[86] 2019-11-15 (PCT/US2019/061845)  
[87] (WO2020/102748)  
[30] US (62/768,740) 2018-11-16  
[30] US (16/601,095) 2019-10-14

---

[11] **3,120,429**  
[13] C

[51] **Int.Cl. A61K 33/42 (2006.01) A61K 9/00 (2006.01) A61P 3/12 (2006.01)**  
[25] EN  
[54] **MINERAL SUPPLEMENTS FOR RUMINANT NUTRITION**  
[54] **SUPPLEMENTS MINERAUX POUR LA NUTRITION DES RUMINANTS**  
[72] OLSON, MERLE, CA  
[73] ALBERTA VETERINARY LABORATORIES LTD., CA  
[85] 2021-05-31  
[86] 2020-12-11 (PCT/CA2020/051708)  
[87] (3120429)  
[30] US (62/947,329) 2019-12-12

---

[11] **3,122,140**  
[13] C

[51] **Int.Cl. B65G 43/00 (2006.01) B65G 19/18 (2006.01) B65G 23/22 (2006.01) B65G 23/26 (2006.01) B65G 23/44 (2006.01) B65G 43/02 (2006.01)**  
[25] EN  
[54] **DRIVING SYSTEM OF SCRAPER CONVEYOR AND CONTROL METHOD**  
[54] **SYSTEME D'ENTRAINEMENT DE TRANSPORTEUR A RACLETTES ET PROCEDE DE COMMANDE**  
[72] SHEN, GANG, CN  
[72] ZHU, ZHENCAI, CN  
[72] DAI, KAIYU, CN  
[72] TANG, YU, CN  
[72] LI, XIANG, CN  
[72] PENG, YUXING, CN  
[72] LU, HAO, CN  
[72] CAO, GUOHUA, CN  
[72] ZHOU, GONGBO, CN  
[72] LI, WEI, CN  
[72] JIANG, FAN, CN  
[73] CHINA UNIVERSITY OF MINING AND TECHNOLOGY, CN  
[85] 2021-06-04  
[86] 2020-04-10 (PCT/CN2020/084227)  
[87] (WO2021/103380)  
[30] CN (201911172333.1) 2019-11-26

---

[11] **3,125,531**  
[13] C

[51] **Int.Cl. A01G 25/16 (2006.01)**  
[25] EN  
[54] **BATTERY PLACEMENT WITH SENSOR**  
[54] **PLACEMENT DE BATTERIE AVEC CAPTEUR**  
[72] BURGER, VICTOR, DE  
[72] WILK, CHRISTIAN, DE  
[72] BROBEIL, ACHIM, DE  
[73] HUSQVARNA AB, SE  
[85] 2021-06-30  
[86] 2019-12-09 (PCT/EP2019/084276)  
[87] (WO2020/173593)  
[30] DE (10 2019 001 318.2) 2019-02-25

---

[11] **3,131,043**  
[13] C

[51] **Int.Cl. G06Q 10/10 (2012.01) G06F 40/205 (2020.01)**  
[25] EN  
[54] **GRAPHICAL USER INTERFACE FOR EMAIL FILE CONTENT**  
[54] **INTERFACE UTILISATEUR GRAPHIQUE D'UN CONTENU DE FICHIER DE COURRIER ELECTRONIQUE**  
[72] ZHANG, JINREN, CN  
[72] CAO, LEI, CN  
[73] CITRIX SYSTEMS, INC., US  
[85] 2021-08-20  
[86] 2019-12-06 (PCT/CN2019/123473)  
[87] (WO2021/109097)

# Canadian Applications Open to Public Inspection

November 28, 2021 to December 4, 2021

## Demandes canadiennes mises à la disponibilité du public

28 novembre 2021 au 4 décembre 2021

	[21] <b>3,077,063</b> [13] A1		[21] <b>3,081,515</b> [13] A1		[21] <b>3,081,533</b> [13] A1
[51] Int.Cl. F16L 1/06 (2006.01) F16L 1/028 (2006.01)		[51] Int.Cl. B65C 9/26 (2006.01) B25J 9/18 (2006.01)		[51] Int.Cl. A61L 2/10 (2006.01) A61L 2/26 (2006.01)	
[25] EN		[25] EN		[25] EN	
[54] UNDERGROUND PIPE REMOVAL TOOL		[54] METHOD AND APPARATUS FOR LABEL APPLICATION		[54] ULTRAVIOLET-C DEVICE FOR SURFACE-DISINFECTING OF PIN PADS	
[54] OUTIL D-EXTRACTION DE TUYAUX SOUTERRAINS		[54] METHODE ET APPAREIL POUR APPLIQUER DES ETIQUETTES		[54] DISPOSITIF A RAYONNEMENT ULTRAVIOLET C POUR LA DESINFECTION DE SURFACE DE CLAVIERS NUMEROTES	
[72] GENSHOREK, TREVOR L., CA		[72] GURBERG, BARRY, CA		[72] TAGHIZADEH NOUEI, MEHRDAD, CA	
[71] GENSHOREK, TREVOR L., CA		[72] KOUTSOUBIDIS, VASILIOS, CA		[72] TAGHIZADEH NOUEI, MAHYAR, CA	
[22] 2020-06-04		[72] MCDONALD, JEFFERY, CA		[72] AMIRI, MOHAMMAD, CA	
[41] 2021-12-04		[71] CANADIAN BANK NOTE COMPANY, LIMITED, CA		[71] ROBONOMIST INC., CA	
		[22] 2020-05-28		[22] 2020-05-30	
		[41] 2021-11-28		[41] 2021-11-30	
	[21] <b>3,081,435</b> [13] A1		[21] <b>3,081,518</b> [13] A1		[21] <b>3,081,588</b> [13] A1
[51] Int.Cl. C02F 9/14 (2006.01) C02F 3/28 (2006.01) C02F 5/00 (2006.01) C02F 11/04 (2006.01)		[51] Int.Cl. B05C 3/20 (2006.01) A47G 23/00 (2006.01) B65D 85/72 (2006.01)		[51] Int.Cl. B63B 34/21 (2020.01) B63C 13/00 (2006.01)	
[25] EN		[25] EN		[25] EN	
[54] METHOD FOR TREATING HIGH-CALCIUM WASTEWATER BY CALCIFICATION BLOCKING, AND DEVICE FOR IMPLEMENTING SAME		[54] BEVERAGE CONTAINER RIMMER		[54] WATERCRAFT	
[54] METHODE DE TRAITEMENT D'EAUX USEES A TENEUR ELEVEE EN CALCIUM PAR BLOCAGE DE CALCIFICATION, ET DISPOSITIF POUR METTRE EN OEUVRE LA METHODE		[54] GARNISSEUR DE REBORD DE CONTENANT A BREUVAGE		[54] EMBARCATION	
[72] ZHANG, JIAN, CN		[72] MILLER, KYLE T., CA		[72] BOYER, REJEAN, CA	
[72] WANG, SHUANGFEI, CN		[72] PAUL, JOSEPH, CA		[72] GIRARD, JEAN-THOMAS, CA	
[72] QIN, CHENGRONG, CN		[71] MILLER, KYLE T., CA		[72] DUBREUIL, ISABELLE, CA	
[72] ZHAO, SHANSHAN, CN		[71] PAUL, JOSEPH, CA		[71] PELICAN INTERNATIONAL INC., CA	
[72] GAN, PENG, CN		[22] 2020-05-29		[22] 2020-05-28	
[72] PENG, LING, CN		[41] 2021-11-29		[41] 2021-11-28	
[72] LU, JINGYANG, CN		[30] US (16/886,904) 2020-05-29			
[72] WANG, ZHIWEI, CN					
[71] GUANGXI UNIVERSITY, CN					
[22] 2020-05-28					
[41] 2021-11-28					
					[21] <b>3,081,589</b> [13] A1
					[51] Int.Cl. B25H 3/00 (2006.01) B25H 3/06 (2006.01)
					[25] EN
					[54] PORTABLE AND CUSTOMIZABLE TOOL AND BIT HOLDER
					[54] OUTIL PORTATIF ET PERSONNALISABLE ET PORTE-EMBOUS
					[72] SNIDER, JOSHUA R., CA
					[71] SNIDER, JOSHUA R., CA
					[22] 2020-05-31
					[41] 2021-11-30

**Canadian Applications Open to Public Inspection**  
**November 28, 2021 to December 4, 2021**

---

[21] **3,081,619**  
[13] A1

[51] **Int.Cl. H04W 12/37 (2021.01) H04W 12/02 (2009.01) H04W 84/12 (2009.01) G06F 21/44 (2013.01) G16Y 30/10 (2020.01) H04W 12/0431 (2021.01)**

[25] EN

[54] **SECURE MOBILE INTERNET-OF-THINGS (IOT) DEVICE REGISTRY MANAGEMENT**

[54] **GESTION DES REGISTRES DE DISPOSITIFS DE L-INTERNET DES OBJETS SECURISEE**

[72] LATOUR, JACQUES, CA

[72] CHRISWELL, DAVE, CA

[71] CANADIAN INTERNET REGISTRATION AUTHORITY, CA

[22] 2020-06-02

[41] 2021-12-02

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[21] **3,081,629**  
[13] A1

[51] **Int.Cl. B60P 1/00 (2006.01) B60R 99/00 (2009.01) B60W 60/00 (2020.01)**

[25] EN

[54] **AUTOMATED PARCEL PACKAGE LOCKER DELIVERY VEHICLE FOR AUTONOMOUS DRIVING TECHNOLOGY WITH CARTRIDGE LOADING SYSTEM AND REMOTELY LOADABLE STATIONARY PACKAGE LOCKER SYSTEM**

[54] **VEHICULE DE LIVRAISON A CASIER A COLIS AUTOMATISE POUR LA TECHNOLOGIE DE CONDUITE AUTONOME COMPORTANT UN SYSTEME DE CHARGEMENT DE CARTOUCHE ET UN SYSTEME DE CASIER A COLIS STATIONNAIRE POUVANT ETRE CHARGE A DISTANCE**

[72] CHENG, VINCENT, CA

[71] CHENG, VINCENT, CA

[22] 2020-06-02

[41] 2021-12-02

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[21] **3,081,722**  
[13] A1

[51] **Int.Cl. B25B 27/00 (2006.01)**

[25] EN

[54] **CLUTCH BRAKE REMOVAL APPARATUS**

[54] **APPAREIL DE RETRAIT DE FREIN D-EMBRAYAGE**

[72] CAMILLE, MICHEAL S., CA

[71] CAMILLE, MICHEAL S., CA

[22] 2020-06-01

[41] 2021-11-30

[30] US (16/888,834) 2020-05-31

---

[21] **3,081,739**  
[13] A1

[51] **Int.Cl. G06T 7/13 (2017.01) G06T 7/00 (2017.01) G06T 7/40 (2017.01) G07D 7/20 (2016.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR IDENTIFYING CHARACTERISTICS OF TRADING CARDS**

[54] **METHODE ET APPAREIL POUR IDENTIFIER DES CARACTERISTIQUES DE CARTES A COLLECTIONNER**

[72] GORDON, GRAEME FREDERICK, CA

[71] TCG MACHINES INC., CA

[22] 2020-05-29

[41] 2021-11-29

---

[21] **3,081,835**  
[13] A1

[51] **Int.Cl. G06F 16/90 (2019.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR COMMUNICATING INFORMATION ABOUT TANGIBLE ARTICLES AVAILABLE FOR PHYSICAL DISPLAY TO A VIEWER**

[54] **SYSTEME ET METHODE POUR COMMUNIQUER DE L-INFORMATION SUR DES ARTICLES TANGIBLES DISPONIBLES AUX FINS DE PRESENTATION PHYSIQUE A UN PUBLIC**

[72] ORZECOWSKI, ANNA A., CA

[71] ORZECOWSKI, ANNA A., CA

[22] 2020-06-03

[41] 2021-12-03

---

[21] **3,081,858**  
[13] A1

[51] **Int.Cl. C07D 311/08 (2006.01) C07C 37/16 (2006.01) C07C 41/30 (2006.01) C07C 45/71 (2006.01) C07C 201/12 (2006.01) C07C 253/30 (2006.01) C07C 315/04 (2006.01) C07D 307/86 (2006.01) C07D 311/82 (2006.01) C07J 1/00 (2006.01)**

[25] EN

[54] **PROCESSES FOR THE PREPARATION OF ORTHO-ALLYLATED HYDROXY ARYL COMPOUNDS**

[54] **PROCEDES POUR LA PREPARATION DE COMPOSES D-HYDROXY ARYLE ORTHOALLYLE**

[72] MAGOLAN, JAKOB, CA

[72] ZHANG, XIONG, CA

[72] JENTSCH, NICHOLAS, CA

[71] MCMASTER UNIVERSITY, CA

[22] 2020-05-29

[41] 2021-11-29

---

[21] **3,081,877**  
[13] A1

[51] **Int.Cl. C12H 1/12 (2006.01) B01D 3/38 (2006.01) C12H 1/00 (2006.01)**

[25] EN

[54] **APPARATUS FOR PERFORMING THE INVERTED STEAM DISTILLATION METHOD FOR PREPARING: HIGH-GRADE, HIGH-QUALITY ON STEAM DISTILLED ORGANIC PRODUCTS, SUCH AS ALCOHOLIC BEVERAGES, DEPLETING THESE PRODUCTS OF UNWANTED SUBSTANCES**

[54] **APPAREIL POUR REALISER LA METHODE DE DISTILLATION A VAPEUR INVERSEE POUR PREPARER DES PRODUITS ORGANIQUES A FORTE TENEUR ET DE GRANDE QUALITE DISTILLES A VAPEUR, COMME DES BREUVAGES ALCOOLISES POUR ELIMINER LES SUBSTANCES NON SOUHAITEES DANS CES PRODUITS**

[72] BOJIC, MILIJANKO, CA

[71] BOJIC, MILIJANKO, CA

[22] 2020-06-04

[41] 2021-12-04

**Demandes canadiennes mises à la disponibilité du public**  
**28 novembre 2021 au 4 décembre 2021**

[21] **3,081,886**  
 [13] A1

[51] **Int.Cl. B64F 1/36 (2017.01)**  
 [25] EN  
 [54] **AIRCRAFT INLETS PROTECTION AGAINST FOREIGN OBJECTS**  
 [54] **PROTECTION DES ENTREES D~AERONEF CONTRE LES OBJETS ETRANGERS**  
 [72] GRAJEK, JOZEF J. G., CA  
 [71] GRAJEK, JOZEF J. G., CA  
 [22] 2020-06-02  
 [41] 2021-12-02

[21] **3,081,893**  
 [13] A1

[51] **Int.Cl. G06F 17/00 (2019.01) G06Q 30/02 (2012.01)**  
 [25] EN  
 [54] **SYSTEM AND METHOD FOR TAGGING DATA**  
 [54] **SYSTEME ET METHODE POUR MARQUER LES DONNEES**  
 [72] D'AGOSTINO, DINO PAUL, CA  
 [71] THE TORONTO-DOMINION BANK, CA  
 [22] 2020-06-02  
 [41] 2021-12-02

[21] **3,081,894**  
 [13] A1

[51] **Int.Cl. G10D 13/12 (2020.01) G10H 3/12 (2006.01)**  
 [25] EN  
 [54] **DRUMSTICK**  
 [54] **BAGUETTE DE TAMBOUR**  
 [72] CHRISTIE, SCOTT, CA  
 [71] CHRISTIE, SCOTT, CA  
 [22] 2020-06-03  
 [41] 2021-12-03

[21] **3,081,898**  
 [13] A1

[51] **Int.Cl. H04L 12/16 (2006.01) G06F 21/57 (2013.01) G06F 16/95 (2019.01) H04L 9/32 (2006.01)**  
 [25] EN  
 [54] **SYSTEM AND METHOD FOR PROVIDING TRUSTED LINKS BETWEEN APPLICATIONS**  
 [54] **SYSTEME ET METHODE POUR FOURNIR DES LIENS FIABLES ENTRE APPLICATIONS**  
 [72] D'AGOSTINO, DINO PAUL, CA  
 [71] THE TORONTO-DOMINION BANK, CA  
 [22] 2020-06-02  
 [41] 2021-12-02

[21] **3,081,924**  
 [13] A1

[51] **Int.Cl. G02C 7/02 (2006.01) B33Y 80/00 (2015.01) A61B 3/11 (2006.01) B41N 1/24 (2006.01)**  
 [25] EN  
 [54] **APPARATUS AND METHOD FOR PLOTTING AND VERIFYING OPHTHALMIC MEASUREMENTS FOR FITTING AND DISPENSING SPECTACLES WITH MINIMAL PATIENT CONTACT**  
 [54] **APPAREIL ET METHODE POUR TRACER ET VERIFIER DES MESURES OPHTALMIQUES AUX FINS D~AJUSTEMENT ET DE DISTRIBUTION DE LUNETTES SELON UN MINIMUM DE CONTACT AVEC LES PATIENTS**  
 [72] WICKS, JENNIFER M., CA  
 [71] WICKS, JENNIFER M., CA  
 [22] 2020-06-04  
 [41] 2021-12-04

[21] **3,081,942**  
 [13] A1

[51] **Int.Cl. A61M 1/36 (2006.01) A61B 17/34 (2006.01) A61M 25/10 (2013.01)**  
 [25] EN  
 [54] **CANNULA FOR PERCUTANEOUS MINIMALLY INVASIVE CANNULATION OF THE VENA CAVA**  
 [54] **CANULE POUR UNE CANULATION PERCUTANEE PEU INVASIVE DE LA VEINE CAVE**  
 [72] CHOUDHARY, SANJEEV, PL  
 [72] SUWALSKI, PIOTR, PL  
 [72] MAKUCH, MARTA, PL  
 [72] OLSZEWSKI, JACEK, PL  
 [71] MEDINICE S.A., PL  
 [22] 2020-05-29  
 [41] 2021-11-28  
 [30] EP (EP20177271.2) 2020-05-28

[21] **3,081,966**  
 [13] A1

[51] **Int.Cl. A61F 2/14 (2006.01) A61F 9/00 (2006.01) A61F 9/007 (2006.01)**  
 [25] EN  
 [54] **SCLERAL BELT AND METHOD**  
 [54] **COURROIE SCLERALE ET METHODE**  
 [72] KHAN, MEHDI A., US  
 [71] KHAN, MEHDI A., US  
 [22] 2020-06-04  
 [41] 2021-12-04

[21] **3,081,969**  
 [13] A1

[51] **Int.Cl. C01B 32/159 (2017.01) B82Y 15/00 (2011.01) C01B 32/168 (2017.01) G01N 21/65 (2006.01)**  
 [25] EN  
 [54] **PH RESPONSIVE OPTICAL NANOPROBE**  
 [54] **NANOSONDE OPTIQUE REPENDANT AU PH**  
 [72] MARTEL, RICHARD, CA  
 [72] SHOGHI, FATEMEH (NATASHA), CA  
 [72] BADIA, ANTONELLA, CA  
 [72] MAL, SURAJ, CA  
 [71] VALORISATION-RECHERCHE, LIMITED PARTNERSHIP, CA  
 [22] 2020-06-04  
 [41] 2021-12-04

**Canadian Applications Open to Public Inspection**  
**November 28, 2021 to December 4, 2021**

[21] **3,081,971**  
 [13] A1

[51] **Int.Cl. C01B 3/02 (2006.01) B01J 19/24 (2006.01) C10L 3/00 (2006.01)**

[25] FR

[54] **METHOD AND REACTOR FOR THE PRODUCTION OF SYNTHESIS GAS FROM A CARBON AND HYDROGEN SOURCE IN THE PRESENCE OF AN OXY-FLAME**

[54] **METHODE ET REACTEUR POUR LA PRODUCTION DE GAZ DE SYNTHÈSE À PARTIR D'UNE SOURCE DE CARBONE ET D'HYDROGENE EN PRESENCE D'UNE OXY-FLAMME**

[72] LABRECQUE, RAYNALD, CA  
 [72] SCHULZ, ROBERT, CA  
 [72] VIENNEAU, MICHEL, CA  
 [72] LAROCQUE, GERMAIN, CA  
 [71] HYDRO-QUEBEC, CA  
 [22] 2020-06-04  
 [41] 2021-12-04

[21] **3,082,211**  
 [13] A1

[51] **Int.Cl. G01N 1/30 (2006.01) G01N 23/2251 (2018.01) G01N 21/00 (2006.01)**

[25] EN

[54] **CONTRAST-ENHANCING STAINING SYSTEM AND METHOD AND IMAGING METHODS AND SYSTEMS RELATED THERETO**

[54] **SYSTEME ET METHODE DE TEINTURE A REHAUSSEMENT DES CONTRASTES ET METHODES ET SYSTEMES D-IMAGERIE CONNEXES**

[72] PAWLOWICZ, CHRISTOPHER, CA  
 [72] NTAIS, SPYRIDON, CA  
 [71] TECHINSIGHTS INC., CA  
 [22] 2020-06-02  
 [41] 2021-12-02

[21] **3,082,217**  
 [13] A1

[51] **Int.Cl. B64F 1/00 (2006.01) B64C 39/02 (2006.01)**

[25] EN

[54] **BATTERY EXCHANGE AND CHARGING SYSTEM FOR DRONES**

[54] **SYSTEME D-ECHANGE ET DE RECHARGE A BATTERIES POUR DRONES**

[72] LIVINGSTON, JOHN RICHARD PHILIP, CA  
 [72] PILSKALNS, OREST, US  
 [71] SKYYFISH LLC, US  
 [22] 2020-06-03  
 [41] 2021-12-03

[21] **3,082,241**  
 [13] A1

[51] **Int.Cl. A62D 3/35 (2007.01) B01J 19/28 (2006.01)**

[25] EN

[54] **REUSABLE ALKALINE HYDROLYSIS CONTAINER AND ALKALINE HYDROLYSIS SYSTEM AND METHOD USING SAME**

[54] **CONTENANT D'HYDROLYSE ALCALINE REUTILISABLE ET SYSTEME D'HYDROLYSE ALCALINE ET METHODE L'UTILISANT**

[72] MASON, PHILIP JONATHON, BM  
 [72] MONETTE, JOCELYNE, CA  
 [71] MASON, PHILIP JONATHON, BM  
 [71] MONETTE, JOCELYNE, CA  
 [22] 2020-05-28  
 [41] 2021-11-28

[21] **3,082,336**  
 [13] A1

[51] **Int.Cl. G01S 5/00 (2006.01) A63B 43/00 (2006.01) A63B 63/00 (2006.01) A63B 67/14 (2006.01) A63B 71/06 (2006.01) G01S 5/16 (2006.01)**

[25] EN

[54] **ENHANCED INFRARED HOCKEY PUCK AND GOAL DETECTION SYSTEM**

[54] **RONDELLE DE HOCKEY INFRAROUGE AMELIOREE ET SYSTEME DE DETECTION DE BUT**

[72] KOUNELLAS, JAMILLA, US  
 [72] HAY, KEVIN, US  
 [72] WIERENGA, PAUL, US  
 [71] KOUNELLAS, JAMILLA, US  
 [22] 2020-06-08  
 [41] 2021-11-28  
 [30] US (16/886,699) 2020-05-28

[21] **3,082,438**  
 [13] A1

[51] **Int.Cl. B62M 3/08 (2006.01) A43B 5/14 (2006.01)**

[25] EN

[54] **MODIFICATION ON SHIMANO CLIKR CLIPLESS PEDAL**

[54] **MODIFICATION DE PEDALE SANS ATTACHE SHIMANO CLIK-R**

[72] UNKNOWN, XX  
 [71] SY, ARVIN, CA  
 [22] 2020-06-04  
 [41] 2021-12-04

[21] **3,082,623**  
 [13] A1

[51] **Int.Cl. A41D 13/11 (2006.01) A42B 3/20 (2006.01)**

[25] EN

[54] **FACE SHIELD SYSTEM**

[54] **SYSTEME D-ECRAN FACIAL**

[72] MARTINO, FILIPPO, CA  
 [72] CAMPBELL, JAMES BRUCE ANTHONY, CA  
 [72] SIMON, JIS, CA  
 [72] LEUNG, MARTIN KWAN YU, CA  
 [71] IPEX TECHNOLOGIES INC., CA  
 [22] 2020-05-29  
 [41] 2021-11-29



**Demandes canadiennes mises à la disponibilité du public  
28 novembre 2021 au 4 décembre 2021**

[21] **3,082,999**  
[13] A1

[51] **Int.Cl. H04M 3/22 (2006.01) H04M 3/42 (2006.01) H04M 3/523 (2006.01)**  
[25] EN  
[54] **COMMUNICATIONS MANAGEMENT AND CALL STATISTICS SYSTEM (CMCS)**  
[54] **SYSTEME DE GESTION DES COMMUNICATIONS ET DE STATISTIQUES D~APPELS (CMCS)**  
[72] UNKNOWN, XX  
[71] KARIMI, MAHMOUD, IR  
[22] 2020-06-10  
[41] 2021-11-30  
[30] US (139950140003002021) 2020-05-30

[21] **3,089,880**  
[13] A1

[51] **Int.Cl. F21K 9/00 (2016.01) H05B 45/30 (2020.01) H05B 45/40 (2020.01) F21V 23/00 (2015.01)**  
[25] EN  
[54] **LED BULB APPARATUS**  
[54] **APPAREIL D~AMPOULE A DEL**  
[72] CAO, LIANGLIANG, CN  
[72] WU, CHENGZONG, CN  
[72] JIANG, HONGKUI, CN  
[72] GAO, YANZENG, CN  
[71] XIAMEN LEEDARSON LIGHTING CO., LTD., CN  
[22] 2020-08-12  
[41] 2021-12-04  
[30] US (16/893,324) 2020-06-04  
[30] US (16/893,339) 2020-06-04

[21] **3,090,641**  
[13] A1

[51] **Int.Cl. B64F 1/00 (2006.01) B64F 5/50 (2017.01) B64C 39/02 (2006.01)**  
[25] EN  
[54] **BATTERY EXCHANGE AND CHARGING SYSTEM FOR DRONES**  
[54] **SYSTEME D~ECHANGE ET DE RECHARGE A BATTERIES POUR DRONES**  
[72] LIVINGSTON, JOHN RICHARD PHILIP, CA  
[72] PILSKALNS, OREST, US  
[71] SKYYFISH LLC, US  
[22] 2020-08-20  
[41] 2021-12-03  
[30] CA (3082217) 2020-06-03

[21] **3,101,747**  
[13] A1

[51] **Int.Cl. B25F 1/00 (2006.01) B25B 13/02 (2006.01)**  
[25] EN  
[54] **JET DRIVE MARINE ENGINE MAINTENANCE TOOL**  
[54] **OUTIL DE MAINTENANCE DE MOTEUR MARIN A REACTION HYDRAULIQUE**  
[72] BOYHER, T. BENJAMIN, US  
[72] STEPHENS, C. SHANE, US  
[71] JET MEDIC LLC, US  
[22] 2020-12-04  
[41] 2021-12-04  
[30] US (16/893230) 2020-06-04

[21] **3,102,730**  
[13] A1

[51] **Int.Cl. A61H 39/08 (2006.01) A61H 39/00 (2006.01) B21G 1/00 (2006.01)**  
[25] EN  
[54] **ACUPUNCTURE NEEDLE AND METHOD OF FORMING ACUPUNCTURE NEEDLE**  
[54] **AIGUILLE D~ACUPUNCTURE ET METHODE DE FABRICATION**  
[72] NAKANO, RYOICHI, JP  
[72] KANEKO, YUYA, JP  
[72] TANIGUCHI, SHOHEI, JP  
[72] KOBAYASHI, TAKUYA, JP  
[71] SEIRIN CORPOARTION, JP  
[22] 2020-12-16  
[41] 2021-12-03  
[30] JP (2020-96918) 2020-06-03  
[30] JP (2020-163126) 2020-09-29

[21] **3,102,736**  
[13] A1

[51] **Int.Cl. A61H 39/08 (2006.01)**  
[25] EN  
[54] **ACUPUNCTURE NEEDLE**  
[54] **AIGUILLE D~ACUPUNCTURE**  
[72] NAKANO, RYOICHI, JP  
[72] KANEKO, YUYA, JP  
[72] TANIGUCHI, SHOHEI, JP  
[72] KOBAYASHI, TAKUYA, JP  
[71] SEIRIN CORPOARTION, JP  
[22] 2020-12-16  
[41] 2021-12-03  
[30] JP (2020-96730) 2020-06-03

[21] **3,103,112**  
[13] A1

[51] **Int.Cl. G06Q 20/20 (2012.01) G06Q 20/32 (2012.01) G06Q 30/06 (2012.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR MOBILE POINT-OF-SALE TRANSACTIONS**  
[54] **SYSTEMES ET METHODES DE TRANSACTIONS EN POINT DE VENTE MOBILE**  
[72] SARTORI, LUKE JAMES, CA  
[72] MAAN, DAANISH, CA  
[72] NITSCH, PETER, CA  
[72] DEFAZIO, MICHAEL, CA  
[72] ZALDIVAR, SILVANA, CA  
[72] MOORE, GREGORY, CA  
[71] SHOPIFY INC., CA  
[22] 2020-12-18  
[41] 2021-12-01  
[30] US (16/889,215) 2020-06-01

[21] **3,103,430**  
[13] A1

[51] **Int.Cl. H03F 3/02 (2006.01) H03F 3/68 (2006.01) H04S 1/00 (2006.01)**  
[25] EN  
[54] **VACUUM TUBE AMPLIFICATION SYSTEM CAPABLE OF REDUCING RESIDUAL NOISE AND A GROUNDING METHOD THEREOF**  
[54] **SYSTEME D~AMPLIFICATION DE TUBE D~ASPIRATION CAPABLE DE REDUIRE LE BRUIT RESIDUEL ET METHODE DE MISE A LA TERRE CONNEXE**  
[72] CHEN, HSI-HSIEN, TW  
[71] ECHOWELL ELECTRONIC CO., LTD., CN  
[22] 2020-12-21  
[41] 2021-12-04  
[30] US (16/892,403) 2020-06-04

**Canadian Applications Open to Public Inspection  
November 28, 2021 to December 4, 2021**

[21] **3,103,791**  
[13] A1

[51] **Int.Cl. G06F 16/43 (2019.01) G06F 16/435 (2019.01) G11B 27/10 (2006.01)**

[25] EN

[54] **QUERY SYSTEM WITH SPOILER PREVENTION**

[54] **SYSTEME DE REQUETE AVEC PREVENTION DES DIVULGACHEURS**

[72] AHER, ANKUR ANIL, IN

[72] CHUNDI, CHARISHMA, IN

[71] ROVI GUIDES, INC., US

[22] 2020-12-22

[41] 2021-11-29

[30] US (16/887945) 2020-05-29

[21] **3,103,820**  
[13] A1

[51] **Int.Cl. G06F 16/903 (2019.01) G06F 16/9032 (2019.01) G06F 40/279 (2020.01) G10L 15/26 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR IMPROVING CONTENT DISCOVERY IN RESPONSE TO A VOICE QUERY**

[54] **SYSTEMES ET METHODES POUR AMELIORER LA DECOUVERTE DE CONTENU EN REPOSE A UNE COMMANDE VOCALE**

[72] ROBERT JOSE, JEFFRY COPPS, IN

[72] SRI, SINDHUJA CHONAT, IN

[71] ROVI GUIDES, INC., US

[22] 2020-12-22

[41] 2021-12-01

[30] US (16/889036) 2020-06-01

[21] **3,105,932**  
[13] A1

[51] **Int.Cl. G06F 17/00 (2019.01) G06F 3/14 (2006.01) G06Q 40/06 (2012.01)**

[25] EN

[54] **HIERARCHICAL NODE-BASED DISPLAY ARCHITECTURE**

[54] **ARCHITECTURE D'AFFICHAGE A BASE DE NOEUDS HIERARCHIQUES**

[72] SABERIAN, NAFISEH, US

[72] TAPPETA VENKATA, RAVINDRA REDDY, US

[72] NAIR, ABHILASH KRISHNANKUTTY, US

[71] THE TORONTO-DOMINION BANK, CA

[22] 2021-01-15

[41] 2021-11-28

[30] US (16/886,144) 2020-05-28

[21] **3,105,970**  
[13] A1

[51] **Int.Cl. H03K 17/945 (2006.01) B66B 1/14 (2006.01)**

[25] EN

[54] **CONTACTLESS BUTTON OF ELEVATOR**

[54] **BOUTON SANS CONTACT POUR ASCENSEUR**

[72] WANG, KE, CA

[71] WANG, KE, CA

[22] 2021-01-19

[41] 2021-11-29

[30] CN (2020209411046.4) 2020-05-29

[21] **3,109,495**  
[13] A1

[51] **Int.Cl. E04C 2/284 (2006.01) E04C 2/288 (2006.01)**

[25] EN

[54] **BUILDING SYSTEM AND METHOD UTILIZING INTEGRATED INSULATION**

[54] **SYSTEME DE CONSTRUCTION ET METHODE D~UTILISATION D~UNE ISOLATION INTEGREE**

[72] MALINOWSKI, EDWARD, US

[72] WANG, WEI, US

[71] INTEGRATED STEEL BUILDING, LLC, US

[22] 2021-02-18

[41] 2021-12-03

[30] US (16/891, 785) 2020-06-03

[21] **3,109,776**  
[13] A1

[51] **Int.Cl. A61C 17/06 (2006.01)**

[25] EN

[54] **HANDS-FREE SUCTION APPARATUS**

[54] **APPAREIL D~ASPIRATION MAINS LIBRES**

[72] BEKIRI, LINDITE, CA

[71] BEKIRI, LINDITE, CA

[22] 2021-02-22

[41] 2021-11-29

[30] US (17/178,993) 2021-02-18

[30] US (63/031,790) 2020-05-29

[21] **3,113,494**  
[13] A1

[51] **Int.Cl. G08G 1/14 (2006.01) H04W 4/12 (2009.01) H04W 4/024 (2018.01) H04W 4/029 (2018.01) H04W 4/30 (2018.01) G07B 15/02 (2011.01) G07C 1/30 (2006.01) G08G 1/017 (2006.01)**

[25] EN

[54] **PARKING LOT MANAGEMENT SYSTEM BASED ON REAL-TIME COMPUTER VISION PROCESSING**

[54] **SYSTEME DE GESTION DU PARC DE STATIONNEMENT EN FONCTION D~UN TRAITEMENT DE VISION PAR ORDINATEUR EN TEMPS REEL**

[72] DANG, TRANH VI, CA

[72] TRAN, HA THI, CA

[72] EM, NGUYEN VAN NGHIA, CA

[71] HTT SMART SOLUTIONS CANADA INC., CA

[22] 2021-03-30

[41] 2021-11-29

[30] US (63/031,968) 2020-05-29

[21] **3,114,011**  
[13] A1

[51] **Int.Cl. H05B 45/20 (2020.01) H05B 45/37 (2020.01) H05B 45/40 (2020.01)**

[25] EN

[54] **LIGHTING DRIVING CIRCUIT AND METHOD FOR REMOVING INRUSH CURRENT IN LED CHANNELS**

[54] **CIRCUIT D~ATTAQUE D~ECLAIRAGE ET METHODE D~ELIMINATION DU COURANT D~APPEL DANS LES CANAUX A DEL**

[72] WANG, FANBIN, CN

[72] WANG, FRANK, CN

[72] ZHUO, XIN, CN

[71] SAVANT TECHNOLOGIES LLC, US

[22] 2021-04-01

[41] 2021-12-01

[30] US (16/888,996) 2020-06-01

**Demandes canadiennes mises à la disponibilité du public**  
**28 novembre 2021 au 4 décembre 2021**

[21] **3,114,300**  
[13] A1

[51] **Int.Cl. F02D 19/08 (2006.01) E21B 43/26 (2006.01) F02B 63/06 (2006.01) F02M 25/00 (2006.01)**

[25] EN

[54] **BI-FUEL RECIPROCATING ENGINE TO POWER DIRECT DRIVE TURBINE FRACTURING PUMPS ONBOARD AUXILIARY SYSTEMS AND RELATED METHODS**

[54] **MOTEUR ALTERNATIF BICARBURANT POUR ALIMENTER DES POMPES DE FRACTURATION A TURBINE A PRISE DIRECTE A BORD DE SYSTEMES AUXILIAIRES ET METHODES CONNEXES**

[72] YEUNG, TONY, US

[72] RODRIGUEZ-RAMON, RICARDO, US

[72] RODRIGUEZ, GUILLERMO, US

[71] BJ ENERGY SOLUTIONS, LLC, US

[22] 2021-04-07

[41] 2021-11-28

[30] US (62/704,774) 2020-05-28

[30] US (62/705,188) 2020-06-15

[30] US (17/301,241) 2021-03-30

[21] **3,114,664**  
[13] A1

[51] **Int.Cl. B23K 9/10 (2006.01)**

[25] EN

[54] **WELDING SEQUENCE GUIDANCE USING THREE DIMENSIONAL MODELS**

[54] **GUIDE DE SEQUENCE DE SOUDAGE UTILISANT DES MODELES TRIDIMENSIONNELS**

[72] ROMANO, VINCENT NICHOLAS, US

[72] MCELLIS, TODD MICHAEL, US

[72] FALDE, LELAND DARYL, US

[71] ILLINOIS TOOL WORKS INC., US

[22] 2021-04-12

[41] 2021-11-29

[30] US (16/887,010) 2020-05-29

[21] **3,116,055**  
[13] A1

[51] **Int.Cl. H02J 13/00 (2006.01) G06F 1/26 (2006.01) H02J 1/08 (2006.01)**

[25] EN

[54] **POWER SUPPLY COMBINATION FOR DELIVERING POWER AT MULTIPLE VOLTAGES**

[54] **COMBINAISON DE SOURCES D'ALIMENTATION POUR LA DISTRIBUTION A DE MULTIPLES TENSIONS**

[72] THIBAUT, CHRISTOPHE MAURICE, FR

[72] MAILLOT PATRICK-GILLES, FR

[71] OVH, FR

[22] 2021-04-23

[41] 2021-11-28

[30] EP (20315266.5) 2020-05-28

[30] EP (20315267.3) 2020-05-28

[30] EP (20315268.1) 2020-05-28

[21] **3,116,057**  
[13] A1

[51] **Int.Cl. F16F 9/53 (2006.01) B60J 5/00 (2006.01) E05F 3/14 (2006.01) F16F 9/46 (2006.01)**

[25] EN

[54] **VARIABLE FLUID DAMPING**

[54] **AMORTISSEMENT PAR LIQUIDE VARIABLE**

[72] NYAMAGOUDAR, VINAYAK M., US

[72] CHANDAR N C, ASWIN, US

[71] THE BOEING COMPANY, US

[22] 2021-04-23

[41] 2021-12-04

[30] US (16/893160) 2020-06-04

[21] **3,116,225**  
[13] A1

[51] **Int.Cl. H02J 13/00 (2006.01) G06F 1/26 (2006.01) H02J 1/08 (2006.01)**

[25] EN

[54] **POWER SUPPLY COMBINATION HAVING HETEROGENEOUS POWER SUPPLIES**

[54] **COMBINAISON DE SOURCES D'ALIMENTATION AYANT DES SOURCES D'ALIMENTATION HETEROGENES**

[72] THIBAUT, CHRISTOPHE MAURICE, FR

[72] MAILLOT, PATRICK-GILLES, FR

[71] OVH, FR

[22] 2021-04-27

[41] 2021-11-28

[30] EP (20315266.5) 2020-05-28

[30] EP (20315267.3) 2020-05-28

[30] EP (20315268.1) 2020-05-28

[21] **3,116,228**  
[13] A1

[51] **Int.Cl. G06F 1/26 (2006.01) H02J 13/00 (2006.01)**

[25] EN

[54] **METHOD AND CONTROL CIRCUIT FOR CONTROLLING DELIVERY OF POWER TO ONE OR MORE SERVERS**

[54] **METHODE ET CIRCUIT DE COMMANDE POUR CONTROLER L'ALIMENTATION A UN OU PLUSIEURS SERVEURS**

[72] MAILLOT, PATRICK-GILLES, FR

[72] THIBAUT, CHRISTOPHE MAURICE, FR

[71] OVH, FR

[22] 2021-04-27

[41] 2021-11-28

[30] EP (20315266.5) 2020-05-28

[30] EP (20315267.3) 2020-05-28

[30] EP (20315268.1) 2020-05-28

**Canadian Applications Open to Public Inspection  
November 28, 2021 to December 4, 2021**

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[21] **3,116,256**  
[13] A1

[51] **Int.Cl. B65B 9/10 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR PACKING PRODUCT IN A TUBULAR CASING**

[54] **METHODE ET APPAREIL D-EMBALLAGE DE PRODUIT DANS UN BOITIER TUBULAIRE**

[72] FOGARTY, TIM, CA  
[72] MCDUGALL, MIKE, CA  
[72] DEVITO, JOEL, CA  
[71] FOGARTY, TIM, CA  
[71] MCDUGALL, MIKE, CA  
[71] DEVITO, JOEL, CA  
[22] 2021-04-22  
[41] 2021-11-29  
[30] US (16/887,911) 2020-05-29

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[21] **3,116,434**  
[13] A1

[51] **Int.Cl. H01H 83/04 (2006.01)**  
[25] EN  
[54] **A CIRCUIT INTERRUPTER FOR INTERRUPTING AN ELECTRIC CURRENT DURING FAULT CONDITIONS**

[54] **COUPE-CIRCUIT POUR INTERROMPRE UN COURANT ELECTRIQUE EN CONDITIONS DE DEFAILLANCES**

[72] N, CHANDRASHEKAR, IN  
[72] KAMBHAM, RAGHAVA, IN  
[71] ABB SCHWEIZ AG, CH  
[22] 2021-04-28  
[41] 2021-11-29  
[30] US (16/887,462) 2020-05-29

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[21] **3,116,805**  
[13] A1

[51] **Int.Cl. C02F 3/10 (2006.01) C02F 3/00 (2006.01) C02F 3/02 (2006.01) C02F 3/34 (2006.01)**  
[25] EN  
[54] **AUTOMATIC SEWAGE TREATMENT SYSTEM AND PREPARATION METHOD OF BIOLOGICAL CARRIER**

[54] **SYSTEME D-EPURATION DES EAUX USEES AUTOMATIQUE ET METHODE DE PREPARATION DE PORTEUR BIOLOGIQUE**

[72] HSU, ENJUI, CN  
[72] CUI, XIANPIN, CN  
[71] HUBEI HUINONG BIOLOGICAL TECHNOLOGY CO., LTD., CN  
[22] 2021-04-30  
[41] 2021-12-03  
[30] CN (202010495072.3) 2020-06-03  
[30] CN (202010615144.3) 2020-06-30

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[21] **3,116,958**  
[13] A1

[51] **Int.Cl. G01N 33/52 (2006.01) G01N 21/63 (2006.01) G01N 21/78 (2006.01)**  
[25] EN  
[54] **A METHOD FOR DETECTING A PROSTATE CANCER BIOMARKER**

[54] **METHODE POUR DETECTER UN BIOMARQUEUR DU CANCER DE LA PROSTATE**

[72] KULPAKKO, JANNE, FI  
[72] VESPALAINEN, JOUKO, FI  
[72] PAAVILAINEN, SUSANNA, FI  
[71] AQSENS HEALTH OY, FI  
[22] 2021-05-03  
[41] 2021-11-29  
[30] EP (20177435.3) 2020-05-29

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[21] **3,116,970**  
[13] A1

[51] **Int.Cl. B29C 64/194 (2017.01) B33Y 10/00 (2015.01) B33Y 30/00 (2015.01) B33Y 50/00 (2015.01) B29C 64/379 (2017.01) B29C 70/30 (2006.01) G01S 13/88 (2006.01) G01B 11/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR DEPOSITION AND HIGH-FREQUENCY MICROWAVE INSPECTION OF UNCURED FIBER-REINFORCED POLYMERIC MATERIALS**

[54] **SYSTEMES ET METHODES POUR LE DEPOT D-UNE INSPECTION MICRO-ONDE HAUTE FREQUENCE DE MATERIAUX POLYMERES NON TRAITES RENFORCES DE FIBRES**

[72] SAFAI, MORTEZA, US  
[72] GEORGESON, GARY E., US  
[71] THE BOEING COMPANY, US  
[22] 2021-04-30  
[41] 2021-12-03  
[30] US (16/892,065) 2020-06-03

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[21] **3,117,003**  
[13] A1

[51] **Int.Cl. G06F 11/00 (2006.01) G06F 17/00 (2019.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR DETECTING ANOMALIES IN A DATA PIPELINE**

[54] **METHODE ET SYSTEME POUR DETECTER DES ANOMALIES DANS UN PIPELINE DE DONNEES**

[72] NICOL, OLIVIER, FR  
[72] PARMENTIER, LAURENT, FR  
[72] WAUQUIER, PAULINE, FR  
[71] OVH, FR  
[22] 2021-05-04  
[41] 2021-11-29  
[30] EP (20315288.9) 2020-05-29

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**Demandes canadiennes mises à la disponibilité du public  
28 novembre 2021 au 4 décembre 2021**

[21] **3,117,006**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR QUANTUM BASED OPTIMIZATION OF STRESS TESTING**  
[54] **SYSTEMES ET METHODES POUR L'OPTIMISATION QUANTIQUE DES ESSAIS DE CONTRAINTE**  
[72] RAMANATHAN, RAMANATHAN, US  
[72] GARNER IV, ANDREW J., US  
[72] RAO, ABHIJIT, US  
[72] ARBAJIAN, PIERRE, US  
[72] MEINHOLZ, MICHAEL ERIK, US  
[72] YARLAGADDA, RAMESH, US  
[72] SANDERS, ADAM, US  
[72] SHEA, BRADFORD A., US  
[71] THE TORONTO-DOMINION BANK, CA  
[22] 2021-05-04  
[41] 2021-11-28  
[30] US (16/886,333) 2020-05-28

[21] **3,117,032**  
[13] A1

[51] **Int.Cl. A61B 17/068 (2006.01) A61B 17/064 (2006.01) A61B 17/072 (2006.01)**  
[25] EN  
[54] **ELECTROTAXIS-CONDUCTIVE STAPLING**  
[54] **AGRAFAGE CONDUCTEUR A L'ELECTROTAXIE**  
[72] DIAZ-CHIOSA, OLESEA, US  
[71] COVIDIEN LP, US  
[22] 2021-05-04  
[41] 2021-11-28  
[30] US (16/885,572) 2020-05-28

[21] **3,117,039**  
[13] A1

[51] **Int.Cl. G06Q 40/06 (2012.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR QUANTUM BASED OPTIMIZATION OF A PERSONALIZED PORTFOLIO**  
[54] **SYSTEMES ET METHODES POUR L'OPTIMISATION QUANTIQUE D'UN PORTEFEUILLE PERSONNALISE**  
[72] RAMANATHAN, RAMANATHAN, US  
[72] GARNER, ANDREW J., IV, US  
[72] RAO, ABHIJIT, US  
[72] MEINHOLZ, MICHAEL ERIK, US  
[72] YARLAGADDA, RAMESH, US  
[72] SHEA, BRADFORD A., US  
[72] SANDERS, ADAM, US  
[72] ARBAJIAN, PIERRE, US  
[71] THE TORONTO-DOMINION BANK, CA  
[22] 2021-05-04  
[41] 2021-11-28  
[30] US (16/886,327) 2020-05-28

[21] **3,117,181**  
[13] A1

[51] **Int.Cl. F01D 17/16 (2006.01) F01D 9/02 (2006.01) F02C 9/22 (2006.01)**  
[25] EN  
[54] **VARIABLE GUIDE VANES ASSEMBLY**  
[54] **ENSEMBLE D'AUBES DIRECTRICES VARIABLES**  
[72] LEFEBVRE, GUY, CA  
[72] PAQUET, RENE, CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2021-05-04  
[41] 2021-11-28  
[30] US (16/885,846) 2020-05-28

[21] **3,117,185**  
[13] A1

[51] **Int.Cl. G06F 17/00 (2019.01) G06F 7/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR FORMATTING AND RECONSTRUCTING RAW DATA**  
[54] **SYSTEMES ET METHODES POUR LE FORMATAGE ET LA RECONSTITUTION DE DONNEES BRUTES**  
[72] COTTEREAU, GAETAN, FR  
[72] GLON, RAPHAEL, FR  
[71] OVH, FR  
[22] 2021-05-05  
[41] 2021-11-28  
[30] EP (20315273.1) 2020-05-28

[21] **3,117,189**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR QUANTUM BASED OPTIMIZATION OF AN EFFICIENT FRONTIER DETERMINATION**  
[54] **SYSTEMES ET METHODES POUR L-OPTIMISATION QUANTIQUE DE LA DETERMINATION DE LA FRONTIERE D-EFFICIENCE**  
[72] RAMANATHAN, RAMANATHAN, US  
[72] GARNIER, ANDREW J., IV, US  
[72] RAO, ABHIJIT, US  
[72] ARBADIJIAN, PIERRE, US  
[72] MEINHOLZ, MICHAEL ERIK, US  
[72] YARLAGADDA, RAMESH, US  
[72] SHEA, BRADFORD A., US  
[72] SANDERS, ADAM, US  
[72] GOFF, WILLIAM E., US  
[71] THE TORONTO-DOMINION BANK, CA  
[22] 2021-05-05  
[41] 2021-11-29  
[30] US (16/887,305) 2020-05-29

**Canadian Applications Open to Public Inspection**  
**November 28, 2021 to December 4, 2021**

[21] **3,117,284**  
[13] A1

[51] **Int.Cl. H02J 13/00 (2006.01) G06F 1/26 (2006.01) H02H 3/02 (2006.01) H04B 3/54 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR ELECTRIC SYSTEMS MONITORING AND/OR FAILURE DETECTION**

[54] **SYSTEMES ET METHODES POUR LA SURVEILLANCE ET/OU LA DETECTION DES DEFAILLANCES DE SYSTEMES ELECTRIQUES**

[72] BIESKE, MICHEL, FR

[72] CECCHINATO, BASTIEN, FR

[72] THIBAUT, CHRISTOPHE MAURICE, FR

[72] MAILLOT, PATRICK-GILLES, FR

[71] OVH, FR

[22] 2021-05-06

[41] 2021-11-28

[30] EP (20315274.9) 2020-05-28

[30] EP (20315275.6) 2020-05-28

[21] **3,117,288**  
[13] A1

[51] **Int.Cl. H02J 13/00 (2006.01) G06F 1/28 (2006.01) H02H 3/02 (2006.01) H04B 3/54 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR ELECTRIC SYSTEMS MONITORING AND/OR FAILURE DETECTION**

[54] **SYSTEMES ET METHODES POUR LA SURVEILLANCE ET/OU LA DETECTION DES DEFAILLANCES DE SYSTEMES ELECTRIQUES**

[72] MAILLOT, PATRICK-GILLES, FR

[72] BIESKE, MICHEL, FR

[72] THIBAUT, CHRISTOPHE MAURICE, FR

[72] CECCHINATO, BASTIEN, FR

[71] OVH, FR

[22] 2021-05-06

[41] 2021-11-28

[30] EP (20315274.9) 2020-05-28

[30] EP (20315275.6) 2020-05-28

[21] **3,117,869**  
[13] A1

[51] **Int.Cl. G01N 27/622 (2021.01) G01N 27/623 (2021.01) H01J 49/06 (2006.01) H01J 49/26 (2006.01)**

[25] EN

[54] **ELECTROSPRAY ION SOURCE FOR SPECTROMETRY USING INDUCTIVELY HEATED GAS**

[54] **SOURCE D'ION PAR ELECTRONEBULISATION POUR LA SPECTROMETRIE UTILISANT UN GAZ CHAUFFE PAR INDUCTION**

[72] MAVANUR, ANIL, US

[72] MUNTEAN, FELICIAN, US

[71] BRUKER SCIENTIFIC LLC, US

[22] 2021-05-07

[41] 2021-11-29

[30] US (63/031,837) 2020-05-29

[21] **3,117,980**  
[13] A1

[51] **Int.Cl. B23K 9/133 (2006.01) B65H 49/00 (2006.01)**

[25] EN

[54] **WIRE FEEDER AND SUITCASE SPOOL CARRIER**

[54] **TETE DE SOUDAGE ET PORTE-BOBINE EN VALISE**

[72] BROWN, ERIK ROBERT, US

[71] ILLINOIS TOOL WORKS INC., US

[22] 2021-05-11

[41] 2021-12-02

[30] US (16/890,699) 2020-06-02

[21] **3,118,109**  
[13] A1

[51] **Int.Cl. B60K 1/00 (2006.01) B60K 17/22 (2006.01)**

[25] EN

[54] **ELECTRIC VEHICLE POWERTRAIN ASSEMBLY HAVING NESTED SHAFTS**

[54] **ASSEMBLAGE DE GROUPE PROPULSEUR DE VEHICULE ELECTRIQUE AYANT DES ARBRES NICHES**

[72] WILLIAMS, CAMERON PHILIP, US

[72] VERBRIDGE, MASON, US

[71] RIVIAN IP HOLDINGS, LLC, US

[22] 2021-05-11

[41] 2021-12-04

[30] US (16/892501) 2020-06-04

[21] **3,118,480**  
[13] A1

[51] **Int.Cl. F01D 5/10 (2006.01) F01D 25/04 (2006.01) F16F 15/34 (2006.01)**

[25] EN

[54] **BALANCING RING GEOMETRY**

[54] **GEOMETRIE D~ANNEAU EQUILIBRE**

[72] PELLERIN, HUGUES, CA

[71] PRATT & WHITNEY CANADA CORP., CA

[22] 2021-05-13

[41] 2021-12-02

[30] US (16/889,839) 2020-06-02

[21] **3,118,556**  
[13] A1

[51] **Int.Cl. A61K 31/4045 (2006.01) A61K 9/00 (2006.01) A61P 25/00 (2006.01) A61P 25/24 (2006.01)**

[25] EN

[54] **THERAPEUTIC SOLID DOSAGE FORMS**

[54] **FORMES DE DOSAGES SOLIDES THERAPEUTIQUES**

[72] RANDS, PETER, GB

[72] BENWAY, TIFFANIE, GB

[72] JOEL, ZELAH, GB

[72] LAYZELL, MARIE, GB

[72] JAMES, ELLEN, GB

[71] SMALL PHARMA LTD., GB

[22] 2021-05-13

[41] 2021-12-02

[30] EP (PCT/EP2020/065244) 2020-06-02

[30] EP (PCT/EP2021/060750) 2021-04-23

[30] GB (2008303.6) 2020-06-02

[30] US (16/890664) 2020-06-02

[30] GB (2018950.2) 2020-12-01

[30] GB (2018955.1) 2020-12-01

[30] US (17/108,679) 2020-12-01

[30] US (17/108,938) 2020-12-01

[30] GB (2103981.3) 2021-03-22

[30] US (17/208,583) 2021-03-22

**Demandes canadiennes mises à la disponibilité du public  
28 novembre 2021 au 4 décembre 2021**

[21] **3,118,671**  
[13] A1

[51] **Int.Cl. F25D 25/02 (2006.01) A47F 3/04 (2006.01)**  
[25] EN  
[54] **REFRIGERATED DISPLAY CASE WITH SHELF INDEXING SYSTEM**  
[54] **BOITIER DE PRESENTATION REFRIGERE COMPORTANT UN SYSTEME D'INDICATION DES ETAGERES**  
[72] STUBBLEFIELD, STEVE, US  
[72] SAYKO, KELLY, US  
[71] HILL PHOENIX, INC., US  
[22] 2021-05-14  
[41] 2021-11-28  
[30] US (16/885,925) 2020-05-28

[21] **3,118,676**  
[13] A1

[51] **Int.Cl. A43B 7/12 (2006.01)**  
[25] EN  
[54] **MOISTURE-PERMEABLE WATERPROOF SHOE**  
[54] **CHAUSSURE IMPERMEABLE A L~EAU PERMEABLE A L~HUMIDITE.**  
[72] WANG CHANG, FANG-CHUN, TW  
[71] VESSI FOOTWEAR LTD., CA  
[22] 2021-05-13  
[41] 2021-12-03  
[30] TW (109206951) 2020-06-03

[21] **3,118,860**  
[13] A1

[51] **Int.Cl. A01K 87/02 (2006.01)**  
[25] EN  
[54] **FISHING ROD WITH UTILITY CLIP**  
[54] **CANNE A PECHE AVEC PINCE UTILITAIRE**  
[72] MCCUNE, CLARK PATRICK, US  
[72] LITTAU, CHRISTOPHER S., US  
[72] FETTY, SHANE ANTHONY, US  
[72] FANG, ZU HANG, CN  
[71] ZEBCO HOLDINGS, LLC, US  
[22] 2021-05-17  
[41] 2021-11-29  
[30] US (16/888,332) 2020-05-29

[21] **3,119,141**  
[13] A1

[51] **Int.Cl. B64C 1/14 (2006.01) B64D 25/08 (2006.01)**  
[25] FR  
[54] **AIRCRAFT PANEL RELEASE DEVICE AND ASSOCIATED AIRCRAFT**  
[54] **DISPOSITIF DE LARGAGE D'UN PANNEAU D'AERONEF ET AERONEF ASSOCIE**  
[72] PENELLA, DANIEL, FR  
[71] AIRBUS HELICOPTERS, FR  
[22] 2021-05-19  
[41] 2021-11-28  
[30] FR (2005659) 2020-05-28

[21] **3,119,142**  
[13] A1

[51] **Int.Cl. B23K 10/00 (2006.01) B23K 9/173 (2006.01) B23K 9/29 (2006.01) B23K 10/02 (2006.01)**  
[25] EN  
[54] **CONSUMABLES FOR CUTTING TORCHES**  
[54] **ARTICLES CONSOMMABLES POUR DES CHALUMEAUX COUPEURS**  
[72] FARNHAM, JACOB, US  
[71] THE ESAB GROUP INC., US  
[22] 2021-05-19  
[41] 2021-11-28  
[30] US (16/885,339) 2020-05-28

[21] **3,119,153**  
[13] A1

[51] **Int.Cl. G01C 9/00 (2006.01) G01N 35/02 (2006.01)**  
[25] EN  
[54] **DETECTION APPARATUS, SPECIMEN PROCESSING APPARATUS, AND SPECIMEN PROCESSING METHOD**  
[54] **APPAREIL DE DETECTION, APPAREIL DE TRAITEMENT DE SPECIMEN ET PROCEDE DE TRAITEMENT DE SPECIMEN**  
[72] TERUAKI, ITOH, JP  
[71] AOI SEIKI CO., LTD., JP  
[22] 2021-05-19  
[41] 2021-11-28  
[30] JP (2020-093091) 2020-05-28

[21] **3,119,261**  
[13] A1

[51] **Int.Cl. B25F 5/00 (2006.01) B25F 5/02 (2006.01)**  
[25] EN  
[54] **HOUSING CLAMP FOR A POWER TOOL**  
[54] **ATTACHE DE LOGEMENT POUR UN OUTIL ELECTRIQUE**  
[72] DANCE, WILLIAM BERRY, US  
[71] SNAP-ON INCORPORATED, US  
[22] 2021-05-20  
[41] 2021-12-02  
[30] US (16/890,433) 2020-06-02

[21] **3,119,263**  
[13] A1

[51] **Int.Cl. B25F 5/02 (2006.01) B23B 45/02 (2006.01) B23B 47/06 (2006.01) B23B 47/14 (2006.01)**  
[25] EN  
[54] **DIRECTION SELECTOR MECHANISM FOR A POWER TOOL**  
[54] **MECANISME DE SELECTEUR DE DIRECTION POUR UN OUTIL ELECTRIQUE**  
[72] DANCE, WILLIAM BERRY, US  
[72] PATTERSON, MATTHEW D., US  
[71] SNAP-ON INCORPORATED, US  
[22] 2021-05-20  
[41] 2021-12-02  
[30] US (16/890,348) 2020-06-02

[21] **3,119,282**  
[13] A1

[51] **Int.Cl. B22D 17/04 (2006.01) B22D 17/20 (2006.01)**  
[25] EN  
[54] **CASTING UNIT FOR A DIE CASTING MACHINE**  
[54] **UNITE DE MOULAGE POUR UNE MACHINE A MOULAGE SOUS PRESSION**  
[72] GERNER, DANIEL, DE  
[72] KURZ, JURGEN, DE  
[72] SYDLO, ANDREAS, DE  
[71] OSKAR FRECH GMBH+CO. KG, DE  
[22] 2021-05-20  
[41] 2021-12-04  
[30] DE (102020207016.4) 2020-06-04

**Canadian Applications Open to Public Inspection**  
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[21] **3,119,337**  
[13] A1

[51] **Int.Cl. G06F 17/00 (2019.01)**  
[25] FR  
[54] **REMOTE DISTRIBUTION SYSTEM FOR AIRCRAFT COMPUTER FILES, ASSEMBLY AND ASSOCIATED PROCESS**

[54] **SYSTEME DE TELEDISTRIBUTION DE FICHIERS INFORMATIQUES D'AERONEF, ENSEMBLE ET PROCEDE ASSOCIE**

[72] BRIAND, BENJAMIN, FR  
[72] OCIEPKA, MICHAEL, FR  
[72] ARDOUIN, STEPHANE, FR  
[72] HUBERT, VINCENT, FR  
[72] LHOPITEAU, NICOLAS, FR  
[71] DASSAULT AVIATION, FR  
[22] 2021-05-21  
[41] 2021-11-28  
[30] FR (2005637) 2020-05-28

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[21] **3,119,347**  
[13] A1

[51] **Int.Cl. D03D 13/00 (2006.01) D03D 1/00 (2006.01) D21F 1/10 (2006.01) D21F 7/08 (2006.01)**

[25] EN  
[54] **AN INDUSTRIAL TEXTILE FOR MANUFACTURING A FIBROUS WEB**

[54] **TEXTILE INDUSTRIEL POUR LA FABRICATION D~UNE TOILE FIBREUSE**

[72] MARTIKAINEN, HANNU, FI  
[72] RAUTIO, TANIA, FI  
[72] SEPPANEN, MARI, FI  
[72] TAIPALE, SEPPO, FI  
[71] VALMET TECHNOLOGIES OY, FI  
[22] 2021-05-21  
[41] 2021-12-04  
[30] FI (20205583) 2020-06-04

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[21] **3,119,362**  
[13] A1

[51] **Int.Cl. B60K 23/00 (2006.01) B60W 10/184 (2012.01) B60W 10/04 (2006.01) B60W 10/10 (2012.01) F16H 59/44 (2006.01) F16H 63/40 (2006.01)**

[25] EN  
[54] **SYSTEM AND METHOD TO SHIFT TRANSMISSION IN MACHINES**

[54] **SYSTEME ET METHODE POUR LE CHANGEMENT DE TRANSMISSION DANS LES MACHINES**

[72] THOMPSON, BRODIE LEE, AU  
[72] GUNDLAPALLI, SAI PRAVEEN, IN  
[72] HEROLD, ROBERT ANTHONY, US  
[72] DOWLING, ALEXANDER ELI, AU  
[72] JACKSON, SCOTT GLENN, AU  
[71] CATERPILLAR UNDERGROUND MINING PTY LTD, AU  
[22] 2021-05-21  
[41] 2021-11-29  
[30] AU (2020203556) 2020-05-29

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[21] **3,119,369**  
[13] A1

[51] **Int.Cl. G05B 15/02 (2006.01) G06F 3/048 (2013.01)**

[25] EN  
[54] **OPERATOR CONSOLE PROVIDING GUIDANCE FOR OPERATOR DECISIONS**

[54] **PUPITRE DE COMMANDE OFFRANT UNE ORIENTATION A L~OPERATEUR AUX FINS DE DECISIONS**

[72] MCADAM, ROHAN JAMES, US  
[72] LAYCOCK, GRAEME JOHN, US  
[72] DAVIS, PETER CARL, US  
[71] HONEYWELL INTERNATIONAL INC., US  
[22] 2021-05-21  
[41] 2021-11-29  
[30] US (17/323518) 2021-05-18  
[30] US (63/031903) 2020-05-29

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[21] **3,119,385**  
[13] A1

[51] **Int.Cl. C12Q 1/6876 (2018.01) C12Q 1/6844 (2018.01) C12Q 1/6869 (2018.01) C12Q 1/68 (2018.01)**

[25] EN  
[54] **A METHOD OF DETECTING RNA**

[54] **METHODE POUR DETECTER L~ARN**

[72] CHO, SEOK KEUN, KR  
[71] XENOHELIX CO., LTD., KR  
[22] 2021-05-21  
[41] 2021-12-03  
[30] KR (10-2020-0066932) 2020-06-03

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[21] **3,119,475**  
[13] A1

[51] **Int.Cl. B60P 3/42 (2006.01) B60P 3/40 (2006.01) B62D 53/04 (2006.01) B62D 63/06 (2006.01)**

[25] EN  
[54] **PERIMETER BEAM DOUBLE STRETCH TRAILER**

[54] **REMORQUE A DOUBLE EXTENSION AVEC POUTRES DE PERIMETRE**

[72] LUTZ, DAVID W., US  
[71] LUTZ, DAVID W., US  
[22] 2021-05-25  
[41] 2021-11-28  
[30] US (63/031,063) 2020-05-28

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[21] **3,119,566**  
[13] A1

[51] **Int.Cl. A01G 20/00 (2018.01) A01B 35/00 (2006.01) E02F 3/84 (2006.01)**

[25] EN  
[54] **METHOD OF CONTROLLING TURF GRADING EQUIPMENT**

[54] **METHODE DE CONTROLE DE MATERIEL DE CLASSEMENT DE GAZON**

[72] MERKT, ERIC L., US  
[71] G2 TURFTOOLS, INC., US  
[22] 2021-05-25  
[41] 2021-12-03  
[30] US (63/034,167) 2020-06-03  
[30] US (17/328,163) 2021-05-24

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**Demandes canadiennes mises à la disponibilité du public**  
**28 novembre 2021 au 4 décembre 2021**

[21] **3,119,607**  
 [13] A1

[51] **Int.Cl. G06F 3/041 (2006.01) G06F 3/16 (2006.01)**  
 [25] EN  
 [54] **HARDWARE DEVICE FOR ENTERING A PIN VIA TAPPING ON A TOUCH SCREEN DISPLAY**  
 [54] **DISPOSITIF MATERIEL POUR ENTRER UN NIP EN TAPANT SUR UN ECRAN TACTILE**  
 [72] WHITAKER ABRAMS, JACOB, US  
 [72] BLATTMAN, JEFFREY, US  
 [71] FISERV, INC., US  
 [22] 2021-05-26  
 [41] 2021-12-03  
 [30] US (17/330,287) 2021-05-25  
 [30] US (63/034,276) 2020-06-03

[21] **3,119,612**  
 [13] A1

[51] **Int.Cl. C01B 15/023 (2006.01) C01B 15/013 (2006.01) C01B 15/022 (2006.01)**  
 [25] EN  
 [54] **DEVICE AND PROCESS FOR PRODUCING HYDROGEN PEROXIDE BY AN ANTHRAQUINONE PROCESS**  
 [54] **DISPOSITIF ET PROCEDURE POUR PRODUIRE DU PEROXYDE D'HYDROGENE SELON UN PROCEDURE A L'ANTHRAQUINONE**  
 [72] SEIDEL, NILS HENNING, DE  
 [72] KAMP, JOHANNES, DE  
 [72] GLENNEBERG, JURGEN, DE  
 [72] PANZ, CHRISTIAN, DE  
 [72] AREVALO SAADE, EDUARDO FREDERICO, DE  
 [72] PRASAD MANGALAPALLY, HARI, DE  
 [71] EVONIK OPERATIONS GMBH, DE  
 [22] 2021-05-26  
 [41] 2021-11-28  
 [30] EP (20177047.6) 2020-05-28

[21] **3,119,616**  
 [13] A1

[51] **Int.Cl. B60T 7/12 (2006.01) B60T 8/32 (2006.01) F16D 67/00 (2006.01)**  
 [25] EN  
 [54] **METHOD AND CONTROL SYSTEM FOR CONTROLLING MACHINE**  
 [54] **METHODE ET SYSTEME DE COMMANDE POUR CONTROLER UNE MACHINE**  
 [72] DOWLING, ALEXANDER ELI, AU  
 [72] WIGG, JASON PRAKASH, AU  
 [72] THOMPSON, BRODIE LEE, AU  
 [72] KANDULA, SUNEEL VENKATA, AU  
 [72] GUNDLAPALLI, SAI PRAVEEN, AU  
 [72] CRAWFORD, MARTYN JAMES, AU  
 [71] CATERPILLAR UNDERGROUND MINING PTY. LTD., AU  
 [22] 2021-05-26  
 [41] 2021-12-04  
 [30] AU (2020203698) 2020-06-04

[21] **3,119,627**  
 [13] A1

[51] **Int.Cl. G10D 13/12 (2020.01)**  
 [25] EN  
 [54] **DRUMSTICK**  
 [54] **BAGUETTE DE TAMBOUR**  
 [72] CHRISTIE, SCOTT, CA  
 [71] CHRISTIE, SCOTT, CA  
 [22] 2021-05-26  
 [41] 2021-12-03  
 [30] CA (3081894) 2020-06-03

[21] **3,119,630**  
 [13] A1

[51] **Int.Cl. H02G 5/00 (2006.01) B64G 1/22 (2006.01) F16S 1/00 (2006.01) H02G 3/30 (2006.01)**  
 [25] EN  
 [54] **ELECTRICAL POWER DISTRIBUTION INTEGRATED INTO A SATELLITE STRUCTURAL PANEL**  
 [54] **DISTRIBUTION D'ALIMENTATION ELECTRIQUE INTEGREE DANS UN PANNEAU STRUCTURAL DE SATELLITE**  
 [72] BEKEMANS, MARC, BE  
 [72] VANDEPLASSCHE, PHILIPPE, BE  
 [72] MABED, BARBARA, BE  
 [71] THALES, FR  
 [22] 2021-05-26  
 [41] 2021-11-28  
 [30] EP (20305560.3) 2020-05-28

[21] **3,119,643**  
 [13] A1

[51] **Int.Cl. H04L 12/18 (2006.01) H04N 21/23 (2011.01) H04N 21/436 (2011.01) H04N 21/482 (2011.01)**  
 [25] EN  
 [54] **SYSTEMS AND METHODS FOR DISPLAYING AND CONTROLLING A REMOTELY EXECUTED APPLICATION ON A DISPLAY OF A VEHICLE**  
 [54] **SYSTEMES ET METHODES POUR AFFICHER ET CONTROLER UNE APPLICATION EXECUTEE A DISTANCE SUR UN ECRAN D-UN VEHICULE**  
 [72] MILLER, LARRY, US  
 [72] BIALEK, JASON, US  
 [72] WISE, ANDREW, US  
 [72] SHARMA, PANKAJ, US  
 [71] HONEYWELL INTERNATIONAL INC., US  
 [22] 2021-05-26  
 [41] 2021-12-01  
 [30] US (16/889558) 2020-06-01

[21] **3,119,649**  
 [13] A1

[51] **Int.Cl. B25B 21/00 (2006.01) E04C 5/12 (2006.01) F16B 13/06 (2006.01)**  
 [25] EN  
 [54] **SELF-DRILLING EXPANDABLE ANCHOR INSTALLATION TOOL AND METHODS OF USE THEREOF**  
 [54] **OUTIL D'INSTALLATION D'ANCRAGE EXTENSIBLE AUTOFORREUR ET METHODES D'UTILISATION**  
 [72] KAO, EDDIE, US  
 [72] GONG, YONGPING, US  
 [71] ILLINOIS TOOL WORKS INC., US  
 [22] 2021-05-26  
 [41] 2021-11-28  
 [30] US (63/031,243) 2020-05-28  
 [30] US (17/323,527) 2021-05-18

**Canadian Applications Open to Public Inspection**  
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[21] **3,119,671**  
[13] A1

[51] **Int.Cl. F16B 13/06 (2006.01) F16B 13/13 (2006.01)**

[25] EN

[54] **SELF-DRILLING EXPANDABLE ANCHOR AND METHODS OF USE AND INSTALLATION THEREOF**

[54] **ANCRAGE EXPANSIBLE A FORAGE AUTOMATIQUE ET METHODES D'UTILISATION ET D'INSTALLATION**

[72] KAO, EDDIE, US

[71] ILLINOIS TOOL WORKS INC., US

[22] 2021-05-26

[41] 2021-11-28

[30] US (63/031,231) 2020-05-28

[30] US (17/323,530) 2021-05-18

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[21] **3,119,672**  
[13] A1

[51] **Int.Cl. H04W 4/02 (2018.01) H04W 8/20 (2009.01) G06N 20/00 (2019.01) G06F 17/18 (2006.01) G06N 3/08 (2006.01)**

[25] EN

[54] **METHODS, SYSTEMS, AND APPARATUS FOR DETERMINING VIEWERSHIP**

[54] **METHODES, SYSTEMES ET APPAREILS POUR DETERMINER UN ENSEMBLE DE SPECTATEURS**

[72] BRESS, ROBERT ALAN, US

[72] WHITELY, CHRISTOPHER PAUL, US

[72] XING, ZHAO, US

[71] COMCAST CABLE COMMUNICATIONS, LLC, US

[22] 2021-05-26

[41] 2021-11-28

[30] US (16/886,367) 2020-05-28

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[21] **3,119,678**  
[13] A1

[51] **Int.Cl. F16B 19/02 (2006.01) F16B 35/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR MULTI-HOLE ASSEMBLIES WITH ANGULAR ADJUSTMENT AND LOCKING**

[54] **SYSTEMES ET METHODES POUR DES ASSEMBLAGES MULTI-TROUS COMPORTANT DES FONCTIONS D-AJUSTEMENT ET DE VERROUILLAGE ANGULAIRES**

[72] NARAYAN, KARTHIK, US

[71] GOODRICH CORPORATION, US

[22] 2021-05-26

[41] 2021-12-04

[30] US (16/893,017) 2020-06-04

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[21] **3,119,681**  
[13] A1

[51] **Int.Cl. A01B 63/32 (2006.01) F15B 21/08 (2006.01) G05B 19/042 (2006.01)**

[25] EN

[54] **AUTOMATIC SELECTIVE CONTROL VALVE (SVC) CONFIGURATION DETECTION, AND OPERATION ASSIGNMENT, DIRECTIONALITY CONFIRMATION, AND CALIBRATION FOR TOWABLE IMPLEMENTS TOWABLE BY WORK VEHICLES**

[54] **DETECTION DE CONFIGURATION, ATTRIBUTION DE FONCTIONNEMENT, CONFIGURATION DIRECTIONNELLE ET ETALONNAGE DE VANNE DE REGULATION SELECTIVE (SVC) AUTOMATIQUE POUR DES APPAREILS REMORQUABLES PAR DES VEHICULES DE TRAVAIL**

[72] KALE, MANDAR M., IN

[72] EKHE, SANDEEP, IN

[72] SHAIKH, SHOE BREZA, IN

[72] SPORRER, ADAM D., US

[72] THEILEN, RICKY B., US

[72] LARSEN, LUCAS B., US

[71] DEERE & COMPANY, US

[22] 2021-05-26

[41] 2021-11-28

[30] US (16/886,049) 2020-05-28

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[21] **3,119,684**  
[13] A1

[51] **Int.Cl. A01D 47/00 (2006.01) A01D 41/06 (2006.01)**

[25] EN

[54] **LOCKOUT SYSTEM FOR HEADER**

[54] **SYSTEME D-INTERVERROUILLAGE POUR EN-TETE**

[72] BRIMEYER, ALEX, US

[71] DEERE & COMPANY, US

[22] 2021-05-26

[41] 2021-11-29

[30] US (16/886,844) 2020-05-29

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[21] **3,119,818**  
[13] A1

[51] **Int.Cl. B63B 34/10 (2020.01) B63B 3/48 (2006.01)**

[25] EN

[54] **DECK EXTENDER FOR WATERCRAFT**

[54] **RALLONGE DE PONT POUR EMBARCATION**

[72] WATKINS, SCOTT JEFFERY, US

[72] HOLMEN, ERIK ALLEN, US

[72] BRADY, ROBERT OWEN, US

[72] JOHNSON, BRIAN TRAVIS, US

[72] DOUCETTE, LOUIS ROBERT, US

[72] RICCIARDI, MICHAEL JAMES, US

[71] YAMAHA MOTOR CORPORATION, USA, US

[22] 2021-05-27

[41] 2021-11-29

[30] US (63/032,059) 2020-05-29

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[21] **3,119,822**  
[13] A1

[51] **Int.Cl. F24F 11/30 (2018.01) F24F 11/38 (2018.01) H02K 7/14 (2006.01) H02P 23/00 (2016.01)**

[25] EN

[54] **DETERMINATION OF BLOWER FLOW RATE**

[54] **DETERMINATION DU DEBIT D'UNE SOUFFLANTE**

[72] GOEL, RAKESH, US

[72] WANG, SHILIANG, US

[71] LENNOX INDUSTRIES INC., US

[22] 2021-05-27

[41] 2021-11-28

[30] US (16/885,661) 2020-05-28

**Demandes canadiennes mises à la disponibilité du public**  
**28 novembre 2021 au 4 décembre 2021**

[21] **3,119,823**  
[13] A1

[51] **Int.Cl. E21B 43/16 (2006.01) E21B 49/00 (2006.01)**  
 [25] FR  
 [54] **METHOD FOR RECOVERING HYDROCARBONS FROM A SUBSURFACE FORMATION BY INJECTION OF AN AQUEOUS SALINE SOLUTION COMPRISING A SURFACTANT**  
 [54] **PROCEDE POUR LA RECUPERATION D'HYDROCARBURES D'UNE FORMATION SOUTERRAINE PAR INJECTION D'UNE SOLUTION AQUEUSE SALINE COMPORTANT UN TENSIO-ACTIF**  
 [72] MALINOUSKAYA, IRYNA, FR  
 [72] PREUX, CHRISTOPHE, FR  
 [72] MARTIN, ADELIN, FR  
 [72] DELBOS, ALINE, FR  
 [71] IFP ENERGIES NOUVELLES, FR  
 [22] 2021-05-27  
 [41] 2021-11-29  
 [30] FR (2005675) 2020-05-29

[21] **3,119,826**  
[13] A1

[51] **Int.Cl. H01S 3/10 (2006.01) H01S 5/00 (2006.01)**  
 [25] EN  
 [54] **IMAGING SYSTEM COMPRISING BEAM GUIDANCE ELEMENT WITH HIGH SOLARIZATION RESISTANCE IN THE VISIBLE SPECTRAL RANGE**  
 [54] **SYSTEME D'IMAGERIE COMPRENANT UN ELEMENT DE GUIDAGE SUR FAISCEAU A GRANDE RESISTANCE DE SOLARISATION DANS LE SPECTRE VISIBLE**  
 [72] JEDAMZIK, RALF, DE  
 [72] PETER, NASS, DE  
 [72] LEUKEL, SEBASTIAN, DE  
 [72] HAGEMANN, VOLKER, DE  
 [72] PETZOLD, UWE, DE  
 [71] SCHOTT AG, DE  
 [22] 2021-05-27  
 [41] 2021-11-28  
 [30] DE (10 2020 114 365.6) 2020-05-28

[21] **3,119,828**  
[13] A1

[51] **Int.Cl. F24F 11/49 (2018.01) F24F 11/63 (2018.01)**  
 [25] EN  
 [54] **DETERMINATION OF PULLEY RATIO OF A BELT-DRIVE BLOWER**  
 [54] **DETERMINATION D'UN RAPPORT DE POULIE D'UNE SOUFFLANTE A TRANSMISSION PAR COURROIE**  
 [72] GOEL, RAKESH, US  
 [72] WANG, SHILIANG, US  
 [71] LENNOX INDUSTRIES INC., US  
 [22] 2021-05-27  
 [41] 2021-11-28  
 [30] US (16/885,875) 2020-05-28

[21] **3,119,864**  
[13] A1

[51] **Int.Cl. B60W 20/16 (2016.01)**  
 [25] EN  
 [54] **CYLINDER DEACTIVATION TO MAXIMIZE KINETIC TO POTENTIAL ENERGY CONVERSION IN BRAKING EVENTS**  
 [54] **DESACTIVATION DE CYLINDRES POUR MAXIMISER LA CONVERSION D'ENERGIE CINETIQUE-POTENTIELLE DANS LES EVENEMENTS DE FREINAGE**  
 [72] GERTY, MICHAEL D., US  
 [72] WHITE, MATTHEW, US  
 [71] PACCAR INC, US  
 [22] 2021-05-27  
 [41] 2021-11-28  
 [30] US (16/885932) 2020-05-28

[21] **3,119,899**  
[13] A1

[51] **Int.Cl. A47F 5/00 (2006.01) A47B 96/02 (2006.01)**  
 [25] EN  
 [54] **RETAIL MERCHANDISE SHELVING SYSTEM AND DECK PANELS FOR SAME**  
 [54] **SYSTEME DE MISE SUR ETAGERE DE MARCHANDISE DE DETAIL ET PANNEAUX-PLANCHERS CONNEXES**  
 [72] SMEDLEY, JAMIE A., US  
 [71] FASTENERS FOR RETAIL, INC., US  
 [22] 2021-05-27  
 [41] 2021-11-28  
 [30] US (63/031,344) 2020-05-28  
 [30] US (17/308,775) 2021-05-05

[21] **3,119,903**  
[13] A1

[51] **Int.Cl. E03B 7/07 (2006.01) E03C 1/02 (2006.01) F16K 37/00 (2006.01)**  
 [25] EN  
 [54] **SMART AND CONNECTED BACKFLOW PREVENTER ASSEMBLY**  
 [54] **ASSEMBLAGE DE DISCONNECTEUR INTELLIGENT ET BRANCHE**  
 [72] CHAKRABORTY, ARINDAM, US  
 [72] MALINARO, FRANK, US  
 [72] BROCKMAN, KEVIN, US  
 [71] ZURN INDUSTRIES, LLC, US  
 [22] 2021-05-27  
 [41] 2021-11-28  
 [30] US (63/031,370) 2020-05-28  
 [30] US (16/951,664) 2020-11-18

[21] **3,119,944**  
[13] A1

[51] **Int.Cl. H01Q 5/50 (2015.01) H01Q 5/307 (2015.01) H01Q 3/28 (2006.01) H01Q 21/10 (2006.01)**  
 [25] EN  
 [54] **BASE STATION ANTENNA**  
 [54] **ANTENNE DE STATION DE BASE**  
 [72] LI, YUEMIM, CN  
 [72] ZHANG, JIAN, CN  
 [72] WU, BO, CN  
 [72] WU, LIGANG, CN  
 [71] COMMSCOPE TECHNOLOGIES LLC, US  
 [22] 2021-05-28  
 [41] 2021-11-29  
 [30] CN (202020943827.7) 2020-05-29

[21] **3,119,949**  
[13] A1

[51] **Int.Cl. H02S 20/30 (2014.01) F16M 11/08 (2006.01)**  
 [25] EN  
 [54] **MOUNT FOR AN ENERGIZER**  
 [54] **SOCLE POUR UN ELECTRIFICATEUR**  
 [72] LUBIC, MARKO, US  
 [72] HANEY, LUKE, US  
 [72] GAUKER, ANDREW, US  
 [71] LUBIC, MARKO, US  
 [71] HANEY, LUKE, US  
 [71] GAUKER, ANDREW, US  
 [22] 2021-05-28  
 [41] 2021-11-29  
 [30] US (63/032,106) 2020-05-29

**Canadian Applications Open to Public Inspection  
November 28, 2021 to December 4, 2021**

[21] **3,119,954**  
[13] A1

[51] **Int.Cl. A61B 17/15 (2006.01) A61B 34/20 (2016.01) A61B 17/17 (2006.01) A61F 2/38 (2006.01) A61F 2/46 (2006.01)**

[25] EN

[54] **GAP BALANCING ASSEMBLY FOR KNEE REVISION SURGERY**

[54] **ASSEMBLAGE D'ALIGNEMENT POUR LES CHIRURGIES DE REVISION DU GENOU**

[72] BASTA, IAN, CA

[72] KHATIBI, BAHAREH, CA

[72] MENARD, JEREMIE, CA

[71] ORTHOSOFT ULC, CA

[22] 2021-05-27

[41] 2021-11-28

[30] US (63/031,313) 2020-05-28

[21] **3,119,960**  
[13] A1

[51] **Int.Cl. G05B 15/02 (2006.01) B27B 31/00 (2006.01) G05B 19/418 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD TO MANUALLY CONTROL BUNDLE OUTFEED APPARATUSES**

[54] **SYSTEME ET METHODE DE COMMANDE MANUELLE D'APPAREILS DE PRODUCTION DE LIASSES**

[72] GRAVEL, FRANCOIS, CA

[71] BID GROUP TECHNOLOGIES LTD., CA

[22] 2021-05-28

[41] 2021-11-28

[30] US (63/030,946) 2020-05-28

[21] **3,119,961**  
[13] A1

[51] **Int.Cl. F16H 63/02 (2006.01)**

[25] EN

[54] **GEAR SHIFTING DEVICE, TRANSMISSION AND ALL-TERRAIN VEHICLE**

[54] **DISPOSITIF DE CHANGEMENT DE VITESSE, TRANSMISSION DE DONNEES ET VEHICULE TOUT-TERRAIN**

[72] CHEN, SHANGJIAN, CN

[71] SEGWAY TECHNOLOGY CO., LTD., CN

[22] 2021-05-28

[41] 2021-11-29

[30] CN (202020941794.2) 2020-05-29

[21] **3,120,020**  
[13] A1

[51] **Int.Cl. F16M 11/04 (2006.01)**

[25] EN

[54] **CELL PHONE MOUNT WITH SLIDABLE JAWS**

[54] **SUPPORT A TELEPHONE CELLULAIRE A MACHOIRES COULISSANTES**

[72] IVERSON, DAVID S., US

[71] MACNEIL IP LLC, US

[22] 2021-05-28

[41] 2021-11-29

[30] US (16/887682) 2020-05-29

[21] **3,120,027**  
[13] A1

[51] **Int.Cl. B60R 9/10 (2006.01) B60D 1/58 (2006.01) B60R 9/06 (2006.01)**

[25] EN

[54] **URGING DEVICE BETWEEN BICYCLE RACK AND VEHICLE RECEIVER TUBE**

[54] **DISPOSITIF DE SOLLICITATION ENTRE UN SUPPORT A VELOS ET LE TUBE DE RECEPTION DU VEHICULE**

[72] WANG, CHIU-KUEI, TW

[72] ESPESET, HUGUES, CN

[72] GIROD, FREDERIC, CN

[71] KING RACK INDUSTRIAL CO., LTD., CN

[22] 2021-05-28

[41] 2021-11-29

[30] TW (109118133) 2020-05-29

[21] **3,120,049**  
[13] A1

[51] **Int.Cl. B02C 17/18 (2006.01) B02C 23/10 (2006.01)**

[25] EN

[54] **ANTI-PLUGGING DISCHARGE GRATES**

[54] **GRILLES DE DECHARGE ANTI-OBTURATION**

[72] SEPULVEDA, JAIME E., CL

[72] KUMAR, PRAMOD, CA

[71] POLYCORP LTD., CA

[22] 2021-05-28

[41] 2021-11-29

[30] US (63/032,017) 2020-05-29

[21] **3,120,065**  
[13] A1

[51] **Int.Cl. A01D 47/00 (2006.01) A01D 41/06 (2006.01)**

[25] EN

[54] **LOCKOUT SYSTEM FOR HEADER**

[54] **SYSTEME D'INTERVERROUILLAGE POUR EN-TETE**

[72] BRIMEYER, ALEX, US

[71] DEERE & COMPANY, US

[22] 2021-05-28

[41] 2021-11-29

[30] US (16/886,941) 2020-05-29

[21] **3,120,077**  
[13] A1

[51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/10 (2020.01) A24F 40/42 (2020.01)**

[25] EN

[54] **ELECTRONIC VAPING APPARATUS, CARTRIDGE THEREFOR AND METHOD FOR VAPORIZING A VAPORIZABLE SUBSTANCE USING THE SAME**

[54] **APPAREIL DE VAPOTAGE ELECTRONIQUE, CARTOUCHE CONNEXE ET METHODE DE VAPORISATION D'UNE SUBSTANCE VAPORISABLE L~UTILISANT**

[72] CHOI, MINKYU, CA

[71] CHOI, MINKYU, CA

[22] 2021-06-01

[41] 2021-12-04

[30] US (63034699) 2020-06-04

[21] **3,120,090**  
[13] A1

[51] **Int.Cl. G16Y 30/10 (2020.01) G16Y 40/10 (2020.01)**

[25] EN

[54] **SYSTEMS, METHODS, AND APPARATUSES FOR NETWORK MANAGEMENT**

[54] **SYSTEMES, PROCEDES ET DISPOSITIFS DE GESTION DE RESEAU**

[72] HAQUE, ASAD, US

[72] LIMAYE, BAHAR, US

[71] COMCAST CABLE COMMUNICATIONS, LLC, US

[22] 2021-05-28

[41] 2021-11-29

[30] US (63/031,864) 2020-05-29

**Demandes canadiennes mises à la disponibilité du public  
28 novembre 2021 au 4 décembre 2021**

[21] **3,120,225**  
[13] A1

[51] **Int.Cl. E03D 1/34 (2006.01) E03D 5/10 (2006.01) F16K 27/00 (2006.01) F16K 31/04 (2006.01)**

[25] EN

[54] **FLUSH VALVE AND MOTOR ALIGNMENT BRACKET**

[54] **ROBINET DE CHASSE ET SUPPORT D'ALIGNEMENT MOTEUR**

[72] BOUCHER, KEITH ROGER, US

[72] WILLIAMS, CHADWICK BRICE, US

[72] KAID, ALAN, US

[72] HOEL, DAN, US

[71] ZURN INDUSTRIES, LLC, US

[22] 2021-05-28

[41] 2021-11-29

[30] US (63/032,425) 2020-05-29

[21] **3,120,257**  
[13] A1

[51] **Int.Cl. G16Z 99/00 (2019.01) G06Q 30/06 (2012.01)**

[25] EN

[54] **REQUIREMENT-DRIVEN SELECTION OF BUILDING PRODUCTS AND BUILDING PRODUCT CONFIGURATIONS**

[54] **SELECTION FONDEE SUR DES EXIGENCES DE PRODUITS DE CONSTRUCTION ET CONFIGURATIONS DE TELS PRODUITS**

[72] WEST, BEN, US

[72] MANNING, MATT, US

[72] GROBELNY, ERIK, US

[71] OLDCASTLE BUILDINGENVELOPE, INC., US

[22] 2021-05-31

[41] 2021-12-01

[30] US (63/033,066) 2020-06-01

[21] **3,120,269**  
[13] A1

[51] **Int.Cl. E04F 15/02 (2006.01) E04C 2/40 (2006.01)**

[25] EN

[54] **INTERLOCKABLE MODULAR FLOOR TILE AND METHOD OF ASSEMBLING SAME**

[54] **CARREAU DE SOL MODULAIRE INTERVERROUILLABLE ET METHODE D~ASSEMBLAGE**

[72] OSBAK, GORDON A., CA

[71] OSBAK, GORDON A., CA

[22] 2021-05-31

[41] 2021-11-30

[30] US (63/032,719) 2020-05-31

[21] **3,120,270**  
[13] A1

[51] **Int.Cl. B60W 60/00 (2020.01) H04W 4/18 (2009.01) H04N 21/2343 (2011.01) G08G 1/0967 (2006.01) H04N 7/18 (2006.01)**

[25] EN

[54] **AUTONOMOUS VEHICLE TELEOPERATIONS SYSTEM**

[54] **SYSTEME DE TELEOPERATIONS DE VEHICULE AUTONOME**

[72] GATE, GWENNAEL HERVE, JONATHAN, US

[72] KISLOVSKIY, DMITRIY, US

[72] MELIK-BARKHUDAROV, NAREK, US

[72] GIST, NATHANIEL, IV, US

[71] AURORA INNOVATION, INC., US

[22] 2021-05-31

[41] 2021-12-02

[30] US (63/033,415) 2020-06-02

[30] US (16/918,519) 2020-07-01

[21] **3,120,298**  
[13] A1

[51] **Int.Cl. C07F 7/18 (2006.01) C08G 77/38 (2006.01) C08G 77/46 (2006.01)**

[25] EN

[54] **LINEAR ACETOXY-BEARING SILOXANES AND DESCENDENT PRODUCTS**

[54] **SILOXANES PORTEURS D~ACETOXY LINEAIRE ET PRODUITS DESCENDANTS**

[72] KNOTT, WILFRIED, DE

[72] DUDZIK, HORST, DE

[72] FAVRESSE, PHILIPPE, DE

[71] EVONIK OPERATIONS GMBH, DE

[22] 2021-05-31

[41] 2021-12-02

[30] EP (20177746.3) 2020-06-02

[21] **3,120,302**  
[13] A1

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

[25] EN

[54] **SYSTEM AND METHOD FOR MONETIZING ASSETS**

[54] **SYSTEME ET METHODE DE MONETISATION DE BIENS**

[72] HANISCH, DEAN, CA

[71] HANISCH, DEAN, CA

[22] 2021-05-31

[41] 2021-11-29

[30] US (63/031,920) 2020-05-29

[21] **3,120,305**  
[13] A1

[51] **Int.Cl. B25F 5/00 (2006.01) B25C 1/04 (2006.01) B25F 3/00 (2006.01)**

[25] EN

[54] **INSERT FOR A POWER TOOL HOUSING**

[54] **PIECE RAPPORTEE POUR UN LOGEMENT D~OUTIL ELECTRIQUE**

[72] BOTHMANN, RICHARD, US

[72] KING, BRIAN C., US

[72] KINSLEY, RAY, US

[71] SNAP-ON INCORPORATED, US

[22] 2021-05-31

[41] 2021-12-03

[30] US (16/891,826) 2020-06-03

[21] **3,120,306**  
[13] A1

[51] **Int.Cl. E21B 44/00 (2006.01) G01V 1/40 (2006.01)**

[25] EN

[54] **GUIDING DRILLING OPERATIONS USING A SUBSURFACE MODEL BASED ON FULL WAVEFORM INVERSION OF SEISMIC-WHILE DRILLING DATA**

[54] **GUIDAGE DES OPERATIONS DE FORAGE AU MOYEN D~UN MODELE DE SUBSURFACE FONDE SUR UNE INVERSION COMPLETE DE FORME D~ONDE DES DONNEES SISMIQUES PENDANT LE FORAGE**

[72] KAZEMI NOJADEH, NASSER, CA

[72] SHOR, ROMAN JGOREVICH, CA

[72] INNANEN, KRISTOPHER ALBERT HOLM, CA

[71] UTI LIMITED PARTNERSHIP, CA

[22] 2021-05-31

[41] 2021-12-01

[30] US (63/032,918) 2020-06-01

**Canadian Applications Open to Public Inspection  
November 28, 2021 to December 4, 2021**

[21] **3,120,308**

[13] A1

- [51] **Int.Cl. G21C 5/16 (2006.01)**  
[25] EN  
[54] **HIGH TEMPERATURE GAS-COOLED REACTOR CORE**  
[54] **COEUR DE REACTEUR HAUTE TEMPERATURE REFROIDI AU GAZ**  
[72] WOŁODZKO, KORNELIA, GB  
[72] ABRAM, TIMOTHY JAMES, GB  
[71] U-BATTERY LIMITED, GB  
[22] 2021-05-31  
[41] 2021-12-02  
[30] GB (2008290.5) 2020-06-02

[21] **3,120,311**

[13] A1

- [51] **Int.Cl. H04N 21/266 (2011.01) H04N 21/2365 (2011.01) H04N 21/2387 (2011.01) H04N 21/435 (2011.01) H04N 21/6332 (2011.01) H04N 21/6587 (2011.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR PROVIDING AUDIO-VIDEO STREAMS WITH ALTERNATIVE CONTENT**  
[54] **SYSTEMES ET METHODES POUR FOURNIR DES DIFFUSIONS AUDIO-VIDEO A CONTENU ALTERNATIF**  
[72] ROBERTSON, MARK W., US  
[72] O'NEIL, BRIAN, US  
[72] FILFILI, RABIH, US  
[71] MK SYSTEMS USA INC., US  
[22] 2021-05-31  
[41] 2021-12-04  
[30] US (63/034,577) 2020-06-04

[21] **3,120,412**

[13] A1

- [51] **Int.Cl. G06F 16/906 (2019.01) G06N 20/00 (2019.01) G06N 3/08 (2006.01)**  
[25] EN  
[54] **AN AUTOMATED AND DYNAMIC METHOD AND SYSTEM FOR CLUSTERING DATA RECORDS**  
[54] **METHODE AUTOMATISEE ET DYNAMIQUE ET SYSTEME DE REGROUPEMENT DE DOSSIERS DE DONNEES**  
[72] GHOULA, NIZAR, CA  
[72] REZVANI, REYHANEH, CA  
[72] LI, BOLIN, CA  
[72] BENOIT, FRANCIS, CA  
[71] BANQUE NATIONALE DU CANADA, CA  
[22] 2021-06-01  
[41] 2021-12-02  
[30] US (63/033,425) 2020-06-02

[21] **3,120,458**

[13] A1

- [51] **Int.Cl. B65H 35/06 (2006.01) A47K 10/36 (2006.01) B26D 1/02 (2006.01)**  
[25] EN  
[54] **ROLL MATERIAL DISPENSER TEAR BAR**  
[54] **BARRE DE COUPE POUR DISTRIBUTEUR DE MATERIAU EN ROULEAU**  
[72] YOUNG, MICHAEL, US  
[71] SAN JAMAR, INC., US  
[22] 2021-06-01  
[41] 2021-12-03  
[30] US (16/891,631) 2020-06-03

[21] **3,120,518**

[13] A1

- [51] **Int.Cl. E21B 25/00 (2006.01)**  
[25] EN  
[54] **EXCAVATION APPARATUS WITH SUPPORTING LINKAGE**  
[54] **APPAREIL D~EXCAVATION AVEC TRINGLERIE DE SUPPORT**  
[72] POLLOCK, EDWARD MARSHALL, CA  
[72] POLLOCK, ANDREW LESLIE, CA  
[72] HAAS, JEFFREY, CA  
[71] UTILICOR TECHNOLOGIES INC., CA  
[22] 2021-06-01  
[41] 2021-12-01  
[30] US (62/704,873) 2020-06-01

[21] **3,120,599**

[13] A1

- [51] **Int.Cl. E02D 17/02 (2006.01) E03B 7/09 (2006.01) E21B 47/01 (2012.01) F16B 7/14 (2006.01)**  
[25] EN  
[54] **ADJUSTABLE PIT EXTENSION ASSEMBLY**  
[54] **ENSEMBLE D~EXTENSION DE FOSSE AJUSTABLE**  
[72] ROGERS, RICK, US  
[71] THE FORD METER BOX COMPANY, INC., US  
[22] 2021-06-02  
[41] 2021-12-02  
[30] US (63/033,470) 2020-06-02

[21] **3,120,606**

[13] A1

- [51] **Int.Cl. F16M 3/00 (2006.01) F24H 3/00 (2006.01)**  
[25] EN  
[54] **DUAL INTEGRATED AIR HEATING SYSTEM**  
[54] **SYSTEME DOUBLE DE CHAUFFAGE D~AIR INTEGRE**  
[72] KALLHOFF, CURTIS A., US  
[72] THOMPSON, NATHAN G., US  
[72] STOFFERAN, WESLEY W., US  
[71] JR KOOP, INC., US  
[22] 2021-06-02  
[41] 2021-12-02  
[30] US (16/890,498) 2020-06-02

[21] **3,120,610**

[13] A1

- [51] **Int.Cl. E04F 13/08 (2006.01)**  
[25] EN  
[54] **TWO ZONE SIDING**  
[54] **PAREMENT A DEUX ZONES**  
[72] HAAS, GAYLEN A., US  
[71] HAAS, GAYLEN A., US  
[22] 2021-06-02  
[41] 2021-12-02  
[30] US (63/033,426) 2020-06-02

**Demandes canadiennes mises à la disponibilité du public**  
**28 novembre 2021 au 4 décembre 2021**

[21] **3,120,611**  
[13] A1

[51] **Int.Cl. H04N 21/2747 (2011.01) H04N 21/231 (2011.01) H04N 21/238 (2011.01)**  
 [25] EN  
 [54] **DISTRIBUTED STORAGE OF CONTENT ACROSS STORAGE SUBSYSTEMS**  
 [54] **STOCKAGE DISTRIBUE DE CONTENU DANS L~ENSEMBLE DES SOUS-SYSTEMES DE STOCKAGE**  
 [72] LINTZ, CHRISTOPHER, US  
 [72] GILADI, ALEXANDER, US  
 [72] HASSLER, GAREY, US  
 [72] LUNA, JUSTIN, US  
 [71] COMCAST CABLE COMMUNICATIONS, LLC, US  
 [22] 2021-06-02  
 [41] 2021-12-04  
 [30] US (16/892,921) 2020-06-04

[21] **3,120,692**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) C12Q 1/6809 (2018.01) C12Q 1/6876 (2018.01) C12N 15/10 (2006.01) C12Q 1/68 (2018.01) C40B 40/06 (2006.01)**  
 [25] EN  
 [54] **CIRCULATING MICRORNAS IN KNEE OSTEOARTHRITIS AND USES THEREOF**  
 [54] **CIRCULATION DE MICRO-ARN DANS L~ARTHROSE DU GENOU ET UTILISATIONS CONNEXES**  
 [72] KAPOOR, MOHIT, CA  
 [72] GANDHI, RAJIV, CA  
 [72] ALI, SHABANA AMANDA, CA  
 [71] UNIVERSITY HEALTH NETWORK, CA  
 [22] 2021-06-02  
 [41] 2021-12-02  
 [30] US (63/033,463) 2020-06-02

[21] **3,120,831**  
[13] A1

[51] **Int.Cl. A01N 43/50 (2006.01) A01N 37/22 (2006.01) A01P 13/00 (2006.01)**  
 [25] EN  
 [54] **A COMPOSITION COMPRISING A BENZAMIDE HERBICIDE AND A PYRIDINE CARBOXYLIC ACID HERBICIDE AND A METHOD FOR MAKING AND USING THE COMPOSITION**  
 [54] **COMPOSITION COMPRENANT UN HERBICIDE AU BENZAMIDE ET UN HERBICIDE A L~ACIDE PYRIDINE CARBOXYLIQUE, ET METHODE DE PRODUCTION ET D~UTILISATION DE LA COMPOSITION**  
 [72] SHARMA, SHIV K., US  
 [72] MIDDIONE, JOE, US  
 [72] MCCLINTON, SAMUEL ROBERT, US  
 [71] GENERIC CROP SCIENCE LLC, US  
 [71] FARMER'S BUSINESS NETWORK CANADA, INC., US  
 [22] 2021-06-02  
 [41] 2021-12-03  
 [30] US (63/034082) 2020-06-03

[21] **3,120,631**  
[13] A1

[51] **Int.Cl. G06T 7/00 (2017.01)**  
 [25] EN  
 [54] **SYSTEM AND METHOD FOR UNSUPERVISED SCENE DECOMPOSITION USING SPATIO-TEMPORAL ITERATIVE INFERENCE**  
 [54] **SYSTEME ET METHODE DE DECOMPOSITION DE SCENE NON SUPERVISEE AU MOYEN D~INFERENCE ITERATIVE SPATIO-TEMPORELLE**  
 [72] ZABLOTSKAIA, POLINA, CA  
 [72] SIGAL, LEONID, CA  
 [72] LEHRMANN, ANDREAS STEFFEN MICHAEL, CA  
 [71] ROYAL BANK OF CANADA, CA  
 [22] 2021-06-02  
 [41] 2021-12-02  
 [30] US (63/033,641) 2020-06-02

[21] **3,120,827**  
[13] A1

[51] **Int.Cl. E03C 1/04 (2006.01) B65H 75/34 (2006.01)**  
 [25] EN  
 [54] **SLOW CLOSE SPRAY HEAD FAUCET**  
 [54] **ROBINET DE PULVERISATEUR A FERMETURE LENTE**  
 [72] TRACY, ADAM WILLIAM, US  
 [71] SPECTRUM BRANDS, INC., US  
 [22] 2021-06-03  
 [41] 2021-12-03  
 [30] US (63/034,131) 2020-06-03

[21] **3,120,835**  
[13] A1

[51] **Int.Cl. B02C 17/22 (2006.01)**  
 [25] EN  
 [54] **CERAMIC SMART IMPACT PANEL**  
 [54] **PANNEAU D~IMPACT INTELLIGENT EN CERAMIQUE**  
 [72] OSBORNE, LEE R., US  
 [72] FARLEY, WILLIAM, US  
 [72] GUERCHON, STEPHANE, US  
 [71] CERAMIC TECHNOLOGY, INC., US  
 [22] 2021-06-03  
 [41] 2021-12-04  
 [30] US (16/892,867) 2020-06-04

**Canadian Applications Open to Public Inspection  
November 28, 2021 to December 4, 2021**

[21] **3,120,985**  
[13] A1

[51] **Int.Cl. E04C 2/26 (2006.01) E04B 1/343 (2006.01)**

[25] EN

[54] **STRUCTURAL MODULAR BUILDING PANEL, WALL, AND BUILDING SYSTEM**

[54] **PANNEAU DE CONSTRUCTION MODULAIRE STRUCTURAL, MUR ET SYSTEME DE CONSTRUCTION**

[72] LIVINGSTONE, PATRICIA, CA  
[71] LIVINGSTONE, PATRICIA, CA  
[22] 2021-06-03  
[41] 2021-12-03  
[30] US (63/034,281) 2020-06-03

[21] **3,121,050**  
[13] A1

[51] **Int.Cl. B03B 5/00 (2006.01) B03B 5/52 (2006.01)**

[25] EN

[54] **MATERIAL WASHING APPARATUS**

[54] **APPAREIL DE LAVAGE DE MATERIAUX**

[72] ROONEY, NEIL, GB  
[72] MCWILLIAMS, PAUL, GB  
[72] PATTERSON, JOHNSTON, GB  
[71] TEREX GB LIMITED, GB  
[22] 2021-06-03  
[41] 2021-12-04  
[30] GB (2008448.9) 2020-06-04

[21] **3,121,070**  
[13] A1

[25] EN

[54] **SYSTEM AND METHOD FOR QUALITY OF EXPERIENCE MANAGEMENT**

[54] **SYSTEME ET METHODE DE GESTION DE LA QUALITE DE L~EXPERIENCE**

[72] SRIDHAR, KAMAKSHI, US  
[71] SANDVINE CORPORATION, CA  
[22] 2021-06-04  
[41] 2021-12-04  
[30] US (63/034,474) 2020-06-04  
[30] EP (21177633.1) 2021-06-03

[21] **3,120,990**  
[13] A1

[51] **Int.Cl. A01M 31/00 (2006.01)**

[25] EN

[54] **GAME CALL**

[54] **CORNE D~APPEL**

[72] DELZER, WESTON, US  
[72] DELZER, WAYLON, US  
[71] DELZER, WESTON, US  
[71] DELZER, WAYLON, US  
[22] 2021-06-03  
[41] 2021-12-04  
[30] US (16/893,350) 2020-06-04

[21] **3,121,057**  
[13] A1

[51] **Int.Cl. F16K 15/20 (2006.01) A47C 27/08 (2006.01) F16K 7/12 (2006.01) F16K 15/14 (2006.01)**

[25] EN

[54] **INFLATABLE OBJECT AND VALVE THEREFOR**

[54] **OBJET GONFLABLE ET VANNE CONNEXE**

[72] GAINES, C. LATHAM, US  
[72] GRANER, STEVEN, US  
[71] SPIN MASTER, INC., US  
[22] 2021-06-04  
[41] 2021-12-04  
[30] US (63/034,855) 2020-06-04

[21] **3,121,085**  
[13] A1

[51] **Int.Cl. G06Q 10/04 (2012.01) G06Q 10/06 (2012.01)**

[25] EN

[54] **PERFORMANCE PREDICTION USING DYNAMIC MODEL CORRELATION**

[54] **PREDICTION DE RENDEMENT AU MOYEN D~UNE CORRELATION DE MODELES DYNAMIQUES**

[72] SLINGER, NIGEL, US  
[72] ZHU, WENJIE, US  
[72] KALLMAN, ROXANNE, US  
[72] DRUMMOND, CATHERINE, US  
[72] FLOURNOY, JOHN, US  
[71] BMC SOFTWARE, INC., US  
[22] 2021-06-04  
[41] 2021-12-04  
[30] US (62/704,966) 2020-06-04  
[30] US (16/949,477) 2020-10-30

[21] **3,120,996**  
[13] A1

[51] **Int.Cl. G06F 16/178 (2019.01) G06F 21/60 (2013.01) G06F 15/16 (2006.01)**

[25] EN

[54] **SYNCHRONIZATION OF DATA BETWEEN LOCAL AND REMOTE COMPUTING ENVIRONMENT BUFFERS**

[54] **SYNCHRONISATION DE DONNEES ENTRE DES TAMPONS D~ENVIRONNEMENTS INFORMATIQUES LOCAUX ET ELOIGNES**

[72] WEI, DAOWEN, CN  
[72] DING, JIAN, CN  
[72] WANG, HENGBO, CN  
[72] ZHANG, SHENG-CHI, CN  
[71] CITRIX SYSTEMS, INC., US  
[22] 2021-06-03  
[41] 2021-12-04  
[30] CN (PCT/CN2020/094259) 2020-06-04  
[30] US (16/906160) 2020-06-19

[21] **3,121,062**  
[13] A1

[51] **Int.Cl. G06K 19/073 (2006.01) G06K 19/02 (2006.01) G06K 19/077 (2006.01)**

[25] FR

[54] **BIOMETRIC SENSOR MODULE FOR SMART CARD AND PROCESS FOR MANUFACTURING SUCH A MODULE**

[54] **MODULE DE CAPTEUR BIOMETRIQUE POUR CARTE A PUCE ET PROCEDE DE FABRICATION D'UN TEL MODULE**

[72] MATHIEU, CHRISTOPHE, FR  
[72] LAURENS DE LOPEZ, CLAIRE, FR  
[72] GERMAIN, SEBASTIEN, FR  
[71] LINXENS HOLDING, FR  
[22] 2021-06-04  
[41] 2021-12-04  
[30] FR (FR2005877) 2020-06-04



**Demandes canadiennes mises à la disponibilité du public**  
**28 novembre 2021 au 4 décembre 2021**

[21] **3,121,349**  
 [13] A1

[51] **Int.Cl. G02B 6/13 (2006.01) G06F 30/20 (2020.01)**  
 [25] EN  
 [54] **METHOD AND SYSTEM FOR DESIGN OF PHOTONICS SYSTEMS**  
 [54] **METHODE ET SYSTEME DE CONCEPTION DE SYSTEMES PHOTONIQUES**  
 [72] MACLELLAN, BENJAMIN, CA  
 [72] ROZTOCKI, PIOTR, CA  
 [72] VAN HOWE, JAMES, US  
 [72] ROMERO CORTES, LUIS, ES  
 [72] FISCHER, BENNET, CA  
 [72] JESTIN, YOANN, CA  
 [72] AZANA, JOSE, CA  
 [72] MORANDOTTI, ROBERTO, CA  
 [71] INSTITUT NATIONAL DE LA RECHERCHE SCIENTIFIQUE, CA  
 [22] 2021-06-04  
 [41] 2021-12-04  
 [30] US (63/034,974) 2020-06-04

[21] **3,121,361**  
 [13] A1

[51] **Int.Cl. H04W 64/00 (2009.01) H04W 76/10 (2018.01) H04W 76/27 (2018.01)**  
 [25] EN  
 [54] **WIRELESS DEVICE LOCATION DETERMINATION**  
 [54] **DETERMINATION DE L~EMPLACEMENT D~UN DISPOSITIF SANS FIL**  
 [72] QIAO, WEIHUA, US  
 [72] DINAN, ESMAEL HEJAZI, US  
 [72] PARK, KYUNGMIN, US  
 [72] RYU, JINSOOK, US  
 [72] FARD, PEYMAN TALEBI, US  
 [72] KIM, TAEHUN, US  
 [71] COMCAST CABLE COMMUNICATIONS, LLC, US  
 [22] 2021-06-04  
 [41] 2021-12-04  
 [30] US (63/034,512) 2020-06-04

[21] **3,126,510**  
 [13] A1

[51] **Int.Cl. A61K 36/185 (2006.01) A61K 31/01 (2006.01) A61K 31/015 (2006.01) A61K 31/045 (2006.01) A61K 31/05 (2006.01) A61K 31/4045 (2006.01) A61K 36/534 (2006.01) A61K 36/752 (2006.01) A61P 25/00 (2006.01)**  
 [25] EN  
 [54] **CANNABIS PLANT FORMULATIONS AND METHODS OF DELIVERY**  
 [54] **FORMULATIONS DE PLANTS DE CANNABIS ET METHODE DE DISTRIBUTION**  
 [72] CHUANG, JAMES, US  
 [71] CHUANG, JAMES, US  
 [22] 2021-07-30  
 [41] 2021-12-01  
 [30] US (17/335,875) 2021-06-01  
 [30] US (63/033,179) 2020-06-01

[21] **3,121,353**  
 [13] A1

[51] **Int.Cl. E05B 41/00 (2006.01) E05B 15/00 (2006.01)**  
 [25] EN  
 [54] **INDICATOR LOCK**  
 [54] **INDICATEUR DE VERROU**  
 [72] ASHCROFT, PHILLIP, US  
 [72] GRISWOLD, LEE, US  
 [72] VOELKER, CHRISTINE, US  
 [72] FOURNIER, BRIAN R., US  
 [71] SARGENT MANUFACTURING COMPANY, US  
 [22] 2021-06-04  
 [41] 2021-12-04  
 [30] US (63/034656) 2020-06-04

[21] **3,126,497**  
 [13] A1

[51] **Int.Cl. A47L 15/39 (2006.01) B08B 1/02 (2006.01) B08B 1/04 (2006.01)**  
 [25] EN  
 [54] **PAN CLEANER MACHINE WITH IMPROVED CLEANING MODULE, CONTROLLER AND METHODS OF SAME**  
 [54] **MACHINE A NETTOYER DES POELES COMPORTANT UN MODULE DE NETTOYAGE AMELIORE, COMMANDE ET METHODES CONNEXES**  
 [72] SCHMIDT, NORMAN, CA  
 [71] FME FOOD MACHINERY ENGINEERING LTD., CA  
 [22] 2021-07-30  
 [41] 2021-12-02  
 [30] US (63/033,826) 2020-06-02  
 [30] US (17/009,203) 2020-09-01  
 [30] US (17/009,566) 2020-09-01  
 [30] US (17/389,316) 2021-07-29

**Canadian Applications Open to Public Inspection  
November 28, 2021 to December 4, 2021**

[21] **3,131,676**  
[13] A1

[51] **Int.Cl. B65F 3/04 (2006.01) B65F 3/06 (2006.01)**  
[25] EN  
[54] **ELECTRIC POWER TAKE-OFF FOR A REFUSE VEHICLE**  
[54] **PRISE DE FORCE ELECTRIQUE POUR VEHICULE A ORDURES**  
[72] KOGA, JEFFREY, US  
[72] DAVIS, EMILY, US  
[72] KAPPERS, JERROD, US  
[72] SCHAD, VINCE, US  
[72] MESSINA, ROBERT S., US  
[72] YAKES, CHRISTOPHER K., US  
[72] HOOVER, VINCENT, US  
[72] WECKWERTH, CLINTON T., US  
[72] KLEIN, ZACHARY L., US  
[72] BECK, JOHN, US  
[72] CHAN, BRENDAN, US  
[72] WACHTER, SKYLAR A., US  
[72] NASR, NADER, US  
[72] SMITH, CHAD K., US  
[72] GARY, LOGAN, US  
[72] WENTE, DEREK A., US  
[72] NAGLIK, SHAWN, US  
[72] BOLTON, MIKE J., US  
[72] WALLIN, JACOB, US  
[72] WITTMAN, QUINCY, US  
[72] RUKAS, CHRISTOPHER J., US  
[72] HESS, DYLAN, US  
[72] RICE, JASON, US  
[72] WEI, ZHENYI, US  
[72] AMIN, BASHAR, US  
[72] LINSMEIER, CATHERINE, US  
[72] ROCHOLL, JOSHUA D., US  
[72] MATSUMOTO, DALE, US  
[71] OSHKOSH CORPORATION, US  
[22] 2021-09-22  
[41] 2021-11-30  
[30] US (63/084,386) 2020-09-28  
[30] US (17/327,229) 2021-05-21

[21] **3,131,683**  
[13] A1

[51] **Int.Cl. B60L 1/00 (2006.01) B60K 17/28 (2006.01) B65F 3/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR ELECTRONIC POWER TAKE-OFF CONTROLS**  
[54] **SYSTEME ET METHODE DE COMMANDE ELECTRONIQUE DE PRISE DE FORCE**  
[72] KOGA, JEFFREY, US  
[72] DAVIS, EMILY, US  
[72] KAPPERS, JERROD, US  
[72] SCHAD, VINCE, US  
[72] MESSINA, ROBERT S., US  
[72] YAKES, CHRISTOPHER K., US  
[72] HOOVER, VINCENT, US  
[72] WECKWERTH, CLINTON T., US  
[72] KLEIN, ZACHARY L., US  
[72] BECK, JOHN, US  
[72] CHAN, BRENDAN, US  
[72] WACHTER, SKYLAR A., US  
[72] NASR, NADER, US  
[72] SMITH, CHAD K., US  
[72] GARY, LOGAN, US  
[72] WENTE, DEREK A., US  
[72] NAGLIK, SHAWN, US  
[72] BOLTON, MIKE J., US  
[72] WALLIN, JACOB, US  
[72] WITTMAN, QUINCY, US  
[72] RUKAS, CHRISTOPHER J., US  
[72] HESS, DYLAN, US  
[72] RICE, JASON, US  
[72] WEI, ZHENYI, US  
[72] AMIN, BASHAR, US  
[72] LINSMEIER, CATHERINE, US  
[72] ROCHOLL, JOSHUA D., US  
[71] OSHKOSH CORPORATION, US  
[22] 2021-09-22  
[41] 2021-11-30  
[30] US (63/084,415) 2020-09-28  
[30] US (17/327,336) 2021-05-21

[21] **3,133,626**  
[13] A1

[51] **Int.Cl. F24F 1/26 (2011.01) B32B 1/08 (2006.01) B32B 27/08 (2006.01) F16L 9/14 (2006.01) F16L 59/10 (2006.01) F16L 59/153 (2006.01)**  
[25] EN  
[54] **PIPE FOR CONVEYING FLUIDS IN HVACR SYSTEMS AND COMPOSITE COATING FOR SUCH A PIPE**  
[54] **TUYAU POUR LE TRANSPORT DE FLUIDES DANS LES SYSTEMES CVC ET DEPOT COMPOSITE POUR UN TEL TUYAU**  
[72] PILONE, NICOLA, US  
[71] PTUBES, INC., US  
[22] 2021-10-07  
[41] 2021-12-02  
[30] US (17/397,264) 2021-08-09

[21] **3,133,669**  
[13] A1

[51] **Int.Cl. F24F 1/26 (2011.01) B32B 1/08 (2006.01) B32B 27/08 (2006.01) F16L 9/14 (2006.01) F16L 59/10 (2006.01) F16L 59/153 (2006.01)**  
[25] EN  
[54] **PIPE FOR CONVEYING FLUIDS IN HVACR SYSTEMS**  
[54] **TUYAU POUR LE TRANSPORT DE FLUIDES DANS LES SYSTEMES CVC**  
[72] PILONE, NICOLA, US  
[71] PTUBES, INC., US  
[22] 2021-10-07  
[41] 2021-12-02  
[30] US (17/397,285) 2021-08-09

[21] **3,137,335**  
[13] A1

[51] **Int.Cl. F02M 47/04 (2006.01) F02B 53/10 (2006.01) F02M 57/02 (2006.01)**  
[25] EN  
[54] **FUEL INJECTION SYSTEM FOR AIRCRAFT ENGINE**  
[54] **SYSTEME D-INJECTION DE CARBURANT POUR UN MOTEUR D~AERONEF**  
[72] BERGERON, SEBASTIEN, CA  
[72] PLAMONDON, ETIENNE, CA  
[72] THOMASSIN, JEAN, CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2021-05-14  
[41] 2021-12-02  
[30] US (16/890,660) 2020-06-02

# PCT Applications Entering the National Phase

## Demandes PCT entrant en phase nationale

[21] <b>3,090,282</b> [13] A1	[21] <b>3,126,560</b> [13] A1	[21] <b>3,134,376</b> [13] A1
[51] <b>Int.Cl. C02F 11/00 (2006.01) C02F 11/18 (2006.01) D21C 11/00 (2006.01)</b> [25] EN [54] <b>INTEGRATED SLUDGE PULPING AND HYDROLYZING EQUIPMENT</b> [54] <b>EQUIPEMENT D'HYDROLYSE ET DE DEPULPAGE DE BOUE INTEGRE</b> [72] DAI, JU YING, CA [71] NEWWAY TECHNOLOGIES LTD., CA [85] 2020-08-04 [86] 2020-06-04 (PCT/IB2020/055262) [87] (3090282)	[51] <b>Int.Cl. A61K 38/12 (2006.01) A61P 31/14 (2006.01)</b> [25] EN [54] <b>TREATMENT OR PREVENTION OF CORONAVIRIDAE INFECTION</b> [54] <b>TRAITEMENT OU PREVENTION DES INFECTIONS DE CORONAVIRIDAE</b> [72] CUI, JIAN, CN [72] HU, MINGLONG, CN [72] YU, YAO, CN [72] ZHAO, ALONG, CN [72] ZHANG, FAMING, CN [71] WATERSTONE PHARMACEUTICALS (WUHAN) CO., LTD., CN [85] 2021-07-30 [86] 2020-06-04 (PCT/CN2020/094431) [87] (3126560)	[51] <b>Int.Cl. A22C 21/00 (2006.01)</b> [25] EN [54] <b>TRANSPORT DEVICE FOR TRANSPORTING EVISCERATED POULTRY CARCASSES OR PARTS THEREOF</b> [54] <b>DISPOSITIF DE TRANSPORT SERVANT A TRANSPORTER DES CORPS DE VOLAILLES EVISCERES OU DES PARTIES DE CEUX-CI</b> [72] RIGGERT, LASSE, DE [72] FISCHER, VALENTIN, DE [71] NORDISCHER MASCHINENBAU RUD. BAADER GMBH + CO. KG, DE [85] 2021-10-20 [86] 2020-04-22 (PCT/EP2020/061205) [87] (WO2020/216787) [30] EP (19171118.3) 2019-04-25
[21] <b>3,101,349</b> [13] A1	[21] <b>3,134,375</b> [13] A1	[21] <b>3,134,377</b> [13] A1
[51] <b>Int.Cl. F24F 1/037 (2019.01) F24F 1/03 (2019.01) F24F 1/032 (2019.01) F16M 13/02 (2006.01) F24F 6/04 (2006.01)</b> [25] EN [54] <b>EVAPORATIVE AIR COOLING TOWER</b> [54] <b>TOUR DE REFROIDISSEMENT D'AIR PAR EVAPORATION</b> [72] BARLETTANO, SCOTT, US [71] ONTEL PRODUCTS CORPORATION, US [85] 2021-01-27 [86] 2020-10-13 (PCT/US2020/055377) [87] (3101349) [30] US (29/736,364) 2020-05-29 [30] US (16/897,678) 2020-06-10 [30] US (16/911,797) 2020-06-25	[51] <b>Int.Cl. B29C 64/165 (2017.01) B33Y 30/00 (2015.01) B29C 64/255 (2017.01)</b> [25] EN [54] <b>CONSTRUCTION BOX SYSTEM FOR A 3D PRINTER, 3D PRINTER, 3D PRINTER SYSTEM, USE OF THE CONSTRUCTION BOX SYSTEM, AND 3D PRINTING METHOD</b> [54] <b>SYSTEME DE CAISSE DE CONSTRUCTION DESTINE A UNE IMPRIMANTE 3D, IMPRIMANTE 3D, SYSTEME D'IMPRIMANTE 3D, UTILISATION DU SYSTEME DE CAISSE DE CONSTRUCTION ET PROCEDE D'IMPRESSION 3D</b> [72] HUBER, THOMAS, DE [72] FISCHER, MICHAEL, DE [72] LADEWIG, ROLAND, DE [71] EXONE GMBH, DE [85] 2021-10-20 [86] 2020-05-07 (PCT/EP2020/062666) [87] (WO2020/225345) [30] EP (19173550.5) 2019-05-09	[51] <b>Int.Cl. A61B 17/00 (2006.01) A61B 17/04 (2006.01) A61B 17/06 (2006.01)</b> [25] EN [54] <b>SUTURE SECURITY DEVICE FOR MINIMALLY INVASIVE SURGICAL SUTURING</b> [54] <b>DISPOSITIF DE SECURITE DE SUTURE POUR SUTURES CHIRURGICALES MINIMALEMENT INVASIVES</b> [72] SAUER, JUDE S., US [71] LSI SOLUTIONS, INC., US [85] 2021-10-20 [86] 2020-04-24 (PCT/US2020/029688) [87] (WO2020/219791) [30] US (62/838,281) 2019-04-24

## PCT Applications Entering the National Phase

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[21] **3,134,379**  
[13] A1

[51] **Int.Cl. A61K 35/761 (2015.01) C07K 14/015 (2006.01) C12N 15/35 (2006.01)**

[25] EN

[54] **NOVEL AAV CAPSIDS AND COMPOSITIONS CONTAINING SAME**

[54] **NOUVELLES CAPSIDES DE AAV ET COMPOSITIONS LES CONTENANT**

[72] NAMBIAR, KALYANI, US

[72] WILSON, JAMES M., US

[72] WANG, QIANG, US

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

[85] 2021-10-20

[86] 2020-04-28 (PCT/US2020/030266)

[87] (WO2020/223231)

[30] US (62/840,184) 2019-04-29

[30] US (62/924,095) 2019-10-21

[30] US (62/913,314) 2019-10-10

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[21] **3,134,382**  
[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01) G06N 20/00 (2019.01) G16B 40/00 (2019.01)**

[25] EN

[54] **CLASSIFIERS FOR DETECTION OF ENDOMETRIOSIS**

[54] **CLASSIFICATEURS POUR LA DETECTION DE L'ENDOMETRIOSE**

[72] TAYLOR, HUGH, US

[72] BOWERMAN, HEATHER, US

[71] YALE UNIVERSITY, US

[71] DOT LABORATORIES, INC., US

[85] 2021-10-20

[86] 2020-04-28 (PCT/US2020/030284)

[87] (WO2020/223238)

[30] US (62/840,300) 2019-04-29

[30] US (PCT/US2019/059006) 2019-10-31

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[21] **3,134,387**  
[13] A1

[51] **Int.Cl. C12Q 1/6893 (2018.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR TARGETING DIROFILARIA IMMITIS AND DIROFILARIA REPENS**

[54] **SYSTEMES ET PROCEDES DE CIBLAGE DE DIROFILARIA IMMITIS ET DE DIROFILARIA REPENS**

[72] SAUNDERS, LORI J., US

[72] WILLIAMS, STEVEN A., US

[72] PILOTTE, NILS, US

[71] SMITH COLLEGE, US

[85] 2021-10-20

[86] 2020-04-27 (PCT/US2020/030111)

[87] (WO2020/220030)

[30] US (62/839,136) 2019-04-26

[30] US (62/871,463) 2019-07-08

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[21] **3,134,388**  
[13] A1

[51] **Int.Cl. G06Q 10/02 (2012.01) G06Q 10/04 (2012.01) G06Q 30/08 (2012.01) G06Q 50/14 (2012.01)**

[25] EN

[54] **SUBSCRIPTION BASED TRAVEL SERVICE**

[54] **SERVICE DE VOYAGE A BASE D'ABONNEMENT**

[72] HANDLER, BRENT, US

[72] HOLLOWAY, CODY, US

[72] GANDARILLA, JESUS, US

[72] RODRIGUEZ, RODOLFO, US

[72] ROYBAL, ASHLEY, US

[72] SMITH, CHRISTOPHER, US

[72] HANDLER, BRAD, US

[71] INSPIRATO, US

[85] 2021-10-20

[86] 2020-02-28 (PCT/US2020/020396)

[87] (WO2020/219161)

[30] US (16/390,752) 2019-04-22

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[21] **3,134,422**  
[13] A1

[51] **Int.Cl. G06F 8/33 (2018.01) G06F 8/40 (2018.01)**

[25] EN

[54] **SYSTEM AND METHOD OF COMPUTER-ASSISTED COMPUTER PROGRAMMING**

[54] **SYSTEME ET PROCEDE DE PROGRAMMATION ASSISTEE PAR ORDINATEUR**

[72] TAVOR, AMON, IL

[71] AI GAMES LLC, IL

[85] 2021-10-21

[86] 2020-05-07 (PCT/IL2020/050503)

[87] (WO2020/230119)

[30] US (62/845,902) 2019-05-10

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[21] **3,134,466**  
[13] A1

[51] **Int.Cl. G05B 19/418 (2006.01)**

[25] EN

[54] **METHOD FOR COMMUNICATION IN A MACHINE TOOL SYSTEM AND A COMMUNICATION SYSTEM THEREFOR**

[54] **PROCEDE DE COMMUNICATION DANS UN SYSTEME DE MACHINE-OUTIL ET SYSTEME DE COMMUNICATION ASSOCIE**

[72] HOLMSTROM, TENNERTH, SE

[71] AB SANDVIK COROMANT, SE

[85] 2021-10-21

[86] 2020-04-21 (PCT/EP2020/061084)

[87] (WO2020/224949)

[30] EP (19172573.8) 2019-05-03

## Demandes PCT entrant en phase nationale

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[21] **3,134,468**  
[13] A1

[51] **Int.Cl. A61K 35/761 (2015.01) C07K 14/015 (2006.01) C12N 15/35 (2006.01)**

[25] EN

[54] **NOVEL AAV CAPSIDS AND COMPOSITIONS CONTAINING SAME**

[54] **NOUVELLES CAPSIDES DE VAA ET COMPOSITIONS LES CONTENANT**

[72] NAMBIAR, KALYANI, US

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

[85] 2021-10-21

[86] 2020-04-28 (PCT/US2020/030273)

[87] (WO2020/223232)

[30] US (62/840,184) 2019-04-29

[30] US (62/924,095) 2019-10-21

[30] US (62/913,314) 2019-10-10

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[21] **3,134,485**  
[13] A1

[51] **Int.Cl. C12N 9/24 (2006.01) C07K 19/00 (2006.01) C12N 9/26 (2006.01) C12N 15/86 (2006.01) C12N 15/864 (2006.01)**

[25] EN

[54] **COMPOSITIONS USEFUL FOR TREATMENT OF POMPE DISEASE**

[54] **COMPOSITIONS POUR LE TRAITEMENT DE LA MALADIE DE POMPE**

[72] WILSON, JAMES M., US

[72] HORDEAUX, JULIETTE, US

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

[85] 2021-10-21

[86] 2020-04-29 (PCT/US2020/030493)

[87] (WO2020/223362)

[30] US (62/840,911) 2019-04-30

[30] US (62/913,401) 2019-10-10

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[21] **3,134,494**  
[13] A1

[51] **Int.Cl. C07H 1/00 (2006.01) C07H 15/08 (2006.01) C07H 21/00 (2006.01)**

[25] EN

[54] **PROCESS FOR THE PREPARATION OF GALNAC PHOSPHORAMIDITE EPIMERS**

[54] **PROCEDE POUR LA PREPARATION D'EPIMERES DE PHOSPHORAMIDITE GALNAC**

[72] BREITLER, SIMON ADOLF, CH

[72] PUENTENER, KURT, CH

[71] F. HOFFMANN-LA ROCHE AG, CH

[85] 2021-10-21

[86] 2020-05-18 (PCT/EP2020/063749)

[87] (WO2020/234208)

[30] EP (19175309.4) 2019-05-20

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[21] **3,134,507**  
[13] A1

[51] **Int.Cl. A61K 35/761 (2015.01) C07K 14/015 (2006.01) C12N 15/35 (2006.01)**

[25] EN

[54] **NOVEL AAV CAPSIDS AND COMPOSITIONS CONTAINING SAME**

[54] **NOUVELLES CAPSIDES DE VAA ET COMPOSITIONS LES CONTENANT**

[72] NAMBIAR, KALYANI, US

[72] WILSON, JAMES M., US

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

[85] 2021-10-21

[86] 2020-04-28 (PCT/US2020/030281)

[87] (WO2020/223236)

[30] US (62/840,184) 2019-04-29

[30] US (62/924,095) 2019-10-21

[30] US (62/913,314) 2019-10-10

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[21] **3,134,523**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01)**

[25] EN

[54] **COMPOSITIONS USEFUL FOR TREATMENT OF POMPE DISEASE**

[54] **COMPOSITIONS DESTINEES AU TRAITEMENT DE LA MALADIE DE POMPE**

[72] WILSON, JAMES M., US

[72] HORDEAUX, JULIETTE, US

[72] DO, HUNG, V., US

[72] GOTSCHALL, RUSSELL, US

[72] TUSKE, STEVEN, US

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

[71] AMICUS THERAPEUTICS, INC., US

[85] 2021-10-21

[86] 2020-04-29 (PCT/US2020/030484)

[87] (WO2020/223356)

[30] US (62/840,911) 2019-04-30

[30] US (62/913,401) 2019-10-10

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[21] **3,134,533**  
[13] A1

[51] **Int.Cl. C10B 57/08 (2006.01) C10L 9/06 (2006.01)**

[25] EN

[54] **LOW-SULFUR COAL PRODUCTION METHOD**

[54] **PROCEDE DE PRODUCTION DE CHARBON A FAIBLE TENEUR EN SOUFRE**

[72] MURAI, RYOTA, JP

[72] SUMI, IKUHIRO, JP

[72] SUGAWARA, KATSUYASU, JP

[72] KATO, TAKAHIRO, JP

[71] JFE STEEL CORPORATION, JP

[85] 2021-10-21

[86] 2020-04-20 (PCT/JP2020/017074)

[87] (WO2020/218248)

[30] JP (2019-082750) 2019-04-24

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## PCT Applications Entering the National Phase

[21] **3,134,547**  
[13] A1

[51] **Int.Cl. C10B 57/08 (2006.01) C10L 9/06 (2006.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING LOW-SULFUR COAL**  
[54] **PROCEDE DE PRODUCTION DE CHARBON A FAIBLE TENEUR EN SOUFRE**  
[72] MURAI, RYOTA, JP  
[72] SUMI, IKUHIRO, JP  
[72] SUGAWARA, KATSUYASU, JP  
[72] KATO, TAKAHIRO, JP  
[71] JFE STEEL CORPORATION, JP  
[85] 2021-10-21  
[86] 2020-04-20 (PCT/JP2020/017060)  
[87] (WO2020/218243)  
[30] JP (2019-082733) 2019-04-24  
[30] JP (2019-083176) 2019-04-24

[21] **3,134,551**  
[13] A1

[51] **Int.Cl. A23K 10/30 (2016.01) A23L 33/105 (2016.01) A61K 36/538 (2006.01) A61K 36/718 (2006.01) A61P 1/00 (2006.01) A61P 29/00 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITION COMPRISING MIXTURE EXTRACT OF COPTIS DELTOIDEA AND SCHIZONEPETA TENUIFOLIA AS ACTIVE INGREDIENT FOR PREVENTION OR TREATMENT OF INFLAMMATORY BOWEL DISEASE**  
[54] **COMPOSITION PHARMACEUTIQUE COMPRENANT UN EXTRAIT DE MELANGE DE COPTIS DELTODEA ET DE SCHIZONEPETA TENUIFOLIA EN TANT QUE PRINCIPE ACTIF POUR LA PREVENTION OU LE TRAITEMENT D'UNE MALADIE INTESTINALE INFLAMMATOIRE**  
[72] LEE, WONWOO, KR  
[72] LEE, DOO SUK, KR  
[71] HELIXMITH CO., LTD, KR  
[85] 2021-10-21  
[86] 2020-04-24 (PCT/KR2020/005475)  
[87] (WO2020/222470)  
[30] KR (10-2019-0050088) 2019-04-29

[21] **3,134,555**  
[13] A1

[51] **Int.Cl. C10G 1/00 (2006.01) C10G 1/10 (2006.01) C10G 3/00 (2006.01) C10G 19/02 (2006.01) C10G 31/08 (2006.01) C10G 67/10 (2006.01)**  
[25] EN  
[54] **ALKALI-ENHANCED HYDROTHERMAL PURIFICATION OF PLASTIC PYROLYSIS OILS**  
[54] **PURIFICATION HYDROTHERMALE AMELIOREE PAR UN ALCALI D'HUILES DE PYROLYSE DU PLASTIQUE**  
[72] PAASIKALLIO, VILLE, FI  
[72] TOUKONIITTY, BLANKA, FI  
[72] PASANEN, JUKKA-PEKKA, FI  
[71] NESTE OYJ, FI  
[85] 2021-10-21  
[86] 2020-05-26 (PCT/EP2020/064512)  
[87] (WO2020/239729)  
[30] FI (20195446) 2019-05-28

[21] **3,134,563**  
[13] A1

[51] **Int.Cl. G05B 19/408 (2006.01)**  
[25] EN  
[54] **METHOD FOR ESTABLISHING COMMUNICATION IN A MACHINE TOOL SYSTEM AND A COMMUNICATION APPARATUS THEREFOR**  
[54] **PROCEDE D'ETABLISSEMENT DE COMMUNICATION DANS UN SYSTEME DE MACHINE-OUTIL ET SON APPAREIL DE COMMUNICATION**  
[72] HOLMSTROM, TENNERTH, SE  
[72] GABERT, ANDERS, SE  
[71] AB SANDVIK COROMANT, SE  
[85] 2021-10-21  
[86] 2020-04-02 (PCT/EP2020/059439)  
[87] (WO2020/224880)  
[30] EP (19172582.9) 2019-05-03

[21] **3,134,564**  
[13] A1

[51] **Int.Cl. A61K 31/135 (2006.01) A61K 31/192 (2006.01) A61K 31/366 (2006.01)**  
[25] EN  
[54] **INHIBITING USP19**  
[54] **INHIBITION DE L'USP19**  
[72] MARCIN, LAWRENCE, US  
[72] HAN, BINGSONG, US  
[72] IOANNIDIS, STEPHANOS, US  
[72] KAYSER-BRICKER, KATHERINE, US  
[72] LIU, CUIXIAN, US  
[72] TALBOT, ADAM, US  
[71] VALO HEALTH, INC., US  
[71] INTEGRAL HEALTH HOLDINGS, LLC, US  
[85] 2021-10-21  
[86] 2020-05-06 (PCT/US2020/031608)  
[87] (WO2020/227365)  
[30] US (62/843,801) 2019-05-06  
[30] US (62/857,598) 2019-06-05

[21] **3,134,565**  
[13] A1

[51] **Int.Cl. G06N 3/02 (2006.01) G06N 3/04 (2006.01) G06N 3/08 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR INITIALIZING A NEURAL NETWORK**  
[54] **PROCEDE ET SYSTEME D'INITIALISATION D'UN RESEAU NEURONAL**  
[72] VARNO, FARSHED, CA  
[72] SOLEIMANI, BEHROUZ HAJI, CA  
[72] SAGHAYI, MARZIE, CA  
[72] DI JORIO, LISA, CA  
[72] MATWIN, STAN, CA  
[71] IMAGIA CYBERNETICS INC., CA  
[85] 2021-10-21  
[86] 2020-05-07 (PCT/IB2020/054350)  
[87] (3134565)  
[30] US (62/844,472) 2019-05-07

## Demandes PCT entrant en phase nationale

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[21] **3,134,567**  
[13] A1

[51] **Int.Cl. H02G 1/08 (2006.01) H02G 3/04 (2006.01) H02G 9/06 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR INTRODUCING A CABLE INTO A CONDUIT**

[54] **PROCEDE ET APPAREIL D'INTRODUCTION D'UN CABLE DANS UN CONDUIT**

[72] ALLEN, JERRY L., US

[71] WESCO EQUITY CORPORATION, US

[85] 2021-10-21

[86] 2020-04-14 (PCT/US2020/028067)

[87] (WO2020/219296)

[30] US (62/836,795) 2019-04-22

[30] US (16/841,719) 2020-04-07

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[21] **3,134,570**  
[13] A1

[51] **Int.Cl. C07K 1/04 (2006.01) C07K 1/06 (2006.01) C07K 7/06 (2006.01)**

[25] FR

[54] **METHOD FOR PRODUCING PEPTIDES OR PROTEINS OR PEPTIDOMIMETICS**

[54] **METHODE DE PRODUCTION DE PEPTIDES OU PROTEINES OU PEPTIDOMIMETIQUES**

[72] YOUTE TENDOUNG, JEAN-JACQUES, FR

[72] SERRE, AUDREY, FR

[71] STRAINCHEM, FR

[85] 2021-10-21

[86] 2020-05-04 (PCT/FR2020/000158)

[87] (WO2020/221970)

[30] FR (1904604) 2019-05-02

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[21] **3,134,572**  
[13] A1

[51] **Int.Cl. A61K 31/519 (2006.01) A61P 35/00 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **AMORPHOUS PI3K INHIBITOR AND PHARMACEUTICAL COMPOSITION COMPRISING SAME**

[54] **INHIBITEUR PI3K AMORPHE ET COMPOSITION PHARMACEUTIQUE LE COMPRENANT**

[72] KIM, SEONG HEON, KR

[72] LEE, JOON KWANG, KR

[72] SUN, YONG HO, KR

[72] KIM, JI HAN, KR

[71] BORYUNG PHARMACEUTICAL CO., LTD., KR

[85] 2021-10-21

[86] 2020-05-08 (PCT/IB2020/054365)

[87] (WO2020/225782)

[30] KR (10-2019-0054507) 2019-05-09

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[21] **3,134,573**  
[13] A1

[51] **Int.Cl. B22F 8/00 (2006.01) B22F 9/04 (2006.01)**

[25] EN

[54] **MECHANICALLY ALLOYED POWDER FEEDSTOCK**

[54] **CHARGE D'ALIMENTATION EN POUDRE ALLIEE MECANIQUEMENT**

[72] BADWE, SUNIL BHALCHANDRA, US

[72] REDJDAL, MAKHLOUF, US

[72] TURCHETTI, SCOTT, US

[71] 6K INC., US

[85] 2021-10-21

[86] 2020-04-29 (PCT/US2020/030487)

[87] (WO2020/223358)

[30] US (62/840,607) 2019-04-30

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[21] **3,134,577**  
[13] A1

[51] **Int.Cl. A61K 35/644 (2015.01) A61K 38/44 (2006.01)**

[25] EN

[54] **BIOFILM DISRUPTION LEADING TO MICROBIAL DESTRUCTION**

[54] **PERTURBATION DE BIOFILM CONDUISANT A UNE DESTRUCTION MICROBIENNE**

[72] SAMPSON, RICHARD, US

[72] SAMPSON, ALLISON, US

[72] MIALKOWSKI, JAMES ANDREW, US

[72] NIETO, MAURICIO MATA, US

[71] DRIPPING WET WATER, INC., US

[85] 2021-10-21

[86] 2020-04-29 (PCT/US2020/030373)

[87] (WO2020/223287)

[30] US (62/842,090) 2019-05-02

[30] US (16/859,170) 2020-04-27

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[21] **3,134,579**  
[13] A1

[51] **Int.Cl. C01G 35/00 (2006.01) H01M 10/0525 (2010.01) C30B 29/22 (2006.01)**

[25] EN

[54] **LITHIUM LANTHANUM ZIRCONIUM OXIDE (LLZO) POWDER**

[54] **POUDRE D'OXYDE DE LITHIUM, DE LANTHANE ET DE ZIRCONIUM (LLZO)**

[72] WROBEL, GREGORY, US

[72] HOLMAN, RICHARD, US

[72] PAL, ANGSHUMAN, US

[72] HADIDI, KAMAL, US

[71] 6K INC., US

[85] 2021-10-21

[86] 2020-04-29 (PCT/US2020/030510)

[87] (WO2020/223374)

[30] US (62/841,039) 2019-04-30

## PCT Applications Entering the National Phase

[21] **3,134,580**  
[13] A1

[51] **Int.Cl. B22F 3/02 (2006.01) C10M 105/22 (2006.01) C10M 105/32 (2006.01) C10M 105/58 (2006.01) C10M 105/68 (2006.01)**

[25] EN

[54] **MIXED POWDER FOR POWDER METALLURGY**

[54] **POUDRE MELANGEE POUR METALLURGIE DES POUDRES**

[72] SHIMAMOTO, HANAKO, JP

[72] MATSUOKA, RYOSUKE, JP

[72] ASHIZUKA, KOHSUKE, JP

[72] UNAMI, SHIGERU, JP

[71] JFE STEEL CORPORATION, JP

[85] 2021-10-21

[86] 2020-01-28 (PCT/JP2020/003003)

[87] (WO2020/217618)

[30] JP (2019-082258) 2019-04-23

[30] JP (PCT/JP2019/028551) 2019-07-19

[21] **3,134,582**  
[13] A1

[51] **Int.Cl. B01D 5/00 (2006.01) B29B 17/00 (2006.01)**

[25] EN

[54] **METHOD FOR PROCESSING PLASTIC WASTE PYROLYSIS GAS**

[54] **PROCEDE DE TRAITEMENT DE GAZ DE PYROLYSE DE DECHETS PLASTIQUES**

[72] KURKIJARVI, ANTTI, FI

[72] LEHTINEN, HANNU, FI

[72] KORHONEN, ESA, FI

[72] MATILAINEN, MIKKO, FI

[72] NYSTROM, MAX, FI

[71] NESTE OYJ, FI

[85] 2021-10-21

[86] 2020-06-01 (PCT/FI2020/050370)

[87] (WO2020/249854)

[30] FI (20195493) 2019-06-10

[21] **3,134,583**  
[13] A1

[51] **Int.Cl. A61F 2/97 (2013.01)**

[25] EN

[54] **CONSTRAINING MECHANISMS FOR SELECTIVE DEPLOYMENT AND ASSOCIATED METHODS**

[54] **MECANISMES DE CONTRAINTE DE DEPLOIEMENT SELECTIF ET PROCEDES ASSOCIES**

[72] SKELTON, TYSON J., US

[71] W. L. GORE & ASSOCIATES, INC., US

[85] 2021-10-21

[86] 2019-05-10 (PCT/US2019/031769)

[87] (WO2020/231388)

[21] **3,134,584**  
[13] A1

[51] **Int.Cl. A61M 60/50 (2021.01) A61M 60/135 (2021.01) A61M 60/205 (2021.01)**

[25] EN

[54] **USE OF CARDIAC ASSIST DEVICE TO IMPROVE KIDNEY FUNCTION**

[54] **UTILISATION D'UN DISPOSITIF D'ASSISTANCE CARDIAQUE POUR AMELIORER LA FONCTION RENALE**

[72] JOSEPHY, NOAM, US

[72] CURRAN, JERALD WAYNE, US

[72] PARKS, RANDI, US

[71] ABIOMED, INC., US

[85] 2021-10-21

[86] 2020-05-07 (PCT/US2020/031861)

[87] (WO2020/227521)

[30] US (16/406,896) 2019-05-08

[21] **3,134,585**  
[13] A1

[51] **Int.Cl. C07D 403/02 (2006.01) A61K 31/454 (2006.01) A61P 19/02 (2006.01) A61P 37/02 (2006.01) C07D 413/02 (2006.01)**

[25] EN

[54] **HETEROCYCLIC COMPOUNDS, USES THEREOF, AND COMPOSITIONS CONTAINING THE SAME**

[54] **COMPOSES HETEROCYCLIQUES, UTILISATIONS CONNEXES ET COMPOSITIONS LES COMPRENANT**

[72] FU, XIN-YUAN, CN

[72] LU, CENBIN, CN

[72] LIU, XINYU, CN

[72] LUFEL, CHENGCHEN, CN

[72] ZHOU, YI, CN

[71] GENEROS BIOPHARMA LTD., CN

[85] 2021-10-21

[86] 2020-04-26 (PCT/CN2020/087008)

[87] (WO2020/216378)

[30] CN (201910342107.7) 2019-04-26

[30] US (62/861,857) 2019-06-14

[21] **3,134,586**  
[13] A1

[51] **Int.Cl. A61B 17/04 (2006.01) A61B 17/06 (2006.01) A61L 17/00 (2006.01)**

[25] EN

[54] **CONTINUOUS TETHERED TISSUE ANCHOR AND ASSOCIATED SYSTEMS AND METHODS**

[54] **ANCRAGE TISSULAIRE ATTACHE EN CONTINU ET SYSTEMES ET PROCEDES ASSOCIES**

[72] YOUNG, PATRICK S., US

[71] W. L. GORE & ASSOCIATES, INC., US

[85] 2021-10-21

[86] 2020-05-08 (PCT/US2020/032168)

[87] (WO2020/227662)

[30] US (62/845,666) 2019-05-09

[30] US (62/965,595) 2020-01-24



## Demandes PCT entrant en phase nationale

[21] **3,134,587**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 1/00 (2006.01)**  
[25] EN  
[54] **MIRIKIZUMAB FOR USE IN A METHOD OF TREATING CROHN'S DISEASE**  
[54] **MIRIKIZUMAB DESTINE A ETRE UTILISE DANS UN PROCEDE DE TRAITEMENT DE LA MALADIE DE CROHN**  
[72] FRIEDRICH, STUART WILLIAM, US  
[72] POLLACK, PAUL FREDERICK, US  
[72] TUTTLE, JAY LAWRENCE, US  
[71] ELI LILLY AND COMPANY, US  
[85] 2021-10-21  
[86] 2020-04-15 (PCT/US2020/028273)  
[87] (WO2020/219314)  
[30] US (62/836,910) 2019-04-22

[21] **3,134,677**  
[13] A1

[51] **Int.Cl. E21B 33/12 (2006.01) E21B 34/06 (2006.01) E21B 34/10 (2006.01)**  
[25] EN  
[54] **WELLBORE PLUG**  
[54] **BOUCHON DE Puits DE FORAGE**  
[72] BUCKLAND, JONATHAN PETER, GB  
[71] WESTFIELD ENGINEERING & TECHNOLOGY LTD, GB  
[85] 2021-10-22  
[86] 2020-04-22 (PCT/GB2020/050997)  
[87] (WO2020/217051)  
[30] GB (1905704.1) 2019-04-24  
[30] GB (1916743.6) 2019-11-18

[21] **3,134,689**  
[13] A1

[51] **Int.Cl. A61K 35/28 (2015.01) A61P 37/02 (2006.01) C07K 14/805 (2006.01)**  
[25] EN  
[54] **CONDITIONING METHODS FOR GENE THERAPY**  
[54] **METHODES DE CONDITIONNEMENT POUR THERAPIE GENIQUE**  
[72] BOITANO, ANTHONY, US  
[72] COOKE, MICHAEL, US  
[72] PALCHAUDHURI, RAHUL, US  
[72] PEARSE, BRADLEY R., US  
[71] MAGENTA THERAPEUTICS, INC., US  
[85] 2021-10-22  
[86] 2020-04-24 (PCT/US2020/029934)  
[87] (WO2020/219964)  
[30] US (62/838,278) 2019-04-24  
[30] US (62/944,925) 2019-12-06

[21] **3,134,703**  
[13] A1

[51] **Int.Cl. E04H 12/04 (2006.01) F03D 13/20 (2016.01) B32B 21/13 (2006.01) B32B 21/14 (2006.01)**  
[25] EN  
[54] **WOOD CONNECTION AND A LAMINATED WOOD TOWER COMPRISING A PLURALITY OF SUCH WOOD CONNECTIONS**  
[54] **ELEMENT DE LIAISON EN BOIS ET TOUR STRATIFIEE EN BOIS COMPRENANT UNE PLURALITE DE CES ELEMENTS DE LIAISON EN BOIS**  
[72] DOLERUD, ERIK, SE  
[72] WICKSTROM, ANDERS, SE  
[71] MODVION AB, SE  
[85] 2021-10-22  
[86] 2020-05-07 (PCT/SE2020/050469)  
[87] (WO2020/226562)  
[30] SE (1950561-9) 2019-05-09

[21] **3,134,716**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2012.01)**  
[25] EN  
[54] **RFID-BASED INVENTORY TRACKING SYSTEM**  
[54] **SYSTEME DE SUIVI D'INVENTAIRE BASE SUR LA RFID**  
[72] SCHOENING, KENNETH F., US  
[71] A-1 PACKAGING SOLUTIONS, INC., US  
[85] 2021-10-22  
[86] 2020-04-22 (PCT/US2020/029308)  
[87] (WO2020/219537)  
[30] US (62/837,138) 2019-04-22

[21] **3,134,718**  
[13] A1

[51] **Int.Cl. B01D 53/047 (2006.01) C01B 32/50 (2017.01) C01B 3/00 (2006.01)**  
[25] EN  
[54] **A PRESSURE SWING ADSORPTION PROCESS FOR PRODUCING HYDROGEN AND CARBON DIOXIDE**  
[54] **PROCEDE D'ADSORPTION MODULEE EN FREQUENCE POUR PRODUCTION D'HYDROGENE ET DIOXYDE DE CARBONE**  
[72] STREB, ANNE, CH  
[72] HEFTI, MAX, CH  
[72] GAZZANI, MATTEO, NL  
[72] MAZZOTTI, MARCO, CH  
[71] CASALE SA, CH  
[85] 2021-10-22  
[86] 2020-04-21 (PCT/EP2020/061109)  
[87] (WO2020/221629)  
[30] EP (19172384.0) 2019-05-02

## PCT Applications Entering the National Phase

[21] **3,134,725**  
[13] A1

[51] **Int.Cl. A21D 10/00 (2006.01) A21D 13/40 (2017.01) A23C 11/06 (2006.01)**

[25] EN

[54] **EGG REPLACER AND COMPOSITIONS COMPRISING THE EGG REPLACER, AND METHODS FOR PRODUCING THE SAME**

[54] **SUBSTITUT D'OEUF ET COMPOSITIONS COMPRENANT LE SUBSTITUT D'OEUF, ET LEURS PROCEDES DE PRODUCTION**

[72] GEISTLINGER, TIMOTHY, US  
[72] GLICKSBERG, JONATHAN R., US  
[72] JHALA, RAVIRAJ SINGH P., US  
[72] WAGONER, TY B., US  
[71] PERFECT DAY, INC., US  
[85] 2021-10-22  
[86] 2020-04-22 (PCT/US2020/029391)  
[87] (WO2020/219595)  
[30] US (62/837,024) 2019-04-22

[21] **3,134,728**  
[13] A1

[51] **Int.Cl. C09D 11/03 (2014.01) C09D 11/10 (2014.01)**

[25] EN

[54] **HARD RESIN SOLUTION AND WATER-BASED OVERPRINT VARNISH INCLUDING AN AMINE COMPOUND COMPRISING HYDROXYL GROUPS**

[54] **SOLUTION DE RESINE DURE ET VERNIS DE SURIMPRESSIION A BASE D'EAU COMPRENANT UN COMPOSE AMINE COMPRENANT DES GROUPES HYDROXYLES**

[72] GARBER, ANDRE, DE  
[72] SCHORER, JOACHIM, DE  
[71] HUBERGROUP DEUTSCHLAND GMBH, DE  
[85] 2021-10-22  
[86] 2021-02-23 (PCT/EP2021/054407)  
[87] (WO2021/175654)  
[30] EP (20160752.0) 2020-03-03

[21] **3,134,729**  
[13] A1

[51] **Int.Cl. C07K 14/415 (2006.01) C12N 9/06 (2006.01) C12N 15/53 (2006.01) C12N 15/81 (2006.01) C12P 19/44 (2006.01)**

[25] EN

[54] **KAURENOIC ACID 13-HYDROXYLASE (KAH) VARIANTS AND USES THEREOF**

[54] **VARIANTS DE L'ACIDE KAURENOIQUE 13-HYDROXYLASE (KAH) ET LEURS UTILISATIONS**

[72] KLEIN, ANDREW P., US  
[72] LUND, SEAN, US  
[72] WICHMANN, GALE, US  
[72] KORYAKINA, IRINA, US  
[72] HOGAN, KYLE, US  
[72] BORISOVA, SVETLANA, US  
[71] AMYRIS, INC., US  
[85] 2021-10-22  
[86] 2020-05-01 (PCT/US2020/031171)  
[87] (WO2020/227148)  
[30] US (62/842,810) 2019-05-03

[21] **3,134,750**  
[13] A1

[51] **Int.Cl. A61K 31/519 (2006.01) A61P 17/00 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **A 7H-PYRROLO[2,3-D]PYRIMIDINE JAK-INHIBITOR**

[54] **INHIBITEUR DE JAK 7H-PYRROLO[2,3-D]PYRIMIDINE**

[72] HU, JINGDAN, US  
[72] WOODS, TIMOTHY ANDREW, US  
[71] ELANCO US INC., US  
[85] 2021-10-22  
[86] 2020-04-22 (PCT/US2020/029283)  
[87] (WO2020/219524)  
[30] US (62/837,972) 2019-04-24

[21] **3,134,752**  
[13] A1

[51] **Int.Cl. B60C 11/24 (2006.01) B60C 23/04 (2006.01) B60W 40/12 (2012.01)**

[25] EN

[54] **TRUCK TIRE SCRUB INTERVENTION**

[54] **INTERVENTION SUR LE RIPAGE D'UN PNEU DE CAMION**

[72] MERRILL, ZACHARY ALEXANDER, US  
[71] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR  
[85] 2021-10-22  
[86] 2019-05-15 (PCT/US2019/032507)  
[87] (WO2020/231430)

[21] **3,134,753**  
[13] A1

[51] **Int.Cl. E04B 2/78 (2006.01)**

[25] EN

[54] **STIFFENER FOR CONSTRUCTION ELEMENTS**

[54] **RAIDISSEUR POUR ELEMENTS DE CONSTRUCTION**

[72] SAMINATHAN, KANAKAVEL, IN  
[72] S, VIKRAM, IN  
[72] AHMED, RIZWAN, IN  
[71] SAINT-GOBAIN PLACO, FR  
[85] 2021-10-22  
[86] 2020-04-20 (PCT/IN2020/050369)  
[87] (WO2020/217251)  
[30] IN (201941016268) 2019-04-24

[21] **3,134,754**  
[13] A1

[51] **Int.Cl. A23C 9/15 (2006.01)**

[25] EN

[54] **RECOMBINANT MILK PROTEINS AND COMPOSITIONS COMPRISING THE SAME**

[54] **PROTEINES DE LAIT DE RECOMBINAISON ET COMPOSITIONS LES COMPRENANT**

[72] GEISTLINGER, TIMOTHY, US  
[72] MEERMAN, HENDRIK, US  
[72] JENSEN, HEATHER, US  
[72] JHALA, RAVIRAJ SINGH P., US  
[71] PERFECT DAY, INC., US  
[85] 2021-10-22  
[86] 2020-04-22 (PCT/US2020/029392)  
[87] (WO2020/219596)  
[30] US (62/837,098) 2019-04-22

## Demandes PCT entrant en phase nationale

[21] **3,134,756**  
[13] A1

[51] **Int.Cl. A23L 33/00 (2016.01) G16H 20/60 (2018.01)**  
[25] EN  
[54] **FASTING-MIMICKING DIET (FMD) AS AN INTERVENTION FOR ALZHEIMER'S DISEASE (AD)**  
[54] **REGIME D'IMITATION DE JEUNE (FMD) EN TANT QU'INTERVENTION POUR LA MALADIE D'ALZHEIMER (AD)**  
[72] LONGO, VALTER D., US  
[72] WEI, MIN, US  
[72] RANGAN, PRIYA, US  
[71] UNIVERSITY OF SOUTHERN CALIFORNIA, US  
[85] 2021-10-22  
[86] 2020-04-30 (PCT/US2020/030793)  
[87] (WO2020/223522)  
[30] US (62/840,762) 2019-04-30

[21] **3,134,757**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/19 (2006.01) A61K 38/26 (2006.01)**  
[25] EN  
[54] **METHOD FOR PREPARING STABLE PEPTIDE FORMULATIONS**  
[54] **PROCEDE DE PREPARATION DE FORMULATIONS PEPTIDIQUES STABLES**  
[72] BROWN, GREGORY NELSON, US  
[72] VAN SCOIK, KURT GARD, US  
[71] ELI LILLY AND COMPANY, US  
[85] 2021-10-22  
[86] 2020-04-20 (PCT/US2020/028988)  
[87] (WO2020/219391)  
[30] US (62/839,246) 2019-04-26

[21] **3,134,761**  
[13] A1

[51] **Int.Cl. B25J 1/04 (2006.01)**  
[25] EN  
[54] **HEALTH AND SAFETY HANDLE**  
[54] **POIGNEE DE SANTE ET DE SECURITE**  
[72] GUAY, PATRICE, CA  
[71] GUAY, PATRICE, CA  
[85] 2021-10-22  
[86] 2020-04-24 (PCT/CA2020/050544)  
[87] (WO2020/215162)  
[30] US (62/839,206) 2019-04-26

[21] **3,134,762**  
[13] A1

[51] **Int.Cl. C07H 19/20 (2006.01) A61K 31/7064 (2006.01)**  
[25] EN  
[54] **DERIVATIVES OF GLYCEROMANNO-HEPTOSE PHOSPHATE AND THEIR USE IN MODULATING AN IMMUNE RESPONSE**  
[54] **DERIVES DE PHOSPHATE GLYCEROMANNO-HEPTOSE ET LEUR UTILISATION DANS LA MODULATION D'UNE REPOSE IMMUNITAIRE**  
[72] XU, TIAN, CN  
[72] XU, CONG, CN  
[72] LIU, DANYANG, CN  
[72] FAN, JIEQING, CN  
[71] SHANGHAI YAO YUAN BIOTECHNOLOGY CO., LTD., CN  
[85] 2021-10-22  
[86] 2020-04-24 (PCT/CN2020/086688)  
[87] (WO2020/216326)  
[30] CN (PCT/CN2019/084582) 2019-04-26

[21] **3,134,763**  
[13] A1

[51] **Int.Cl. C12P 7/42 (2006.01)**  
[25] EN  
[54] **PRODUCTION OF CHEMICALS FROM RENEWABLE SOURCES**  
[54] **PRODUCTION DE PRODUITS CHIMIQUES A PARTIR DE SOURCES RENOUVELABLES**  
[72] CHOKHAWALA, HARSHAL, US  
[72] KUCHENREUTHER, JONATHAN, US  
[72] GUTIERREZ, JORGE-ALONSO, US  
[72] TAI, YI-SHU, US  
[71] ZYMOCHEM, INC., US  
[85] 2021-10-22  
[86] 2020-04-25 (PCT/US2020/029981)  
[87] (WO2020/220001)  
[30] US (62/838,793) 2019-04-25  
[30] US (62/868,824) 2019-06-28

[21] **3,134,764**  
[13] A1

[51] **Int.Cl. A61K 9/10 (2006.01) A61K 9/107 (2006.01) A61K 31/352 (2006.01) A61P 25/28 (2006.01) A61P 27/02 (2006.01) C07D 311/58 (2006.01) C07D 311/60 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR USE OF CANNABINOIDS FOR NEUROPROTECTION**  
[54] **COMPOSITIONS ET METHODES D'UTILISATION DE CANNABINOIDES POUR LA NEUROPROTECTION**  
[72] HSU, ERIC, CA  
[72] KUMAR, UJENDRA, CA  
[72] SOMVANSHI, RISHI KUMAR, CA  
[72] ZOU, SHENGLONG, CA  
[71] INMED PHARMACEUTICALS INC., CA  
[85] 2021-10-22  
[86] 2020-04-24 (PCT/CA2020/050547)  
[87] (WO2020/215164)  
[30] US (62/838,216) 2019-04-24

[21] **3,134,918**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 47/68 (2017.01) A61P 35/02 (2006.01)**  
[25] EN  
[54] **ANTI-BCMA ANTIBODY CONJUGATE, COMPOSITIONS COMPRISING THE SAME, AND METHODS OF MAKING AND USING THE SAME**  
[54] **CONJUGUE D'ANTICORPS ANTI-BCMA, COMPOSITIONS LES COMPRENANT, ET PROCEDES DE FABRICATION ET D'UTILISATION DE CEUX-CI**  
[72] LEE, JOHN, US  
[72] STAFFORD, RYAN, US  
[72] YAM, ALICE, US  
[72] LI, XIAOFAN, US  
[72] YU, ABIGAIL, US  
[72] GAKHAL, AMANDEEP, US  
[71] CELGENE CORPORATION, US  
[85] 2021-10-25  
[86] 2020-05-01 (PCT/US2020/031067)  
[87] (WO2020/227110)  
[30] US (62/843,226) 2019-05-03

## PCT Applications Entering the National Phase

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[21] **3,134,934**  
[13] A1

[51] **Int.Cl. C12N 9/22 (2006.01) C12N 15/10 (2006.01) C12N 15/90 (2006.01)**  
[25] EN  
[54] **PROGRAMMABLE NUCLEASES AND METHODS OF USE**  
[54] **NUCLEASES PROGRAMMABLES ET PROCEDES D'UTILISATION**  
[72] HARRINGTON, LUCAS BENJAMIN, US  
[72] CHEN, JANICE SHA, US  
[72] WITTE, ISAAC PATERSON, US  
[71] MAMMOTH BIOSCIENCES, INC., US  
[85] 2021-10-25  
[86] 2020-05-01 (PCT/US2020/031030)  
[87] (WO2020/223634)  
[30] US (62/841,770) 2019-05-01

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[21] **3,134,947**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61P 3/00 (2006.01) A61P 25/02 (2006.01) A61P 27/02 (2006.01) A61P 35/00 (2006.01) C12N 15/11 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR MODULATING SPLICING OF ALTERNATIVE INTRONS**  
[54] **PROCEDES ET COMPOSITIONS PERMETTANT DE MODULER L'EPISSAGE D'INTRONS ALTERNATIFS**  
[72] AZNAREZ, ISABEL, US  
[71] STROKE THERAPEUTICS, INC., US  
[85] 2021-10-25  
[86] 2020-04-24 (PCT/US2020/029953)  
[87] (WO2020/219977)  
[30] US (62/839,572) 2019-04-26

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[21] **3,134,950**  
[13] A1

[51] **Int.Cl. B29C 64/124 (2017.01) B29C 64/386 (2017.01) A61L 27/52 (2006.01) A61F 2/06 (2013.01)**  
[25] EN  
[54] **MULTIVASCULAR NETWORKS AND FUNCTIONAL INTRAVASCULAR TOPOLOGIES WITHIN BIOCOMPATIBLE HYDROGELS**  
[54] **RESEAUX MULTIVASCULAIRES ET TOPOLOGIES INTRAVASCULAIRES FONCTIONNELLES DANS DES HYDROGELS BIOCOMPATIBLES**  
[72] MILLER, JORDAN, US  
[72] GRIGORYAN, BAGRAT, US  
[71] VOLUMETRIC BIOTECHNOLOGIES, INC., US  
[85] 2021-10-25  
[86] 2020-04-27 (PCT/US2020/030153)  
[87] (WO2020/220046)  
[30] US (62/839,358) 2019-04-26

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[21] **3,134,954**  
[13] A1

[51] **Int.Cl. G01S 13/75 (2006.01)**  
[25] EN  
[54] **WIRELESS SENSOR NETWORKS INSTALLATION, DEPLOYMENT, MAINTENANCE, AND OPERATION**  
[54] **INSTALLATION, DEPLOIEMENT, MAINTENANCE ET FONCTIONNEMENT DE RESEAUX DE CAPTEURS SANS FIL**  
[72] VOLKERINK, ERIK, US  
[72] KHOCHÉ, AJAY, US  
[72] FILLER, SCOTT, US  
[71] TRACKONOMY SYSTEMS, INC., US  
[85] 2021-10-25  
[86] 2020-04-24 (PCT/US2020/029859)  
[87] (WO2020/219910)  
[30] US (62/838,940) 2019-04-25  
[30] US (62/846,384) 2019-05-10  
[30] US (62/851,231) 2019-05-22

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[21] **3,134,966**  
[13] A1

[51] **Int.Cl. A61F 2/97 (2013.01)**  
[25] EN  
[54] **CONSTRAINING MECHANISMS FOR SELECTIVE DEPLOYMENT AND ASSOCIATED METHODS**  
[54] **MECANISMES DE CONTRAINTE POUR DEPLOIEMENT SELECTIF ET PROCEDES ASSOCIES**  
[72] BROYLES, MICHAEL R., US  
[72] STASTKA, JERRY J., US  
[71] W. L. GORE & ASSOCIATES, INC., US  
[85] 2021-10-25  
[86] 2019-05-10 (PCT/US2019/031761)  
[87] (WO2020/231387)

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[21] **3,134,986**  
[13] A1

[51] **Int.Cl. B03D 1/01 (2006.01)**  
[25] EN  
[54] **METHOD FOR FLOTATION OF A SILICATE-CONTAINING IRON ORE WITH A CATIONIC COLLECTOR**  
[54] **PROCEDE DE FLOTTATION D'UN MINERAI DE FER CONTENANT DU SILICATE AVEC UN COLLECTEUR CATIONIQUE**  
[72] MICHAILOVSKI, ALEXEJ, DE  
[72] PANCHENKO, ALEXANDER, DE  
[72] ZIPFEL, HANNES FERDINAND, DE  
[72] ERNST, MARTIN, DE  
[72] BUDEMBERG, GABRIELA, BR  
[72] DREBOV, NEDKO STEFANOV, DE  
[72] VON KROG, SYLVIA, DE  
[72] KUELZER, TAMARA, DE  
[72] PHAN, LONG, DE  
[71] BASF SE, DE  
[85] 2021-10-25  
[86] 2020-04-27 (PCT/EP2020/061604)  
[87] (WO2020/221685)  
[30] EP (19171801.4) 2019-04-30

## Demandes PCT entrant en phase nationale

[21] **3,134,989**  
[13] A1

[51] **Int.Cl. A61K 9/58 (2006.01)**  
[25] EN  
[54] **PELLET AND MULTI-UNIT  
PELLET SYSTEM (MUPS)**  
[54] **MICROGRANULE ET SYSTEME A  
UNITES MULTIPLES DE  
MICROGRANULES (MUPS)**  
[72] GUHA, ASHISH, IN  
[72] JOSHI, SHRADDHA, IN  
[72] PODDAR, ADITI, IN  
[72] DOKE, SURESH, IN  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2021-10-25  
[86] 2020-03-26 (PCT/EP2020/058534)  
[87] (WO2020/221522)  
[30] IN (201941017213) 2019-04-30

[21] **3,134,992**  
[13] A1

[51] **Int.Cl. F16D 65/56 (2006.01) F16D  
65/58 (2006.01) F16D 65/60 (2006.01)  
F16H 1/22 (2006.01)**  
[25] EN  
[54] **AUTOMATIC SLACK ADJUSTER  
DISPOSITIF DE RATTRAPAGE DE  
MOU AUTOMATIQUE**  
[72] DESHPANDE, MADHAV, US  
[72] TAMBE, RAOSAHEB, US  
[72] GILBOY, LAWRENCE F., US  
[72] LOUIS, JOHN M., US  
[71] BENDIX COMMERCIAL VEHICLE  
SYSTEMS LLC, US  
[85] 2021-10-25  
[86] 2020-05-11 (PCT/US2020/032285)  
[87] (WO2020/231891)  
[30] US (16/412,640) 2019-05-15

[21] **3,134,993**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2012.01)**  
[25] EN  
[54] **SAME DAY DELIVERY  
SCHEDULING METHOD AND  
SYSTEM**  
[54] **PROCEDE ET SYSTEME DE  
PLANIFICATION DE LIVRAISON  
LE MEME JOUR**  
[72] DEARING, STEPHEN M., US  
[71] UNITED STATES POSTAL SERVICE,  
US  
[85] 2021-10-25  
[86] 2020-05-04 (PCT/US2020/031365)  
[87] (WO2020/227238)  
[30] US (62/843,535) 2019-05-05

[21] **3,134,994**  
[13] A1

[51] **Int.Cl. H04W 52/02 (2009.01) H04B  
1/3805 (2015.01)**  
[25] EN  
[54] **CONTROL DEVICE HAVING A  
SECONDARY RADIO FOR  
WAKING UP A PRIMARY RADIO**  
[54] **DISPOSITIF DE COMMANDE  
COMPRENANT UNE RADIO  
SECONDAIRE POUR REVEILLER  
UNE RADIO PRIMAIRE**  
[72] DEJONGE, STUART W., US  
[71] LUTRON TECHNOLOGY  
COMPANY LLC, US  
[85] 2021-10-25  
[86] 2020-04-24 (PCT/US2020/029960)  
[87] (WO2020/219984)  
[30] US (62/838,362) 2019-04-25

[21] **3,134,996**  
[13] A1

[51] **Int.Cl. H02G 15/04 (2006.01) H02G  
15/072 (2006.01)**  
[25] EN  
[54] **CABLE FITTING  
GARNITURE DE CABLE**  
[72] ADILI, SEDAT, CH  
[71] BRUGG KABEL AG, CH  
[85] 2021-10-25  
[86] 2020-04-24 (PCT/EP2020/061537)  
[87] (WO2020/216939)  
[30] EP (19171440.1) 2019-04-26

[21] **3,134,999**  
[13] A1

[51] **Int.Cl. E05F 15/686 (2015.01) B66D  
1/30 (2006.01)**  
[25] EN  
[54] **DRIVE DRUM FOR OVERHEAD  
DOORS**  
[54] **TAMBOUR D'ENTRAINEMENT  
POUR PORTES BASCULANTES**  
[72] KICHER, PAUL T., US  
[72] KICHER, THOMAS P., US  
[71] ENGINEERED HARDWARE, LLC,  
US  
[85] 2021-10-25  
[86] 2020-04-23 (PCT/US2020/029428)  
[87] (WO2020/219616)  
[30] US (62/839,252) 2019-04-26  
[30] US (62/936,815) 2019-11-18

[21] **3,135,002**  
[13] A1

[51] **Int.Cl. A61F 2/97 (2013.01)**  
[25] EN  
[54] **CONSTRAINING MECHANISMS  
FOR SELECTIVE DEPLOYMENT  
AND ASSOCIATED METHODS**  
[54] **MECANISMES DE CONTRAINTE  
POUR DEPLOIEMENT SELECTIF  
ET PROCEDES ASSOCIES**  
[72] SKELTON, TYSON J., US  
[71] W. L. GORE & ASSOCIATES, INC.,  
US  
[85] 2021-10-25  
[86] 2019-05-10 (PCT/US2019/031780)  
[87] (WO2020/231390)

[21] **3,135,003**  
[13] A1

[51] **Int.Cl. A01G 9/029 (2018.01)**  
[25] EN  
[54] **A MANUFACTURED SEED POD, A  
COMPOSITION FOR A  
MANUFACTURED SEED POD  
AND A METHOD FOR  
MANUFACTURING A SEED POD**  
[54] **COSSE FABRIQUEE,  
COMPOSITION POUR UNE  
COSSE FABRIQUEE ET PROCEDE  
DE FABRICATION D'UNE COSSE**  
[72] WALKER, ANDREW FRANCIS, AU  
[72] LOUW, ANDRIES WILLEN, AU  
[71] AIRSEED TECHNOLOGIES  
HOLDINGS PTY LTD, AU  
[85] 2021-10-25  
[86] 2020-04-27 (PCT/AU2020/050401)  
[87] (WO2020/215129)  
[30] AU (2019901422) 2019-04-26

[21] **3,135,014**  
[13] A1

[51] **Int.Cl. B07B 1/15 (2006.01)**  
[25] EN  
[54] **DISC, SPACER AND  
TRANSPORTATION ASSEMBLY**  
[54] **DISQUE, ELEMENT  
D'ESPACEMENT ET ENSEMBLE  
DE TRANSPORT**  
[72] ESBELANI, HODIN, SE  
[71] SANDVIK SRP AB, SE  
[85] 2021-10-25  
[86] 2019-05-10 (PCT/EP2019/062039)  
[87] (WO2020/228924)

## PCT Applications Entering the National Phase

[21] **3,135,016**  
[13] A1

[51] **Int.Cl. G01S 7/48 (2006.01) G01S 17/00 (2020.01) G05D 1/02 (2020.01)**  
[25] EN  
[54] **AUTONOMOUS MINE VEHICLE OPERATION**  
[54] **FONCTIONNEMENT AUTONOME D'UN VEHICULE MINIER**  
[72] SANERMA, SIMO, FI  
[72] LEHTINEN, ANTTI, FI  
[72] PARKKINEN, TEEMU, FI  
[72] PAJALA, ESA, FI  
[72] PULLI, RIKU, FI  
[71] SANDVIK MINING AND CONSTRUCTION OY, FI  
[85] 2021-10-25  
[86] 2020-05-12 (PCT/EP2020/063225)  
[87] (WO2020/229489)  
[30] EP (19174444.0) 2019-05-14

[21] **3,135,019**  
[13] A1

[51] **Int.Cl. A61B 5/145 (2006.01) C12Q 1/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR AN ANALYTE SENSOR COVER-MEMBRANE PREPARATION**  
[54] **PROCEDE DE PREPARATION DE MEMBRANE DE RECOUVREMENT DE CAPTEUR D'ANALYTE**  
[72] HOCHMUTH, GERNOT, DE  
[72] HOERTZ, CHRISTIAN, DE  
[72] MISCHLER, REINHOLD, DE  
[72] SLIOZBERG, KIRILL, DE  
[72] STECK, ALEXANDER, DE  
[72] ZOU, PENG, DE  
[71] F. HOFFMANN-LA ROCHE AG, CH  
[85] 2021-10-25  
[86] 2020-05-04 (PCT/EP2020/062270)  
[87] (WO2020/225190)  
[30] EP (19172715.5) 2019-05-06

[21] **3,135,020**  
[13] A1

[51] **Int.Cl. A61M 5/32 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR TREATING CHRONIC INFLAMMATORY INJURY, METAPLASIA, DYSPLASIA AND CANCERS OF EPITHELIAL TISSUES**  
[54] **METHODES ET COMPOSITIONS POUR TRAITER UNE LESION INFLAMMATOIRE CHRONIQUE, UNE METAPLASIE, UNE DYSPLASIE ET DES CANCERS DES TISSUS EPITHELIAUX**  
[72] MCKEON, FRANK, US  
[72] DULEBA, MARCIN, US  
[72] ZHANG, YANTING, US  
[72] XIE, JINGZHONG, US  
[72] XIAN, WA, US  
[72] VINCENT, MATTHEW, US  
[71] UNIVERSITY OF HOUSTON SYSTEM, US  
[71] THE BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM, US  
[71] TRACT PHARMACEUTICALS, INC., US  
[85] 2021-10-25  
[86] 2020-04-24 (PCT/US2020/029933)  
[87] (WO2020/219963)  
[30] US (62/839,152) 2019-04-26  
[30] US (62/924,978) 2019-10-23

[21] **3,135,022**  
[13] A1

[51] **Int.Cl. G06F 3/00 (2006.01)**  
[25] EN  
[54] **ELECTRONIC SYSTEMS AND METHODS FOR THE ASSESSMENT OF EMOTIONAL STATE**  
[54] **SYSTEMES ET PROCEDES ELECTRONIQUES PERMETTANT L'EVALUATION D'UN ETAT EMOTIONNEL**  
[72] KIM, YONG-CHUL CHARLES, US  
[72] MESSENGER, MEGHAN, US  
[72] KUNKEL, GREG, US  
[72] FULLER, THOMAS, US  
[71] NEXT JUMP, INC, US  
[85] 2021-10-25  
[86] 2020-04-29 (PCT/US2020/030456)  
[87] (WO2020/223339)  
[30] US (62/841,180) 2019-04-30

[21] **3,135,042**  
[13] A1

[51] **Int.Cl. E05B 15/00 (2006.01) E05B 17/20 (2006.01) E05B 47/00 (2006.01) E05B 47/02 (2006.01) E05B 47/06 (2006.01)**  
[25] EN  
[54] **CATCH MECHANISM FOR A LOCKING DEVICE**  
[54] **MECANISME DE LOQUET POUR DISPOSITIF DE VERROUILLAGE**  
[72] JENSEN, LARS, SE  
[71] STENDALS EL AB, SE  
[85] 2021-10-26  
[86] 2020-05-14 (PCT/SE2020/050500)  
[87] (WO2020/236069)  
[30] SE (1950590-8) 2019-05-17

[21] **3,135,061**  
[13] A1

[51] **Int.Cl. E05B 15/00 (2006.01) E05B 47/00 (2006.01) E05B 47/02 (2006.01) E05B 63/00 (2006.01)**  
[25] EN  
[54] **LOCKING DEVICE**  
[54] **DISPOSITIF DE VERROUILLAGE**  
[72] JENSEN, LARS, SE  
[71] STENDALS EL AB, SE  
[85] 2021-10-26  
[86] 2020-05-14 (PCT/SE2020/050499)  
[87] (WO2020/236068)  
[30] SE (1950590-8) 2019-05-17  
[30] SE (1951546-9) 2019-12-20

## Demandes PCT entrant en phase nationale

[21] **3,135,091**  
[13] A1

[51] **Int.Cl. B60L 9/00 (2019.01) B60L 50/53 (2019.01) B60L 53/302 (2019.01)**  
[25] EN  
[54] **METHOD AND ARRANGEMENT FOR CONTROLLING ELECTRIC CURRENT IN TETHER CABLE OF A MINING VEHICLE**  
[54] **PROCEDE ET AGENCEMENT POUR COMMANDER LE COURANT ELECTRIQUE DANS UN CABLE D'ATTACHE D'UN VEHICULE MINIER**  
[72] VERHO, SAMULI, FI  
[72] VATANEN, HARRI, FI  
[72] TIHONEN, TOMMI, FI  
[72] KOUVO, MIKKO, SE  
[72] JUNTUNEN, RAIMO, FI  
[72] KITULA, MIKKO, FI  
[71] SANDVIK MINING AND CONSTRUCTION OY, FI  
[85] 2021-10-26  
[86] 2020-05-20 (PCT/EP2020/064097)  
[87] (WO2020/234366)  
[30] EP (19175916.6) 2019-05-22

[21] **3,135,114**  
[13] A1

[51] **Int.Cl. B60L 9/00 (2019.01) B60L 50/53 (2019.01) B60L 58/13 (2019.01)**  
[25] EN  
[54] **MINING VEHICLE**  
[54] **VEHICULE MINIER**  
[72] KOUVO, MIKKO, SE  
[72] JUNTUNEN, RAIMO, FI  
[72] VERHO, SAMULI, FI  
[72] KITULA, MIKKO, FI  
[72] ERIKSSON, HARRI, FI  
[72] VATANEN, HARRI, FI  
[72] MIKKOLA, JUSSI, FI  
[72] TEPPU, JOUNI, FI  
[71] SANDVIK MINING AND CONSTRUCTION OY, FI  
[85] 2021-10-26  
[86] 2020-05-13 (PCT/EP2020/063369)  
[87] (WO2020/234093)  
[30] EP (19175913.3) 2019-05-22

[21] **3,135,177**  
[13] A1

[51] **Int.Cl. A61K 31/702 (2006.01) C07H 3/04 (2006.01) C07H 3/06 (2006.01)**  
[25] EN  
[54] **IMMUNOMODULATORY OLIGOSACCHARIDES FOR THE TREATMENT OF PAIN**  
[54] **OLIGOSACCHARIDES IMMUNOMODULATOIRES DE TRAITEMENT DE LA DOULEUR**  
[72] MARTINEZ, ALEXANDER, US  
[72] FERRONE, JASON, US  
[71] INTRINSIC MEDICINE, INC., US  
[85] 2021-10-26  
[86] 2020-03-25 (PCT/US2020/024621)  
[87] (WO2020/210027)  
[30] US (62/831,245) 2019-04-09  
[30] US (62/931,386) 2019-11-06

[21] **3,135,193**  
[13] A1

[51] **Int.Cl. H04W 72/04 (2009.01)**  
[25] EN  
[54] **TRANSMISSION INSTRUCTION METHOD, DEVICE, TERMINAL, BASE STATION AND STORAGE MEDIUM**  
[54] **PROCEDE D'INSTRUCTION DE TRANSMISSION, DISPOSITIF, TERMINAL, STATION DE BASE ET SUPPORT DE STOCKAGE**  
[72] GAO, BO, CN  
[72] LU, ZHAOHUA, CN  
[72] LI, YU NGOK, CN  
[72] JIANG, CHUANGXIN, CN  
[72] ZHANG, SHUJUAN, CN  
[71] ZTE CORPORATION, CN  
[85] 2021-10-26  
[86] 2020-02-26 (PCT/CN2020/076801)  
[87] (WO2020/199799)  
[30] CN (201910253399.7) 2019-03-29

[21] **3,135,206**  
[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR INTEGRATED ON-CHIP SINGLE-MOLECULE DETECTION**  
[54] **PROCEDES ET SYSTEMES DE DETECTION DE MOLECULE UNIQUE INTEGREE SUR PUCE**  
[72] INDERMUHLE, PIERRE, US  
[72] SORELLE, ELLIOTT, US  
[72] STERN, DAVID, US  
[72] MALLICK, PARAG, US  
[72] PATEL, SUJAL M., US  
[71] NAUTILUS BIOTECHNOLOGY, INC., US  
[85] 2021-10-26  
[86] 2020-04-29 (PCT/US2020/030501)  
[87] (WO2020/223368)  
[30] US (62/840,209) 2019-04-29

[21] **3,135,735**  
[13] A1

[51] **Int.Cl. B22F 12/67 (2021.01) B33Y 10/00 (2015.01) B33Y 30/00 (2015.01) B33Y 50/00 (2015.01) B29C 64/153 (2017.01) B22F 10/28 (2021.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING THREE-DIMENSIONAL SHAPED PRODUCT, AND THREE-DIMENSIONAL SHAPED PRODUCT OBTAINED BY THE METHOD**  
[54] **METHODE DE PRODUCTION D'UN PRODUIT FORME EN TROIS DIMENSIONS ET UN TEL PRODUIT OBTENU GRACE A LA METHODE**  
[72] AMAYA, KOICHI, JP  
[72] MIDORIKAWA, TETSUSHI, JP  
[72] TOMITA SEIICHI, JP  
[72] TANAKA, RYUZO, JP  
[71] MATSUURA MACHINERY CORPORATION, JP  
[85] 2021-10-25  
[86] 2021-04-30 (PCT/JP2021/017264)  
[87] (3135735)  
[30] JP (2020-095202) 2020-06-01

## PCT Applications Entering the National Phase

[21] **3,136,030**  
[13] A1

[51] **Int.Cl. G06F 7/00 (2006.01)**  
[25] EN  
[54] **CONTEXT MODELING OF OCCUPANCY CODING FOR POINT CLOUD CODING**  
[54] **MODELISATION DE CONTEXTE DU CODAGE D'OCCUPATION POUR LE CODAGE DE NUAGE DE POINTS**  
[72] ZHANG, XIANG, US  
[72] GAO, WEN, US  
[72] LIU, SHAN, US  
[71] TENCENT AMERICA LLC, US  
[85] 2021-10-26  
[86] 2021-04-28 (PCT/US2021/029691)  
[87] (3136030)  
[30] US (63/034,113) 2020-06-03  
[30] US (63/066,099) 2020-08-14  
[30] US (17/231,695) 2021-04-15

[21] **3,137,039**  
[13] A1

[51] **Int.Cl. B60K 11/08 (2006.01) B60J 10/30 (2016.01)**  
[25] EN  
[54] **AUTOMOBILE AIR-INLET GRILLE SEALING STRIP WITH SOFT HOLLOW STRUCTURE**  
[54] **LANIERE D'ETANCHEITE DE CALANDRE D'ENTREE D'AIR POUR AUTOMOBILE MUNIE D'UNE STRUCTURE CREUSE SOUPLE**  
[72] ZHANG, WANWU, CN  
[72] OU, ZHENQUAN, CN  
[72] WU, HAITAO, CN  
[71] HEBEI KELI AUTOMOBILE EQUIPMENT CO., LTD., CN  
[85] 2021-10-29  
[86] 2021-03-12 (PCT/CN2021/080561)  
[87] (3137039)  
[30] CN (202010488980.X) 2020-06-02

[21] **3,137,818**  
[13] A1

[25] EN  
[54] **MULTIMODAL HEARING ASSISTANCE DEVICES AND SYSTEMS**  
[54] **DISPOSITIFS ET SYSTEMES D'AIDE A L'AUDITION MULTIMODAUX**  
[72] KOMEILPOOR, NAEEM, CA  
[71] TANDEMLAUNCH INC., CA  
[85] 2021-11-05  
[86] 2021-05-28 (PCT/CA2021/050730)  
[87] (3137818)  
[30] US (63/032,307) 2020-05-29

[21] **3,138,898**  
[13] A1

[51] **Int.Cl. B21D 22/14 (2006.01) B21D 22/10 (2006.01) B21D 22/16 (2006.01) B21D 31/00 (2006.01) B26D 3/08 (2006.01) B26D 5/00 (2006.01) B26F 1/38 (2006.01) B31F 1/08 (2006.01) B31F 1/10 (2006.01)**  
[25] EN  
[54] **INCREMENTAL SHEET FORMING SYSTEM WITH RESILIENT TOOLING**  
[54] **SYSTEME DE FORMATION DE FEUILLE INCREMENTALE AVEC OUTILLAGE ELASTIQUE**  
[72] NARDONE, JUSTIN MICHAEL, US  
[71] FIGUR MACHINE TOOLS LLC, US  
[85] 2021-11-02  
[86] 2020-05-04 (PCT/US2020/031336)  
[87] (WO2020/227224)  
[30] US (62/844,177) 2019-05-07  
[30] US (63/006,802) 2020-04-08

[21] **3,138,904**  
[13] A1

[51] **Int.Cl. C08L 25/12 (2006.01) C08J 9/14 (2006.01) C08K 5/02 (2006.01) C08K 5/101 (2006.01) C08L 25/06 (2006.01) C08L 25/08 (2006.01)**  
[25] EN  
[54] **BLOWING AGENT BLENDS FOR THERMOPLASTIC POLYMERS**  
[54] **SOUFFLAGE POUR POLYMERES THERMOPLASTIQUES**  
[72] KONTOMARIS, KONSTANTINOS, US  
[71] THE CHEMOURS COMPANY FC, LLC, US  
[85] 2021-11-02  
[86] 2020-06-23 (PCT/US2020/039053)  
[87] (WO2020/263775)  
[30] US (62/865,743) 2019-06-24

[21] **3,138,919**  
[13] A1

[51] **Int.Cl. B23Q 11/08 (2006.01) B23Q 17/20 (2006.01) B23Q 17/24 (2006.01) G05B 19/00 (2006.01)**  
[25] FR  
[54] **DEVICE AND METHOD FOR INSPECTING A WORKPIECE IN THE PROCESS OF BEING MANUFACTURED**  
[54] **DISPOSITIF ET PROCEDE POUR LE CONTROLE D'UNE PIECE EN COURS DE FABRICATION**  
[72] NOZAIS, DOMINIQUE, FR  
[72] SHAO, ZILONG, FR  
[72] HASCOET, JEAN-YVES, FR  
[71] I-MC, FR  
[85] 2021-11-03  
[86] 2020-05-04 (PCT/EP2020/062330)  
[87] (WO2020/225218)  
[30] FR (FR1904696) 2019-05-03

[21] **3,138,940**  
[13] A1

[51] **Int.Cl. C07D 405/14 (2006.01) A61K 31/4184 (2006.01) A61P 29/00 (2006.01) A61P 37/00 (2006.01) C07D 403/14 (2006.01) C07D 413/14 (2006.01) C07D 417/14 (2006.01) C07D 487/04 (2006.01) C07D 498/04 (2006.01)**  
[25] EN  
[54] **FUSED IMIDAZOLE DERIVATIVES AS IL-17 MODULATORS**  
[54] **DERIVES D'IMIDAZOLE FUSIONNES UTILISES EN TANT QUE MODULATEURS D'IL-17**  
[72] CHU, SHUYU, GB  
[72] REUBERSON, JAMES THOMAS, GB  
[72] TAYLOR, RICHARD DAVID, GB  
[72] ZHU, ZHAONING, GB  
[72] CHAPPELL, ROSE ELIZABETH, GB  
[72] HASLETT, GREGORY WILLIAM, GB  
[72] SMALLEY, ADAM PETER, GB  
[72] MONCK, NATHANIEL JULIUS THOMAS, GB  
[72] BRACE, GARETH NEIL, GB  
[72] CHOVIATIA, PRAFULKUMAR TULSHIBHAI, GB  
[72] HORSLEY, HELEN TRACEY, GB  
[71] USB BIOPHARMA SRL, BE  
[85] 2021-11-03  
[86] 2020-06-24 (PCT/EP2020/067758)  
[87] (WO2020/260425)  
[30] GB (1909191.7) 2019-06-26



## Demandes PCT entrant en phase nationale

<p style="text-align: center;">[21] <b>3,138,957</b> [13] A1</p> <p>[51] <b>Int.Cl. B01D 9/00 (2006.01) C01F 11/44 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>METHOD AND CRYSTALLIZING TANK AND ARRANGEMENT THEREOF FOR CRYSTALLIZING CALCIUM NITRATE FROM THE NITRO-PHOSPHATE PROCESS</b></p> <p>[54] <b>METHODE ET RESERVOIR DE CRISTALLISATION ET AGENCEMENT ASSOCIE POUR LA CRISTALLISATION DE NITRATE DE CALCIUM A PARTIR DU PROCEDE NITRO-PHOSPHATE</b></p> <p>[72] LOUWE, ROBERTUS, NO</p> <p>[72] LIER, OLAV, NO</p> <p>[71] YARA INTERNATIONAL ASA, NO</p> <p>[85] 2021-11-03</p> <p>[86] 2020-07-09 (PCT/EP2020/069342)</p> <p>[87] (WO2021/005146)</p> <p>[30] EP (19185147.6) 2019-07-09</p>	<p style="text-align: center;">[21] <b>3,138,976</b> [13] A1</p> <p>[51] <b>Int.Cl. B01D 53/50 (2006.01) B01D 53/62 (2006.01) B01D 53/80 (2006.01) B01D 53/82 (2006.01) C04B 18/16 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>METHOD FOR SCRUBBING EXHAUST GAS FROM CO2 AND/OR SOX</b></p> <p>[54] <b>PROCEDE D'EPURATION DE GAZ D'ECHAPPEMENT A PARTIR DE CO2 ET/OU DE SOX</b></p> <p>[72] SKOCEK, JAN, DE</p> <p>[72] ZAJAC, MACIEJ, DE</p> <p>[72] BEN HAHA, MOHSEN, DE</p> <p>[72] FEDERHEN, STEFAN, DE</p> <p>[71] HEIDELBERGCEMENT AG, DE</p> <p>[85] 2021-11-03</p> <p>[86] 2020-06-04 (PCT/EP2020/065402)</p> <p>[87] (WO2020/249444)</p> <p>[30] EP (19179579.8) 2019-06-12</p>	<p style="text-align: center;">[21] <b>3,139,202</b> [13] A1</p> <p>[51] <b>Int.Cl. A63B 21/02 (2006.01) A63B 21/00 (2006.01) A63B 21/055 (2006.01) A63B 21/16 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>EXERCISE DEVICE FOR USE WHILE SEATED</b></p> <p>[54] <b>DISPOSITIF D'EXERCICE UTILISABLE LORSQU'ON EST ASSIS</b></p> <p>[72] GREEN, ALAN JOSEPH, GB</p> <p>[71] GREEN, ALAN JOSEPH, GB</p> <p>[85] 2021-11-04</p> <p>[86] 2020-06-16 (PCT/IB2020/055613)</p> <p>[87] (WO2020/254958)</p> <p>[30] GB (1908674.3) 2019-06-17</p> <p>[30] GB (1912785.1) 2019-09-05</p> <p>[30] GB (1913723.1) 2019-09-24</p> <p>[30] GB (1916717.0) 2019-11-15</p> <p>[30] GB (1916718.8) 2019-11-15</p> <p>[30] GB (2003824.6) 2020-03-16</p>
<p style="text-align: center;">[21] <b>3,138,968</b> [13] A1</p> <p>[51] <b>Int.Cl. A24F 40/465 (2020.01) A24F 40/50 (2020.01) H05B 6/06 (2006.01) H05B 6/10 (2006.01) H05B 6/36 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>AEROSOL-GENERATING DEVICE COMPRISING AN INDUCTIVE HEATING ARRANGEMENT COMPRISING FIRST AND SECOND LC CIRCUITS HAVING DIFFERENT RESONANCE FREQUENCIES</b></p> <p>[54] <b>DISPOSITIF DE GENERATION D'AEROSOL COMPRENANT UN AGENCEMENT DE CHAUFFAGE PAR INDUCTION COMPRENANT DES PREMIER ET SECOND CIRCUITS LC AYANT DES FREQUENCES DE RESONANCE DIFFERENTES</b></p> <p>[72] COURBAT, JEROME CHRISTIAN, CH</p> <p>[72] MIRONOV, OLEG, CH</p> <p>[72] STURA, ENRICO, CH</p> <p>[71] PHILIP MORRIS PRODUCTS S.A., CH</p> <p>[85] 2021-11-03</p> <p>[86] 2020-07-03 (PCT/EP2020/068869)</p> <p>[87] (WO2021/001547)</p> <p>[30] EP (19184552.8) 2019-07-04</p> <p>[30] EP (19191197.3) 2019-08-12</p>	<p style="text-align: center;">[21] <b>3,138,988</b> [13] A1</p> <p>[51] <b>Int.Cl. C07K 14/415 (2006.01) C12N 15/82 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>GENE FOR PARTHENOGENESIS</b></p> <p>[54] <b>GENE POUR PARTHENOGENESE</b></p> <p>[72] UNDERWOOD, CHARLES JOSEPH, NL</p> <p>[72] RIGOLA, DIANA, NL</p> <p>[72] VAN DIJK, PETER JOHANNES, NL</p> <p>[72] OP DEN CAMP, RIK HUBERTUS MARTINUS, NL</p> <p>[72] SCHRANZ, MICHAEL ERIC, NL</p> <p>[72] VIJVERBERG, CATHARINA ADRIANA, NL</p> <p>[71] KEYGENE N.V., NL</p> <p>[85] 2021-11-03</p> <p>[86] 2020-05-29 (PCT/EP2020/064991)</p> <p>[87] (WO2020/239984)</p> <p>[30] EP (19177252.4) 2019-05-29</p> <p>[30] EP (19200872.0) 2019-10-01</p> <p>[30] EP (20170243.8) 2020-04-17</p>	<p style="text-align: center;">[21] <b>3,139,214</b> [13] A1</p> <p>[51] <b>Int.Cl. F16F 9/32 (2006.01) B60G 17/08 (2006.01) F16F 9/34 (2006.01) F16F 9/348 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>AN AUTOMOTIVE HYDRAULIC SHOCK ABSORBER</b></p> <p>[54] <b>AMORTISSEUR HYDRAULIQUE POUR AUTOMOBILE</b></p> <p>[72] COHEN, EVYATAR, IL</p> <p>[71] EVCO PRO 2018 LTD, IL</p> <p>[85] 2021-11-04</p> <p>[86] 2020-05-13 (PCT/IL2020/050517)</p> <p>[87] (WO2020/230128)</p> <p>[30] IL (266688) 2019-05-16</p>

## PCT Applications Entering the National Phase

[21] **3,139,217**  
[13] A1

[51] **Int.Cl. A61K 31/198 (2006.01) A61K 9/00 (2006.01) A61P 25/16 (2006.01)**

[25] EN

[54] **TREATMENT OF NOCTURNAL SYMPTOMS AND MORNING AKINESIA IN SUBJECTS WITH PARKINSON'S DISEASE**

[54] **TRAITEMENT DE SYMPTOMES NOCTURNES ET DE L'AKINESIE MATINALE CHEZ DES SUJETS ATTEINTS DE LA MALADIE DE PARKINSON**

[72] FISHER, RICHARD, IL

[71] CLEXIO BIOSCIENCES LTD., IL

[85] 2021-11-04

[86] 2020-05-14 (PCT/IB2020/054591)

[87] (WO2020/230089)

[30] US (62/847,542) 2019-05-14

[30] US (62/858,018) 2019-06-06

[21] **3,139,223**  
[13] A1

[51] **Int.Cl. G08B 21/02 (2006.01) G08B 23/00 (2006.01)**

[25] EN

[54] **ANCHOR MONITOR**

[54] **DISPOSITIF DE SURVEILLANCE D'ANCRE**

[72] TOLLEY, MARK, SC

[71] KOTO HOLDINGS LIMITED, SC

[85] 2021-11-04

[86] 2020-05-12 (PCT/IB2020/054474)

[87] (WO2020/234692)

[30] GB (1907111.7) 2019-05-20

[21] **3,139,226**  
[13] A1

[51] **Int.Cl. A61L 9/00 (2006.01) B01D 53/26 (2006.01)**

[25] EN

[54] **A SYSTEM AND METHOD FOR INFUSION AND DESICCATION OF FOODSTUFFS**

[54] **SYSTEME ET PROCEDE D'INFUSION ET DE DESSICCATION DE PRODUITS ALIMENTAIRES**

[72] CREPEAU, BRADLEY, CA

[72] HAYMAN, MARK JONATHAN BRICE, CA

[72] WANG, MENG, CA

[72] MAXWELL, TIMOTHY JOHN, CA

[71] FOOD CYCLE SCIENCE CORPORATION, CA

[85] 2021-11-04

[86] 2020-05-07 (PCT/IB2020/054343)

[87] (WO2020/225767)

[30] US (62/844,421) 2019-05-07

[30] US (62/844,454) 2019-05-07

[30] US (62/946,655) 2019-12-11

[30] US (16/868,482) 2020-05-06

[21] **3,139,234**  
[13] A1

[51] **Int.Cl. C02F 1/44 (2006.01) C02F 1/52 (2006.01) C02F 1/66 (2006.01)**

[25] EN

[54] **METHODS OF REDUCING CALCITE FORMATION AND SOLUBILIZED METALS FROM AQUEOUS EFFLUENT STREAMS**

[54] **PROCEDES DE REDUCTION DE LA FORMATION DE CALCITE ET DE METAUX SOLUBILISES EMANANT DE FLUX D'EFFLUENTS AQUEUX**

[72] ROPER, RALPH E., JR., US

[72] ROGERS, ANTHONY, US

[72] VARGAS, CARINA, US

[72] KRIECH, ANTHONY J., US

[71] HERITAGE RESEARCH GROUP, LLC, US

[85] 2021-11-04

[86] 2020-05-06 (PCT/US2020/031678)

[87] (WO2020/227411)

[30] US (62/844,210) 2019-05-07

[21] **3,139,236**  
[13] A1

[51] **Int.Cl. E21B 34/06 (2006.01) B33Y 30/00 (2015.01) B22F 3/105 (2006.01) B22F 5/00 (2006.01) E21B 33/127 (2006.01)**

[25] EN

[54] **A DOWNHOLE BARRIER DEVICE HAVING A BARRIER HOUSING AND AN INTEGRALLY FORMED RUPTURE SECTION**

[54] **DISPOSITIF DE BARRIERE DE FOND DE TROU COMPORTANT UN BOITIER DE BARRIERE ET UNE SECTION DE RUPTURE FORMEE D'UN SEUL TENANT**

[72] FRIPP, MICHAEL LINLEY, US

[72] GRECI, STEPHEN MICHAEL, US

[72] ORNELAZ, RICHARD DECENA, US

[72] TRUJILLO, CELSO MAX., JR., US

[71] HALLIBURTON ENERGY SERVICES, INC., US

[85] 2021-11-04

[86] 2019-09-05 (PCT/US2019/049660)

[87] (WO2021/045758)

[21] **3,139,238**  
[13] A1

[51] **Int.Cl. A61F 5/00 (2006.01)**

[25] EN

[54] **MEASUREMENT AND ORDERING SYSTEM FOR ORTHOTIC DEVICES**

[54] **SYSTEME DE MESURE ET DE COMMANDE POUR DISPOSITIFS ORTHETIQUES**

[72] LUNAU, KEVIN R., US

[72] FISCHER, WALLACE RAY, US

[72] SKAHAN, MICHAEL S., US

[71] VISION QUEST INDUSTRIES INCORPORATED DBA VQ ORTHOCARE, US

[85] 2021-11-04

[86] 2020-05-04 (PCT/US2020/031306)

[87] (WO2020/231662)

[30] US (16/404,580) 2019-05-06

## Demandes PCT entrant en phase nationale

[21] **3,139,239**  
[13] A1

[51] **Int.Cl. A61K 31/4245 (2006.01) A61P 25/02 (2006.01)**

[25] EN

[54] **SUBSTITUTED 4-[5-(BENZOFURAN-2-YL)-1,2,4-OXADIAZOL-3-YL]BENZOIC ACID COMPOUNDS FOR USE IN THERAPY FOR NEUROPATHIC PAIN**

[54] **COMPOSES D'ACIDE 4-[5-(BENZOFURAN-2-YL)-1,2,4-OXADIAZOL-3-YL] BENZOIQUE SUBSTITUE DESTINES A ETRE UTILISES DANS LE TRAITEMENT DE LA DOULEUR NEUROPATHIQUE**

[72] CORCORAN, JONATHAN PATRICK THOMAS, GB

[72] DE CASTRO VASCONCELOS GONCALVES, MARIA BEATRIZ, GB

[71] KING'S COLLEGE LONDON, GB

[85] 2021-11-04

[86] 2020-05-29 (PCT/EP2020/064969)

[87] (WO2020/239978)

[30] GB (1907647.0) 2019-05-30

[21] **3,139,241**  
[13] A1

[51] **Int.Cl. B65D 25/06 (2006.01) A01K 97/06 (2006.01) B65D 81/26 (2006.01) B25H 3/02 (2006.01)**

[25] EN

[54] **UTILITY BOX COMPARTMENT DIVIDER AND BAIT AND TACKLE STORAGE**

[54] **SEPARATION DE COMPARTIMENT DE BOITE MULTI-USAGE ET RANGEMENT D'APPATS ET DE MATERIEL DE PECHE**

[72] WHALEN, JOHN, US

[72] KWIATOWSKI, NEIL, US

[72] UMHOLTZ, MASON, US

[72] DAY, MICHAEL, US

[72] PARADISE, CHARLES, US

[71] PLANO MOLDING COMPANY, US

[85] 2021-11-04

[86] 2020-05-07 (PCT/US2020/031888)

[87] (WO2020/227539)

[30] US (62/845,565) 2019-05-09

[21] **3,139,248**  
[13] A1

[51] **Int.Cl. A61K 8/31 (2006.01) A61K 8/02 (2006.01) A61K 8/81 (2006.01) A61K 8/90 (2006.01) C07C 9/14 (2006.01) C07C 9/22 (2006.01)**

[25] EN

[54] **SUBSTANTIALLY SILICONE-FREE GELLED COMPOSITIONS**

[54] **COMPOSITIONS GELIFIEES SENSIBLEMENT EXEMPTES DE SILICONE**

[72] QUEEN, CRAIG, US

[72] VIERTTEL, ANGELA, US

[72] VOELKER, MARK A., US

[71] CALUMET SPECIALTY PRODUCTS PARTNERS, L.P., US

[85] 2021-11-04

[86] 2020-05-04 (PCT/US2020/031296)

[87] (WO2020/227200)

[30] US (62/843,696) 2019-05-06

[21] **3,139,252**  
[13] A1

[51] **Int.Cl. F17C 1/00 (2006.01) F16K 31/24 (2006.01) F17C 5/02 (2006.01) F17C 13/04 (2006.01)**

[25] EN

[54] **FLUID FILLING SYSTEMS AND METHODS**

[54] **SYSTEMES ET PROCEDES DE REMPLISSAGE DE FLUIDE**

[72] TANSEY, FRANCIS X., JR., US

[72] TANSEY, GWENIVERE R., US

[71] FOUNTAIN MASTER, LLC, US

[85] 2021-11-04

[86] 2020-05-06 (PCT/US2020/031700)

[87] (WO2020/227425)

[30] US (62/843,912) 2019-05-06

[21] **3,139,256**  
[13] A1

[51] **Int.Cl. A61K 51/04 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **NEW USE OF TRIAZOLO[4,5-D]PYRIMIDINE DERIVATIVES**

[54] **NOUVELLE UTILISATION DE DERIVES DE TRIAZOLO[4,5-D]PYRIMIDINE**

[72] OURY, CECILE, BE

[72] LANCELLOTTI, PATRIZIO, BE

[72] NCHIMI, ALAIN, BE

[72] LUXEN, ANDRE, BE

[72] GOFFIN, ERIC, BE

[71] UNIVERSITE DE LIEGE, BE

[71] CENTRE HOSPITALIER UNIVERSITAIRE DE LIEGE, BE

[85] 2021-11-04

[86] 2020-07-22 (PCT/EP2020/070721)

[87] (WO2021/013903)

[30] GB (1910656.6) 2019-07-25

[21] **3,139,258**  
[13] A1

[51] **Int.Cl. A63J 5/02 (2006.01) G06T 15/08 (2011.01) G06T 7/50 (2017.01) A63J 5/00 (2006.01) G03H 1/00 (2006.01) G03H 1/04 (2006.01) G06T 15/50 (2011.01)**

[25] EN

[54] **LIGHT FIELD DISPLAY SYSTEM FOR PERFORMANCE EVENTS**

[54] **SYSTEME D'AFFICHAGE " LIGHT FIELD " POUR EVENEMENTS DE PERFORMANCE**

[72] KARAFIN, JONATHAN SEAN, US

[72] BEVENSEE, BRENDAN ELWOOD, US

[72] DOHM, JOHN, US

[71] LIGHT FIELD LAB, INC., US

[85] 2021-11-04

[86] 2020-04-30 (PCT/US2020/030761)

[87] (WO2020/231640)

[30] US (16/411,004) 2019-05-13

## PCT Applications Entering the National Phase

[21] **3,139,263**  
[13] A1

[51] **Int.Cl. B66B 5/22 (2006.01) B66B 5/08 (2006.01)**  
[25] EN  
[54] **CONVEYANCE CATCH APPARATUS**  
[54] **APPAREIL DE TRANSPORT A TAQUET**  
[72] THIESEN, MARCUS, CA  
[71] FLSMIDTH A/S, DK  
[85] 2021-11-04  
[86] 2020-05-07 (PCT/IB2020/054349)  
[87] (WO2020/225771)  
[30] US (62/844,626) 2019-05-07

[21] **3,139,264**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2012.01) A01K 7/02 (2006.01)**  
[25] EN  
[54] **FOOD SUPPLY TRACKING, VERIFICATION, AND FEEDBACK SYSTEM**  
[54] **SYSTEME DE TRACABILITE, DE VERIFICATION ET DE RETOUR D'INFORMATION EN APPROVISIONNEMENT ALIMENTAIRE**  
[72] HICKS, RONALD B., US  
[72] HARKLEROAD, SARH C., US  
[72] ADAMS, AUSTIN, US  
[72] SCHROEDER, DAVID, US  
[71] HERDX, INC., US  
[85] 2021-11-04  
[86] 2019-05-06 (PCT/US2019/030970)  
[87] (WO2019/213672)  
[30] US (62/666,985) 2018-05-04

[21] **3,139,270**  
[13] A1

[51] **Int.Cl. C05F 3/04 (2006.01) C05F 17/05 (2020.01) C05F 3/00 (2006.01) C02F 11/147 (2019.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING VERMICOMPOST**  
[54] **METHODE DE PRODUCTION DE VERMICOMPOST**  
[72] ADACHI, KANICHI, JP  
[71] EXCELSIOR INC., JP  
[85] 2021-11-04  
[86] 2021-01-29 (PCT/JP2021/003325)  
[87] (WO2021/117911)

[21] **3,139,274**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/30 (2006.01)**  
[25] EN  
[54] **HUMANIZED ANTI-CD137 ANTIBODIES AND USES THEREOF**  
[54] **ANTICORPS ANTI-CD137 HUMANISES ET LEURS UTILISATIONS**  
[72] WANG, JIEYI, US  
[72] WU, YI, CN  
[71] LYVGEN BIOPHARMA CO., LTD., CN  
[71] LYVGEN BIOPHARMA (SUZHOU) CO., LTD., CN  
[85] 2021-11-04  
[86] 2020-05-08 (PCT/US2020/032095)  
[87] (WO2020/231809)  
[30] CN (PCT/CN2019/086364) 2019-05-10

[21] **3,139,278**  
[13] A1

[51] **Int.Cl. C07K 16/40 (2006.01) C12N 9/88 (2006.01)**  
[25] EN  
[54] **ANTI-CARBONIC ANHYDRASE IX ANTIBODY**  
[54] **ANTICORPS ANTI-ANHYDRASE CARBONIQUE IX**  
[72] TSAI, BOR-YU, TW  
[72] HSU, WEI-TING, TW  
[72] HUANG, YU HSUAN, TW  
[71] NAVI BIO-THERAPEUTICS, INC., TW  
[85] 2021-11-04  
[86] 2019-05-06 (PCT/US2019/030807)  
[87] (WO2020/226612)

[21] **3,139,280**  
[13] A1

[51] **Int.Cl. A61M 25/02 (2006.01) A61M 39/02 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR SECURING CATHETERS**  
[54] **SYSTEMES ET METHODES DE SECURISATION DE CATHETERS**  
[72] CHEHAB, ERIC FAYEZ, US  
[72] JOHNSON, ERIC, US  
[72] KRAMER, ERIC ANTHONY, US  
[72] KOHN, MARLO DREISSIGACKER, US  
[72] WALL, JAMES KENNEDY, US  
[72] VENOOK, ROSS DANIEL, US  
[72] TORRES, SHIVANI ALEXANDRA, US  
[72] MURRAY-SCOTT, CERY S ROHANN, US  
[72] BORJA, MARISA JANELLE SAN AGUSTIN, US  
[71] NOVONATE, INC., US  
[85] 2021-11-04  
[86] 2019-06-21 (PCT/US2019/038595)  
[87] (WO2020/005777)  
[30] US (62/689,463) 2018-06-25

[21] **3,139,281**  
[13] A1

[51] **Int.Cl. A61B 5/055 (2006.01) G01R 33/34 (2006.01) A61G 11/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS, DEVICES, AND METHODS FOR MAGNETIC RESONANCE IMAGING OF INFANTS**  
[54] **SYSTEMES, DISPOSITIFS ET METHODES D'IMAGERIE PAR RESONANCE MAGNETIQUE DE NOURRISSONS**  
[72] CHEN, GANG, US  
[72] NELSON, ANNE MICHELE, US  
[72] COUMANS, JACOB, US  
[72] BOSKAMP, EDDY B., US  
[71] HYPERFINE, INC., US  
[85] 2021-11-04  
[86] 2020-05-01 (PCT/US2020/030935)  
[87] (WO2020/227054)  
[30] US (62/844,702) 2019-05-07  
[30] US (62/883,329) 2019-08-06  
[30] US (62/970,459) 2020-02-05

## Demandes PCT entrant en phase nationale

[21] **3,139,283**  
[13] A1

[51] **Int.Cl. A61F 2/07 (2013.01) A61F 2/848 (2013.01)**  
[25] EN  
[54] **STENTS, SYSTEMS, AND METHODS FOR GASTROINTESTINAL TRACT TREATMENT**  
[54] **ENDOPROTHESES, SYSTEMES ET PROCEDES DE TRAITEMENT DU TRACTUS GASTRO-INTESTINAL**  
[72] FOLAN, MARTYN G., IE  
[72] DEVIERE, JACQUES, BE  
[72] CAUCHE, NICOLAS, BE  
[72] KEATING, THOMAS M., IE  
[72] BURKE, MARTIN, IE  
[72] TUCK, DANIEL, IE  
[72] DELATTRE, CECILIA, BE  
[71] BOSTON SCIENTIFIC SCIMED, INC., US  
[71] UNIVERSITE LIBRE DE BRUXELLES, BE  
[71] BRUSSELS MEDICAL DEVICE CENTER, BE  
[85] 2021-11-04  
[86] 2020-07-16 (PCT/US2020/042290)  
[87] (WO2021/011750)  
[30] US (62/875,267) 2019-07-17

[21] **3,139,284**  
[13] A1

[51] **Int.Cl. A61K 31/415 (2006.01) A61K 31/427 (2006.01) A61K 31/485 (2006.01)**  
[25] EN  
[54] **SYNTHESIS OF CRAC CHANNEL INHIBITORS**  
[54] **SYNTHESE D'INHIBITEURS DE CANAL CRAC**  
[72] STAUDERMAN, KENNETH A., US  
[72] DUNN, MICHAEL, US  
[72] WHITTEN, JEFFREY P., US  
[72] ROGERS, EVAN, US  
[71] CALCIMEDICA, INC., US  
[85] 2021-11-04  
[86] 2020-05-05 (PCT/US2020/031506)  
[87] (WO2020/227312)  
[30] US (62/843,822) 2019-05-06

[21] **3,139,287**  
[13] A1

[51] **Int.Cl. A61K 47/69 (2017.01) C07K 14/705 (2006.01) C07K 16/00 (2006.01)**  
[25] EN  
[54] **TAILORED HYPOIMMUNE NANOVESICULAR DELIVERY SYSTEMS FOR CANCER TUMORS**  
[54] **SYSTEMES D'ADMINISTRATION SUR MESURE A BASE DE NANOVESICULES HYPOIMMUNOGENES POUR CIBLER LES TUMEURS CANCEREUSES**  
[72] MALCOLM, THOMAS, US  
[71] MALCOLM, THOMAS, US  
[85] 2021-11-04  
[86] 2020-05-06 (PCT/US2020/031616)  
[87] (WO2020/227369)  
[30] US (62/843,713) 2019-05-06

[21] **3,139,289**  
[13] A1

[51] **Int.Cl. G01N 33/18 (2006.01) B01D 3/00 (2006.01) B01D 65/02 (2006.01) G01N 27/327 (2006.01) G01N 27/38 (2006.01) G01N 27/416 (2006.01)**  
[25] EN  
[54] **SENSOR CLEANING AND CALIBRATION DEVICES AND SYSTEMS**  
[54] **DISPOSITIFS ET SYSTEMES DE NETTOYAGE ET D'ETALONNAGE DE CAPTEUR**  
[72] MCLEOD, GREGG ALLAN, US  
[71] HACH COMPANY, US  
[85] 2021-11-04  
[86] 2020-06-05 (PCT/US2020/036365)  
[87] (WO2020/247778)  
[30] US (62/921,281) 2019-06-07  
[30] US (62/995,873) 2020-02-18

[21] **3,139,294**  
[13] A1

[51] **Int.Cl. C07K 14/475 (2006.01) C07K 14/51 (2006.01) C12N 5/00 (2006.01)**  
[25] EN  
[54] **GENERATING DORSAL FOREGUT, AND ANTERIOR DOMAIN, ENDODERM CELLS**  
[54] **GENERATION DE CELLULES D'ENDODERME D'INTESTIN ANTERIEUR DORSAL ET DE DOMAINE ANTERIEUR**  
[72] JENSEN, JAN, US  
[72] BUKYS, MICHAEL A., US  
[71] THE CLEVELAND CLINIC FOUNDATION, US  
[85] 2021-11-04  
[86] 2020-05-22 (PCT/US2020/034201)  
[87] (WO2020/237141)  
[30] US (62/851,348) 2019-05-22

[21] **3,139,295**  
[13] A1

[51] **Int.Cl. C23F 11/00 (2006.01) F16L 58/04 (2006.01) F17D 3/12 (2006.01)**  
[25] EN  
[54] **DUAL MODE CORROSION INHIBITOR FOR HYDROCARBON PROCESSES**  
[54] **INHIBITEUR DE CORROSION A DOUBLE MODE POUR DES PROCEDES D'HYDROCARBURES**  
[72] HENDERSON, WILLIAM, US  
[72] WOOD, PATRICK, US  
[71] CHEMTREAT, INC., US  
[85] 2021-11-04  
[86] 2020-06-30 (PCT/US2020/040332)  
[87] (WO2021/003175)  
[30] US (62/869,261) 2019-07-01

## PCT Applications Entering the National Phase

[21] **3,139,298**  
[13] A1

[51] **Int.Cl. A61K 31/4375 (2006.01) A61K 31/496 (2006.01) A61K 31/529 (2006.01) A61K 45/06 (2006.01) A61P 9/06 (2006.01) A61P 11/00 (2006.01) A61P 25/00 (2006.01) A61P 43/00 (2006.01)**

[25] EN

[54] **COMBINATION OF AN A2-ADRENOCEPTOR SUBTYPE C (ALPHA-2C) ANTAGONISTS WITH A TASK1/3 CHANNEL BLOCKER FOR THE TREATMENT OF SLEEP APNEA**

[54] **COMBINAISON D'UN ANTAGONISTE DE RECEPTEUR A2-ADRENERGIQUES DE SOUS-TYPE C (ALPHA-2C) AVEC UN BLOQUEUR DE CANAL TASK-1/3 POUR LE TRAITEMENT DE L'APNEE DU SOMMEIL**

[72] DELBECK, MARTINA, DE  
[72] HAHN, MICHAEL, DE  
[71] BAYER AKTIENGESELLSCHAFT, DE  
[85] 2021-11-05  
[86] 2020-05-04 (PCT/EP2020/062266)  
[87] (WO2020/225188)  
[30] EP (19173589.3) 2019-05-09

[21] **3,139,301**  
[13] A1

[51] **Int.Cl. C01B 3/32 (2006.01) C01B 3/50 (2006.01) C10G 3/00 (2006.01)**

[25] EN

[54] **PROCESS AND PLANT FOR PRODUCING HYDROCARBONS WITH REDUCED CO<sub>2</sub>-FOOTPRINT AND IMPROVED HYDROGEN INTEGRATION**

[54] **PROCEDE ET INSTALLATION DE PRODUCTION D'HYDROCARBURES A EMPREINTE REDUITE DE CO<sub>2</sub> ET INTEGRATION D'HYDROGENE AMELIOREE**

[72] ROY, RAKESH, DK  
[72] BANSAL, NITESH, IN  
[72] THAKKER, PRIYESH, US  
[72] GALLARDO, THOR, US  
[71] HALDOR TOPSOE A/S, DK  
[85] 2021-11-05  
[86] 2021-03-10 (PCT/EP2021/056085)  
[87] (WO2021/180805)  
[30] EP (20162995.3) 2020-03-13

[21] **3,139,503**  
[13] A1

[51] **Int.Cl. G06F 9/455 (2018.01) G06F 8/71 (2018.01)**

[25] EN

[54] **SYSTEM AND METHODS FOR PROVISIONING DIFFERENT VERSIONS OF A VIRTUAL APPLICATION**

[54] **SYSTEME ET PROCEDES DE FOURNITURE DE DIFFERENTES VERSIONS D'UNE APPLICATION VIRTUELLE**

[72] YOUAKIM, NABEEL, US  
[72] HOUGH, P., J., US  
[71] CITRIX SYSTEMS, INC., US  
[85] 2021-11-05  
[86] 2020-08-17 (PCT/US2020/046603)  
[87] (WO2021/061299)  
[30] US (16/585,173) 2019-09-27

[21] **3,139,504**  
[13] A1

[51] **Int.Cl. B60N 2/28 (2006.01) B60N 2/90 (2018.01) A47C 7/62 (2006.01) A47D 1/10 (2006.01) B60N 2/26 (2006.01)**

[25] EN

[54] **METHODS, APPARATUS AND SYSTEMS FOR SECURING AN INFANT CAR SEAT TO A VEHICLE SEAT WITH A TIGHT FIT AND WITHOUT USING A DETACHABLE VEHICLE INSTALLATION BASE OR A VEHICLE SEAT BELT, AND RIDE-HAILING METHODS RELATING TO SAME**

[54] **PROCEDES, APPAREIL ET SYSTEMES POUR FIXER UN SIEGE DE SECURITE POUR BEBE A UN SIEGE DE VEHICULE AVEC UN AJUSTEMENT SERRE ET SANS UTILISER DE BASE D'INSTALLATION AMOVIBLE DE VEHICULE NI DE CEINTURE DE SECURITE DE VEHICULE ET PROCEDES DE VOITURAGE SE RAPPORTANT A CEUX-CI**

[72] MASON, KYLE S., US  
[72] KEEBLER, NATHANIEL W., US  
[72] HARTENSTINE, CURTIS, US  
[72] WILLIAMS, BRUCE, US  
[72] BICKLEY, BRAD, US  
[71] WONDERLAND SWITZERLAND AG, CH  
[85] 2021-11-05  
[86] 2020-08-10 (PCT/US2020/045576)  
[87] (WO2021/030243)  
[30] US (62/884,863) 2019-08-09

[21] **3,139,506**  
[13] A1

[51] **Int.Cl. G16H 20/17 (2018.01) G16H 40/63 (2018.01) A61M 5/20 (2006.01) A61M 5/31 (2006.01)**

[25] EN

[54] **DRUG DELIVERY SYSTEM WITH ADJUSTABLE INJECTION TIME AND METHOD OF USE**

[54] **SYSTEME D'ADMINISTRATION DE MEDICAMENT AVEC DUREE D'INJECTION REGLABLE ET PROCEDE D'UTILISATION**

[72] RAHBARI, AZITA, US  
[72] DASOJU, SUNITHA, US  
[72] ANTONINI, ANTONIO, US  
[72] ALAGIA, NICOLA ANTONIO, US  
[72] VALENTI, FERDINADO, US  
[71] AMGEN INC., US  
[85] 2021-11-05  
[86] 2020-07-16 (PCT/US2020/042222)  
[87] (WO2021/011715)  
[30] US (62/875,716) 2019-07-18

[21] **3,139,517**  
[13] A1

[51] **Int.Cl. B65H 19/10 (2006.01) B27D 5/00 (2006.01)**

[25] EN

[54] **DEVICE FOR PROVIDING EDGE STRIPS, AND EDGING SYSTEM HAVING A DEVICE OF THIS TYPE**

[54] **DISPOSITIF POUR FOURNIR DES BANDES DE CHANT, SYSTEME DE FABRICATION DE CHANTS COMPRENANT UN DISPOSITIF DE CE TYPE**

[72] CULEMANN, LARS, DE  
[72] KOTTKAMP, TIM, DE  
[72] KROKER, SIMON, DE  
[72] GERDWILKER, HENDRIK, DE  
[72] HEIDENREICH, TIMO, DE  
[72] HUSENER, STEFAN, DE  
[72] PETKER, RENE, DE  
[72] STUKE, BJORN, DE  
[71] IMA SCHELLING DEUTSCHLAND GMBH, DE  
[85] 2021-11-08  
[86] 2020-08-18 (PCT/EP2020/073127)  
[87] (WO2021/032753)  
[30] DE (10 2019 122 413.6) 2019-08-21

## Demandes PCT entrant en phase nationale

[21] <b>3,139,568</b> [13] A1	[21] <b>3,139,576</b> [13] A1	[21] <b>3,139,578</b> [13] A1
[51] <b>Int.Cl. G05D 3/12 (2006.01) A63F 13/28 (2014.01) A63G 31/02 (2006.01)</b>	[51] <b>Int.Cl. F01N 3/20 (2006.01) F01N 3/28 (2006.01)</b>	[51] <b>Int.Cl. A61K 9/127 (2006.01) C12N 15/113 (2010.01) A61K 31/7088 (2006.01) A61K 31/713 (2006.01) A61K 47/28 (2006.01) A61K 48/00 (2006.01) C12N 15/11 (2006.01) C12N 15/88 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>SYSTEMS AND METHODS FOR MAPPING MOTION-RELATED PARAMETERS OF REMOTE MOVING OBJECTS</b>	[54] <b>METHODS AND DEVICES FOR CONTROLLING UREA MIXERS TO REDUCE NOX EMISSION FROM COMBUSTION ENGINES</b>	[54] <b>NANOVESICLES AND ITS USE FOR NUCLEIC ACID DELIVERY</b>
[54] <b>SYSTEMES ET PROCEDES DE MAPPAGE DE PARAMETRES RELATIFS AU MOUVEMENT D'OBJETS MOBILES A DISTANCE</b>	[54] <b>PROCEDES ET DISPOSITIFS DE COMMANDE DE MELANGEURS D'UREE POUR LA REDUCTION D'EMISSION NOX DE MOTEURS A COMBUSTION INTERNE</b>	[54] <b>NANOVESICULES ET LEUR UTILISATION POUR L'ADMINISTRATION D'ACIDES NUCLEIQUES</b>
[72] STANNERS, ROBERT, CA	[72] MASOUDI, MANSOUR, US	[72] SEGURA GINARD, MIGUEL FRANCISCO, ES
[72] STANNERS, ALEXANDER, CA	[72] TEGELER IV, EDWARD B., US	[72] GALLEGO MELCON, SOLEDAD, ES
[71] VRX VENTURES LTD., CA	[72] HENSEL, JACOB R., US	[72] SANCHEZ DE TOLEDO CODINA, JOSEP, ES
[85] 2021-11-04	[71] EMISSOL LLC, US	[72] SORIANO FERNANDEZ, AROA, ES
[86] 2020-08-28 (PCT/CA2020/051181)	[85] 2021-09-29	[72] VENTOSA RULL, NORA, ES
[87] (WO2021/035362)	[86] 2019-03-29 (PCT/US2019/024732)	[72] VECIANA MIRO, JAUME, ES
[30] US (62/894,486) 2019-08-30	[87] (WO2019/191528)	[72] BOLOIX AMENOS, ARIADNA, ES
	[30] US (62/649,793) 2018-03-29	[72] SEGOVIA RAMOS, NATHALY VERONICA, ES
		[71] FUNDACIO HOSPITAL UNIVERSITARI VALL D'HEBRON - INSTITUT DE RECERCA, ES
		[71] CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS (CSIC), ES
		[71] CONSORCIO CENTRO DE INVESTIGACION BIOMEDICA EN RED, M.P., ES
		[85] 2021-11-08
		[86] 2020-05-12 (PCT/EP2020/063195)
		[87] (WO2020/229469)
		[30] EP (19382372.1) 2019-05-13
[21] <b>3,139,572</b> [13] A1		
[51] <b>Int.Cl. B63B 59/08 (2006.01)</b>		
[25] EN		
[54] <b>A ROBOT, SYSTEM AND A METHOD FOR UNDERWATER MONITORING AND MAINTENANCE OF A SHIP'S HULL</b>		
[54] <b>ROBOT, SYSTEME ET PROCEDE DE SURVEILLANCE ET DE MAINTENANCE SOUS-MARINE D'UNE COQUE DE NAVIRE</b>		
[72] FREYER, RUNE, NO		
[71] SHIPSHAVE AS, NO		
[85] 2021-11-09		
[86] 2020-04-17 (PCT/EP2020/060865)		
[87] (WO2020/229091)		
[30] NO (20190599) 2019-05-10		

## PCT Applications Entering the National Phase

[21] **3,139,581**  
[13] A1

[51] **Int.Cl. C12N 9/22 (2006.01) A61K 9/14 (2006.01) A61K 38/46 (2006.01) C12N 11/04 (2006.01) C12N 15/00 (2006.01) C12N 15/09 (2006.01) C12N 15/11 (2006.01) C12N 15/12 (2006.01) C12N 15/87 (2006.01)**

[25] EN

[54] **LIPID-ENCAPSULATED DUAL-CLEAVING ENDONUCLEASE FOR DNA AND GENE EDITING**

[54] **ENDONUCLEASE A DOUBLE CLIVAGE ENCAPSULEE DANS DES LIPIDES POUR ADN ET GENE**

[72] EDGELL, DAVID R., CA

[72] MCMURROUGH, THOMAS A., CA

[72] STEAD, BRENT E., CA

[72] ISRAEL, ODISHO K., CA

[71] THE UNIVERSITY OF WESTERN ONTARIO (GENOMICS), CA

[71] SPECIFIC BIOLOGICS INC., CA

[85] 2021-11-03

[86] 2020-05-04 (PCT/IB2020/054229)

[87] (WO2020/225719)

[30] US (62/842,586) 2019-05-03

[30] US (63/019,423) 2020-05-03

[21] **3,139,583**  
[13] A1

[51] **Int.Cl. C12P 19/44 (2006.01) C12N 9/42 (2006.01) C12P 17/18 (2006.01)**

[25] EN

[54] **METHODS FOR PRODUCTION OF STRICTOSIDINE AGLYCONES AND MONOTERPENOID INDOLE ALKALOIDS**

[54] **PROCEDES DE PRODUCTION D'UN AGLYCONE DE STRICTOSIDINE ET D'ALCALOIDES D'INDOLE MONOTERPENOIDES**

[72] JENSEN, MICHAEL KROGH, DK

[72] KEASLING, JAY D., US

[72] ZHANG, JIE, DK

[72] HANSEN, LEA GRAM, DK

[71] DANMARKS TEKNISKE UNIVERSITET, DK

[85] 2021-11-08

[86] 2020-05-13 (PCT/EP2020/063283)

[87] (WO2020/229516)

[30] US (62/846,820) 2019-05-13

[30] EP (19175969.5) 2019-05-22

[21] **3,139,597**  
[13] A1

[51] **Int.Cl. A23G 3/42 (2006.01) A23G 1/32 (2006.01) A23G 1/40 (2006.01) A23G 1/46 (2006.01) A23G 3/36 (2006.01) A23G 3/38 (2006.01) A23G 3/46 (2006.01)**

[25] EN

[54] **CONFECTIONERY**

[54] **CONFISERIE**

[72] LIANG, YOUYUN, SG

[71] SOCIETE DES PRODUITS NESTLE S.A., CH

[85] 2021-11-08

[86] 2020-07-22 (PCT/EP2020/070724)

[87] (WO2021/018700)

[30] EP (19188493.1) 2019-07-26

[30] EP (20169041.9) 2020-04-09

[21] **3,139,599**  
[13] A1

[51] **Int.Cl. B32B 3/30 (2006.01) B05D 1/38 (2006.01) B05D 3/06 (2006.01) B05D 5/10 (2006.01) B05D 7/08 (2006.01) B27N 3/00 (2006.01) B27N 7/00 (2006.01) B32B 7/10 (2006.01) B32B 27/42 (2006.01) B44C 5/04 (2006.01) B44F 9/02 (2006.01) B44F 9/04 (2006.01)**

[25] EN

[54] **PANELS COMPRISING A STRUCTURED LACQUER SURFACE**

[54] **PANNEAUX PRESENTANT UNE SURFACE DE VERNIS STRUCTUREE**

[72] HULLENKREMER, FELIX, DE

[72] HOFF, EGON, DE

[72] BUHLMANN, CARSTEN, DE

[71] AKZENTA PANELEE + PROFILE GMBH, DE

[85] 2021-11-08

[86] 2020-07-07 (PCT/EP2020/069129)

[87] (WO2021/008946)

[30] EP (19186795.1) 2019-07-17

[21] **3,139,611**  
[13] A1

[51] **Int.Cl. F02C 9/18 (2006.01) F02C 6/08 (2006.01)**

[25] FR

[54] **METHOD AND DEVICE FOR ESTIMATING AND USING A DEAD ZONE OF A TURBOMACHINE VALVE**

[54] **PROCEDE ET DISPOSITIF D'ESTIMATION ET D'UTILISATION D'UNE ZONE MORTE D'UNE VANNE DE TURBOMACHINE**

[72] DENEUVE, SEBASTIEN JEAN FERNAND, FR

[72] TRONCHE, JEROME PASCAL LAURENT PATRICK, FR

[71] SAFRAN AIRCRAFT ENGINES, FR

[85] 2021-11-08

[86] 2020-05-15 (PCT/EP2020/063583)

[87] (WO2020/229651)

[30] FR (FR1905104) 2019-05-16

[21] **3,139,612**  
[13] A1

[51] **Int.Cl. F02C 6/08 (2006.01) F02C 9/16 (2006.01) F02C 9/18 (2006.01)**

[25] FR

[54] **METHOD AND DEVICE FOR ESTIMATING A DEAD ZONE OF A TURBOMACHINE DISCHARGE VALVE**

[54] **PROCEDE ET DISPOSITIF D'ESTIMATION D'UNE ZONE MORTE D'UNE VANNE DE DECHARGE DE TURBOMACHINE**

[72] DENEUVE, SEBASTIEN JEAN FERNAND, FR

[72] TRONCHE, JEROME PASCAL LAURENT PATRICK, FR

[71] SAFRAN AIRCRAFT ENGINES, FR

[85] 2021-11-08

[86] 2020-05-15 (PCT/EP2020/063596)

[87] (WO2020/229655)

[30] FR (FR1905102) 2019-05-16



## Demandes PCT entrant en phase nationale

[21] **3,139,613**  
[13] A1

[51] **Int.Cl. A61K 38/26 (2006.01) A61K 31/70 (2006.01) A61K 31/724 (2006.01) A61P 1/16 (2006.01) A61P 3/04 (2006.01) A61P 3/10 (2006.01)**

[25] EN

[54] **CYCLODEXTRIN BASED INJECTABLE COFORMULATIONS OF SGLT2 INHIBITORS AND INCRETIN PEPTIDES**

[54] **CO-FORMULATIONS INJECTABLES A BASE DE CYCLODEXTRINE D'INHIBITEURS DE SGLT2 ET DE PEPTIDES D'INCRETINE**

[72] LAINE, ANNE-LAURE, GB

[72] JERMUTUS, LUTZ, GB

[72] GOMES DOS SANTOS, ANA, GB

[71] MEDIMMUNE LIMITED, GB

[85] 2021-11-08

[86] 2020-05-20 (PCT/EP2020/064128)

[87] (WO2020/234384)

[30] US (62/850,710) 2019-05-21

[21] **3,139,614**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) G16H 50/30 (2018.01) A61B 5/11 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR MONITORING AND TREATING DIABETIC FOOT ULCERS**

[54] **SYSTEMES ET PROCEDES DE SURVEILLANCE ET DE TRAITEMENT D'ULCERES DE PIED DIABETIQUE**

[72] BELDING, JONATHAN EDWARD MIKA, GB

[72] DAGEVOS VAN RIJ, JOHANNES, GB

[72] HUNT, ALLAN KENNETH FRAZER GRUGEON, GB

[72] LAY, JONATHON SIMON, GB

[72] QUIST, BRIAN WILLIAM, US

[72] SMITH, DAMIAN LAWSON, GB

[71] T.J.SMITH AND NEPHEW,LIMITED, GB

[85] 2021-11-08

[86] 2020-05-21 (PCT/EP2020/064228)

[87] (WO2020/234429)

[30] US (62/889,955) 2019-08-21

[30] GB (1907254.5) 2019-05-23

[30] GB (1907260.2) 2019-05-23

[21] **3,139,615**  
[13] A1

[51] **Int.Cl. A61K 31/706 (2006.01) A23L 2/00 (2006.01) A23L 2/52 (2006.01) A61P 1/16 (2006.01) A61P 31/22 (2006.01) A61P 43/00 (2006.01)**

[25] EN

[54] **REDUCED NICOTINAMIDERIBOSIDES FOR THE TREATMENT/PREVENTION OF LIVER DISEASE**

[54] **NICOTINAMIDE RIBOSIDES REDUITS POUR LE TRAITEMENT/LA PREVENTION D'UNE MALADIE HEPATIQUE**

[72] CANTO ALVAREZ, CARLES, CH

[72] CHRISTEN, STEFAN, CH

[72] GINER, MARIA PILAR, CH

[72] GIROUD-GERBETANT, JUDITH, ES

[72] MOCO, SOFIA, CH

[72] MIGAUD, MARIE, US

[71] SOCIETE DES PRODUITS NESTLE S.A., CH

[85] 2021-11-08

[86] 2020-06-03 (PCT/EP2020/065335)

[87] (WO2020/245190)

[30] EP (19178427.1) 2019-06-05

[21] **3,139,616**  
[13] A1

[51] **Int.Cl. C09B 61/00 (2006.01) A61K 8/35 (2006.01) A61Q 1/02 (2006.01) A61Q 5/06 (2006.01) C09B 67/22 (2006.01)**

[25] EN

[54] **DYE COMPOSITION COMPRISING A COMBINATION OF NATURAL DYEING AGENTS INCLUDING AN EXTRACT OF LAWSONIA INERMIS**

[54] **COMPOSITION COLORANTE COMPRENANT UNE COMBINAISON D'AGENTS DE COLORATION NATURELS COMPRENANT UN EXTRAIT DE LAWSONIA INERMIS**

[72] FIORINI-PUYBARET, CHRISTEL, FR

[72] JOULIA, PHILIPPE, FR

[71] PIERRE FABRE DERMO-COSMETIQUE, FR

[85] 2021-11-08

[86] 2020-06-12 (PCT/EP2020/066330)

[87] (WO2020/249747)

[30] FR (FR1906265) 2019-06-12

[21] **3,139,617**  
[13] A1

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

[25] EN

[54] **SYSTEMS AND METHODS FOR USER VERIFICATION BASED ON ACTIGRAPHY DATA**

[54] **SYSTEMES ET PROCEDES DE VERIFICATION D'UTILISATEUR SUR LA BASE DE DONNEES D'ACTIGRAPHIE**

[72] DORN, JONAS, CH

[72] ILLIANO, VITTORIO PAOLO, CH

[71] NOVARTIS AG, CH

[85] 2021-11-08

[86] 2020-06-16 (PCT/EP2020/066564)

[87] (WO2020/254291)

[30] EP (19181740.2) 2019-06-21

[21] **3,139,619**  
[13] A1

[51] **Int.Cl. A61K 35/747 (2015.01) A61K 45/06 (2006.01) A61P 3/00 (2006.01) A61P 25/24 (2006.01)**

[25] EN

[54] **LACTOBACILLUS COMPOSITIONS AND USES THEREOF**

[54] **COMPOSITIONS DE LACTOBACILLUS ET LEURS UTILISATIONS**

[72] SVENSSON, MICHAEL, SE

[71] PROBI AB, SE

[85] 2021-11-08

[86] 2020-06-17 (PCT/EP2020/066722)

[87] (WO2020/254381)

[30] GB (1908706.3) 2019-06-18

[21] **3,139,622**  
[13] A1

[51] **Int.Cl. A61K 31/4725 (2006.01) A61P 25/00 (2006.01) C07D 401/06 (2006.01)**

[25] EN

[54] **A SUBSTITUTED TETRAHYDROISOQUINOLINE DERIVATIVE AS A D1 POSITIVE ALLOSTERIC MODULATOR**

[54] **DERIVE DE TETRAHYDROISOQUINOLEINE SUBSTITUE UTILISE COMME MODULATEUR ALLOSTERIQUE POSITIF DE D1**

[72] VALADE, ANNE, BE

[71] UCB BIOPHARMA SRL, BE

[85] 2021-11-08

[86] 2020-06-29 (PCT/EP2020/068181)

[87] (WO2021/001286)

[30] EP (19183641.0) 2019-07-01

## PCT Applications Entering the National Phase

[21] **3,139,623**  
[13] A1

[51] **Int.Cl. C07C 37/50 (2006.01) C07C 37/84 (2006.01) C07C 39/23 (2006.01) C07C 67/343 (2006.01) C07C 67/54 (2006.01)**

[25] EN

[54] **METHODS OF MANUFACTURING CANNABIDIOL OR CANNABIDIVARIN AND INTERMEDIATES OF MANUFACTURING CANNABIDIOL OR CANNABIDIVARIN**

[54] **PROCEDES DE FABRICATION DE CANNABIDIOL OU DE CANNABIDIVARINE ET INTERMEDIAIRES DE FABRICATION DE CANNABIDIOL OU DE CANNABIDIVARINE**

[72] MITCHELL, JAMES PATRICK JR., US

[72] PRINCE, PATRICK, US

[71] BENVIA MANUFACTURING, LLC, US

[85] 2021-11-08

[86] 2020-05-08 (PCT/IB2020/000365)

[87] (WO2020/229891)

[30] US (62/846,279) 2019-05-10

[21] **3,139,624**  
[13] A1

[51] **Int.Cl. G05D 1/02 (2020.01)**

[25] EN

[54] **CONGESTION AVOIDANCE AND COMMON RESOURCE ACCESS MANAGEMENT FOR MULTIPLE ROBOTS**

[54] **EVITEMENT DE CONGESTION ET GESTION D'ACCES A UNE RESSOURCE COMMUNE POUR DE MULTIPLES ROBOTS**

[72] SKUBCH, HENDRIK, JP

[71] ROPYUTA ROBOTICS CO., LTD., JP

[85] 2021-11-08

[86] 2020-03-27 (PCT/IB2020/052906)

[87] (WO2020/194249)

[30] US (16/366,444) 2019-03-27

[21] **3,139,625**  
[13] A1

[51] **Int.Cl. G05D 1/02 (2020.01)**

[25] EN

[54] **GENERATING A 2D-NAVIGATION MAP FOR COLLISION-FREE NAVIGATION BY MULTIPLE ROBOTS**

[54] **GENERATION D'UNE CARTE DE NAVIGATION EN 2D POUR NAVIGATION SANS COLLISION PAR DE MULTIPLES ROBOTS**

[72] LI, WEN ZHENG, JP

[72] SKUBCH, HENDRIK, JP

[71] ROPYUTA ROBOTICS CO., LTD., JP

[85] 2021-11-08

[86] 2020-03-27 (PCT/IB2020/052920)

[87] (WO2020/194253)

[30] US (16/366,286) 2019-03-27

[21] **3,139,627**  
[13] A1

[51] **Int.Cl. A23L 33/21 (2016.01) A23L 33/10 (2016.01) A61K 31/7004 (2006.01) A61K 31/717 (2006.01) A61P 1/00 (2006.01) A61P 3/02 (2006.01) C08L 5/00 (2006.01)**

[25] EN

[54] **MATERIALS AND METHODS FOR PRODUCING ARABINOXYLAN COMPOSITIONS**

[54] **MATERIAUX ET PROCEDES DE PRODUCTION DE COMPOSITIONS D'ARABINOXYLANE**

[72] RICHARD, ANDREW, CA

[72] D'AGOSTINO, DENNIS, CA

[72] IVANOV-DRAGUT, ANA-TEODORA, CA

[71] COMET BIOREFINING INC., CA

[85] 2021-11-08

[86] 2020-05-08 (PCT/IB2020/054390)

[87] (WO2020/229977)

[30] US (62/846,291) 2019-05-10

[21] **3,139,630**  
[13] A1

[51] **Int.Cl. B65D 5/30 (2006.01) B65D 43/10 (2006.01)**

[25] EN

[54] **INTERLOCKING PACKAGING ARTICLE AND ITS FORMING METHOD AND APPARATUS**

[54] **ARTICLE D'EMBALLAGE VERROUILLABLE, ET PROCEDE DE FORMATION ET APPAREIL CORRESPONDANTS**

[72] RONCONI, GIOVANNI, IT

[71] EMS GROUP S.P.A., IT

[85] 2021-11-08

[86] 2020-05-11 (PCT/IB2020/054429)

[87] (WO2020/229998)

[30] IT (102019000006722) 2019-05-10

[21] **3,139,631**  
[13] A1

[51] **Int.Cl. A61K 9/20 (2006.01) A61K 31/553 (2006.01) A61P 17/06 (2006.01)**

[25] EN

[54] **MATRIX COMPOSITION COMPRISING (S)-5-BENZYL-N-(5-METHYL-4-OXO-2,3,4,5-TETRAHYDROBENZO[B][1,4]OXAZEPIN-3-YL)-4H-1,2,4-TRIAZOLE-3-CARBOXAMIDE**

[54] **COMPOSITION DE MATRICE COMPRENANT (S)-5-BENZYL-N-(5-METHYL-4-OXO-2,3,4,5-TETRAHYDROBENZO[B][1,4]OXAZEPIN-3-YL)-4 H-1,2,4-TRIAZOLE-3-CARBOXAMIDE**

[72] APFELBAUM, RACHEL, US

[72] CHEN, XIN, US

[72] PAN, RENNAN, US

[71] GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED, GB

[85] 2021-11-08

[86] 2020-05-15 (PCT/IB2020/054615)

[87] (WO2020/234716)

[30] US (62/849,180) 2019-05-17

[30] US (62/990,093) 2020-03-16

## Demandes PCT entrant en phase nationale

[21] **3,139,633**  
[13] A1

[51] **Int.Cl. C21D 1/22 (2006.01) C21D 8/02 (2006.01) C22C 38/22 (2006.01) C22C 38/28 (2006.01) C22C 38/44 (2006.01) C22C 38/50 (2006.01)**

[25] EN

[54] **A COLD ROLLED MARTENSITIC STEEL AND A METHOD OF MARTENSITIC STEEL THEREOF**

[54] **ACIER MARTENSITIQUE LAMINE A FROID ET PROCEDE D'ACIER MARTENSITIQUE S'Y RAPPORTANT**

[72] SIEBENTRITT, MATTHIEU, FR

[72] LHOIST, VINCENT, BE

[72] ESNAUT, AURELIE, FR

[71] ARCELORMITTAL, LU

[85] 2021-11-08

[86] 2020-06-05 (PCT/IB2020/055319)

[87] (WO2020/250098)

[30] IB (PCT/IB2019/054901) 2019-06-12

[21] **3,139,636**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 47/10 (2017.01) A61K 47/34 (2017.01) A61K 47/36 (2006.01) A61P 27/02 (2006.01)**

[25] EN

[54] **OPHTHALMIC COMPOSITIONS**

[54] **COMPOSITIONS OPHTALMIQUES**

[72] ZHANG, STEVE YUN, US

[72] BREITKOPF, RICHARD CHARLES, US

[72] WU, DAQING, US

[72] GE, JUNHAO, US

[72] GUBITOSI RASPINO, MARIA F., US

[72] KUMI, AUGUSTINE TWUM, US

[72] LIANG, WEI, US

[71] ALCON INC., CH

[85] 2021-11-08

[86] 2020-06-25 (PCT/IB2020/056039)

[87] (WO2020/261185)

[30] US (62/868,220) 2019-06-28

[21] **3,139,638**  
[13] A1

[51] **Int.Cl. A61H 5/00 (2006.01) A61B 3/00 (2006.01)**

[25] EN

[54] **FUNCTION RECOVERY TRAINING SYSTEM, FUNCTION RECOVERY TRAINING DEVICE AND PROGRAM**

[54] **SYSTEME D'ENTRAINEMENT POUR RESTAURATION DE FONCTION, DISPOSITIF D'ENTRAINEMENT POUR RESTAURATION DE FONCTION, ET PROGRAMME**

[72] HIRAOKA, MARI, JP

[71] SUMITOMO DAINIPPON PHARMA CO., LTD., JP

[85] 2021-11-08

[86] 2020-05-01 (PCT/JP2020/018411)

[87] (WO2020/226133)

[30] JP (2019-088811) 2019-05-09

[21] **3,139,634**  
[13] A1

[51] **Int.Cl. A61K 31/44 (2006.01) A61K 31/4965 (2006.01) A61P 11/00 (2006.01)**

[25] EN

[54] **PYRIDINE AND PYRAZINE DERIVATIVE FOR THE TREATMENT OF CF, COPD, AND BRONCHIECTASIS**

[54] **DERIVE DE PYRIDINE ET DE PYRAZINE POUR LE TRAITEMENT DE LA FK, DE LA BPCO ET DE LA BRONCHIECTASIE**

[72] GRANT, SARAH SCHMIDT, CH

[72] HEDERER, BETTINA, CH

[72] LANGENICKEL, THOMAS, CH

[72] ROWLANDS, DAVID J., US

[72] STRIETER, ROBERT MARTIN, US

[72] TIAN, XIANBIN, US

[71] NOVARTIS AG, CH

[85] 2021-11-08

[86] 2020-06-08 (PCT/IB2020/055383)

[87] (WO2020/250116)

[30] US (62/859,442) 2019-06-10

[30] US (63/025,567) 2020-05-15

[21] **3,139,637**  
[13] A1

[51] **Int.Cl. G08C 15/00 (2006.01) G08C 15/06 (2006.01) G08C 25/00 (2006.01) H04L 7/00 (2006.01)**

[25] EN

[54] **DATA COLLECTION DEVICE, SIGNAL GENERATION POSITION IDENTIFICATION SYSTEM, DATA COLLECTION METHOD, SIGNAL GENERATION POSITION IDENTIFICATION METHOD, AND PROGRAM**

[54] **DISPOSITIF DE COLLECTE DE DONNEES, SYSTEME D'IDENTIFICATION DE POSITION DE GENERATION DE SIGNAL, PROCEDE DE COLLECTE DE DONNEES, PROCEDE D'IDENTIFICATION DE POSITION DE GENERATION DE SIGNAL ET PROGRAMME**

[72] HATANO, SHOJI, JP

[72] KOBAYASHI, MASARU, JP

[72] OHTA, KOICHI, JP

[71] FUJI TECOM INC., JP

[85] 2021-11-08

[86] 2020-04-23 (PCT/JP2020/017546)

[87] (WO2020/226069)

[30] JP (2019-089162) 2019-05-09

[21] **3,139,639**  
[13] A1

[51] **Int.Cl. H01J 40/06 (2006.01) H01J 1/34 (2006.01) H01J 9/12 (2006.01) H01J 43/24 (2006.01)**

[25] EN

[54] **PHOTOCATHODE, ELECTRON TUBE, AND METHOD FOR MANUFACTURING PHOTOCATHODE**

[54] **PHOTOCATHODE, TUBE ELECTRONIQUE ET PROCEDE DE FABRICATION DE PHOTOCATHODE**

[72] KAWAI, TERUNORI, JP

[72] TORII, YOSHITAKA, JP

[72] SHIBAYAMA, MASAMI, JP

[72] WATANABE, HIROYUKI, JP

[72] YAMASHITA, SHINICHI, JP

[71] HAMAMATSU PHOTONICS K.K., JP

[85] 2021-11-08

[86] 2020-05-12 (PCT/JP2020/019001)

[87] (WO2020/261786)

[30] JP (2019-118249) 2019-06-26

## PCT Applications Entering the National Phase

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[21] **3,139,640**  
[13] A1

[51] **Int.Cl. D02G 3/22 (2006.01) A41D 31/00 (2019.01) D03D 15/00 (2021.01) D04B 1/16 (2006.01)**

[25] EN

[54] **COMPOSITE YARN, FABRIC, AND FIBER PRODUCT**

[54] **FIL COMPOSITE, TISSU ET PRODUIT FIBREUX**

[72] SHIBATA, SONOMI, JP

[72] OGATA, NOBUAKI, JP

[71] TEIJIN FRONTIER CO., LTD., JP

[85] 2021-11-08

[86] 2020-05-18 (PCT/JP2020/019637)

[87] (WO2020/241353)

[30] JP (2019-102638) 2019-05-31

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[21] **3,139,641**  
[13] A1

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

[25] EN

[54] **ANTIBODY TO TIGIT AND USE THEREOF**

[54] **ANTICORPS DIRIGE CONTRE TIGIT ET SON UTILISATION**

[72] PARK, HYE-YOUNG, KR

[72] SONG, EUN JUNG, KR

[72] LEE, EUN HEE, KR

[72] YUM, HYE IN, KR

[72] NAM, HYE MI, KR

[72] KIM, MUN KYUNG, KR

[72] LEE, JEE WON, KR

[72] SHEEN, JOONG HYUK, KR

[72] HUR, MIN KYU, KR

[72] LIM, SO JUNG, KR

[72] LIM, OK JAE, KR

[72] LIM, YANG MI, KR

[72] WON, JONG HWA, KR

[71] GREEN CROSS CORPORATION, KR

[71] MOGAM INSTITUTE FOR BIOMEDICAL RESEARCH, KR

[85] 2021-11-08

[86] 2020-05-22 (PCT/KR2020/006705)

[87] (WO2020/251187)

[30] KR (10-2019-0069931) 2019-06-13

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[21] **3,139,643**  
[13] A1

[51] **Int.Cl. C12N 7/01 (2006.01) A61K 35/768 (2015.01) A61K 31/522 (2006.01) A61K 38/45 (2006.01) A61P 35/00 (2006.01) C12N 7/00 (2006.01) C12N 9/12 (2006.01) C12N 15/54 (2006.01) C12N 15/863 (2006.01)**

[25] EN

[54] **ONCOLYTIC VIRUS WITH IMPROVED SAFETY AND ANTICANCER EFFECTS**

[54] **VIRUS ONCOLYTIQUE A SECURITE ET EFFET ANTICANCEREUX AMELIORES**

[72] HWANG, TAEHO, KR

[72] CHO, MONG, KR

[71] BIONOXX INC., KR

[85] 2021-11-08

[86] 2020-06-29 (PCT/KR2020/008472)

[87] (WO2020/263059)

[30] KR (10-2019-0077377) 2019-06-27

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[21] **3,139,644**  
[13] A1

[51] **Int.Cl. A01K 79/00 (2006.01) A01K 61/13 (2017.01) A01K 74/00 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR COLLECTING LOOSENED FISH PARASITES IN A FISH PEN**

[54] **APPAREIL ET PROCEDE POUR COLLECTER DES PARASITES DE POISSON DETACHES DANS UN ENCLOS A POISSONS**

[72] ERITZLAND, RUNE, NO

[71] ASKVIK AQUA AS, NO

[85] 2021-11-08

[86] 2020-05-07 (PCT/NO2020/050116)

[87] (WO2020/226508)

[30] NO (20190594) 2019-05-09

[30] NO (20200358) 2020-03-26

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[21] **3,139,656**  
[13] A1

[51] **Int.Cl. G06T 13/40 (2011.01) G06T 17/20 (2006.01)**

[25] EN

[54] **METHOD OF INFERRING MICRODETAIL ON SKIN ANIMATION**

[54] **PROCEDE DE DEDUCTION DE MICRODETAILS SUR UNE ANIMATION DE LA PEAU**

[72] PADOVANI, EMILIANO, NZ

[72] VILL, ARTUR, NZ

[71] WETA DIGITAL LIMITED, NZ

[85] 2021-11-08

[86] 2020-10-02 (PCT/NZ2020/050118)

[87] (WO2021/154097)

[30] US (62/968,014) 2020-01-30

[30] US (17/035,522) 2020-09-28

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[21] **3,139,657**  
[13] A1

[51] **Int.Cl. G06T 7/00 (2017.01) G06T 7/50 (2017.01)**

[25] EN

[54] **APPARATUS FOR MULTI-ANGLE SCREEN COVERAGE ANALYSIS**

[54] **APPAREIL D'ANALYSE DE COUVERTURE D'ECRAN MULTI-ANGLE**

[72] GIMPELSON, KENNETH, NZ

[71] WETA DIGITAL LIMITED, NZ

[85] 2021-11-08

[86] 2020-10-20 (PCT/NZ2020/050130)

[87] (WO2021/154098)

[30] US (62/968,047) 2020-01-30

[30] US (17/071,940) 2020-10-15

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[21] **3,139,658**  
[13] A1

[51] **Int.Cl. A61F 13/20 (2006.01)**

[25] EN

[54] **NASAL PLUG**

[54] **EMBOUT NASAL**

[72] AHNBLAD, SUSANNE, SE

[72] AHNBLAD, PETER, SE

[71] HOGNE AB, SE

[85] 2021-11-08

[86] 2020-05-13 (PCT/SE2020/050491)

[87] (WO2020/231317)

[30] SE (1950566-8) 2019-05-13

## Demandes PCT entrant en phase nationale

[21] **3,139,659**  
[13] A1

[51] **Int.Cl. A61N 1/362 (2006.01) C09D 175/02 (2006.01)**  
[25] EN  
[54] **ANTIBIOTIC ELUTING POLY (ESTER UREA) FILMS FOR INFECTION CONTROL OF IMPLANTABLE MEDICAL DEVICES**  
[54] **FILMS DE POLY(ESTER-UREE) D'ELUTION D'ANTIBIOTIQUE POUR LA LUTTE CONTRE L'INFECTION DE DISPOSITIFS MEDICAUX IMPLANTABLES**  
[72] BECKER, MATTHEW, US  
[72] NIKAM, SHANTANU PRATAP, US  
[72] ALFARO, ARTHUR, US  
[71] THE UNIVERSITY OF AKRON, US  
[71] 21ST CENTURY MEDICAL TECHNOLOGIES, LLC, US  
[85] 2021-11-08  
[86] 2019-05-09 (PCT/US2019/031405)  
[87] (WO2020/226646)

[21] **3,139,660**  
[13] A1

[51] **Int.Cl. G01N 9/00 (2006.01) G01N 11/16 (2006.01)**  
[25] EN  
[54] **DETERMINING AND IDENTIFYING ANOMALIES IN FORK METERS**  
[54] **DETERMINATION ET IDENTIFICATION D'ANOMALIES DANS DES COMPTEURS A RAMIFICATION**  
[72] SMITH, KEVIN F., US  
[71] MICRO MOTION, INC., US  
[85] 2021-11-08  
[86] 2019-05-09 (PCT/US2019/031536)  
[87] (WO2020/226654)

[21] **3,139,661**  
[13] A1

[51] **Int.Cl. B29C 41/06 (2006.01) B29C 41/18 (2006.01) B29C 41/38 (2006.01)**  
[25] EN  
[54] **FLUIDIZED BED ROTATIONAL MOLDING**  
[54] **MOULAGE ROTATIF A LIT FLUIDISE**  
[72] EPLEE, DUSTIN, US  
[71] EPLEE, DUSTIN, US  
[85] 2021-11-08  
[86] 2019-05-09 (PCT/US2019/031593)  
[87] (WO2020/226660)

[21] **3,139,662**  
[13] A1

[51] **Int.Cl. A61K 31/20 (2006.01) A23K 20/158 (2016.01) A23K 50/40 (2016.01) A61K 31/202 (2006.01) A61P 13/04 (2006.01)**  
[25] EN  
[54] **PET FOOD COMPOSITIONS COMPRISING CAPRYLIC ACID AND DOCOSAHEXAENOIC ACID AND/OR EICOSAPETAENOIC ACID FOR USE IN TREATING STRUVITE UROLITHIASIS**  
[54] **COMPOSITIONS ALIMENTAIRES POUR ANIMAUX DE COMPAGNIE COMPRENANT DE L'ACIDE CAPRYLIQUE ET DE L'ACIDE DOCOSAHEXAENOIQUE ET/OU DE L'ACIDE EICOSAPENTANOIQUE DESTINEES A ETRE UTILISEES DANS LE TRAITEMENT DE L'UROLITHIASIS DE STRUVITE**  
[72] JACKSON, MATTHEW, US  
[72] JEWELL, DENNIS, US  
[71] HILL'S PET NUTRITION, INC., US  
[85] 2021-11-08  
[86] 2019-05-24 (PCT/US2019/033899)  
[87] (WO2020/242437)

[21] **3,139,663**  
[13] A1

[51] **Int.Cl. E21B 41/00 (2006.01) E21B 43/116 (2006.01) E21B 43/119 (2006.01) E21B 43/26 (2006.01) E21B 44/00 (2006.01)**  
[25] EN  
[54] **EVALUATING HYDRAULIC FRACTURING BREAKDOWN EFFECTIVENESS**  
[54] **EVALUATION D'EFFICACITE DE RUPTURE DE FRACTURATION HYDRAULIQUE**  
[72] MARTYSEVICH, VLADIMIR NIKOLAYEVICH, US  
[72] DUSTERHOFT, RONALD GLEN, US  
[72] MA, JIANFU, US  
[71] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2021-11-08  
[86] 2019-06-21 (PCT/US2019/038548)  
[87] (WO2019/246564)  
[30] US (16/448,993) 2018-06-21

[21] **3,139,664**  
[13] A1

[51] **Int.Cl. C23C 2/00 (2006.01) C23C 2/06 (2006.01) C23C 2/38 (2006.01)**  
[25] EN  
[54] **CONTINUOUS GALVANIZING APPARATUS FOR MULTIPLE RODS**  
[54] **APPAREIL DE GALVANISATION EN CONTINU POUR DE MULTIPLES TIGES**  
[72] MASON, CHRISTOPHER STEPHEN, US  
[72] PATTERSON, RUSSELL WAYNE, US  
[71] WESTERN TECHNOLOGIES, INC., US  
[85] 2021-11-08  
[86] 2019-08-29 (PCT/US2019/048694)  
[87] (WO2020/231454)  
[30] US (16/411,412) 2019-05-14

[21] **3,139,665**  
[13] A1

[51] **Int.Cl. F04B 51/00 (2006.01) G01M 99/00 (2011.01)**  
[25] EN  
[54] **TEST SYSTEM FLUID EVACUATION**  
[54] **EVACUATION DE FLUIDE D'UN SYSTEME D'ESSAI**  
[72] FIELDER, VANCE LEE, US  
[72] MULLINS, BRYAN DON, US  
[72] KOPECKY, TREVOR ALAN, US  
[72] BROWN, DONN J., US  
[71] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2021-11-08  
[86] 2019-09-24 (PCT/US2019/052717)  
[87] (WO2021/054985)  
[30] US (16/574,557) 2019-09-18

## PCT Applications Entering the National Phase

[21] **3,139,666**  
[13] A1

[51] **Int.Cl. A45C 5/06 (2006.01) A45C 5/03 (2006.01) A45C 7/00 (2006.01) A45C 13/00 (2006.01) A45C 15/00 (2006.01)**

[25] EN  
[54] **LUGGAGE WITH POCKET**  
[54] **BAGAGE A POCHE**  
[72] NAPARSTEK, SAM, US  
[72] LEWIS, CELIA, US  
[72] MADISON, KYLE, US  
[72] ONG, DIANA, US  
[72] LEE, JESSICA, US  
[72] SUOZZO, CHRISTIE, US  
[71] JRSK, INC., US  
[85] 2021-11-08  
[86] 2019-10-07 (PCT/US2019/055074)  
[87] (WO2020/226678)  
[30] US (62/845,199) 2019-05-08

[21] **3,139,667**  
[13] A1

[51] **Int.Cl. H04B 10/54 (2013.01) H04B 10/61 (2013.01) H04J 14/02 (2006.01) H04L 27/20 (2006.01)**

[25] EN  
[54] **BIDIRECTIONAL OPTICAL COMMUNICATIONS**  
[54] **COMMUNICATIONS OPTIQUES BIDIRECTIONNELLES**  
[72] OLSON, MAGNUS, US  
[72] RASHIDINEJAD, AMIR, US  
[71] INFINERA CORPORATION, US  
[85] 2021-11-08  
[86] 2020-02-13 (PCT/US2020/018180)  
[87] (WO2020/226718)  
[30] US (62/844,176) 2019-05-07  
[30] US (16/578,008) 2019-09-20  
[30] US (16/577,932) 2019-09-20

[21] **3,139,668**  
[13] A1

[51] **Int.Cl. A47J 43/27 (2006.01) A47J 43/04 (2006.01)**

[25] EN  
[54] **SHAKER DEVICES**  
[54] **DISPOSITIFS SHAKERS**  
[72] BUSHBY, BRAYTON, US  
[71] BUSHBY, BRAYTON, US  
[85] 2021-11-08  
[86] 2020-04-16 (PCT/US2020/028563)  
[87] (WO2020/226874)

[21] **3,139,669**  
[13] A1

[51] **Int.Cl. E21B 17/18 (2006.01) E21B 19/22 (2006.01) E21B 23/00 (2006.01)**

[25] EN  
[54] **SYSTEM AND METHOD FOR PRESSURE ISOLATION AND RELIEF ACROSS A THREADED CONNECTION**  
[54] **SYSTEME ET PROCEDE D'ISOLATION ET DE RELACHEMENT DE PRESSION A TRAVERS UN RACCORD FILETE**  
[72] GARR, RONALD J., US  
[72] JONES, DARRELL D., US  
[72] SCHUBERT, DALE W., US  
[72] MCWHERTER, DANIEL S., US  
[71] BAKER HUGHES OILFIELD OPERATIONS LLC, US  
[85] 2021-11-08  
[86] 2020-04-17 (PCT/US2020/028712)  
[87] (WO2020/236365)  
[30] US (16/420,389) 2019-05-23

[21] **3,139,670**  
[13] A1

[51] **Int.Cl. A61M 5/32 (2006.01) A61M 5/31 (2006.01) A61M 5/46 (2006.01)**

[25] EN  
[54] **SYRINGES, SYRINGE CONTAINERS, KITS AND METHODS OF USE**  
[54] **SERINGUES, CONTENANTS DE SERINGUE, KITS ET PROCEDES D'UTILISATION**  
[72] DECKMAN, ROB, US  
[72] PERALTA, DOMINIC, US  
[72] ERNESTO, JUAN, US  
[72] STEPHENSON, KATE, US  
[72] DEODHAR, CHINMAY, IN  
[71] MEDICINES360, US  
[85] 2021-11-08  
[86] 2020-04-27 (PCT/US2020/030029)  
[87] (WO2020/226923)  
[30] US (62/845,475) 2019-05-09  
[30] US (62/884,429) 2019-08-08  
[30] US (16/842,704) 2020-04-07

[21] **3,139,671**  
[13] A1

[51] **Int.Cl. G06F 21/62 (2013.01) G06F 9/54 (2006.01)**

[25] EN  
[54] **APPLYING POLICIES TO APIS FOR SERVICE GRAPH**  
[54] **APPLICATION DE POLITIQUES A DES API POUR GRAPHE DE SERVICE**  
[72] VITTAL, CHIRADEEP, US  
[71] CITRIX SYSTEMS, INC., US  
[85] 2021-11-08  
[86] 2020-04-30 (PCT/US2020/030788)  
[87] (WO2020/236414)  
[30] US (16/415,857) 2019-05-17

[21] **3,139,676**  
[13] A1

[51] **Int.Cl. G06F 9/455 (2018.01)**

[25] EN  
[54] **MULTI-TENANT OPTIMIZED SERVERLESS PLACEMENT USING SMART NETWORK INTERFACE CARDS AND COMMODITY STORAGE**  
[54] **PLACEMENT OPTIMISE SANS SERVEUR DE LOCATAIRES MULTIPLES A L'AIDE DE CARTES D'INTERFACE RESEAU INTELLIGENTES ET DE STOCKAGE DE MARCHANDISES**  
[72] MESTERY, KYLE ANDREW DONALD, US  
[72] WELLS, IAN JAMES, US  
[71] CISCO TECHNOLOGY, INC., US  
[85] 2021-11-08  
[86] 2020-05-01 (PCT/US2020/031040)  
[87] (WO2020/227098)  
[30] US (16/406,872) 2019-05-08

## Demandes PCT entrant en phase nationale

[21] **3,139,678**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 48/00 (2006.01) A61P 25/00 (2006.01) A61P 43/00 (2006.01) C12N 15/85 (2006.01) C12N 15/86 (2006.01)**

[25] EN

[54] **UBE3A GENES AND EXPRESSION CASSETTES AND THEIR USE**

[54] **GENES UBE3A ET CASSETTES D'EXPRESSION ET LEUR UTILISATION**

[72] PHILPOT, BENJAMIN DAVID, US

[72] GRAY, STEVEN JAMES, US

[72] SHYNG, CHARLES, US

[72] JUDSON, MATTHEW, US

[71] THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, US

[85] 2021-11-08

[86] 2020-05-22 (PCT/US2020/034171)

[87] (WO2020/237130)

[30] US (62/851,411) 2019-05-22

[21] **3,139,679**  
[13] A1

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

[25] EN

[54] **METHODS FOR PURIFICATION OF MESSENGER RNA**

[54] **PROCEDES DE PURIFICATION D'ARN MESSENGER**

[72] ABYSALH, JONATHAN, US

[72] DEROSA, FRANK, US

[72] VARGAS, JOREL, US

[72] SMITH, CAMERON M., US

[71] TRANSLATE BIO, INC., US

[85] 2021-11-08

[86] 2020-05-15 (PCT/US2020/033185)

[87] (WO2020/232371)

[30] US (62/848,412) 2019-05-15

[30] US (62/891,781) 2019-08-26

[21] **3,139,684**  
[13] A1

[51] **Int.Cl. A01G 7/04 (2006.01) A01G 9/02 (2018.01) A01G 9/24 (2006.01) A01G 31/06 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR CONTROLLING INDOOR FARMS REMOTELY AND USER INTERFACE FOR SAME**

[54] **SYSTEME ET PROCEDE DE COMMANDE DE FERMES INTERIEURES A DISTANCE ET INTERFACE UTILISATEUR ASSOCIEE**

[72] PORTELLO, JOSEPH MICHAEL, US

[72] ZELKIND, MICHAEL, US

[72] LIVINGSTON, PATRICIA, US

[71] 80 ACRES URBAN AGRICULTURE, INC., US

[85] 2021-11-08

[86] 2020-05-13 (PCT/US2020/032719)

[87] (WO2020/232151)

[30] US (62/847,195) 2019-05-13

[21] **3,139,685**  
[13] A1

[51] **Int.Cl. G06F 11/30 (2006.01) G06F 9/455 (2018.01) G06F 11/34 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR RECORDING METADATA ABOUT MICROSERVICES FOR REQUESTS TO THE MICROSERVICES**

[54] **SYSTEMES ET PROCEDES D'ENREGISTREMENT DE METADONNEES CONCERNANT DES MICROSERVICES POUR DES DEMANDES AUX MICROSERVICES**

[72] WHITE, JEREMY, US

[71] CITRIX SYSTEMS, INC., US

[85] 2021-11-08

[86] 2020-05-13 (PCT/US2020/032577)

[87] (WO2020/236468)

[30] US (16/415,807) 2019-05-17

[21] **3,139,686**  
[13] A1

[51] **Int.Cl. B05B 17/06 (2006.01) A61M 11/00 (2006.01) A61M 15/00 (2006.01)**

[25] EN

[54] **ULTRASONIC BREATH ACTUATED RESPIRATORY DROPLET DELIVERY DEVICE AND METHODS OF USE**

[54] **DISPOSITIF D'ADMINISTRATION DE GOUTTELETTES RESPIRATOIRES ACTIONNE PAR LA RESPIRATION ULTRASONORE ET METHODES D'UTILISATION**

[72] HUNTER, CHARLES ERIC, US

[72] HEBRANK, JOHN H., US

[72] LI, CHENGJIE, US

[71] PNEUMA RESPIRATORY, INC., US

[85] 2021-11-08

[86] 2020-05-11 (PCT/US2020/032383)

[87] (WO2020/227717)

[30] US (62/845,664) 2019-05-09

[30] US (62/851,910) 2019-05-23

[30] US (62/871,688) 2019-07-08

[30] US (62/883,030) 2019-08-05

[30] US (62/912,543) 2019-10-08

[21] **3,139,687**  
[13] A1

[51] **Int.Cl. A61M 5/145 (2006.01) A61M 5/14 (2006.01) A61M 5/34 (2006.01)**

[25] EN

[54] **IMPROVED ALL-IN ONE SYRINGE ASSEMBLY FOR BLOOD DRAWS AND MEDICINE DELIVERY TO PATIENTS**

[54] **ENSEMBLE SERINGUE TOUT-EN-UN AMELIORE PERMETTANT DES PRELEVEMENTS DE SANG ET L'ADMINISTRATION DE MEDICAMENTS A DES PATIENTS**

[72] BREWER, MICHAEL, US

[72] BROWNE, ROBERT, US

[72] BARTHOLOMEW, CHONNA, US

[72] FORTUNE, ROBERT, US

[72] PHILLIPS, BILL, US

[71] VASCULAR INTEGRITY, US

[85] 2021-11-08

[86] 2020-05-09 (PCT/US2020/032267)

[87] (WO2020/227701)

[30] US (62/845,767) 2019-05-09

[30] US (62/909,669) 2019-10-02

## PCT Applications Entering the National Phase

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[21] **3,139,689**  
[13] A1

[51] **Int.Cl. A61B 1/24 (2006.01) A61C 17/00 (2006.01) A61C 17/06 (2006.01) A61C 17/10 (2006.01)**

[25] EN  
[54] **DENTAL MOUTHPIECE**  
[54] **EMBOUT BUCCAL DENTAIRE**

[72] NGUYEN, THIEN, US  
[72] PHAM, TAM THANH, US  
[72] NGUYEN, ETHAN, US  
[72] NGUYEN, LAUREN, US  
[71] DRYSHIELD, LLC, US  
[85] 2021-11-08  
[86] 2020-05-08 (PCT/US2020/032228)  
[87] (WO2020/231864)  
[30] US (62/846,353) 2019-05-10

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[21] **3,139,691**  
[13] A1

[51] **Int.Cl. A01G 31/04 (2006.01) A01G 9/14 (2006.01) A01G 9/16 (2006.01) A01G 9/24 (2006.01) A01G 31/02 (2006.01) A01G 31/06 (2006.01)**

[25] EN  
[54] **METHOD AND APPARATUS FOR HIGH-DENSITY INDOOR FARMING**

[54] **PROCEDE ET APPAREIL D'AGRICULTURE EN INTERIEUR HAUTE-DENSITE**

[72] CANIPE, TRACY ALAN, US  
[72] ZELKIND, MICHAEL, US  
[72] LIVINGSTON, PATRICIA, US  
[71] 80 ACRES URBAN AGRICULTURE INC., US  
[85] 2021-11-08  
[86] 2020-05-08 (PCT/US2020/032218)  
[87] (WO2020/227681)  
[30] US (62/845,822) 2019-05-09

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[21] **3,139,692**  
[13] A1

[51] **Int.Cl. B31D 5/00 (2017.01) B65D 81/02 (2006.01) B65D 81/03 (2006.01)**

[25] EN  
[54] **EMBOSSSED PAPER IN COMBINATION WITH PAPER CUSHIONING FOR SHIPPING ENVELOPES**

[54] **PAPIER GAUFRE EN COMBINAISON AVEC UN REMBOURRAGE EN PAPIER POUR DES ENVELOPPES D'EXPEDITION**

[72] GOODRICH, DAVID P., US  
[71] GOODRICH, DAVID P., US  
[85] 2021-11-08  
[86] 2020-05-08 (PCT/US2020/032146)  
[87] (WO2020/227649)  
[30] US (62/845,293) 2019-05-08  
[30] US (62/982,662) 2020-02-27

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[21] **3,139,693**  
[13] A1

[51] **Int.Cl. G06F 9/50 (2006.01)**

[25] EN  
[54] **DYNAMIC ALLOCATION OF COMPUTING RESOURCES**

[54] **ATTRIBUTION DYNAMIQUE DE RESSOURCES INFORMATIQUES**

[72] ZHANG, QUANLU, US  
[72] YANG, FAN, US  
[72] ZHOU, LIDONG, US  
[72] YANG, MAO, US  
[72] ZHAO, HANYU, US  
[72] HAN, ZHENHUA, US  
[71] MICROSOFT TECHNOLOGY LICENSING, LLC, US  
[85] 2021-11-08  
[86] 2020-05-04 (PCT/US2020/031250)  
[87] (WO2020/263414)  
[30] CN (201910578411.1) 2019-06-28

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[21] **3,139,695**  
[13] A1

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

[25] EN  
[54] **INTERFERON REGULATORY FACTOR 5 INHIBITORS AND USES THEREOF**

[54] **INHIBITEURS DU FACTEUR 5 DE REGULATION DE L'INTERFERON ET LEURS UTILISATIONS**

[72] BARNES, BETSY J., US  
[72] SUN, SHAN, US  
[71] THE FEINSTEIN INSTITUTES FOR MEDICAL RESEARCH, US  
[85] 2021-11-08  
[86] 2020-05-04 (PCT/US2020/031283)  
[87] (WO2020/227194)  
[30] US (62/844,894) 2019-05-08

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[21] **3,139,699**  
[13] A1

[51] **Int.Cl. F16L 55/04 (2006.01) E21B 21/01 (2006.01) F16L 55/05 (2006.01)**

[25] EN  
[54] **SYSTEM PULSATION DAMPENERS DEVICE(S) SUBSTITUTING FOR PULSATION DAMPENERS UTILIZING COMPRESSION MATERIAL THEREIN**

[54] **DISPOSITIF(S) AMORTISSEURS DE PULSATIONS DE SYSTEME SUBSTITUANT A DES AMORTISSEURS DE PULSATIONS UTILISANT UN MATERIAU DE COMPRESSION A L'INTERIEUR DE CELUI-CI**

[72] ROGERS, JOHN THOMAS, US  
[71] PERFORMANCE PULSATION CONTROL, INC., US  
[85] 2021-11-08  
[86] 2020-05-04 (PCT/US2020/031335)  
[87] (WO2020/227223)  
[30] US (16/404,248) 2019-05-06



## Demandes PCT entrant en phase nationale

[21] **3,139,701**  
[13] A1

[51] **Int.Cl. E21B 43/16 (2006.01) E21B 33/12 (2006.01) E21B 43/26 (2006.01)**

[25] EN

[54] **METHODS OF DISINTEGRATING DOWNHOLE TOOLS CONTAINING CYANATE ESTERS**

[54] **PROCEDES DE DESINTEGRATION D'OUTILS DE FOND DE TROU CONTENANT DES ESTERS DE CYANATE**

[72] GARZA, RAMON, US

[72] JOHNSON, MICHAEL, US

[71] BAKER HUGHES OILFIELD OPERATIONS LLC, US

[85] 2021-11-08

[86] 2020-05-05 (PCT/US2020/031441)

[87] (WO2020/227272)

[30] US (16/406,743) 2019-05-08

[21] **3,139,702**  
[13] A1

[51] **Int.Cl. A63B 71/14 (2006.01)**

[25] EN

[54] **THUMB-WORN PROTECTIVE BATTING AID FOR REDUCING TRANSMISSION OF VIBRATION AND IMPACT FROM THE BAT**

[54] **AIDE A LA FRAPPE DE PROTECTION PORTEE PAR LE POUCE POUR REDUIRE LA TRANSMISSION DE VIBRATIONS ET D'IMPACTS A PARTIR DE LA BATTE**

[72] CRAIG, FIRST, US

[71] CRAIG, FIRST, US

[85] 2021-11-08

[86] 2020-05-07 (PCT/US2020/031848)

[87] (WO2020/227511)

[30] US (16/407,363) 2019-05-09

[21] **3,139,703**  
[13] A1

[51] **Int.Cl. H04N 13/302 (2018.01) G02B 27/01 (2006.01) G03B 1/04 (2021.01) G03H 1/22 (2006.01)**

[25] EN

[54] **LIGHT FIELD DISPLAY SYSTEM BASED COMMERCIAL SYSTEM**

[54] **SYSTEME COMMERCIAL FONDE SUR UN SYSTEME D'AFFICHAGE A CHAMP LUMINEUX**

[72] KARAFIN, JONATHAN SEAN, US

[72] BEVENSEE, BRENDAN ELWOOD, US

[71] LIGHT FIELD LAB, INC., US

[85] 2021-11-08

[86] 2020-05-07 (PCT/US2020/031915)

[87] (WO2020/236434)

[30] US (16/418,237) 2019-05-21

[21] **3,139,704**  
[13] A1

[51] **Int.Cl. A61M 5/00 (2006.01)**

[25] EN

[54] **DUAL LUMEN IV ADMINISTRATION SET**

[54] **ENSEMBLE D'ADMINISTRATION IV A DOUBLE LUMIERE**

[72] JOHNSON, CASEY, US

[72] THOMAS, DORAN, US

[72] JOHNSON, SCOTT, US

[71] BOHNAS INNOVATIONS LLC, US

[85] 2021-11-08

[86] 2020-05-08 (PCT/US2020/032007)

[87] (WO2020/227597)

[30] US (62/845,769) 2019-05-09

[30] US (62/849,742) 2019-05-17

[30] US (62/858,133) 2019-06-06

[30] US (62/971,435) 2020-02-07

[30] US (16/869,009) 2020-05-07

[21] **3,139,705**  
[13] A1

[51] **Int.Cl. F21S 8/02 (2006.01) F21V 7/00 (2006.01) F21V 13/02 (2006.01) F21V 13/04 (2006.01) F21V 13/10 (2006.01)**

[25] EN

[54] **WALL-WASH LIGHTING FIXTURE**

[54] **APPAREIL D'ECLAIRAGE LECHE-MUR**

[72] DEVOL, NATHANIEL STEPHEN HACK, US

[72] VENHAUS, DAVID ALLEN, US

[71] HUBBELL INCORPORATED, US

[85] 2021-11-08

[86] 2020-05-08 (PCT/US2020/032086)

[87] (WO2020/227624)

[30] US (62/844,990) 2019-05-08

[21] **3,139,708**  
[13] A1

[51] **Int.Cl. C07D 403/12 (2006.01) A61K 31/444 (2006.01) A61K 31/506 (2006.01) A61P 35/00 (2006.01) C07D 403/14 (2006.01) C07D 471/08 (2006.01) C07D 487/04 (2006.01) C07D 487/08 (2006.01)**

[25] EN

[54] **PHENYLAMINOPYRIMIDINE AMIDE AUTOPHAGY INHIBITORS AND METHODS OF USE THEREOF**

[54] **PHENYLAMINOPYRIMIDINE AMIDES INHIBITEURS D'AUTOPHAGIE ET LEURS PROCEDES D'UTILISATION**

[72] FLYNN, DANIEL L., US

[72] AHN, YU MI, US

[72] CALDWELL, TIMOTHY, US

[72] VOGETI, LAKSHMINARAYANA, US

[71] DECIPHERA PHARMACEUTICALS, LLC, US

[85] 2021-11-08

[86] 2020-05-08 (PCT/US2020/032087)

[87] (WO2020/231806)

[30] US (62/846,258) 2019-05-10

[30] US (62/846,251) 2019-05-10

[30] US (62/911,728) 2019-10-07

[30] US (62/911,730) 2019-10-07

[21] **3,139,735**  
[13] A1

[51] **Int.Cl. A63H 33/04 (2006.01) A61B 5/11 (2006.01) A63B 24/00 (2006.01) G09B 1/00 (2006.01)**

[25] EN

[54] **INTERACTIVE HUMAN ACTIVITY TRACKING SYSTEM**

[54] **SYSTEME INTERACTIF DE SUIVI D'ACTIVITE HUMAINE**

[72] KELLY, JAMES, B., AU

[72] JONES, MICHAEL, A., AU

[72] MCNAUGHT, RYAN, N., AU

[71] BRICKFIT PTY LTD, AU

[85] 2021-11-09

[86] 2020-05-11 (PCT/AU2020/000039)

[87] (WO2020/227754)

[30] AU (2019901607) 2019-05-10

## PCT Applications Entering the National Phase

[21] **3,139,737**  
[13] A1

[51] **Int.Cl. C04B 35/043 (2006.01) C04B 35/04 (2006.01)**  
[25] EN  
[54] **A SYSTEM AND METHOD FOR THE PRODUCTION OF HIGH STRENGTH MATERIALS**  
[54] **SYSTEME ET PROCEDE DE PRODUCTION DE MATERIAUX A HAUTE RESISTANCE**  
[72] SCEATS, MARK, AU  
[71] CALIX LTD., AU  
[85] 2021-11-09  
[86] 2020-05-13 (PCT/AU2020/050471)  
[87] (WO2020/227770)  
[30] AU (2019901645) 2019-05-14

[21] **3,139,739**  
[13] A1

[51] **Int.Cl. E02F 9/28 (2006.01) E02F 5/14 (2006.01) E02F 9/26 (2006.01)**  
[25] EN  
[54] **GROUND ENGAGING TOOL MONITORING SYSTEM**  
[54] **SYSTEME DE SURVEILLANCE D'OUTIL D'ENTREE EN CONTACT AVEC LE SOL**  
[72] HILLIER, NICK, AU  
[72] SHRESTHA, SAGUN MAN SINGH, AU  
[72] BATTEN, ROSS, AU  
[72] JUNG, MYOUNGKI, AU  
[71] CQMS PTY LTD, AU  
[85] 2021-11-09  
[86] 2020-05-29 (PCT/AU2020/050550)  
[87] (WO2020/237324)  
[30] AU (2019901878) 2019-05-31

[21] **3,139,773**  
[13] A1

[51] **Int.Cl. G01S 11/00 (2006.01)**  
[25] EN  
[54] **DETERMINING MOTION ZONES IN A SPACE TRAVERSED BY WIRELESS SIGNALS**  
[54] **DETERMINATION DE ZONES DE MOUVEMENT DANS UN ESPACE TRAVERSE PAR DES SIGNAUX SANS FIL**  
[72] DEVISON, STEPHEN ARNOLD, CA  
[72] OMER, MOHAMMAD, CA  
[71] COGNITIVE SYSTEMS CORP., CA  
[85] 2021-11-09  
[86] 2019-08-28 (PCT/CA2019/051182)  
[87] (WO2020/227804)  
[30] US (16/413,109) 2019-05-15

[21] **3,139,774**  
[13] A1

[51] **Int.Cl. G01S 11/00 (2006.01)**  
[25] EN  
[54] **DETERMINING A MOTION ZONE FOR A LOCATION OF MOTION DETECTED BY WIRELESS SIGNALS**  
[54] **DETERMINATION D'UNE ZONE DE MOUVEMENT POUR UN EMPLACEMENT DE MOUVEMENT DETECTE PAR DES SIGNAUX SANS FIL**  
[72] DEVISON, STEPHEN ARNOLD, CA  
[72] OMER, MOHAMMAD, CA  
[71] COGNITIVE SYSTEMS CORP., CA  
[85] 2021-11-09  
[86] 2019-08-28 (PCT/CA2019/051183)  
[87] (WO2020/227805)  
[30] US (16/413,114) 2019-05-15

[21] **3,139,775**  
[13] A1

[51] **Int.Cl. G01S 11/00 (2006.01)**  
[25] EN  
[54] **DETERMINING A CONFIDENCE FOR A MOTION ZONE IDENTIFIED AS A LOCATION OF MOTION FOR MOTION DETECTED BY WIRELESS SIGNALS**  
[54] **DETERMINATION D'UNE CONFIANCE POUR UNE ZONE DE MOUVEMENT IDENTIFIEE COMME UNE LOCALISATION DE MOUVEMENT POUR UN MOUVEMENT DETECTE PAR DES SIGNAUX SANS FIL**  
[72] DEVISON, STEPHEN ARNOLD, CA  
[72] OMER, MOHAMMAD, CA  
[71] COGNITIVE SYSTEMS CORP., CA  
[85] 2021-11-09  
[86] 2019-08-28 (PCT/CA2019/051184)  
[87] (WO2020/227806)  
[30] US (16/413,165) 2019-05-15

[21] **3,139,776**  
[13] A1

[51] **Int.Cl. G06F 1/20 (2006.01) G06F 1/26 (2006.01) G06F 15/00 (2006.01) H04Q 1/02 (2006.01)**  
[25] EN  
[54] **PORTABLE BLOCKCHAIN MINING SYSTEM AND METHODS OF USE**  
[54] **SYSTEME DE MINAGE DE CHAINE DE BLOCS PORTABLE ET PROCEDES D'UTILISATION**  
[72] BARBOUR, STEPHEN, CA  
[71] UPSTREAM DATA INC., CA  
[85] 2021-11-09  
[86] 2020-03-31 (PCT/CA2020/050426)  
[87] (WO2020/227811)  
[30] US (62/848,573) 2019-05-15

[21] **3,139,777**  
[13] A1

[51] **Int.Cl. A01G 7/02 (2006.01) A01C 21/00 (2006.01) A01N 59/04 (2006.01) A01P 1/00 (2006.01)**  
[25] EN  
[54] **CONTROL OF PATHOGENS BY FOLIAR SPRAYING WITH CO<sub>2</sub>-INFUSED WATER**  
[54] **LUTTE CONTRE LES AGENTS PATHOGENES PAR PULVERISATION FOLIAIRE A L'EAU INFUSEE AU CO<sub>2</sub>**  
[72] ARCHIBALD, JOHN, CA  
[71] CO<sub>2</sub> GRO INC., CA  
[85] 2021-11-09  
[86] 2020-04-22 (PCT/CA2020/050527)  
[87] (WO2020/227812)  
[30] US (62/846,837) 2019-05-13

## Demandes PCT entrant en phase nationale

[21] **3,139,778**  
[13] A1

[51] **Int.Cl. B29C 45/20 (2006.01)**  
[25] EN  
[54] **SIDE-GATE INJECTION MOLDING APPARATUS AND SIDE-GATE HOT RUNNER NOZZLE**  
[54] **APPAREIL DE MOULAGE PAR INJECTION A ENTREE LATERALE ET BUSE DE CANAL CHAUFFANT A ENTREE LATERALE**  
[72] QIAN, JIPING, CA  
[72] YAN, BEILEI, CA  
[71] MOLD-MASTERS (2007) LIMITED, CA  
[85] 2021-11-09  
[86] 2020-05-06 (PCT/CA2020/050609)  
[87] (WO2020/227817)  
[30] US (62/846,206) 2019-05-10

[21] **3,139,779**  
[13] A1

[51] **Int.Cl. B67D 7/02 (2010.01) B67D 7/08 (2010.01) A47F 10/00 (2006.01) B65B 1/04 (2006.01) B65B 3/04 (2006.01) B65B 5/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS, METHODS AND DEVICES FOR DISTRIBUTING VARIOUS PRODUCTS**  
[54] **SYSTEMES, PROCEDES ET DISPOSITIFS POUR DISTRIBUER DIVERS PRODUITS**  
[72] BESSETTE, ROBERT, CA  
[72] BROUILLARD, JACINTHE, CA  
[72] DESCHAMBAULT, JEAN-SEBASTIEN, CA  
[71] FABRICATION LLENAR INC., CA  
[85] 2021-11-09  
[86] 2020-05-08 (PCT/CA2020/050629)  
[87] (WO2020/223822)  
[30] US (62/845,461) 2019-05-09

[21] **3,139,780**  
[13] A1

[51] **Int.Cl. F23B 20/00 (2006.01) A47J 37/07 (2006.01) F24B 1/182 (2006.01)**  
[25] EN  
[54] **PORTABLE FIRE PIT AND GRILL ASSEMBLY**  
[54] **ENSEMBLE FOYER ET GRIL PORTATIF**  
[72] ASHFORD, MAXWELL, GB  
[72] HOFER, JOSEPH, CA  
[72] PARKER, CHRIS, CA  
[72] RIZKALLA, GEORGE, CA  
[71] ENTERPRISES NOLK INC., CA  
[85] 2021-11-09  
[86] 2020-05-08 (PCT/CA2020/050631)  
[87] (WO2020/223823)  
[30] US (62/845,348) 2019-05-09

[21] **3,139,781**  
[13] A1

[51] **Int.Cl. F16L 47/32 (2006.01) C02F 1/00 (2006.01) E03C 1/12 (2006.01) F16L 41/02 (2006.01)**  
[25] EN  
[54] **FLUIDLY CONNECTING END CAP**  
[54] **CAPUCHON D'EXTREMITE A CONNEXION FLUIDIQUE**  
[72] BLONDEAU, SANDRA, CA  
[72] BOISSONNEAULT, CARL, CA  
[72] BOUCHER, BENOIT, CA  
[72] THIFAUULT, JONATHAN, CA  
[71] 11814192 CANADA INC., CA  
[85] 2021-11-09  
[86] 2020-05-11 (PCT/CA2020/050638)  
[87] (WO2020/223827)  
[30] US (62/845,734) 2019-05-09

[21] **3,139,782**  
[13] A1

[51] **Int.Cl. G01N 21/95 (2006.01) F42B 35/00 (2006.01)**  
[25] EN  
[54] **PROJECTILE ALIGNMENT AND SECUREMENT DEVICE**  
[54] **DISPOSITIF D'ALIGNEMENT ET DE FIXATION DE PROJECTILE**  
[72] BONIN, SIMON, CA  
[72] DULHARIU, VALENTIN, CA  
[72] LABRECQUE, SERGE, CA  
[72] LAMARCHE, LOUIS, CA  
[72] LEVESQUE, SERGE, CA  
[72] MARINA, DANNY, CA  
[71] ULTRA ELECTRONICS FORENSIC TECHNOLOGY INC., CA  
[85] 2021-11-09  
[86] 2020-05-15 (PCT/CA2020/050657)  
[87] (WO2020/232535)  
[30] US (62/849,517) 2019-05-17

[21] **3,139,783**  
[13] A1

[51] **Int.Cl. C07D 519/00 (2006.01) A61K 31/4985 (2006.01) A61P 1/04 (2006.01) A61P 17/00 (2006.01) A61P 17/06 (2006.01) A61P 19/02 (2006.01) A61P 35/00 (2006.01) A61P 37/06 (2006.01) C07D 495/04 (2006.01)**  
[25] EN  
[54] **UBIQUITIN-SPECIFIC PROTEASE INHIBITORS, AND PREPARATION METHOD THEREFOR AND APPLICATION THEREOF**  
[54] **INHIBITEURS DE PROTEASE SPECIFIQUES DE L'UBIQUITINE, LEUR PROCEDE DE PREPARATION ET LEUR APPLICATION**  
[72] PENG, JIN, CN  
[72] JIANG, KUN, CN  
[72] BU, JITIAN, CN  
[72] WANG, FENG, CN  
[71] CHASER THERAPEUTICS, INC., CN  
[85] 2021-11-09  
[86] 2020-05-08 (PCT/CN2020/089284)  
[87] (WO2020/224652)  
[30] CN (201910385956.0) 2019-05-09

## PCT Applications Entering the National Phase

[21] **3,139,784**  
[13] A1

[51] **Int.Cl. C07D 405/12 (2006.01) A61K 31/473 (2006.01) A61P 25/00 (2006.01) C07D 455/06 (2006.01)**

[25] EN

[54] **NEW SOLID FORMS OF (2S,3S,4S,5R,6S)-3,4,5-TRIHYDROXY-6-(((4AR,10AR)-7-HYDROXY-1-PROPYL-1,2,3,4,4A,5,10,10A-OCTAHYDROBENZO[G]QUINOLIN-6-YL)OXY)TETRAHYDRO-2H-PYRAN-2-CARBOXYLIC ACID**

[54] **NOUVELLES FORMES SOLIDES D'ACIDE (2S,3S,4S,5R,6S)-3,4,5-TRIHYDROXY-6-(((4AR,10AR)-7-HYDROXY-1-PROPYL-1,2,3,4,4A,5,10,10A-OCTAHYDROBENZO[G]QUINOLIN-6-YL) OXY)TETRAHYDRO-2H-PYRAN-2-CARBOXYLIQUE**

[72] JENSEN, KLAUS GJERVIK, DK

[72] JORGENSEN, MORTEN, DK

[72] JUHL, MARTIN, DK

[72] KVÆRNO, LISBET, DK

[72] DE DIEGO, HEIDI LOPEZ, DK

[72] FREDHOLT, KARIN, DK

[72] THERKELSEN, FRANS DENNIS, DK

[72] FRIHED, TOBIAS GYLLING, DK

[72] JACOBSEN, MIKKEL FOG, DK

[71] H. LUNDBECK A/S, DK

[85] 2021-11-09

[86] 2020-05-19 (PCT/EP2020/063910)

[87] (WO2020/234272)

[30] DK (PA201900598) 2019-05-20

[30] DK (PA201900599) 2019-05-20

[30] DK (PA201900612) 2019-05-21

[30] DK (PA201900636) 2019-05-24

[21] **3,139,785**  
[13] A1

[51] **Int.Cl. B21J 5/12 (2006.01)**

[25] EN

[54] **PROCESSING UNIT AND PROCESSING MACHINE FOR PROCESSING A WORKPIECE ON A WORKPIECE WALL AND METHOD FOR PRODUCING A PROCESSING UNIT OF THE STATED TYPE**

[54] **UNITE D'USINAGE ET MACHINE D'USINAGE SERVANT A USINER UNE PIECE SUR UNE PAROI DE PIECE, ET PROCEDE DE FABRICATION D'UNE UNITE D'USINAGE DU TYPE MENTIONNE**

[72] TRAUTZ, UDO, DE

[72] MUTHNY, ALEXANDER, DE

[72] KLUGE, MATTHIAS, DE

[71] FELSS SYSTEMS GMBH, DE

[85] 2021-10-27

[86] 2020-04-28 (PCT/EP2020/061676)

[87] (WO2020/229156)

[30] DE (10 2019 112 547.2) 2019-05-14

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[21] **3,139,786**  
[13] A1

[51] **Int.Cl. A61K 8/46 (2006.01) A61K 8/02 (2006.01) A61Q 5/00 (2006.01) A61Q 19/00 (2006.01)**

[25] EN

[54] **LAMELLAR LIQUID CLEANSERS COMPRISING ACYL ISETHIONATE AND METHYL ACYL TAURATE SURFACTANT MIXTURES**

[54] **AGENTS NETTOYANTS LIQUIDES LAMELLAIRES COMPRENANT DES MELANGES TENSIOACTIFS D'ISETHIONATE D'ACYLE ET DE TAURATE DE METHYLACYLE**

[72] HIBAN, DOUGLAS JOHN, US

[72] MILLER, JAMIE LYNN, US

[72] VASUDEVAN, TIRUCHERAI VARAHAN, US

[71] UNILEVER GLOBAL IP LIMITED, GB

[85] 2021-11-09

[86] 2020-05-04 (PCT/EP2020/062329)

[87] (WO2020/233972)

[30] EP (19175537.0) 2019-05-21

[21] **3,139,787**  
[13] A1

[51] **Int.Cl. B65D 5/38 (2006.01) B65D 50/04 (2006.01)**

[25] EN

[54] **A CARTON**

[54] **BOITE EN CARTON**

[72] JOINES, MARK DAVID, GB

[72] ARCHAMBAULT, STEVEN GERARD, US

[71] ESSENTRA PACKAGING & SECURITY LIMITED, GB

[85] 2021-11-09

[86] 2020-05-07 (PCT/EP2020/062686)

[87] (WO2020/225355)

[30] GB (1906536.6) 2019-05-09

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[21] **3,139,788**  
[13] A1

[51] **Int.Cl. A23F 3/14 (2006.01) A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 31/353 (2006.01) A61K 36/82 (2006.01) A61K 47/18 (2017.01) A61K 47/20 (2006.01) A61Q 19/08 (2006.01)**

[25] EN

[54] **GREEN TEA CATECHINS EUTECTIC SYSTEM**

[54] **SYSTEME EUTECTIQUE A BASE DE CATECHINES DU THE VERT**

[72] DO, BERNARD, FR

[72] PAUL, MURIEL, FR

[72] ASTIER, ALAIN, FR

[72] THIRION, OLIVIER, FR

[71] ASSISTANCE PUBLIQUE - HOPITAUX DE PARIS, FR

[71] UNIVERSITE PARIS-SACLAY, FR

[85] 2021-11-09

[86] 2020-05-28 (PCT/EP2020/064876)

[87] (WO2020/239929)

[30] EP (19305692.6) 2019-05-29

## Demandes PCT entrant en phase nationale

[21] **3,139,789**  
[13] A1

[51] **Int.Cl. F24S 25/613 (2018.01) H02S 20/23 (2014.01) E04D 1/16 (2006.01) E04D 1/34 (2006.01) E04D 1/36 (2006.01) E04D 3/06 (2006.01)**

[25] EN

[54] **A SYSTEM FOR MOUNTING GLASS ROOF TILES ON A ROOF CONSTRUCTION**

[54] **SYSTEME POUR MONTER DES TUILES DE TOIT EN VERRE SUR UNE CONSTRUCTION DE TOIT**

[72] PEDERSEN, THOMAS, DK

[71] SOLARTAG APS, DK

[85] 2021-11-09

[86] 2020-05-07 (PCT/EP2020/062753)

[87] (WO2020/229307)

[30] EP (19173803.8) 2019-05-10

[21] **3,139,790**  
[13] A1

[51] **Int.Cl. A61K 38/08 (2019.01) A61P 31/20 (2006.01) A61P 31/22 (2006.01)**

[25] EN

[54] **PEPTIDES FOR USE IN THERAPY OR PROPHYLAXIS OF HERPESVIRIDAE-INFECTIONS**

[54] **PEPTIDES DESTINES A ETRE UTILISES DANS LA THERAPIE OU LA PROPHYLAXIE D'INFECTIONS PAR LE VIRUS DE L'HERPES**

[72] WEHKAMP, JAN, US

[72] SCHINDLER, MICHAEL, DE

[72] BOEFFERT, REBECCA, DE

[72] BUSINGER, RAMONA, DE

[72] EHMANN, DIRK, DE

[71] NOVOZYMES A/S, DK

[85] 2021-11-09

[86] 2020-05-08 (PCT/EP2020/062882)

[87] (WO2020/229349)

[30] DE (10 2019 112 244.9) 2019-05-10

[21] **3,139,791**  
[13] A1

[51] **Int.Cl. C12Q 1/6816 (2018.01)**

[25] EN

[54] **METHOD OF DETECTING TARGET NUCLEIC ACID MOLECULES**

[54] **PROCEDE DE DETECTION DE MOLECULES D'ACIDE NUCLEIQUE CIBLE**

[72] KUHNEMUND, MALTE, SE

[72] VERHEYEN, TOON, SE

[71] 10X GENOMICS, INC., US

[85] 2021-11-09

[86] 2020-05-29 (PCT/EP2020/065090)

[87] (WO2020/240025)

[30] GB (1907764.3) 2019-05-31

[30] GB (1907752.8) 2019-05-31

[30] GB (1907779.1) 2019-05-31

[30] GB (1907772.6) 2019-05-31

[21] **3,139,792**  
[13] A1

[51] **Int.Cl. A63H 27/10 (2006.01)**

[25] EN

[54] **POUCH ASSEMBLY**

[54] **ENSEMBLE POCHE**

[72] HALLIBURTON, JAMES, GB

[71] SEATRIEVER INTERNATIONAL HOLDINGS LIMITED, GB

[85] 2021-11-09

[86] 2020-05-28 (PCT/GB2020/051286)

[87] (WO2020/240182)

[30] GB (1907746.0) 2019-05-31

[21] **3,139,793**  
[13] A1

[51] **Int.Cl. B42D 25/24 (2014.01) B42D 25/324 (2014.01) B42D 25/337 (2014.01) B42D 25/351 (2014.01) B42D 25/41 (2014.01) B42D 25/425 (2014.01) B42D 25/435 (2014.01) B42D 25/445 (2014.01) B42D 25/455 (2014.01) B42D 25/46 (2014.01)**

[25] EN

[54] **A SECURITY SHEET**

[54] **FEUILLE DE SECURITE**

[72] BOBAT, SHIREEN, GB

[72] SUGDON, MATTHEW, GB

[72] HUSMANN, CHRISTOPH, GB

[71] DE LA RUE INTERNATIONAL LIMITED, GB

[85] 2021-11-09

[86] 2020-06-10 (PCT/EP2020/066052)

[87] (WO2020/249601)

[30] GB (1908252.8) 2019-06-10

[21] **3,139,794**  
[13] A1

[51] **Int.Cl. B23K 10/00 (2006.01) H05B 7/00 (2006.01) H05H 1/34 (2006.01)**

[25] FR

[54] **ELECTRODE-FEED DEVICE**

[54] **DISPOSITIF D'ALIMENTATION EN ELECTRODES**

[72] TAKALI, SABRI, FR

[72] KACEM, AHMED, FR

[71] PLENESYS, FR

[85] 2021-11-09

[86] 2020-05-11 (PCT/EP2020/063049)

[87] (WO2020/229408)

[30] FR (FR1904940) 2019-05-13

[21] **3,139,795**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/4178 (2006.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01)**

[25] EN

[54] **SUBSTITUTED 1-AMINO-1H-IMIDAZOLE-5-CARBOXAMIDE AS BRUTON'S TYROSINE KINASE INHIBITORS**

[54] **1-AMINO-1H-IMIDAZOLE-5-CARBOXAMIDE SUBSTITUE UTILISE EN TANT QU'INHIBITEURS DE LA TYROSINE KINASE DE BRUTON**

[72] DING, QINGJIE, CN

[72] MA, CHUNHUA, CN

[72] JIANG, YUQIN, CN

[72] XU, GUIQING, CN

[72] LI, WEI, CN

[72] ZHAO, MINGHAO, CN

[72] LI, QINGYUN, CN

[72] ZHANG, DANDAN, CN

[72] FAN, GUOJIE, CN

[72] LI, YANG, CN

[72] SHI, XIN, CN

[72] YANG, SHOUNING, CN

[71] HENAN NORMAL UNIVERSITY, CN

[71] HENAN ZHIWEI BIOMEDICINE CO., LTD., CN

[85] 2021-11-09

[86] 2020-05-09 (PCT/CN2020/089407)

[87] (WO2020/228637)

[30] CN (201910388246.3) 2019-05-10

## PCT Applications Entering the National Phase

[21] **3,139,796**  
[13] A1

[51] **Int.Cl. C12M 1/12 (2006.01) A61L 2/10 (2006.01) A61L 9/20 (2006.01) A61M 39/16 (2006.01) A61M 39/18 (2006.01) C12M 1/00 (2006.01) C02F 1/32 (2006.01)**

[25] EN

[54] **IMPROVEMENTS IN AND RELATING TO STERILISATION OF FLUID-GUIDING ELEMENTS FOR BIOPROCESSING APPLICATIONS**

[54] **AMELIORATIONS APORTEES A LA STERILISATION D'ELEMENTS DE GUIDAGE DE FLUIDE POUR DES APPLICATIONS DE BIOTRAITEMENT**

[72] EHRING, HANNO, SE  
[71] CYTIVA SWEDEN AB, SE  
[85] 2021-11-09  
[86] 2020-06-17 (PCT/EP2020/066747)  
[87] (WO2020/260089)  
[30] GB (1909315.2) 2019-06-28

[21] **3,139,797**  
[13] A1

[51] **Int.Cl. E01D 11/04 (2006.01) D07B 1/16 (2006.01) E01D 19/16 (2006.01)**

[25] EN

[54] **A DEICING DEVICE FOR A SHEATH OF A STRUCTURAL CABLE AND A METHOD FOR DEICING A STRUCTURAL CABLE**

[54] **DISPOSITIF DE DEGIVRAGE POUR UNE GAINÉ D'UN CABLE DE STRUCTURE ET PROCEDE DE DEGIVRAGE D'UN CABLE DE STRUCTURE**

[72] CROS, EMMANUEL, FR  
[72] GUESDON, MATTHIEU, FR  
[72] ERDOGAN, JULIEN, FR  
[72] TOTH, MIKLOS, FR  
[71] SOLETANCHE FREYSSINET, FR  
[85] 2021-11-09  
[86] 2019-05-14 (PCT/IB2019/000598)  
[87] (WO2020/229867)

[21] **3,139,798**  
[13] A1

[51] **Int.Cl. H01M 10/056 (2010.01) H01M 4/136 (2010.01) H01M 10/0525 (2010.01) H01M 10/054 (2010.01)**

[25] EN

[54] **RECHARGEABLE BATTERY CELL**

[54] **PILE RECHARGEABLE**

[72] ZINCK, LAURENT, FR  
[72] PSZOLLA, CHRISTIAN, DE  
[72] BORCK, MARKUS, DE  
[71] INNOLITH TECHNOLOGY AG, CH  
[85] 2021-11-09  
[86] 2020-07-30 (PCT/EP2020/071563)  
[87] (WO2021/019041)  
[30] EP (19189435.1) 2019-07-31

[21] **3,139,799**  
[13] A1

[51] **Int.Cl. A01B 13/00 (2006.01) A01B 33/08 (2006.01) A01B 33/16 (2006.01) A01B 71/02 (2006.01)**

[25] EN

[54] **DEVICE FOR AGRICULTURAL MACHINE**

[54] **DISPOSITIF POUR MACHINE AGRICOLE**

[72] PINA CABRITA DA SILVA RIBEIRO, MANUEL, BR  
[71] AGROTRITUS - LOCACAO E COMERCIO DE MAQUINAS, LTDA, BR  
[85] 2021-11-09  
[86] 2019-09-20 (PCT/IB2019/001162)  
[87] (WO2020/225585)  
[30] AP (AP/P/2019/011556) 2019-05-09

[21] **3,139,800**  
[13] A1

[51] **Int.Cl. H01M 10/056 (2010.01) H01M 4/131 (2010.01) H01M 10/0525 (2010.01) H01M 10/054 (2010.01)**

[25] EN

[54] **RECHARGEABLE BATTERY CELL**

[54] **ELEMENT DE BATTERIE RECHARGEABLE**

[72] ZINCK, LAURENT, FR  
[72] PSZOLLA, CHRISTIAN, DE  
[72] BORCK, MARKUS, DE  
[71] INNOLITH TECHNOLOGY AG, CH  
[85] 2021-11-09  
[86] 2020-07-30 (PCT/EP2020/071565)  
[87] (WO2021/019042)  
[30] EP (19189435.1) 2019-07-31

[21] **3,139,802**  
[13] A1

[51] **Int.Cl. A24D 1/20 (2020.01) A24F 40/42 (2020.01) A24D 3/02 (2006.01)**

[25] EN

[54] **FLAVOR ARTICLE FOR AN AEROSOL DELIVERY DEVICE**

[54] **ARTICLE D'AROME POUR UN DISPOSITIF DE DISTRIBUTION D'AEROSOL**

[72] HEJAZI, VAHID, US  
[72] REYNOLDS, REBECCA H., US  
[71] RAI STRATEGIC HOLDINGS, INC., US  
[85] 2021-11-09  
[86] 2020-05-07 (PCT/IB2020/054332)  
[87] (WO2020/229961)  
[30] US (16/408,942) 2019-05-10

[21] **3,139,803**  
[13] A1

[51] **Int.Cl. H01M 10/056 (2010.01) H01M 4/13 (2010.01) H01M 10/0525 (2010.01) H01M 10/054 (2010.01)**

[25] EN

[54] **RECHARGEABLE BATTERY CELL**

[54] **ELEMENT DE BATTERIE RECHARGEABLE**

[72] ZINCK, LAURENT, FR  
[72] RAPP, MANFRED, DE  
[72] URBANSKI, ANNA, DE  
[71] INNOLITH TECHNOLOGY AG, CH  
[85] 2021-11-09  
[86] 2020-07-30 (PCT/EP2020/071566)  
[87] (WO2021/019043)  
[30] EP (19189435.1) 2019-07-31

[21] **3,139,804**  
[13] A1

[51] **Int.Cl. H04L 12/16 (2006.01)**

[25] EN

[54] **SMART PROXY ROTATOR**

[54] **DISPOSITIF DE ROTATION INTELLIGENT DE SERVEURS MANDATAIRES**

[72] JURAVICIUS, MARTYNAS, LT  
[72] VILCINSKAS, EIVYDAS, LT  
[71] METACLUSTER LT, UAB, LT  
[85] 2021-11-09  
[86] 2020-06-08 (PCT/IB2020/055359)  
[87] (WO2021/064480)  
[30] US (16/590,040) 2019-10-01

## Demandes PCT entrant en phase nationale

[21] **3,139,805**  
[13] A1

[51] **Int.Cl. F16M 11/00 (2006.01) F16M 13/00 (2006.01)**

[25] EN

[54] **MOTION MECHANISM WITHOUT VIBRATION AND NO-NOISE TELESCOPIC CRANE OF PROFESSIONAL VIDEO CAMERA**

[54] **MECANISME DE MOUVEMENT SANS VIBRATION ET GRUE TELESCOPIQUE DE CAMERA VIDEO PROFESSIONNELLE SILENCIEUSE**

[72] HEIDARI KAYEDAN, SOROUGH, IR

[71] HEIDARI KAYEDAN, SOROUGH, IR

[85] 2021-11-09

[86] 2019-06-09 (PCT/IB2019/054795)

[87] (WO2020/250001)

[21] **3,139,806**  
[13] A1

[51] **Int.Cl. C07D 413/06 (2006.01) A61K 31/4427 (2006.01) A61K 51/04 (2006.01) A61K 51/10 (2006.01) A61P 35/00 (2006.01) C07D 413/14 (2006.01)**

[25] EN

[54] **MACROCYCLIC CHELATORS AND METHODS OF USE THEREOF**

[54] **CHELATEURS MACROCYCLIQUES ET LEURS PROCEDES D'UTILISATION**

[72] SALTER, RHYS, US

[72] DUDKIN, VADIM, US

[72] SONG, FENGBIN, US

[72] ZHANG, WEI, US

[72] GOLDBERG, SHALOM, US

[72] KEITH, JOHN, US

[71] JANSSEN BIOTECH, INC., US

[85] 2021-11-09

[86] 2020-05-08 (PCT/IB2020/054381)

[87] (WO2020/229974)

[30] US (62/846,044) 2019-05-10

[21] **3,139,807**  
[13] A1

[51] **Int.Cl. H01M 10/056 (2010.01) H01M 4/131 (2010.01) H01M 4/136 (2010.01) H01M 10/0525 (2010.01) H01M 10/054 (2010.01)**

[25] EN

[54] **RECHARGEABLE BATTERY CELL**

[54] **PILE RECHARGEABLE**

[72] ZINCK, LAURENT, FR

[72] PSZOLLA, CHRISTIAN, DE

[72] BORCK, MARKUS, DE

[71] INNOLITH TECHNOLOGY AG, CH

[85] 2021-11-09

[86] 2020-07-30 (PCT/EP2020/071577)

[87] (WO2021/019045)

[30] EP (19189435.1) 2019-07-31

[21] **3,139,808**  
[13] A1

[51] **Int.Cl. A01G 31/02 (2006.01) A01G 27/00 (2006.01) A01G 27/04 (2006.01) C04B 33/28 (2006.01)**

[25] EN

[54] **APPARATUS FOR PLANT GROWTH**

[54] **APPAREIL DESTINE A LA CROISSANCE DE PLANTES**

[72] ZARHI, ERAN, IL

[72] BURKO, ELAD, IL

[71] ZARHI, ERAN, IL

[71] BURKO, ELAD, IL

[85] 2021-11-09

[86] 2020-06-11 (PCT/IB2020/055488)

[87] (WO2020/230112)

[21] **3,139,809**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01) A61P 33/00 (2006.01) A61P 35/00 (2006.01) C07F 9/6574 (2006.01) C07H 21/00 (2006.01) C07K 9/00 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **ANTIBODY DRUG CONJUGATES**

[54] **CONJUGUES ANTICORPS-MEDICAMENT**

[72] ISHII, YUMIKO, JP

[72] NISHIMOTO, YUTAKA, JP

[72] ENGLAND, DYLAN BRADLEY, US

[72] LANGSTON, STEVE P., US

[72] LEE, HONG MYUNG, US

[72] MA, LITING, US

[72] SHI, ZHAN, US

[72] VYSKOCIL, STEPAN, US

[72] WANG, JIANING, US

[72] XU, HE, US

[71] TAKEDA PHARMACEUTICAL COMPANY LIMITED, JP

[85] 2021-11-09

[86] 2020-05-08 (PCT/IB2020/054400)

[87] (WO2020/229982)

[30] US (62/846,494) 2019-05-10

[30] US (62/855,367) 2019-05-31

[30] US (62/952,768) 2019-12-23

[30] US (63/016,682) 2020-04-28

[21] **3,139,810**  
[13] A1

[51] **Int.Cl. F01N 3/021 (2006.01) F01N 11/00 (2006.01) F02N 5/02 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR FILTERING EXHAUST GASES OF A VEHICLE**

[54] **SYSTEME ET PROCEDE PERMETTANT DE FILTRER DES GAZ D'ECHAPPEMENT D'UN VEHICULE**

[72] BHATNAGAR, RISHI, IN

[71] BHATNAGAR, RISHI, IN

[85] 2021-11-09

[86] 2019-08-06 (PCT/IB2019/056667)

[87] (WO2020/260935)

[30] IN (201911025268) 2019-06-25

## PCT Applications Entering the National Phase

[21] **3,139,811**  
[13] A1

[51] **Int.Cl. G02C 7/08 (2006.01) G02B 3/08 (2006.01) G02B 27/00 (2006.01) G02F 1/29 (2006.01)**

[25] EN

[54] **ELECTRICALLY-TUNABLE VISION AID FOR TREATMENT OF MYOPIA**

[54] **AIDE A LA VISION AJUSTABLE ELECTRIQUEMENT DESTINE AU TRAITEMENT DE LA MYOPIE**

[72] ALON, ALEX, IL  
[72] HADDAD, YARIV, IL  
[72] YADIN, YOAV, IL  
[71] OPTICA AMUKA (A.A.) LTD., IL  
[85] 2021-11-09  
[86] 2020-05-13 (PCT/IB2020/054524)  
[87] (WO2020/245680)  
[30] US (62/856,065) 2019-06-02

[21] **3,139,812**  
[13] A1

[51] **Int.Cl. A61K 31/4439 (2006.01) A61P 35/00 (2006.01) C07D 401/14 (2006.01)**

[25] EN

[54] **CRYSTALLINE FORMS OF N-[4-(CHLORODIFLUOROMETHOXY) PHENYL]-6-[(3R)-3-HYDROXYPYRROLIDIN-1-YL]-5-(1H-PYRAZOL-5-YL)PYRIDINE-3-CARBOXAMIDE**

[54] **FORMES CRISTALLINES DE N-[4-(CHLORODIFLUOROMETHOXY) PHENYL]-6-[(3R)-3-HYDROXYPYRROLIDIN-1-YL]-5-(1H-PYRAZOL-5-YL)PYRIDINE-3-CARBOXAMIDE**

[72] DODD, STEPHANIE KAY, US  
[72] GRANDEURY, ARNAUD, CH  
[72] ROUSAKI, EVGENIA, CH  
[72] SUFFERT, EMMANUEL, CH  
[71] NOVARTIS AG, CH  
[85] 2021-11-09  
[86] 2020-05-15 (PCT/IB2020/054628)  
[87] (WO2020/230099)  
[30] US (62/848,857) 2019-05-16  
[30] US (62/949,599) 2019-12-18

[21] **3,139,813**  
[13] A1

[51] **Int.Cl. H04W 84/10 (2009.01) H04W 24/02 (2009.01) H04W 80/02 (2009.01) H04B 17/318 (2015.01) H04B 7/14 (2006.01) H04L 12/28 (2006.01)**

[25] EN

[54] **ANTENNA SYSTEMS FOR CONTROLLED COVERAGE IN BUILDINGS**

[54] **SYSTEMES D'ANTENNES DE COUVERTURE COMMANDEE DANS DES BATIMENTS**

[72] BROWN, STEPHEN CLARK, US  
[72] SANFORD, JOHN, US  
[72] KLAUWUHN, ERICH R., US  
[72] SHRIVASTAVA, DHAIRYA, US  
[72] ROZBICKI, ROBERT T., US  
[72] PURDY, DANIEL LOY, US  
[72] ANTES, TODD D., US  
[72] GRAY, TODD, US  
[71] VIEW, INC., US  
[85] 2021-11-09  
[86] 2020-05-09 (PCT/US2020/032269)  
[87] (WO2020/227702)  
[30] US (62/845,764) 2019-05-09  
[30] US (62/850,993) 2019-05-21

[21] **3,139,814**  
[13] A1

[51] **Int.Cl. H01R 13/514 (2006.01) H01R 4/56 (2006.01) H01R 11/12 (2006.01) H01R 13/502 (2006.01) H01R 13/512 (2006.01) H01R 13/62 (2006.01) H01R 13/621 (2006.01) H01R 13/648 (2006.01) H01R 27/02 (2006.01)**

[25] EN

[54] **DEADBREAK CONNECTOR**

[54] **CONNECTEUR DEBROCHABLE HORS CHARGE**

[72] VAN BESOUW, BASTIAAN, US  
[71] HUBBELL INCORPORATED, US  
[85] 2021-11-09  
[86] 2020-05-11 (PCT/US2020/032325)  
[87] (WO2020/231912)  
[30] US (62/846,075) 2019-05-10

[21] **3,139,816**  
[13] A1

[51] **Int.Cl. C07D 513/14 (2006.01) A61K 31/407 (2006.01) A61P 31/20 (2006.01) C07D 515/14 (2006.01)**

[25] EN

[54] **OXALAMIDO-SUBSTITUTED TRICYCLIC INHIBITORS OF HEPATITIS B VIRUS**

[54] **INHIBITEURS TRICYCLIQUES A SUBSTITUTION OXALAMIDO DU VIRUS DE L'HEPATITE B**

[72] DE FRANCESCO, RAFFAELE, IT  
[72] DONNICI, LORENA, IT  
[72] GUIDOTTI, LUCA, IT  
[72] IANNAcone, MATTEO, IT  
[72] DI FABIO, ROMANO, IT  
[72] SUMMA, VINCENZO, IT  
[72] PRANDI, ADOLFO, IT  
[72] RANDAZZO, PIETRO, IT  
[72] IVANOVA BENCHEVA, LEDA, IT  
[72] DE MATTEO, MARILENIA, IT  
[72] FERRANTE, LUCA, IT  
[72] GORNATI, DAVIDE, IT  
[72] GRILLO, ALESSANDRO, IT  
[71] ISTITUTO NAZIONALE DI GENETICA MOLECOLARE-INGM, IT  
[71] OSPEDALE SAN RAFFAELE S.R.L., IT  
[71] IRBM S.P.A., IT  
[71] PROMIDIS S.R.L., IT  
[85] 2021-11-09  
[86] 2020-05-25 (PCT/EP2020/064424)  
[87] (WO2020/234483)  
[30] EP (19176238.4) 2019-05-23  
[30] EP (19211249.8) 2019-11-25

[21] **3,139,817**  
[13] A1

[51] **Int.Cl. F21V 21/04 (2006.01) F21S 8/02 (2006.01) F21V 21/03 (2006.01)**

[25] EN

[54] **FRAME SYSTEM FOR A LIGHTING FIXTURE**

[54] **SYSTEME DE BATI POUR UN APPAREIL D'ECLAIRAGE**

[72] WESTON, RUSSELL JAMES, US  
[72] ROULIER, JARED, US  
[71] HUBBELL INCORPORATED, US  
[85] 2021-11-09  
[86] 2020-05-11 (PCT/US2020/032330)  
[87] (WO2020/231915)  
[30] US (62/846,063) 2019-05-10



## Demandes PCT entrant en phase nationale

[21] <b>3,139,818</b> [13] A1	[21] <b>3,139,820</b> [13] A1	[21] <b>3,139,821</b> [13] A1
<p>[51] <b>Int.Cl. G01S 17/02 (2020.01) G01S 17/08 (2006.01) G01S 17/89 (2020.01)</b></p> <p>[25] EN</p> <p>[54] <b>AIRBORNE TOPO-BATHY LIDAR SYSTEM AND METHODS THEREOF</b></p> <p>[54] <b>SYSTEMES LIDAR TOPOGRAPHIQUES ET BATHYMETRIQUES AEROPORTES ET PROCEDES ASSOCIES</b></p> <p>[72] HOPPER, NATHAN LEE, US</p> <p>[72] SEPPI, JOSEPH R., US</p> <p>[72] FAULKNER, RODNEY ROSS, II, US</p> <p>[72] SMITS, MARK DOUGLAS, II, US</p> <p>[72] PARK, JOONGYONG, US</p> <p>[72] MILLMAN, MARK STEPHEN, US</p> <p>[72] CAHOON, ERIC JOSEF, US</p> <p>[72] COTTON, CHRISTOPHER T., US</p> <p>[72] GLUCKMAN, JOSHUA, US</p> <p>[72] HALTERMAN, ALEXANDER CHEFF, US</p> <p>[72] TUELL, GRADY, US</p> <p>[72] STARK, ANDREW WALLACE, US</p> <p>[72] GERHARD, JOHN HENRY, US</p> <p>[72] LILLYCROP, WILLIAM JEFFREY, US</p> <p>[71] WOOLPERT, INC., US</p> <p>[85] 2021-11-09</p> <p>[86] 2020-05-30 (PCT/US2020/035454)</p> <p>[87] (WO2020/251787)</p> <p>[30] US (62/854,571) 2019-05-30</p>	<p>[51] <b>Int.Cl. G01N 21/17 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>SYSTEM AND METHOD FOR AUTOMATED MODULAR ILLUMINATION AND DEPLOYMENT</b></p> <p>[54] <b>SYSTEME ET PROCEDE DE DEPLOIEMENT ET D'ECLAIRAGE MODULAIRES AUTOMATISES</b></p> <p>[72] ZAPATA, JORGE, US</p> <p>[72] VARGAS SILVA, CARLOS EDUARDO, CO</p> <p>[71] GENTEX CORPORATION, US</p> <p>[85] 2021-11-09</p> <p>[86] 2020-06-19 (PCT/IB2020/055810)</p> <p>[87] (WO2020/255082)</p> <p>[30] US (62/863,903) 2019-06-20</p>	<p>[51] <b>Int.Cl. C07D 401/14 (2006.01) A61K 31/501 (2006.01) A61K 31/53 (2006.01) A61P 25/28 (2006.01) C07D 413/14 (2006.01) C07D 417/14 (2006.01) C07D 487/04 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>COMPOUNDS FOR TREATING HUNTINGTON'S DISEASE</b></p> <p>[54] <b>COMPOSES POUR LE TRAITEMENT DE LA MALADIE DE HUNTINGTON</b></p> <p>[72] SYDORENKO, NADIYA, US</p> <p>[72] ALAM, MD RAUFUL, US</p> <p>[72] AMEDZO, LUKIANA, US</p> <p>[72] ARNOLD, MICHAEL A., US</p> <p>[72] BABU, SURESH, US</p> <p>[72] BHATTACHARYYA, ANURADHA, US</p> <p>[72] KARP, GARY MITCHELL, US</p> <p>[72] KENTON, NATHANIEL T., US</p> <p>[72] LUONG, TOM TUAN, US</p> <p>[72] MAZZOTTI, ANTHONY R., US</p> <p>[72] MOON, YOUNG-CHOON, US</p> <p>[72] MORRILL, CHRISTIE, US</p> <p>[72] MSZAR, NICHOLAS WALTER, US</p> <p>[72] NARASIMHAN, JANA, US</p> <p>[72] PATEL, JIGAR S., US</p> <p>[72] REN, HONGYU, US</p> <p>[72] TURPOFF, ANTHONY, US</p> <p>[72] WANG, GANG, US</p> <p>[72] WOLL, MATTHEW G., US</p> <p>[72] ZHANG, NANJING, US</p> <p>[72] ZHANG, XIAOYAN, US</p> <p>[71] PTC THERAPEUTICS, INC., US</p> <p>[85] 2021-11-09</p> <p>[86] 2020-05-12 (PCT/US2020/032446)</p> <p>[87] (WO2020/231977)</p> <p>[30] US (62/846,896) 2019-05-13</p>
<p style="text-align: center;">[21] <b>3,139,819</b> [13] A1</p> <p>[51] <b>Int.Cl. G16B 30/00 (2019.01) G16H 50/30 (2018.01) G16B 50/50 (2019.01)</b></p> <p>[25] EN</p> <p>[54] <b>DATA STRUCTURES AND OPERATIONS FOR SEARCHING, COMPUTING, AND INDEXING IN DNA-BASED DATA STORAGE</b></p> <p>[54] <b>STRUCTURES DE DONNEES ET OPERATIONS DE RECHERCHE, DE CALCUL ET D'INDEXATION DANS UNE MEMOIRE DE DONNEES A BASE D'ADN</b></p> <p>[72] ROQUET, NATHANIEL, US</p> <p>[72] BHATIA, SWAPNIL, US</p> <p>[72] FERRAGINA, PAOLO, US</p> <p>[71] CATALOG TECHNOLOGIES, INC., US</p> <p>[85] 2021-11-09</p> <p>[86] 2020-05-11 (PCT/US2020/032384)</p> <p>[87] (WO2020/227718)</p> <p>[30] US (62/845,638) 2019-05-09</p> <p>[30] US (62/860,117) 2019-06-11</p> <p>[30] US (62/890,243) 2019-08-22</p>		

## PCT Applications Entering the National Phase

[21] **3,139,822**  
[13] A1

[51] **Int.Cl. H04K 3/00 (2006.01)**  
[25] EN  
[54] **SYSTEM, METHOD AND COMPUTER-READABLE STORAGE MEDIUM FOR DETECTING, MONITORING AND MITIGATING THE PRESENCE OF A DRONE**

[54] **SYSTEME, PROCEDE ET SUPPORT D'INFORMATIONS LISIBLE PAR ORDINATEUR PERMETTANT LA DETECTION, LA SURVEILLANCE ET L'ATTENUATION DE LA PRESENCE D'UN DRONE**

[72] YEUNG, CHUN KIN AU, US  
[72] LO, BRANDON FANG-HSUAN, US  
[72] TORBORG, SCOTT, US  
[71] SKYSAFE, INC., US  
[85] 2021-11-09  
[86] 2020-05-11 (PCT/US2020/032391)  
[87] (WO2020/231947)  
[30] US (62/846,680) 2019-05-12

[21] **3,139,823**  
[13] A1

[51] **Int.Cl. H04W 72/04 (2009.01)**  
[25] EN  
[54] **UPLINK INFORMATION GENERATION METHOD AND DEVICE THEREOF**

[54] **PROCEDE DE GENERATION D'INFORMATIONS DE LIAISON MONTANTE ET DISPOSITIF ASSOCIE**

[72] LIN, YANAN, CN  
[72] WU, ZUOMIN, CN  
[71] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN  
[85] 2021-11-10  
[86] 2019-09-30 (PCT/CN2019/109310)  
[87] (WO2021/062583)

[21] **3,139,824**  
[13] A1

[51] **Int.Cl. C09K 3/18 (2006.01) G02B 1/18 (2015.01) C08J 7/054 (2020.01) C03C 17/00 (2006.01) C04B 41/81 (2006.01) G02B 1/12 (2006.01) H05H 1/00 (2006.01)**

[25] EN  
[54] **METHOD FOR PLASMA DEPOSITION OF ANTI-FOG COATINGS**

[54] **PROCEDE DE DEPOT PAR PLASMA DE REVETEMENTS ANTI-BUEE**

[72] LAROCHE, GAETAN, CA  
[72] RODRIGUEZ DURAN, IVAN, ES  
[72] STAFFORD, LUC, CA  
[72] VALLADE, JULIEN, FR  
[72] DUROCHER-JEAN, ANTOINE, CA  
[72] PROFILI, JACOPO, CA  
[72] GHERARDI, NICOLAS, FR  
[72] COZZOLINO, RAPHAEL, FR  
[71] UNIVERSITE LAVAL, CA  
[71] UNIVERSITE TOULOUSE III - PAUL SABATIER, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[71] UNIVERSITE DE MONTREAL, CA  
[85] 2021-11-10  
[86] 2020-05-13 (PCT/CA2020/050646)  
[87] (WO2020/227828)  
[30] US (62/847,474) 2019-05-14

[21] **3,139,825**  
[13] A1

[51] **Int.Cl. H04N 19/70 (2014.01) H04N 19/82 (2014.01) H04N 19/91 (2014.01)**

[25] EN  
[54] **CLIPPING INDICES CODING FOR ADAPTIVE LOOP FILTER IN VIDEO CODING**

[54] **CODAGE D'INDICES D'ECRETEMENT POUR FILTRE ADAPTATIF A BOUCLE DANS UN CODAGE VIDEO**

[72] HU, NAN, US  
[72] SEREGIN, VADIM, US  
[72] EGILMEZ, HILMI ENES, US  
[72] KARCZEWICZ, MARTA, US  
[71] QUALCOMM INCORPORATED, US  
[85] 2021-11-09  
[86] 2020-06-11 (PCT/US2020/037217)  
[87] (WO2020/252154)  
[30] US (62/859,948) 2019-06-11  
[30] US (16/897,049) 2020-06-09

[21] **3,139,826**  
[13] A1

[51] **Int.Cl. C12N 15/70 (2006.01) C07K 14/605 (2006.01)**

[25] EN  
[54] **POLYPEPTIDE DERIVATIVE AND PREPARATION METHOD THEREFOR**

[54] **DERIVE POLYPEPTIDIQUE ET SON PROCEDE DE PREPARATION**

[72] ZHANG, ZHENSHAN, CN  
[72] WU, SONG, CN  
[72] LIU, HUILING, CN  
[72] CHEN, WEI, CN  
[71] NINGBO KUNPENG BIOTECH CO., LTD., CN  
[85] 2021-11-10  
[86] 2020-05-08 (PCT/CN2020/089217)  
[87] (WO2020/228610)  
[30] CN (201910390476.3) 2019-05-10

[21] **3,139,827**  
[13] A1

[51] **Int.Cl. C07K 16/46 (2006.01) A61K 39/00 (2006.01) C07K 16/28 (2006.01) C07K 16/30 (2006.01) C07K 16/40 (2006.01)**

[25] EN  
[54] **USE OF BISPECIFIC ANTIGEN-BINDING MOLECULES THAT BIND PSMA AND CD3 IN COMBINATION WITH 4-1BB CO-STIMULATION**

[54] **UTILISATION DE MOLECULES DE LIAISON A L'ANTIGENE BISPECIFIQUES SE LIANT A PSMA ET CD3 EN COMBINAISON AVEC UNE CO-STIMULATION DE 4-1BB**

[72] KIRSHNER, JESSICA R., US  
[72] CRAWFORD, ALISON, US  
[72] CHIU, DANICA, US  
[71] REGENERON PHARMACEUTICALS, INC., US  
[85] 2021-11-09  
[86] 2020-06-19 (PCT/US2020/038786)  
[87] (WO2020/257681)  
[30] US (62/864,999) 2019-06-21

## Demandes PCT entrant en phase nationale

[21] **3,139,828**  
[13] A1

[51] **Int.Cl. A61K 31/4709 (2006.01) A61K 31/704 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **QUINOLINE DERIVATIVE USED FOR SOFT TISSUE SARCOMA COMBINATION THERAPY**

[54] **DERIVE DE QUINOLEINE UTILISE POUR UNE POLYTHERAPIE DE SARCOMES DES TISSUS MOUS**

[72] WANG, ZHIMING, CN  
[72] ZHANG, SHILONG, CN  
[72] ZHUANG, RONGYUAN, CN  
[72] GUO, XI, CN  
[72] WANG, YAN, CN  
[72] YANG, HUA, CN  
[72] LU, WEIQI, CN  
[72] ZHOU, YUHONG, CN  
[72] GAO, LEI, CN  
[71] CHIA TAI TIANQING PHARMACEUTICAL GROUP CO., LTD., CN  
[85] 2021-11-10  
[86] 2020-05-11 (PCT/CN2020/089545)  
[87] (WO2020/228656)  
[30] CN (201910390149.8) 2019-05-10

[21] **3,139,829**  
[13] A1

[51] **Int.Cl. B23K 20/12 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR FORMING A WELD ALONG A LENGTH**

[54] **SYSTEME ET PROCEDE DE FORMATION D'UNE SOUDURE SUR UNE LONGUEUR**

[72] HUISMAN, WAYNE, US  
[72] MARSHALL, DUSTIN, US  
[72] LUZANSKI, TOM, US  
[72] HOVANSKI, YURI, US  
[71] TWB COMPANY, LLC, US  
[85] 2021-11-09  
[86] 2020-06-24 (PCT/US2020/039256)  
[87] (WO2020/263902)  
[30] US (62/865,371) 2019-06-24  
[30] US (62/956,684) 2020-01-03

[21] **3,139,830**  
[13] A1

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 42/00 (2020.01) A24F 42/60 (2020.01) A24F 47/00 (2020.01) A24F 40/40 (2020.01)**

[25] EN

[54] **NON-CONTACT HEAT NOT BURN HEATING DEVICE**

[54] **DISPOSITIF DE CHAUFFAGE DE CIGARETTE ELECTRONIQUE SANS CONTACT**

[72] ZHU, XIAOHUA, CN  
[72] XIONG, ZHAORONG, CN  
[72] FU, ZENGXUE, CN  
[72] YU, XIANGYI, CN  
[72] LIU, MAOQI, CN  
[71] XIAMEN FENGTAO CERAMICS CO., LTD, CN  
[85] 2021-11-10  
[86] 2020-05-14 (PCT/CN2020/090253)  
[87] (WO2020/228777)  
[30] CN (201920703370.X) 2019-05-16  
[30] CN (201921496320.5) 2019-09-10  
[30] CN (201910851072.X) 2019-09-10  
[30] CN (201921496452.8) 2019-09-10  
[30] CN (201921496300.8) 2019-09-10

[21] **3,139,831**  
[13] A1

[51] **Int.Cl. C10G 29/24 (2006.01) C10G 75/02 (2006.01)**

[25] EN

[54] **METHOD OF REMOVAL AND CONVERSION OF AMINES IN A REFINERY DESALTER**

[54] **PROCEDE D'ELIMINATION ET DE CONVERSION D'AMINES DANS UN DESSALEUR DE RAFFINERIE**

[72] DION, MICHAEL, US  
[72] PEREZ DIAZ, PETER L., US  
[72] PATEL, NIMESHKUMAR, US  
[72] BAGARIA, HITESH, US  
[72] KAPLAN, GREGORY, US  
[71] BL TECHNOLOGIES, INC., US  
[85] 2021-11-09  
[86] 2020-07-02 (PCT/US2020/040618)  
[87] (WO2021/011204)  
[30] US (62/875,045) 2019-07-17

[21] **3,139,832**  
[13] A1

[51] **Int.Cl. B64D 27/24 (2006.01) B64D 33/08 (2006.01) H02K 1/30 (2006.01) H02K 3/00 (2006.01) H02K 5/18 (2006.01) H02K 5/20 (2006.01) H02K 7/14 (2006.01) H02K 9/10 (2006.01)**

[25] EN

[54] **ELECTRIC AIRCRAFT PROPULSION SYSTEM**

[54] **SYSTEME DE PROPULSION D'AERONEF ELECTRIQUE**

[72] RABBI, SHEIKH FAZLE, CA  
[72] PILGRIM, RICK RALPH, CA  
[72] GENGE, KYLE REUBEN, CA  
[72] FORWARD, TREVOR, CA  
[72] KEATING, ADAM, CA  
[72] ROPER, RICHARD ROBERT, US  
[71] DUXION MOTORS INC., CA  
[85] 2021-11-10  
[86] 2020-05-15 (PCT/CA2020/050662)  
[87] (WO2020/227837)  
[30] US (62/848,897) 2019-05-16

[21] **3,139,833**  
[13] A1

[51] **Int.Cl. C07K 14/55 (2006.01) A61K 38/20 (2006.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01) C07K 19/00 (2006.01) C12N 5/10 (2006.01) C12N 15/26 (2006.01) C12N 15/63 (2006.01)**

[25] EN

[54] **IL-2 MUTANT PROTEIN PROLIFERATING IMMUNE CELLS**

[54] **CELLULES IMMUNITAIRES A PROLIFERATION DE PROTEINE MUTANTE IL-2**

[72] HU, HUI, CN  
[72] ZHANG, YING, CN  
[71] SHANGHAI GP BIOTECH CO. LTD., CN  
[85] 2021-11-10  
[86] 2020-05-14 (PCT/CN2020/090365)  
[87] (WO2020/228791)  
[30] CN (201910399641.1) 2019-05-14

## PCT Applications Entering the National Phase

[21] **3,139,834**  
[13] A1

[51] **Int.Cl. B25J 21/00 (2006.01) B01L 1/04 (2006.01) B25J 21/02 (2006.01)**  
[25] EN  
[54] **FLUID TRANSFER SYSTEM FOR ISOLATORS**  
[54] **SYSTEME DE TRANSFERT DE FLUIDE DESTINE A DES SEPARATEURS**  
[72] MORRISSEY, MARTIN, US  
[72] KING, CONOR, US  
[72] BOROZENETS, PHILIP, US  
[71] EMD MILLIPORE CORPORATION, US  
[85] 2021-11-09  
[86] 2020-08-06 (PCT/US2020/045085)  
[87] (WO2021/040983)  
[30] US (62/891,493) 2019-08-26

[21] **3,139,835**  
[13] A1

[51] **Int.Cl. G06E 3/00 (2006.01) G01J 1/42 (2006.01) G02B 6/14 (2006.01) G02B 27/10 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHODS FOR GAUSSIAN BOSON SAMPLING**  
[54] **APPAREIL ET PROCEDES DE PRELEVEMENT DE BOSON GAUSSIEN**  
[72] BRADLER, KAMIL, CA  
[72] SU, DAIQIN, CN  
[72] KILLORAN, NATHAN, CA  
[72] SCHULD, MARIA, ZA  
[72] VERNON, ZACHARY, CA  
[72] HELT, LUKAS, CA  
[72] MORRISON, BLAIR, CA  
[72] MAHLER, DYLAN, CA  
[71] XANADU QUANTUM TECHNOLOGIES INC., CA  
[85] 2021-11-10  
[86] 2020-05-20 (PCT/CA2020/050675)  
[87] (WO2020/232546)  
[30] US (62/851,312) 2019-05-22

[21] **3,139,836**  
[13] A1

[51] **Int.Cl. A01N 63/00 (2020.01) C12N 5/07 (2010.01) C12N 5/00 (2006.01) C12N 5/02 (2006.01)**  
[25] EN  
[54] **FIBROBLAST GENERATED PATIENT-SPECIFIC VACCINES**  
[54] **VACCINS SPECIFIQUES A UN PATIENT GENERES PAR DES FIBROBLASTES**  
[72] O'HEERON, PETE, US  
[72] ICHIM, THOMAS, US  
[71] FIGENE, LLC, US  
[85] 2021-11-09  
[86] 2020-05-08 (PCT/US2020/032207)  
[87] (WO2020/227677)  
[30] US (62/845,403) 2019-05-09

[21] **3,139,837**  
[13] A1

[51] **Int.Cl. E21B 17/18 (2006.01) E21B 17/042 (2006.01) E21B 41/00 (2006.01)**  
[25] EN  
[54] **A MULTILATERAL JUNCTION**  
[54] **JONCTION MULTILATERALE**  
[72] STEELE, DAVID JOE, US  
[72] JELLY, CHRISTIAN ALEXANDER, AU  
[72] DAHL, ESPEN, NO  
[71] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2021-11-09  
[86] 2020-08-24 (PCT/US2020/047668)  
[87] (WO2021/041331)  
[30] US (62/894,589) 2019-08-30

[21] **3,139,838**  
[13] A1

[51] **Int.Cl. A24F 47/00 (2020.01)**  
[25] EN  
[54] **NON-CONTACT HEAT NOT BURN HEATING DEVICE**  
[54] **DISPOSITIF DE CHAUFFAGE DE CIGARETTE ELECTRONIQUE SANS CONTACT**  
[72] ZHU, XIAOHUA, CN  
[72] XIONG, ZHAORONG, CN  
[72] FU, ZENGXUE, CN  
[72] YU, XIANGYI, CN  
[72] LIU, MAOQI, CN  
[71] XIAMEN FENGTAO CERAMICS CO., LTD, CN  
[85] 2021-11-10  
[86] 2020-05-15 (PCT/CN2020/090399)  
[87] (WO2020/228803)  
[30] CN (201920703370.X) 2019-05-16  
[30] CN (201921496439.2) 2019-09-10

[21] **3,139,839**  
[13] A1

[51] **Int.Cl. H04W 52/02 (2009.01) H04W 76/28 (2018.01)**  
[25] EN  
[54] **WAKE-UP SIGNAL MONITORING INDICATION**  
[54] **INDICATION DE SURVEILLANCE DE SIGNAL DE REVEIL**  
[72] TURPINEN, SAMULI, FI  
[72] WU, CHUNLI, CN  
[72] KOSKINEN, JUSSI-PEKKA, FI  
[71] NOKIA TECHNOLOGIES OY, FI  
[85] 2021-11-10  
[86] 2019-05-10 (PCT/CN2019/086368)  
[87] (WO2020/227846)

[21] **3,139,840**  
[13] A1

[51] **Int.Cl. B05C 17/00 (2006.01) B05C 17/005 (2006.01) B05D 1/28 (2006.01) B05D 5/00 (2006.01) C23C 22/00 (2006.01)**  
[25] EN  
[54] **APPLICATOR FOR HAZARDOUS MATERIALS**  
[54] **APPLICATEUR POUR MATIERES DANGEREUSES**  
[72] AHMED, BASHIR M., US  
[72] ABU-SHANAB, OMAR L., US  
[72] TKACZ, KRISTINA M., US  
[72] EYASSU, TSEHAYE N., US  
[72] KAM, MING SIONG, SG  
[72] GOMEZ, MARC, US  
[72] COOKE, RYAN M., US  
[71] HENKEL IP & HOLDING GMBH, DE  
[71] HENKEL AG & CO. KGAA, DE  
[85] 2021-11-09  
[86] 2020-05-08 (PCT/US2020/032206)  
[87] (WO2020/231852)  
[30] US (62/846,331) 2019-05-10

## Demandes PCT entrant en phase nationale

[21] **3,139,842**  
[13] A1

[51] **Int.Cl. C11D 11/00 (2006.01) A47L 13/17 (2006.01) C11D 1/72 (2006.01) C11D 3/20 (2006.01) C11D 3/50 (2006.01) C11D 17/04 (2006.01)**

[25] EN

[54] **HARD SURFACE CLEANING COMPOSITIONS COMPRISING ALKOXYLATED PHENOLS AND PERFUMES AND CLEANING PADS AND METHODS FOR USING SUCH CLEANING COMPOSITIONS**

[54] **COMPOSITIONS DE NETTOYAGE DE SURFACES DURES COMPORTANT DES PHENOLS ALCOXYLES ET DES PARFUMS ET TAMPONS DE NETTOYAGE ET PROCÉDES POUR L'UTILISATION DESDITES COMPOSITIONS**

[72] TOLLENS, FERNANDO RAY, US

[72] VU, PAULINE CUC, US

[72] GROENDYKE, BRIAN CHRISTOPHER, US

[72] CYNECKI, WILLIAM ALEXANDER, US

[72] MAYFIELD, DANIEL ROSS, US

[72] KARIKARI, AFUA SARPONG, US

[71] THE PROCTER & GAMBLE COMPANY, US

[85] 2021-11-09

[86] 2020-05-06 (PCT/US2020/070029)

[87] (WO2020/232464)

[30] US (62/845,955) 2019-05-10

[21] **3,139,843**  
[13] A1

[51] **Int.Cl. H01M 10/056 (2010.01) H01M 4/131 (2010.01) H01M 4/136 (2010.01) H01M 10/0525 (2010.01)**

[25] EN

[54] **RECHARGEABLE BATTERY CELL**

[54] **PILE RECHARGEABLE**

[72] ZINCK, LAURENT, FR

[72] WOLFFARTH, CLAUDIA, DE

[72] BIOLLAZ, HEIDE, DE

[71] INNOLITH TECHNOLOGY AG, CH

[85] 2021-11-09

[86] 2020-07-30 (PCT/EP2020/071579)

[87] (WO2021/019047)

[30] EP (19189435.1) 2019-07-31

[21] **3,139,845**  
[13] A1

[51] **Int.Cl. C12M 3/00 (2006.01) C12N 5/071 (2010.01) C12M 3/06 (2006.01) C12Q 1/02 (2006.01)**

[25] EN

[54] **ENGINEERED BONE MARROW MODEL**

[54] **MODELE DE MOELLE OSSEUSE GENETIQUEMENT MODIFIEE**

[72] MOKHTARI, NEGIN, US

[72] KONETSKI, DANIELLE, US

[72] BEADLE, KEITH, US

[72] TAHAYERI, ANTHONY, US

[72] TRAER, ELIE, US

[72] BERTASSONI, LUIZ, US

[72] CHIU, YU-JUI, US

[72] ALVAREZ, JESUS BUENO, US

[72] THAKUR, RAVIRAJ, US

[71] OREGON HEALTH & SCIENCE UNIVERSITY, US

[85] 2021-11-09

[86] 2020-05-08 (PCT/US2020/032174)

[87] (WO2020/231839)

[30] US (62/846,484) 2019-05-10

[30] US (62/866,237) 2019-06-25

[30] US (63/021,595) 2020-05-07

[21] **3,139,846**  
[13] A1

[51] **Int.Cl. A24F 40/46 (2020.01)**

[25] EN

[54] **NON-CONTACT HEAT NOT BURN HEATING DEVICE**

[54] **DISPOSITIF DE CHAUFFAGE DE CIGARETTE ELECTRONIQUE SANS CONTACT**

[72] ZHU, XIAOHUA, CN

[72] XIONG, ZHAORONG, CN

[72] FU, ZENGXUE, CN

[72] YU, XIANGYI, CN

[72] LIU, MAOQI, CN

[71] XIAMEN FENGTAO CERAMICS CO., LTD, CN

[85] 2021-11-10

[86] 2020-05-15 (PCT/CN2020/090423)

[87] (WO2020/228805)

[30] CN (201920703370.X) 2019-05-16

[30] CN (201922439531.1) 2019-12-30

[30] CN (201911397002.8) 2019-12-30

[30] CN (201922448707.X) 2019-12-30

[30] CN (202020734040.X) 2020-05-07

[30] CN (202020733034.2) 2020-05-07

[21] **3,139,847**  
[13] A1

[51] **Int.Cl. H02K 3/28 (2006.01)**

[25] EN

[54] **STATOR ASSEMBLY, ELECTRIC MOTOR, COMPRESSOR, AND REFRIGERATION DEVICE**

[54] **ESEMBLE STATOR, MOTEUR ELECTRIQUE, COMPRESSEUR ET DISPOSITIF FRIGORIFIQUE**

[72] MAO, LINSHU, CN

[72] QIU, XIAOHUA, CN

[72] XIE, RUMING, CN

[72] WANG, YULONG, CN

[71] ANHUI MEIZHI PRECISION MANUFACTURING CO., LTD., CN

[85] 2021-11-10

[86] 2019-09-26 (PCT/CN2019/108182)

[87] (WO2021/035862)

[30] CN (201910792849.X) 2019-08-26

[21] **3,139,848**  
[13] A1

[51] **Int.Cl. D21C 1/02 (2006.01) D21C 9/00 (2006.01)**

[25] EN

[54] **CELLULOSE MATERIAL PLASTICIZATION AND VISCOSITY CONTROLLED CELLULOSIC MATERIAL**

[54] **PLASTIFICATION DE MATERIAU CELLULOSIQUE ET MATERIAU CELLULOSIQUE A VISCOSITE CONTROLEE**

[72] VIRTANEN, PASI, FI

[72] RISTOLAINEN, MATTI, FI

[72] KOSONEN, HARRI, FI

[72] POHJALAINEN, TEEMU, FI

[72] MODIG, SAKARI, FI

[72] SAPKOTA, JANAK, FI

[71] UPM-KYMMENE CORPORATION, FI

[85] 2021-11-09

[86] 2019-05-10 (PCT/FI2019/050371)

[87] (WO2020/229722)

## PCT Applications Entering the National Phase

[21] <b>3,139,849</b> [13] A1	[21] <b>3,139,851</b> [13] A1	[21] <b>3,139,853</b> [13] A1
[51] <b>Int.Cl. G10L 15/00 (2013.01)</b> [25] EN [54] <b>SYSTEMS, METHODS, AND APPARATUS FOR ASYNCHRONOUS SPEECH TO TEXT DATA PROCESSING</b> [54] <b>SYSTEMES, PROCEDES ET APPAREIL DE TRAITEMENT DE DONNEES VOIX-TEXTE ASYNCHRONES</b> [72] FORD, JON, US [71] NVOQ INCORPORATED, US [85] 2021-11-09 [86] 2020-05-08 (PCT/US2020/032173) [87] (WO2020/231838) [30] US (62/846,077) 2019-05-10	[51] <b>Int.Cl. B01J 21/16 (2006.01)</b> [25] EN [54] <b>USE OF NATURAL ATTAPULGITE AS NATURAL NANO MINERAL ENZYME</b> [54] <b>APPLICATION D'ATTAPULGITE NATURELLE EN TANT QU'ENZYME MINERALE NATURELLE NANOMETRIQUE</b> [72] ZHANG, YIHE, CN [72] LIANG, MINMIN, CN [72] FENG, FENG, CN [72] WANG, PEIXIA, CN [72] TONG, WANGSHU, CN [72] AN, QI, CN [71] CHINA UNIVERSITY OF GEOSCIENCES (BEIJING), CN [85] 2021-11-10 [86] 2021-01-15 (PCT/CN2021/072169) [87] (WO2021/143849) [30] CN (202010046314.0) 2020-01-16	[51] <b>Int.Cl. A61K 35/15 (2015.01) A61K 31/407 (2006.01) A61P 37/06 (2006.01)</b> [25] EN [54] <b>MIC THERAPY FOR SPECIFIC IMMUNOSUPPRESSION IN TRANSPLANTATION</b> [54] <b>THERAPIE PAR CELLULES IMMUNITAIRES MODIFIEES (MIC) POUR UNE IMMUNOSUPPRESSION SPECIFIQUE DANS UNE TRANSPLANTATION</b> [72] MORATH, CHRISTIAN, DE [72] SCHMITT, ANITA, DE [72] SCHAIER, MATTHIAS, DE [72] OPELZ, GERHARD, DE [72] TERNESS, PETER, DE [72] KLEIST, CHRISTIAN, DE [72] DANIEL, VOLKER, DE [72] SUSAL, CANER, DE [72] SCHMITT, MICHAEL, DE [72] ZEIER, MARTIN, DE [71] TOLEROGENIXX GMBH, DE [71] UNIVERSITAT HEIDELBERG, DE [85] 2021-11-10 [86] 2019-05-17 (PCT/EP2019/062857) [87] (WO2020/233776)
[21] <b>3,139,850</b> [13] A1	[21] <b>3,139,852</b> [13] A1	[21] <b>3,139,854</b> [13] A1
[51] <b>Int.Cl. A61K 38/49 (2006.01) A61P 25/00 (2006.01)</b> [25] EN [54] <b>METHOD AND MEDICINE FOR TREATING AMYOTROPHIC LATERAL SCLEROSIS</b> [54] <b>PROCEDE ET MEDICAMENT POUR LE TRAITEMENT DE LA SCLEROSE LATERALE AMYOTROPHIQUE</b> [72] LI, JINAN, CN [71] TALENGEN INTERNATIONAL LIMITED, CN [85] 2021-11-09 [86] 2020-05-11 (PCT/CN2020/089632) [87] (WO2020/228681) [30] CN (PCT/CN2019/086431) 2019-05-10	[51] <b>Int.Cl. A61L 27/14 (2006.01) C08G 65/329 (2006.01)</b> [25] EN [54] <b>POLYMER-BASED IMPLANT FOR RETINAL THERAPY AND METHODS OF MAKING AND USING THE SAME</b> [54] <b>IMPLANT A BASE DE POLYMERE POUR THERAPIE RETINIENNE ET METHODES DE FABRICATION ET D'UTILISATION DE CELUI-CI</b> [72] BYRNE, LEAH, US [72] FEDORCHAK, MORGAN, US [72] SAHEL, JOSE-ALAIN, US [71] UNIVERSITY OF PITTSBURGH - OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION, US [85] 2021-11-09 [86] 2020-05-12 (PCT/US2020/032496) [87] (WO2020/232005) [30] US (62/846,966) 2019-05-13	[51] <b>Int.Cl. G02B 26/08 (2006.01) F21V 9/30 (2018.01) G01S 7/481 (2006.01) G02B 26/10 (2006.01) G02B 27/00 (2006.01) G02B 27/09 (2006.01) G02B 27/58 (2006.01) G03B 21/20 (2006.01) H04N 9/31 (2006.01)</b> [25] EN [54] <b>IMAGE GENERATING DEVICE FOR A SCANNING PROJECTION METHOD WITH BESSEL-LIKE BEAMS</b> [54] <b>DISPOSITIF DE GENERATION D'IMAGES POUR UN PROCEDE DE PROJECTION A BALAYAGE AVEC RAYONS ANALOGUES A DES RAYONS DE BESSEL</b> [72] HOFMANN, ULRICH, DE [71] OQMENTED GMBH, DE [85] 2021-11-10 [86] 2020-05-13 (PCT/DE2020/100407) [87] (WO2020/228907) [30] DE (DE10 2019 207 073.6) 2019-05-15

## Demandes PCT entrant en phase nationale

[21] **3,139,855**  
[13] A1

[51] **Int.Cl. G01D 5/00 (2006.01) G01D 5/22 (2006.01) G21C 7/08 (2006.01)**

[25] EN

[54] **DIGITAL ROD POSITION INDICATION SYSTEM AND METHOD**

[54] **PROCEDE ET SYSTEME NUMERIQUE D'INDICATION DE POSITION DE BARRE**

[72] MEYERS, TIMOTHY S., US

[72] BOOMGAARD, DIRK JAN (DECEASED), XX

[71] WESTINGHOUSE ELECTRIC COMPANY LLC, US

[85] 2021-11-09

[86] 2020-05-08 (PCT/US2020/032115)

[87] (WO2021/029926)

[30] US (62/846,002) 2019-05-10

[21] **3,139,858**  
[13] A1

[51] **Int.Cl. B01J 3/00 (2006.01) B01J 19/00 (2006.01)**

[25] EN

[54] **USE OF A MICROJET REACTOR FOR PROCESSING BIOMASS**

[54] **UTILISATION D'UN REACTEUR A MICROJET POUR LE TRAITEMENT D'UNE BIOMASSE**

[72] BAUMSTUMMLER, BERND, DE

[72] TURELI, AKIF EMRE, DE

[72] PENTH, FELIX, DE

[72] MULLER, DANIEL, DE

[72] KRUMBHOLZ, RUDOLF, DE

[71] MYBIOTECH GMBH, DE

[85] 2021-11-10

[86] 2020-05-13 (PCT/DE2020/100408)

[87] (WO2020/228908)

[30] DE (10 2019 112 382.8) 2019-05-13

[21] **3,139,860**  
[13] A1

[51] **Int.Cl. B01L 3/00 (2006.01) C12Q 1/6816 (2018.01) C12N 15/10 (2006.01) G01N 15/14 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR ANALYZING RNA TRANSCRIPTS**

[54] **SYSTEMES ET PROCEDES D'ANALYSE DE TRANSCRITS D'ARN**

[72] CONNOLLY, DENNIS M., US

[72] MURANTE, RICHARD S., US

[72] WESCOTT, NATHANIEL E., US

[71] INTEGRATED NANO-TECHNOLOGIES, INC., US

[85] 2021-11-09

[86] 2020-05-08 (PCT/US2020/032091)

[87] (WO2020/251707)

[30] US (16/408,970) 2019-05-10

[21] **3,139,856**  
[13] A1

[51] **Int.Cl. G21B 3/00 (2006.01)**

[25] EN

[54] **ION BEAM DEVICE AND METHOD FOR GENERATING HEAT AND POWER**

[54] **DISPOSITIF A FAISCEAU IONIQUE ET PROCEDE DE GENERATION DE CHALEUR ET D'ELECTRICITE**

[72] BLAKE, RUSSELL, AU

[71] QUANTUM SPRING RESEARCH PTY LTD, AU

[85] 2021-11-10

[86] 2019-05-11 (PCT/AU2019/050441)

[87] (WO2019/217998)

[30] AU (2018901635) 2018-05-13

[21] **3,139,859**  
[13] A1

[51] **Int.Cl. C10G 1/06 (2006.01) C10L 1/02 (2006.01) C10L 1/18 (2006.01)**

[25] EN

[54] **LOW SULPHUR FUEL BLEND OF HYDROCARBON CONTAINING FUELS AND METHOD FOR PRODUCING SUCH BLEND**

[54] **MELANGE A FAIBLE TENEUR EN SOUFRE DE COMBUSTIBLES CONTENANT DES HYDROCARBURES ET PROCEDE DE PRODUCTION D'UN TEL MELANGE**

[72] IVERSEN, STEEN, BRUMMERSTEDT, DK

[72] GUERRERO, JULIE KATERINE RODRIGUEZ, CA

[71] STEEPER ENERGY APS, DK

[85] 2021-11-10

[86] 2020-05-15 (PCT/EP2020/025222)

[87] (WO2020/228990)

[30] DK (PA 2019 00581) 2019-05-15

[21] **3,139,861**  
[13] A1

[51] **Int.Cl. C10G 1/06 (2006.01) C10L 1/02 (2006.01) C10L 1/18 (2006.01)**

[25] EN

[54] **BLEND OF HYDROCARBON CONTAINING FOSSIL AND RENEWABLE COMPONENTS AND METHOD FOR PRODUCING SUCH BLEND**

[54] **MELANGE D'HYDROCARBURES CONTENANT DES CONSTITUANTS FOSSILES ET RENEUVELABLES ET PROCEDE DE PRODUCTION D'UN TEL MELANGE**

[72] IVERSEN, STEEN BRUMMERSTEDT, DK

[72] GUERRERO, JULIE KATERINE RODRIGUEZ, CA

[71] STEEPER ENERGY APS, DK

[85] 2021-11-10

[86] 2020-05-15 (PCT/EP2020/025223)

[87] (WO2020/228991)

[30] DK (PA 2019 00582) 2019-05-15

[21] **3,139,857**  
[13] A1

[51] **Int.Cl. H02K 9/06 (2006.01) H02K 9/22 (2006.01) H02K 21/22 (2006.01)**

[25] EN

[54] **ELECTRICAL MACHINE**

[54] **MACHINE ELECTRIQUE**

[72] SHIRAZEE, NABEEL AHMED, GB

[71] EPROPELLED LIMITED, GB

[85] 2021-11-09

[86] 2019-05-20 (PCT/GB2019/051385)

[87] (WO2019/220149)

[30] GB (1808132.3) 2018-05-18

## PCT Applications Entering the National Phase

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[21] **3,139,862**  
[13] A1

[51] **Int.Cl. G01N 33/68 (2006.01)**  
[25] EN  
[54] **MASS SPECTROMETRY CALIBRATOR**  
[54] **PRODUIT D'ETALONNAGE POUR SPECTROMETRIE DE MASSE**  
[72] HARDING, STEPHEN, GB  
[72] WALLIS, GREGG, GB  
[71] THE BINDING SITE GROUP LIMITED, GB  
[85] 2021-11-09  
[86] 2020-04-29 (PCT/GB2020/051040)  
[87] (WO2020/229794)  
[30] GB (1906599.4) 2019-05-10  
[30] GB (1910708.5) 2019-07-26

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[21] **3,139,863**  
[13] A1

[51] **Int.Cl. F03D 13/10 (2016.01) B66C 23/20 (2006.01) B66C 23/32 (2006.01)**  
[25] EN  
[54] **WIND TURBINE TOWER WITH CRANE CONNECTION ELEMENTS AND A CRANE WITH TOWER FLANGE CONNECTION ELEMENTS**  
[54] **TOUR D'EOLIENNE DOTEE D'ELEMENTS DE RACCORDEMENT DE GRUE ET GRUE DOTEE D'ELEMENTS DE RACCORDEMENT DE BRIDE DE TOUR**  
[72] FENGER, PER ESKE, DK  
[71] LIFTRA IP APS, DK  
[85] 2021-11-10  
[86] 2020-05-21 (PCT/EP2020/064238)  
[87] (WO2020/234435)  
[30] DK (PA201970322) 2019-05-21

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[21] **3,139,865**  
[13] A1

[51] **Int.Cl. A61K 31/085 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **TREATMENT OF INFANTILE HEMANGIOMA**  
[54] **TRAITEMENT DE L'HEMANGIOME INFANTILE**  
[72] ROSSI, THOMAS M., US  
[72] DROLET, BETH, US  
[72] KYDONIEUS, AGIS, US  
[71] PEDIATRIC DERM DEVELOPEMENT LLC, US  
[71] ROSSI, THOMAS M., US  
[71] DROLET, BETH, US  
[71] KYDONIEUS, AGIS, US  
[85] 2021-11-09  
[86] 2020-05-22 (PCT/US2020/034270)  
[87] (WO2020/242962)  
[30] US (62/921,007) 2019-05-24  
[30] US (62/974,851) 2019-12-27

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[21] **3,139,866**  
[13] A1

[51] **Int.Cl. C12Q 1/6869 (2018.01) G01N 33/487 (2006.01) G01N 33/92 (2006.01)**  
[25] EN  
[54] **METHOD**  
[54] **PROCEDE**  
[72] HERON, ANDREW JOHN, GB  
[72] BRUCE, MARK JOHN, GB  
[72] BOWEN, REBECCA VICTORIA, GB  
[72] MCNEILL, LUKE ALEXANDER, GB  
[72] VILLARREAL, SIMON RAFAEL, GB  
[72] MARTIN, SAMUEL JOHN, GB  
[72] STAFFORD-ALLEN, REBECCA ANNE, GB  
[71] OXFORD NANOPORE TECHNOLOGIES PLC, GB  
[85] 2021-11-09  
[86] 2020-05-22 (PCT/GB2020/051260)  
[87] (WO2020/234612)  
[30] GB (1907244.6) 2019-05-22

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[21] **3,139,867**  
[13] A1

[51] **Int.Cl. G01N 21/64 (2006.01)**  
[25] EN  
[54] **DETECTION OF NON-PHYTOPLANKTON-EATING ZOOPLANKTON WITHIN A VOLUME OF WATER**  
[54] **DETECTION DE ZOOPLANCTON NON-MANGEUR DE PHYTOPLANCTON DANS UN VOLUME D'EAU**  
[72] NIELSEN, JOSEFINE HOLM, DK  
[72] SORENSEN, MIKKEL BRYDEGAARD, SE  
[72] PRANGSMA, JORD CORNELIS, NL  
[72] RODRIGO, PETER JOHN, DK  
[71] FAUNAPHOTONICS AGRICULTURE & ENVIRONMENTAL A/S, DK  
[85] 2021-11-11  
[86] 2020-05-27 (PCT/EP2020/064696)  
[87] (WO2020/239833)  
[30] EP (19177357.1) 2019-05-29  
[30] EP (20165650.1) 2020-03-25

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[21] **3,139,868**  
[13] A1

[51] **Int.Cl. B60R 21/015 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR OCCUPANT CLASSIFICATION**  
[54] **SYSTEMES ET PROCEDES POUR LA CLASSIFICATION D'OCCUPANTS**  
[72] YANG, HANLONG, US  
[72] JOHNSON, JAMES B., US  
[72] CARRARO, BRUNO D., US  
[71] MAGNA SEATING INC., CA  
[85] 2021-11-09  
[86] 2020-05-08 (PCT/US2020/032014)  
[87] (WO2020/227599)  
[30] US (62/845,542) 2019-05-09

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[21] **3,139,869**  
[13] A1

[51] **Int.Cl. B32B 9/02 (2006.01) B32B 3/18 (2006.01) B32B 7/03 (2019.01) B32B 5/16 (2006.01)**  
[25] EN  
[54] **COMPOSITE BOARD**  
[54] **PANNEAU DE MATERIAU**  
[72] BARD, MARKUS, CH  
[71] BARD, MARKUS, CH  
[85] 2021-11-10  
[86] 2020-04-23 (PCT/EP2020/061397)  
[87] (WO2020/216871)  
[30] CH (00553/19) 2019-04-25



## Demandes PCT entrant en phase nationale

[21] **3,139,870**  
[13] A1

[51] **Int.Cl. A23L 3/00 (2006.01) A23C 3/027 (2006.01) A23L 2/46 (2006.01) A23L 3/02 (2006.01) A23L 3/04 (2006.01) C02F 1/00 (2006.01) C02F 1/02 (2006.01) C02F 1/44 (2006.01) C02F 1/50 (2006.01) C02F 1/66 (2006.01) C02F 1/76 (2006.01) C02F 5/08 (2006.01) C02F 9/00 (2006.01) C12H 1/00 (2006.01) C12H 1/08 (2006.01)**

[25] EN

[54] **METHODS FOR OPERATING A PASTEURIZING DEVICE**

[54] **PROCEDE POUR FAIRE FONCTIONNER UN DISPOSITIF DE PASTEURISATION**

[72] CONCIN, ROLAND, AT  
[72] RINDERER, CHRISTIAN, AT  
[72] HANS, KLEMENS, AT  
[72] EDER, HARALD, AT  
[72] THONHAUSER, PHILIP, AT  
[72] HERZOG, DANIEL, AT  
[71] RED BULL GMBH, AT  
[85] 2021-11-10  
[86] 2020-06-18 (PCT/EP2020/066997)  
[87] (WO2020/254510)  
[30] EP (19180979.7) 2019-06-18

[21] **3,139,871**  
[13] A1

[51] **Int.Cl. C12N 9/64 (2006.01) C07K 1/14 (2006.01) C07K 1/20 (2006.01) C07K 1/36 (2006.01)**

[25] EN

[54] **PURIFIED FISH PROTEASES WITH HIGH SPECIFIC ACTIVITIES AND ITS PROCESS OF PRODUCTION**

[54] **PROTEASES DE POISSON PURIFIEES AYANT DES ACTIVITES SPECIFIQUES ELEVEES ET LEUR PROCEDE DE PRODUCTION**

[72] YOUSIF, ALEX NOBAR, CA  
[72] DUTTA PASSECKER, PRIYANKA, AT  
[72] FERRARI, VALERIO MARIA, IT  
[72] SIDDHARTH, JAY, CH  
[71] BIOSEUTICA B.V., NL  
[85] 2021-11-10  
[86] 2020-04-27 (PCT/EP2020/061588)  
[87] (WO2020/229145)  
[30] US (62/847,013) 2019-05-13

[21] **3,139,872**  
[13] A1

[51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/46 (2020.01) C04B 35/10 (2006.01)**

[25] EN

[54] **AN AIR-HEATING TYPE HEAT NOT BURN HEATING DEVICE, A CERAMIC HEATING ELEMENT AND A PREPARATION METHOD THEREOF**

[54] **DISPOSITIF DE CHAUFFAGE DE CIGARETTE ELECTRONIQUE DE TYPE A CHAUFFAGE D'AIR, CORPS CERAMIQUE CHAUFFANT ET PROCEDE DE PREPARATION CORRESPONDANT**

[72] ZHU, XIAOHUA, CN  
[72] XIONG, ZHAORONG, CN  
[72] FU, ZENGXUE, CN  
[72] YU, XIANGYI, CN  
[72] LIU, MAOQI, CN  
[71] XIAMEN FENGTAO CERAMICS CO., LTD, CN  
[85] 2021-11-09  
[86] 2020-05-14 (PCT/CN2020/090241)  
[87] (WO2020/228773)  
[30] CN (201920703126.3) 2019-05-16  
[30] CN (201920703695.8) 2019-05-16  
[30] CN (201920707429.2) 2019-05-16  
[30] CN (201910409470.6) 2019-05-16

[21] **3,139,873**  
[13] A1

[51] **Int.Cl. F16B 25/10 (2006.01) F16B 25/00 (2006.01) F16B 35/06 (2006.01)**

[25] EN

[54] **DRYWALL SCREW**

[54] **VIS POUR CONSTRUCTION A PAROI SECHE**

[72] HAAG, STEFAN, CH  
[71] HILTI AKTIENGESELLSCHAFT, LI  
[85] 2021-11-10  
[86] 2020-06-22 (PCT/EP2020/067307)  
[87] (WO2021/001192)  
[30] EP (19184079.2) 2019-07-03

[21] **3,139,874**  
[13] A1

[51] **Int.Cl. A61M 16/00 (2006.01) G16H 40/67 (2018.01)**

[25] EN

[54] **TWO-WAY COMMUNICATION IN A MEDICAL DEVICE**

[54] **COMMUNICATION BIDIRECTIONNELLE DANS UN DISPOSITIF MEDICAL**

[72] PEAKE, GREGORY ROBERT, US  
[72] LIU, NATHAN ZERSEE, AU  
[72] DE SOUZA, SAKEENA, AU  
[72] WEALE, ANDREW, AU  
[72] DASSOS, PETER JAMES, AU  
[71] RESMED PTY LTD, AU  
[85] 2021-11-10  
[86] 2020-05-15 (PCT/IB2020/054641)  
[87] (WO2020/230105)  
[30] US (62/848,991) 2019-05-16

[21] **3,139,876**  
[13] A1

[51] **Int.Cl. B04B 1/20 (2006.01) B04B 11/02 (2006.01)**

[25] EN

[54] **HEAVY PHASE LIQUID DISCHARGE ELEMENT FOR A CENTRIFUGAL SEPARATOR, CENTRIFUGAL SEPARATOR AND METHOD FOR SEPARATING TWO LIQUID PHASES**

[54] **ELEMENT D'EVACUATION DE LIQUIDE DE PHASE LOURDE POUR SEPARATEUR CENTRIFUGE, SEPARATEUR CENTRIFUGE ET PROCEDE DE SEPARATION DE DEUX PHASES LIQUIDES**

[72] MADSEN, BENT, DK  
[71] ALFA LAVAL CORPORATE AB, SE  
[85] 2021-11-10  
[86] 2020-04-29 (PCT/EP2020/061884)  
[87] (WO2020/229184)  
[30] EP (19174947.2) 2019-05-16

## PCT Applications Entering the National Phase

[21] **3,139,877**  
[13] A1

[51] **Int.Cl. H02K 13/02 (2006.01) H01R 39/34 (2006.01)**  
[25] EN  
[54] **THROUGH BORE SLIP RING CONDITION MONITORING SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE DE SURVEILLANCE DE CONDITION DE BAGUE COLLECTRICE DE TROU TRAVERSANT**  
[72] PETROU, ANTON A., US  
[72] HAN, LU, US  
[72] JAKYMIW, MATT, US  
[71] DEUBLIN COMPANY, LLC, US  
[85] 2021-11-09  
[86] 2020-05-07 (PCT/US2020/031913)  
[87] (WO2020/231749)  
[30] US (62/846,306) 2019-05-10  
[30] US (16/869,200) 2020-05-07

[21] **3,139,878**  
[13] A1

[51] **Int.Cl. C10L 1/24 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS AND USES RELATING THERETO**  
[54] **COMPOSITIONS ET PROCEDES ET UTILISATIONS ASSOCIEES**  
[72] BURGAZLI, CENK R., US  
[72] LEMIEUX, CHRISTOPHER E., US  
[71] INNOSPEC LIMITED, GB  
[85] 2021-11-10  
[86] 2020-05-11 (PCT/GB2020/051145)  
[87] (WO2020/229804)  
[30] US (62/848,311) 2019-05-15  
[30] GB (1908912.7) 2019-06-21

[21] **3,139,879**  
[13] A1

[25] EN  
[54] **SYSTEM AND METHOD FOR CHARACTERIZING CELLULAR PHENOTYPIC DIVERSITY FROM MULTI-PARAMETER CELLULAR AND SUB-CELLULAR IMAGING DATA**  
[54] **SYSTEME ET PROCEDE DE CARACTERISATION DE DIVERSITE PHENOTYPIQUE CELLULAIRE A PARTIR DE DONNEES D'IMAGERIE CELLULAIRE ET SUBCELLULAIRE MULTIPARAMETRIQUE**  
[72] CHENNUBHOTLA, SRINIVAS C., US  
[72] PULLARA, FILIPPO, US  
[72] FURMAN, SAMANTHA A., US  
[71] UNIVERSITY OF PITTSBURGH-OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION, US  
[85] 2021-11-09  
[86] 2020-05-13 (PCT/US2020/032637)  
[87] (WO2020/232094)  
[30] US (62/847,622) 2019-05-14

[21] **3,139,880**  
[13] A1

[51] **Int.Cl. B63B 21/16 (2006.01) B66D 1/14 (2006.01) B66D 1/50 (2006.01)**  
[25] EN  
[54] **TOWING WINCH SYSTEM AND A METHOD TO CARRY OUT A TOWING OPERATION, IN PARTICULAR AN ESCORT OPERATION FOR ASSISTING A VESSEL IN PASSING A WATER PASSAGE**  
[54] **SYSTEME DE TREUIL DE REMORQUE ET PROCEDE D'EXECUTION D'UNE OPERATION DE REMORQUAGE, EN PARTICULIER D'UNE OPERATION D'ESCORTE POUR AIDER UN NAVIRE A PASSER DANS UN PASSAGE D'EAU**  
[72] KREISCHER, JOHANNES BERNARDUS GERARDUS, NL  
[71] TUGPINS B.V., NL  
[85] 2021-11-10  
[86] 2020-05-08 (PCT/EP2020/062883)  
[87] (WO2020/229350)  
[30] NL (2023108) 2019-05-10

[21] **3,139,881**  
[13] A1

[51] **Int.Cl. A61B 34/20 (2016.01) A61B 90/30 (2016.01)**  
[25] EN  
[54] **ILLUMINATION SYSTEM AND METHOD FOR OBJECT TRACKING**  
[54] **SYSTEME D'ECLAIRAGE ET PROCEDE DE POURSUITE D'OBJET**  
[72] ZAPATA, JORGE, US  
[72] VARGAS SILVA, CARLOS EDUARDO, CO  
[71] GENTEX CORPORATION, US  
[85] 2021-11-09  
[86] 2020-06-19 (PCT/IB2020/055811)  
[87] (WO2020/255083)  
[30] US (62/863,905) 2019-06-20

[21] **3,139,882**  
[13] A1

[51] **Int.Cl. A61G 13/12 (2006.01) A61G 13/00 (2006.01) A61G 13/10 (2006.01)**  
[25] EN  
[54] **SURGICAL POSITIONER**  
[54] **POSITIONNEUR CHIRURGICAL**  
[72] SHEKHMAN, MARK, US  
[71] FORTRUSS, LLC, US  
[85] 2021-11-09  
[86] 2020-05-13 (PCT/US2020/032640)  
[87] (WO2020/232097)  
[30] US (62/847,054) 2019-05-13  
[30] US (62/934,860) 2019-11-13

[21] **3,139,883**  
[13] A1

[51] **Int.Cl. H03K 17/14 (2006.01) H03K 17/082 (2006.01) H01L 27/02 (2006.01) H03K 17/08 (2006.01)**  
[25] EN  
[54] **THYRISTOR CIRCUIT AND THYRISTOR PROTECTION METHOD**  
[54] **CIRCUIT DE THYRISTOR ET PROCEDE DE PROTECTION DE THYRISTOR**  
[72] STADLER, RAETO, CH  
[72] BAECHLE, RALF, DE  
[71] ABB SCHWEIZ AG, CH  
[85] 2021-11-10  
[86] 2020-05-08 (PCT/EP2020/062940)  
[87] (WO2020/229366)  
[30] EP (19173822.8) 2019-05-10

## Demandes PCT entrant en phase nationale

[21] **3,139,884**  
[13] A1

[51] **Int.Cl. F41J 3/02 (2006.01) F41J 5/02 (2006.01) F41J 5/10 (2006.01) F41J 5/14 (2006.01) A63B 67/14 (2006.01)**

[25] EN  
[54] **VIDEO REPLAY**  
[54] **RELECTURE DE VIDEO**  
[72] DALE, JASON, GB  
[71] FLIGHT PATH IP LIMITED, GB  
[85] 2021-11-10  
[86] 2020-05-13 (PCT/GB2020/051170)  
[87] (WO2020/240154)  
[30] GB (1907552.2) 2019-05-29

[21] **3,139,885**  
[13] A1

[51] **Int.Cl. A24F 42/60 (2020.01) A24F 42/00 (2020.01) A24F 47/00 (2020.01) A24F 40/40 (2020.01)**

[25] EN  
[54] **CERAMIC HEATING ELEMENT AND NON-CONTACT HEAT NOT BURN HEATING DEVICE WITH SAME**  
[54] **ELEMENT CERAMIQUE CHAUFFANT ET DISPOSITIF DE CHAUFFAGE DE CIGARETTE ELECTRONIQUE DE TYPE SANS CONTACT LE COMPRENANT**  
[72] ZHU, XIAOHUA, CN  
[72] XIONG, ZHAORONG, CN  
[72] FU, ZENGXUE, CN  
[72] YU, XIANGYI, CN  
[72] LIU, MAOQI, CN  
[71] XIAMEN FENGTAO CERAMICS CO., LTD, CN  
[85] 2021-11-09  
[86] 2020-05-14 (PCT/CN2020/090245)  
[87] (WO2020/228775)  
[30] CN (201920703370.X) 2019-05-16  
[30] CN (201921493371.2) 2019-09-10  
[30] CN (201910851288.6) 2019-09-10  
[30] CN (201921496504.1) 2019-09-10

[21] **3,139,887**  
[13] A1

[25] EN  
[54] **CALIBRATION SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE D'ETALONNAGE**  
[72] MEYERS, TIMOTHY S., US  
[72] GRUBER, DANIEL G., US  
[72] BARTELS, MARK A., US  
[72] SWIDWA, KENNETH J., US  
[71] WESTINGHOUSE ELECTRIC COMPANY LLC, US  
[85] 2021-11-09  
[86] 2020-05-07 (PCT/US2020/031758)  
[87] (WO2020/231717)  
[30] US (62/845,980) 2019-05-10

[21] **3,139,889**  
[13] A1

[51] **Int.Cl. C08G 79/025 (2016.01) H01M 4/13 (2010.01) H01M 10/052 (2010.01) H01M 10/0562 (2010.01)**

[25] EN  
[54] **WET-CHEMICALLY PREPARED POLYMERIC LITHIUM PHOSPHORUS OXYNITRIDE (LIPON), METHOD FOR THE PREPARATION THEREOF, USES THEREOF, AND BATTERY**  
[54] **NITRURE DE PHOSPHORE DE LITHIUM POLYMERE PRODUIT PAR VOIE CHIMIQUE HUMIDE (LIPON), SON PROCEDE DE PRODUCTION, SES UTILISATIONS AINSI QUE BATTERIE**  
[72] ABELS, GIDEON, DE  
[72] BARDENHAGEN, INGO, DE  
[72] SCHWENZEL, JULIAN, DE  
[72] BUSSE, MATTHIAS, DE  
[71] FRAUNHOFER-GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2021-11-10  
[86] 2020-05-12 (PCT/EP2020/063188)  
[87] (WO2020/229467)  
[30] DE (10 2019 207 196.1) 2019-05-16

[21] **3,139,890**  
[13] A1

[51] **Int.Cl. A01G 22/30 (2018.01) A01G 27/00 (2006.01)**

[25] EN  
[54] **METHODS FOR CULTIVATING SPHAGNUM**  
[54] **PROCEDES DE CULTURE DE SPHAIGNE**  
[72] WRIGHT, NEAL, GB  
[71] MICROPROPAGATION SERVICES (E.M.) LIMITED, GB  
[85] 2021-11-10  
[86] 2020-05-22 (PCT/GB2020/051252)  
[87] (WO2020/234607)  
[30] GB (1907229.7) 2019-05-22

[21] **3,139,891**  
[13] A1

[51] **Int.Cl. A61L 24/00 (2006.01) A61F 13/56 (2006.01)**

[25] EN  
[54] **METHOD AND SYSTEM FOR TESTING AN ADHESIVE USED FOR A FEMININE CARE PAD**  
[54] **PROCEDE ET SYSTEME D'ESSAI D'UN ADHESIF UTILISE POUR UN TAMPON HYGIENIQUE FEMININ**  
[72] BURKHOLDER, LUKE A., US  
[72] STUCZYNSKI, RUSSELL P., US  
[72] VAN DYKE, KAYLA, US  
[72] HOURIEZ, GAUTIER, US  
[71] BOSTIK, INC., US  
[85] 2021-11-09  
[86] 2020-05-13 (PCT/US2020/032643)  
[87] (WO2020/232099)  
[30] US (62/847,486) 2019-05-14

[21] **3,139,892**  
[13] A1

[51] **Int.Cl. A61K 8/37 (2006.01) A61K 8/41 (2006.01) A61K 8/49 (2006.01) A61Q 17/04 (2006.01)**

[25] FR  
[54] **PHOTOPROTECTIVE SYSTEM CONSISTING OF 4 SUNSCREENS**  
[54] **SYSTEME PHOTOPROTECTEUR CONSTITUE DE 4 FILTRES SOLAIRES**  
[72] PROVOST, ROXANE, FR  
[72] PAULET, STEPHANIE, FR  
[72] DROMIGNY, HELENE, FR  
[72] PERIER, VALERIE, FR  
[71] PIERRE FABRE DERMOCOSMETIQUE, FR  
[85] 2021-11-08  
[86] 2020-05-11 (PCT/EP2020/063081)  
[87] (WO2020/229425)  
[30] FR (FR1904891) 2019-05-10

## PCT Applications Entering the National Phase

[21] **3,139,893**  
[13] A1

[51] **Int.Cl. E04B 9/22 (2006.01) E04B 9/24 (2006.01) E04B 9/00 (2006.01) E04B 9/04 (2006.01)**

[25] EN

[54] **A SYSTEM FOR MOUNTING A SUSPENDED CEILING**

[54] **SYSTEME DE MONTAGE DE FAUX-PLAFONDS**

[72] POLLENUS, JAN, DK

[71] ROCKWOOL INTERNATIONAL A/S, DK

[85] 2021-11-10

[86] 2020-05-14 (PCT/EP2020/063414)

[87] (WO2020/229582)

[30] EP (19174347.5) 2019-05-14

[21] **3,139,894**  
[13] A1

[51] **Int.Cl. A01G 22/30 (2018.01) C05G 1/00 (2006.01) A01H 11/00 (2006.01)**

[25] EN

[54] **NUTRIENT COMPOSITIONS FOR CULTIVATING SPHAGNUM**

[54] **COMPOSITIONS NUTRITIVES POUR LA CULTURE DE SPHAIGNE**

[72] WRIGHT, NEAL, GB

[71] MICROPROPAGATION SERVICES (E.M.) LIMITED, GB

[85] 2021-11-10

[86] 2020-05-22 (PCT/GB2020/051258)

[87] (WO2020/234611)

[30] GB (1907228.9) 2019-05-22

[30] GB (1907229.7) 2019-05-22

[21] **3,139,895**  
[13] A1

[51] **Int.Cl. A23K 10/12 (2016.01) A23L 7/104 (2016.01) A23L 7/126 (2016.01) A23L 7/135 (2016.01) A23L 25/00 (2016.01) C13K 13/00 (2006.01)**

[25] EN

[54] **FERMENTED CEREAL**

[54] **CEREALE FERMENTEE**

[72] MULLER, JEROEN ANDRE, CH

[72] ANANTA, EDWIN, SG

[72] YE, LIJUAN, CH

[72] LIMLEY, ANN, CH

[71] SOCIETES DES PRODUITS NESTLE S.A., CH

[85] 2021-11-10

[86] 2020-05-15 (PCT/EP2020/063658)

[87] (WO2020/234169)

[30] EP (19175193.2) 2019-05-17

[21] **3,139,896**  
[13] A1

[51] **Int.Cl. A47J 27/00 (2006.01) A47J 36/00 (2006.01)**

[25] EN

[54] **AUTOMATED COOKING SYSTEM**

[54] **SYSTEME DE CUISSON AUTOMATISE**

[72] CHEUNG, CHIM LEE, CN

[72] CHAN, CHUN KIT, CN

[72] FU, HING CHOI, CN

[72] LEE, KA TAK, CN

[72] TSUI, MING HIM MELVIN, CN

[71] HESTIA TECHNOLOGY LIMITED, CN

[85] 2021-11-09

[86] 2020-07-31 (PCT/IB2020/057243)

[87] (WO2021/024124)

[30] HK (19127660.9) 2019-08-02

[21] **3,139,897**  
[13] A1

[51] **Int.Cl. G02B 23/12 (2006.01)**

[25] EN

[54] **ELECTRO-OPTICS BASED OPTICAL DEVICES**

[54] **DISPOSITIFS OPTIQUES A BASE ELECTRO-OPTIQUE**

[72] THOMAS, JAMES, US

[71] MARANON, INC., US

[85] 2021-11-09

[86] 2020-05-13 (PCT/US2020/032661)

[87] (WO2020/232113)

[30] US (62/846,882) 2019-05-13

[21] **3,139,898**  
[13] A1

[51] **Int.Cl. F24S 20/69 (2018.01) H02S 20/25 (2014.01) H02S 40/44 (2014.01) F24S 10/50 (2018.01) F24S 25/40 (2018.01) F24S 25/67 (2018.01) F24S 80/30 (2018.01) E04D 13/18 (2018.01)**

[25] EN

[54] **SOLAR ENERGY ROOF TILE, SOLAR ENERGY SYSTEM AND METHOD FOR OBTAINING ENERGY FROM SOLAR RADIATION**

[54] **TUILE DE COLLECTE D'ENERGIE SOLAIRE, SYSTEME D'ENERGIE SOLAIRE ET PROCEDE DE PRODUCTION D'ENERGIE A PARTIR DU RAYONNEMENT SOLAIRE**

[72] HAKENBERG, PETER, DE

[71] MEYER BURGER (GERMANY) GMBH, DE

[85] 2021-11-10

[86] 2020-05-15 (PCT/EP2020/063711)

[87] (WO2020/229686)

[30] DE (10 2019 112 799.8) 2019-05-15

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[21] **3,139,899**  
[13] A1

[51] **Int.Cl. A61K 39/085 (2006.01) A61K 47/68 (2017.01) A61K 38/16 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) A61P 37/04 (2006.01) C07K 14/31 (2006.01) C07K 16/30 (2006.01)**

[25] EN

[54] **CANCER TREATMENT**

[54] **TRAITEMENT CONTRE LE CANCER**

[72] SHAHAR, MICHAL, IL

[72] AZULAY, MEIR, IL

[72] NATHAN, ASHER, IL

[71] NEOTX THERAPEUTICS LTD., IL

[85] 2021-11-10

[86] 2020-05-15 (PCT/IL2020/050533)

[87] (WO2020/230142)

[30] US (62/848,518) 2019-05-15

## Demandes PCT entrant en phase nationale

[21] **3,139,900**  
[13] A1

[51] **Int.Cl. H01L 21/48 (2006.01) H01L 23/373 (2006.01) H01L 23/42 (2006.01)**

[25] EN

[54] **MULTILAYERED NANOWIRE ARRAYS WITH LATERAL INTERPOSERS**

[54] **RESEAUX DE NANOFILS MULTICOUCHES AVEC INTERPOSEURS LATERAUX**

[72] BARAKO, MICHAEL T., US

[72] TICE, JESSE B., US

[72] KUCIEJ, MAX H., US

[71] NORTHROP GRUMMAN SYSTEMS CORPORATION, US

[85] 2021-11-09

[86] 2020-04-27 (PCT/US2020/030049)

[87] (WO2020/231623)

[30] US (16/409,107) 2019-05-10

[21] **3,139,901**  
[13] A1

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

[25] EN

[54] **METHOD FOR SELECTING A PATIENT FOR A REPERFUSION THERAPY**

[54] **PROCEDE DE SELECTION D'UN PATIENT POUR UNE THERAPIE DE REPERFUSION**

[72] MONTANER VILLALONGA, JOAN, ES

[71] FUNDACIO HOSPITAL UNIVERSITARI VALL D'HEBRON- INSTITUT DE RECERCA, ES

[85] 2021-11-10

[86] 2020-05-15 (PCT/EP2020/063726)

[87] (WO2020/229691)

[30] EP (19382384.6) 2019-05-16

[21] **3,139,902**  
[13] A1

[51] **Int.Cl. A45D 19/00 (2006.01) G16Z 99/00 (2019.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR COLORING HAIR**

[54] **SYSTEMES ET PROCEDES DE COLORATION CAPILLAIRE**

[72] BROWN, CHARLES D., US

[72] MACEDO, LEILANI M., US

[72] BUCK, HEIDI L., US

[72] PLOETNER, JEFFREY S., US

[72] HALLENBORG, ERIC C., US

[72] D'ALESSANDRO, STUART, US

[72] CEFALU, JACKIE, US

[71] CLICS, LLC, US

[85] 2021-11-09

[86] 2020-05-14 (PCT/US2020/032981)

[87] (WO2020/232300)

[30] US (62/848,438) 2019-05-15

[30] US (62/848,471) 2019-05-15

[30] US (62/848,498) 2019-05-15

[30] US (62/848,504) 2019-05-15

[21] **3,139,903**  
[13] A1

[51] **Int.Cl. F17C 13/12 (2006.01) F17C 13/04 (2006.01)**

[25] EN

[54] **RELEASE VALVE**

[54] **SOUPAPE DE DECOMPRESSION**

[72] CAPPELLER, ALESSANDRO, IT

[72] CAMPAGNARI, CLAUDIO, IT

[71] ST-IL SPECIAL S.A.S. DI CAPPELLER ALESSANDRO & C., IT

[85] 2021-11-10

[86] 2020-06-09 (PCT/IT2020/050144)

[87] (WO2020/250258)

[30] IT (102019000008637) 2019-06-11

[21] **3,139,904**  
[13] A1

[51] **Int.Cl. H04L 9/06 (2006.01) H04W 12/00 (2021.01) H04L 9/08 (2006.01) H04L 9/32 (2006.01)**

[25] EN

[54] **QUANTUM-RESISTANT SIM CARD**

[54] **CARTE SIM A RESISTANCE QUANTIQUE**

[72] KOVAC, STIEPAN AURELIEN, CH

[72] UNDERHILL, JOHN GREGORY, CA

[71] QRC AAA SARL, CH

[85] 2021-11-10

[86] 2019-11-11 (PCT/IB2019/001133)

[87] (WO2020/229871)

[30] CH (00620/19) 2019-05-10

[30] CH (00731/19) 2019-06-06

[21] **3,139,905**  
[13] A1

[51] **Int.Cl. C09J 163/00 (2006.01) B27N 3/00 (2006.01) B32B 21/00 (2006.01) C08L 1/00 (2006.01) C08L 3/00 (2006.01) C08L 5/00 (2006.01) C08L 63/00 (2006.01) C08L 89/00 (2006.01) C08L 93/00 (2006.01) C08L 99/00 (2006.01) C09J 101/00 (2006.01) C09J 103/00 (2006.01) C09J 105/00 (2006.01) C09J 189/00 (2006.01) C09J 193/00 (2006.01) C09J 199/00 (2006.01)**

[25] EN

[54] **USE OF BONDING RESIN**

[54] **UTILISATION D'UNE RESINE ADHESIVE**

[72] NASLI BAKIR, BEN, SE

[72] ZAFAR, ASHAR, SE

[72] EKSTROM, JESPER, SE

[71] STORA ENSO OYJ, FI

[85] 2021-11-10

[86] 2020-05-13 (PCT/IB2020/054503)

[87] (WO2020/230034)

[30] SE (1950574-2) 2019-05-15

[21] **3,139,906**  
[13] A1

[51] **Int.Cl. C25B 15/02 (2021.01)**

[25] EN

[54] **METHOD FOR OPERATING ELECTROLYSIS APPARATUS**

[54] **PROCEDE DE FONCTIONNEMENT D'UN APPAREIL D'ELECTROLYSE**

[72] OHNO, JUN, JP

[72] UCHINO, YOUSUKE, JP

[71] ASahi KASEI KABUSHIKI KAISHA, JP

[85] 2021-11-10

[86] 2020-04-22 (PCT/JP2020/017357)

[87] (WO2020/241129)

[30] JP (2019-103103) 2019-05-31

[30] JP (2019-103106) 2019-05-31

## PCT Applications Entering the National Phase

[21] **3,139,907**  
[13] A1

[51] **Int.Cl. A23F 5/02 (2006.01) A23L 25/00 (2016.01) A23L 29/00 (2016.01)**

[25] EN

[54] **MYCELIATED PROTEIN COMPOSITIONS HAVING IMPROVED TEXTURE AND METHODS FOR MAKING**

[54] **COMPOSITIONS DE PROTEINES MYCELIEES PRESENTANT UNE TEXTURE AMELIOREE, ET LEURS PROCEDES DE FABRICATION**

[72] NADAL, MARINA, US

[72] WILLIAMS, MICHELLE J., US

[72] SMITH, DELANEY A., US

[72] HAHN, ALAN D., US

[72] CLARK, ANTHONY J., US

[72] LANGAN, JAMES PATRICK, US

[72] KELLY, BROOKS JOHN, US

[71] MYCOTECHNOLOGY, INC., US

[85] 2021-11-09

[86] 2020-05-15 (PCT/US2020/033106)

[87] (WO2020/232347)

[30] US (62/849,080) 2019-05-16

[30] US (62/887,473) 2019-08-15

[21] **3,139,908**  
[13] A1

[51] **Int.Cl. B63H 3/00 (2006.01) B63H 3/06 (2006.01) B64C 11/06 (2006.01) B64C 11/30 (2006.01) B64C 11/32 (2006.01) B64C 11/34 (2006.01)**

[25] EN

[54] **RELUCTANCE DRIVEN AXIAL MODULATING MECHANISM FOR ROTATING SHAFTS REALIZING A CONTROLLABLE PITCH PROPELLER/FAN/TURBINE**

[54] **MECANISME DE MODULATION AXIALE ENTRAINE PAR RELUCTANCE POUR ARBRES ROTATIFS CONFIGURANT UNE HELICE/UN VENTILATEUR/UNE TURBINE A PAS REGLABLE**

[72] MCBAIN, JORDAN, US

[71] MCBAIN, JORDAN, US

[85] 2021-11-09

[86] 2020-04-02 (PCT/US2020/026478)

[87] (WO2020/172689)

[30] US (62/846,655) 2019-05-11

[21] **3,139,909**  
[13] A1

[51] **Int.Cl. C21D 8/10 (2006.01) C22C 38/00 (2006.01) C22C 38/38 (2006.01) C22C 38/60 (2006.01)**

[25] EN

[54] **ELECTRIC-RESISTANCE-WELDED STEEL PIPE FOR HOLLOW STABILIZER**

[54] **TUYAU EN ACIER SOUDE PAR RESISTANCE ELECTRIQUE POUR STABILISATEUR CREUX**

[72] ARATANI, MASATOSHI, JP

[72] ISHIKAWA, KAZUTOSHI, JP

[72] MATSUI, RYOJI, JP

[72] KONDOU, TOMONORI, JP

[71] JFE STEEL CORPORATION, JP

[85] 2021-11-10

[86] 2020-05-12 (PCT/JP2020/019015)

[87] (WO2020/230795)

[30] JP (2019-090627) 2019-05-13

[21] **3,139,910**  
[13] A1

[51] **Int.Cl. A61K 31/7004 (2006.01) A61K 31/7016 (2006.01) A61K 35/74 (2015.01)**

[25] EN

[54] **AUTOBIOTIC COMPOSITIONS AND METHOD FOR PROMOTING HEALTHY GUT MICROBIOME**

[54] **COMPOSITIONS AUTOBIOTIQUES ET PROCEDE POUR FAVORISER UN MICROBIOME INTESTINAL SAIN**

[72] MILLET, GARY, US

[71] AXCESS GLOBAL SCIENCES, LLC, US

[85] 2021-11-09

[86] 2020-05-15 (PCT/US2020/033159)

[87] (WO2020/232362)

[30] US (62/848,039) 2019-05-15

[30] US (16/874,670) 2020-05-14

[21] **3,139,911**  
[13] A1

[51] **Int.Cl. C12C 12/04 (2006.01) A23L 2/38 (2021.01) C12C 11/00 (2006.01) C12H 3/00 (2019.01)**

[25] EN

[54] **BEER-TASTE FERMENTED MALT BEVERAGE**

[54] **BOISSON MALTEE FERMENTEE AYANT UN GOUT DE BIERE**

[72] KUBOTA, JUN, JP

[72] MAEKAWA, SYOTARO, JP

[71] ASAHI GROUP HOLDINGS, LTD., JP

[85] 2021-11-10

[86] 2020-10-09 (PCT/JP2020/038282)

[87] (WO2021/070930)

[30] JP (2019-187758) 2019-10-11

[21] **3,139,912**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01) A61K 31/404 (2006.01) A61K 31/675 (2006.01) A61K 39/00 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01) G01N 33/574 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **GPCR HETEROMER INHIBITORS AND USES THEREOF**

[54] **INHIBITEURS D'HETEROMERES DE GPCR ET LEURS UTILISATIONS**

[72] SEEN, DONGSEUNG, KR

[72] KIM, EUNHEE, KR

[72] KIM, SOHUI, KR

[72] SEO, HYEONGYU, KR

[72] LEE, JIYEONG, KR

[72] YANG, CHANG SOO, KR

[72] LEE, DONGJIN, KR

[72] YANG, JIWON, KR

[71] GPCR THERAPEUTICS, INC., KR

[85] 2021-11-10

[86] 2020-05-14 (PCT/IB2020/054552)

[87] (WO2020/234698)

[30] US (62/849,755) 2019-05-17

[30] US (63/022,845) 2020-05-11

## Demandes PCT entrant en phase nationale

[21] **3,139,914**  
[13] A1

[51] **Int.Cl. C01B 3/38 (2006.01) B01J 8/06 (2006.01) C01B 3/04 (2006.01) C01B 3/48 (2006.01) C01B 3/50 (2006.01) C01B 3/56 (2006.01) C01B 17/04 (2006.01)**

[25] EN

[54] **FURNACE AND PROCESS FOR SYNTHESIS GAS PRODUCTION**

[54] **FOUR ET PROCEDE DE PRODUCTION DE GAZ DE SYNTHESE**

[72] MANENTI, FLAVIO, IT

[72] PICCIONI, GIULIA, IT

[71] POLITECNICO DI MILANO, IT

[71] I.T.T. S.P.A., IT

[85] 2021-11-10

[86] 2020-05-15 (PCT/IB2020/054606)

[87] (WO2020/234709)

[30] IT (102019000006957) 2019-05-17

[21] **3,139,916**  
[13] A1

[51] **Int.Cl. C25D 13/16 (2006.01) H01G 11/26 (2013.01) C25D 21/00 (2006.01) H01G 9/048 (2006.01) H01M 4/04 (2006.01) H01M 4/88 (2006.01)**

[25] EN

[54] **SYSTEM FOR ROLL-TO-ROLL ELECTROCOATING OF BATTERY ELECTRODE COATINGS ONTO A FOIL SUBSTRATE**

[54] **SYSTEME DE REVETEMENT ELECTROLYTIQUE ROULEAU A ROULEAU DE REVETEMENTS D'ELECTRODE DE BATTERIE SUR UN SUBSTRAT EN FEUILLE**

[72] OAKES, LANDON J., US

[72] ORLER, HALEY L., US

[72] HELLRING, STUART D., US

[71] PPG INDUSTRIES OHIO, INC., US

[85] 2021-11-09

[86] 2020-03-16 (PCT/US2020/022954)

[87] (WO2020/236248)

[30] US (16/415,061) 2019-05-17

[21] **3,139,917**  
[13] A1

[25] EN

[54] **FIRE-AND-FORGET OFFLOAD MECHANISM FOR NETWORK-BASED SERVICES**

[54] **MECANISME DE DELESTAGE AUTONOME APRES LANCEMENT POUR DES SERVICES A BASE DE RESEAU**

[72] GIRBAL, ANTOINE JEAN, US

[71] NETFLIX, INC., US

[85] 2021-11-09

[86] 2020-05-15 (PCT/US2020/033268)

[87] (WO2020/236650)

[30] US (16/416,108) 2019-05-17

[21] **3,139,918**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/05 (2021.01) A61B 5/145 (2006.01) A61B 5/155 (2006.01)**

[25] EN

[54] **RESONATOR ASSEMBLY FOR BIOMETRIC SENSING AND BIOSENSOR USING ELECTROMAGNETIC WAVES**

[54] **ENSEMBLE RESONATEUR POUR DETECTION BIOMETRIQUE ET BIOCAPTEUR UTILISANT DES ONDES ELECTROMAGNETIQUES**

[72] BIEN, FRANKLIN DON, KR

[71] UNIST(ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY), KR

[85] 2021-11-10

[86] 2020-05-13 (PCT/KR2020/006304)

[87] (WO2020/256282)

[30] KR (10-2019-0074031) 2019-06-21

[30] KR (10-2020-0053397) 2020-05-04

[21] **3,139,919**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) C07H 21/04 (2006.01) C12N 15/00 (2006.01) C12N 15/11 (2006.01) C12Q 1/68 (2018.01) C40B 40/06 (2006.01)**

[25] EN

[54] **MICRORNA REGULATORY NETWORK AS BIOMARKERS OF SEIZURE IN PATIENTS WITH SPONTANEOUS INTRACEREBRAL HEMORRHAGE**

[54] **RESEAU DE REGULATION DE MICROARN EN TANT QUE BIOMARQUEURS DE CRISE CHEZ DES PATIENTS PRESENTANT UNE HEMORRAGIE INTRACEREBRALE SPONTANEE**

[72] IWUCHUKWU, IFEANYI, US

[72] NGUYEN, DOAN, US

[71] OCHSNER HEALTH SYSTEM, US

[85] 2021-11-09

[86] 2020-03-10 (PCT/US2020/021896)

[87] (WO2020/185781)

[30] US (62/816,358) 2019-03-11

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[21] **3,139,920**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/05 (2021.01) A61B 5/145 (2006.01) A61B 5/155 (2006.01)**

[25] EN

[54] **ANTENNA DEVICE FOR MEASURING BIOMETRIC INFORMATION BY USING MAGNETIC DIPOLE RESONANCE**

[54] **DISPOSITIF D'ANTENNE POUR MESURER DES INFORMATIONS BIOMETRIQUES AU MOYEN D'UNE RESONANCE DIPOLAIRE MAGNETIQUE**

[72] BIEN, FRANKLIN DON, KR

[72] BYUN, GANG IL, KR

[71] UNIST(ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY), KR

[85] 2021-11-10

[86] 2020-06-19 (PCT/KR2020/008013)

[87] (WO2020/256498)

[30] KR (10-2019-0074031) 2019-06-21

[30] KR (10-2020-0073518) 2020-06-17

## PCT Applications Entering the National Phase

[21] **3,139,921**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/05 (2021.01) A61B 5/145 (2006.01) A61B 5/155 (2006.01)**

[25] EN

[54] **BIOSENSOR USING ARRAY ANTENNA**

[54] **BIOCAPTEUR UTILISANT UNE ANTENNE RESEAU**

[72] BIEN, FRANKLIN DON, KR

[72] BYUN, GANG IL, KR

[71] UNIST(ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY), KR

[85] 2021-11-10

[86] 2020-06-19 (PCT/KR2020/008014)

[87] (WO2020/256499)

[30] KR (10-2019-0074031) 2019-06-21

[30] KR (10-2020-0069613) 2020-06-09

[21] **3,139,922**  
[13] A1

[51] **Int.Cl. F23R 3/60 (2006.01) F23R 3/50 (2006.01)**

[25] FR

[54] **GAS TURBOMACHINE WITH COMBUSTION CHAMBER ATTACHMENT**

[54] **TURBOMACHINE A GAZ AVEC FIXATION DE CHAMBRE DE COMBUSTION**

[72] JOORY, DAN-RANJIV, FR

[72] BUNEL, JACQUES MARCEL ARTHUR, FR

[72] VILLENAVE, BENJAMIN FRANTZ KARL, FR

[71] SAFRAN AIRCRAFT ENGINES, FR

[85] 2021-11-10

[86] 2020-05-14 (PCT/FR2020/050805)

[87] (WO2020/229781)

[30] FR (1904986) 2019-05-14

[21] **3,139,923**  
[13] A1

[51] **Int.Cl. A61K 8/46 (2006.01) A61Q 5/00 (2006.01) A61Q 19/00 (2006.01)**

[25] EN

[54] **ISOTROPIC LIQUID CLEANSERS COMPRISING ACYL ISETHIONATE AND METHYL ACYL TAURATE SURFACTANT MIXTURES**

[54] **NETTOYANTS LIQUIDES ISOTROPES COMPRENANT UN ISETHIONATE D'ACYLE ET DES MELANGES DE TENSIOACTIFS DE TAURATE D'ACYLE METHYLIQUE**

[72] HIBAN, DOUGLAS JOHN, US

[72] MILLER, JAMIE LYNN, US

[72] VASUDEVAN, TIRUCHERAI VARAHAN, US

[71] UNILEVER GLOBAL IP LIMITED, GB

[85] 2021-11-09

[86] 2020-05-04 (PCT/EP2020/062328)

[87] (WO2020/233971)

[30] EP (19175538.8) 2019-05-21

[21] **3,139,924**  
[13] A1

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 40/40 (2020.01)**

[25] EN

[54] **NON-CONTACT HEAT NOT BURN HEATING DEVICE**

[54] **DISPOSITIF DE CHAUFFAGE DE CIGARETTE ELECTRONIQUE SANS CONTACT**

[72] ZHU, XIAOHUA, CN

[72] XIONG, ZHAORONG, CN

[72] FU, ZENGXUE, CN

[72] YU, XIANGYI, CN

[72] LIU, MAOQI, CN

[71] XIAMEN FENGTAO CERAMICS CO., LTD, CN

[85] 2021-11-09

[86] 2020-05-14 (PCT/CN2020/090251)

[87] (WO2020/228776)

[30] CN (201920703370.X) 2019-05-16

[30] CN (201921496546.5) 2019-09-10

[30] CN (201910850981.1) 2019-09-10

[21] **3,139,925**  
[13] A1

[51] **Int.Cl. F16K 31/04 (2006.01) F16K 3/30 (2006.01) F16K 27/00 (2006.01) F16K 31/50 (2006.01) F16K 37/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR TORQUE ISOLATION VALVE ACTUATOR**

[54] **SYSTEMES ET PROCEDES POUR ACTIONNEUR A ISOLATION DE COUPLE**

[72] KRAUSE, KENNETH, US

[72] BAILEY, BENJAMIN, US

[71] TAPCOENPRO, LLC, US

[85] 2021-11-09

[86] 2020-03-04 (PCT/US2020/020979)

[87] (WO2020/231495)

[30] US (16/414,388) 2019-05-16

[21] **3,139,926**  
[13] A1

[51] **Int.Cl. E21B 43/04 (2006.01) E21B 34/06 (2006.01) E21B 43/08 (2006.01)**

[25] EN

[54] **METHODS TO DEHYDRATE GRAVEL PACK AND TO TEMPORARILY INCREASE A FLOW RATE OF FLUID FLOWING FROM A WELLBORE INTO A CONVEYANCE**

[54] **PROCEDES POUR DESHYDRATER UN MASSIF DE GRAVIER ET POUR AUGMENTER TEMPORAIREMENT UN DEBIT DE FLUIDE S'ECOULANT DEPUIS UN Puits DE FORAGE DANS UN ENGIN DE TRANSPORT**

[72] NOVELEN, RYAN MICHAEL, US

[72] WILLIAMSON, EDMUND CHRISTOPHER, US

[72] GRECI, STEPHEN MICHAEL, US

[71] HALLIBURTON ENERGY SERVICES, INC., US

[85] 2021-11-09

[86] 2019-09-25 (PCT/US2019/052941)

[87] (WO2021/061120)

[30] US (16/581,003) 2019-09-24



## Demandes PCT entrant en phase nationale

[21] **3,139,927**  
[13] A1

[51] **Int.Cl. E21B 27/04 (2006.01) E21B 37/00 (2006.01)**  
[25] EN  
[54] **WIRESLINE CLEAN-OUT TOOL HAVING IMPROVED CAPACITY**  
[54] **OUTIL DE NETTOYAGE DE CABLE DE FORAGE A CAPACITE AMELIOREE**  
[72] HAUGLAND, LASSE, NO  
[72] EDVARSEN, SVEIN, NO  
[71] ALTUS INTERVENTION (TECHNOLOGIES) AS, NO  
[85] 2021-11-10  
[86] 2020-06-24 (PCT/NO2020/050176)  
[87] (WO2020/263103)  
[30] NO (20190809) 2019-06-27

[21] **3,139,928**  
[13] A1

[51] **Int.Cl. C12N 15/85 (2006.01) A01K 67/027 (2006.01) A61L 27/36 (2006.01) A61L 27/38 (2006.01) C12N 5/10 (2006.01)**  
[25] EN  
[54] **CELLS, TISSUES, ORGANS, AND/OR ANIMALS HAVING ONE OR MORE MODIFIED GENES FOR ENHANCED XENOGRAFT SURVIVAL AND/OR TOLERANCE**  
[54] **CELLULES, TISSUS, ORGANES ET/OU ANIMAUX AYANT UN OU PLUSIEURS GENES MODIFIES POUR UNE SURVIE ET/OU UNE TOLERANCE AMELIOREE A LA XENOGRFFE**  
[72] YANG, LUHAN, US  
[72] GAO, YANGBIN, CN  
[72] GUELL, MARC, US  
[72] KAN, YINAN, US  
[72] QIN, WENNING, US  
[71] EGENESIS, INC., US  
[71] HANGZHOU QIHAN BIOTECHNOLOGY CO., LTD., CN  
[85] 2021-11-09  
[86] 2020-05-15 (PCT/CN2020/090440)  
[87] (WO2020/228810)  
[30] CN (PCT/CN2019/087310) 2019-05-16  
[30] CN (PCT/CN2019/087314) 2019-05-16  
[30] CN (PCT/CN2019/112038) 2019-10-18  
[30] CN (PCT/CN2019/112039) 2019-10-18

[21] **3,139,929**  
[13] A1

[51] **Int.Cl. B05B 7/24 (2006.01) B05B 15/62 (2018.01) B05B 12/00 (2018.01)**  
[25] EN  
[54] **SPRAY SYSTEM AND METHOD OF SPRAYING**  
[54] **SYSTEME DE PULVERISATION ET PROCEDE DE PULVERISATION**  
[72] JANSEN, MICHAEL, NL  
[72] VERHOOSSEL, JOSEPH, NL  
[71] PPG EUROPE B.V., NL  
[85] 2021-11-09  
[86] 2019-05-10 (PCT/EP2019/062086)  
[87] (WO2020/228930)

[21] **3,139,931**  
[13] A1

[51] **Int.Cl. F16L 58/02 (2006.01) B05C 7/08 (2006.01) F16L 13/02 (2006.01)**  
[25] EN  
[54] **DEVICE FOR ROBOTIC INTERNAL INSULATION OF A PIPELINE WELDED JOINT**  
[54] **DISPOSITIF D'ISOLATION INTERNE ROBOTISEE DE CORDON DE SOUDURE DE CONDUIT**  
[72] CHUIKO, ALEKSANDR GEORGIEVICH, RU  
[72] CHUYKO, ANASTASIA ALEKSANDROVNA, RU  
[71] CHUIKO, ALEKSANDR GEORGIEVICH, RU  
[85] 2021-11-10  
[86] 2020-07-27 (PCT/RU2020/000384)  
[87] (WO2020/256589)

[21] **3,139,932**  
[13] A1

[51] **Int.Cl. G01F 23/28 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR A WIRELESS MONITORING SYSTEM FOR A TANK**  
[54] **PROCEDES ET SYSTEMES DESTINES A UN SYSTEME DE SURVEILLANCE SANS FIL D'UN RESERVOIR**  
[72] BOULAY, ANDRE, CA  
[72] GALLOVICH, JASON M., CA  
[72] ERWIN, ADAM JOSEPH, US  
[72] GAYKOWSKI, MICHAEL, US  
[72] NOEL, SIMON, CA  
[72] O'BRIAN, JENNIFER MARIE, US  
[72] TURCOTTE, PASCAL, CA  
[71] WORTHINGTON CYLINDERS CORPORATION, US  
[71] OTODATA WIRELESS NETWORK, INC., CA  
[85] 2021-11-09  
[86] 2020-01-07 (PCT/US2020/012541)  
[87] (WO2020/236225)  
[30] US (62/852,192) 2019-05-23  
[30] US (16/736,048) 2020-01-07

[21] **3,139,933**  
[13] A1

[51] **Int.Cl. G06T 7/35 (2017.01)**  
[25] EN  
[54] **DEFORMITY-WEIGHTED REGISTRATION OF MEDICAL IMAGES**  
[54] **ENREGISTREMENT D'IMAGES MEDICALES PONDERE EN FONCTION DE LA DEFORMATION**  
[72] STOPP, SEBASTIAN, DE  
[71] BRAINLAB AG, DE  
[85] 2021-11-09  
[86] 2019-05-28 (PCT/EP2019/063719)  
[87] (WO2020/239200)

## PCT Applications Entering the National Phase

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[21] **3,139,935**  
[13] A1

[51] **Int.Cl. G01N 15/06 (2006.01) G01N 15/02 (2006.01) G01N 15/10 (2006.01) H01L 21/67 (2006.01)**

[25] EN

[54] **WATER IMPURITY MEASUREMENTS WITH DYNAMIC LIGHT SCATTERING**

[54] **MESURES D'IMPURETE DE L'EAU PAR DIFFUSION DYNAMIQUE DE LUMIERE**

[72] NASLUND, HARALD, SE

[71] NANOSIZED SWEDEN AB, SE

[85] 2021-11-10

[86] 2020-05-14 (PCT/SE2020/050492)

[87] (WO2020/231318)

[30] SE (1950577-5) 2019-05-15

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[21] **3,139,936**  
[13] A1

[51] **Int.Cl. B02C 4/02 (2006.01) B02C 4/32 (2006.01)**

[25] EN

[54] **CRUSHING DEVICE**

[54] **DISPOSITIF DE BROYAGE**

[72] REZNITCHENKO, VADIM, US

[72] HARBOLD, KEITH, US

[71] METSO OUTOTEC USA INC., US

[85] 2021-11-09

[86] 2019-05-09 (PCT/US2019/031500)

[87] (WO2020/226651)

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[21] **3,139,938**  
[13] A1

[51] **Int.Cl. F03G 1/10 (2006.01) F02C 6/16 (2006.01) F15B 1/04 (2006.01) F17C 1/00 (2006.01) H02J 15/00 (2006.01)**

[25] EN

[54] **ENERGY STORAGE SYSTEMS**

[54] **SYSTEMES DE STOCKAGE D'ENERGIE**

[72] REICHENSTEIN, STEVEN, US

[71] REICHENSTEIN, STEVEN, US

[85] 2021-11-09

[86] 2020-01-24 (PCT/EP2020/051813)

[87] (WO2020/249267)

[30] GB (1908340.1) 2019-06-11

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[21] **3,139,939**  
[13] A1

[51] **Int.Cl. G01B 11/16 (2006.01) E21D 21/02 (2006.01) G01B 5/30 (2006.01) G01D 5/28 (2006.01) G01D 5/34 (2006.01)**

[25] EN

[54] **DEVICE AND METHOD FOR MEASURING DEFORMATION IN METALLIC BARS**

[54] **DISPOSITIF ET PROCEDE DE MESURE DE DEFORMATION DANS DES BARRES METALLIQUES**

[72] ELIASSON, JENS, SE

[71] THINGWAVE AB, SE

[85] 2021-11-10

[86] 2020-05-15 (PCT/SE2020/050508)

[87] (WO2020/231321)

[30] SE (1950575-9) 2019-05-15

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[21] **3,139,940**  
[13] A1

[51] **Int.Cl. A61K 31/4747 (2006.01) A61K 31/675 (2006.01) A61P 35/00 (2006.01) C07D 487/10 (2006.01)**

[25] EN

[54] **TRICYCLIC AKR1C3 DEPENDENT KARS INHIBITORS**

[54] **INHIBITEURS DE KARS DEPENDANT D'AKR1C3 TRICYCLIQUES**

[72] ADAIR, CHRIS, US

[72] CHEN, TRACY, US

[72] DING, JIAN, US

[72] FRYER, CHRISTY, US

[72] ISOME, YUKO, US

[72] LARRAUFIE, MARIE-HELENE, US

[72] NAKAJIMA, KATSUMASA, US

[72] SAVAGE, NIK, US

[72] TWOMEY, ARIEL STERLING, US

[71] NOVARTIS AG, CH

[85] 2021-11-09

[86] 2020-07-31 (PCT/IB2020/057285)

[87] (WO2021/005586)

[30] US (62/881,619) 2019-08-01

[30] US (63/009,513) 2020-04-14

[30] US (63/033,932) 2020-06-03

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[21] **3,139,941**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/06 (2006.01) A61K 31/737 (2006.01) A61K 47/10 (2017.01) A61K 47/36 (2006.01) A61P 31/20 (2006.01)**

[25] EN

[54] **LUBRICATED SUBSTRATES COMPRISING LAMBDA-CARRAGEENAN**

[54] **SUBSTRATS LUBRIFIES COMPRENANT DU LAMBDA-CARRAGENANE**

[72] TREMBLAY, MARIO ELMEN, US

[71] TREMBLAY, MARIO ELMEN, US

[85] 2021-11-10

[86] 2019-05-09 (PCT/US2019/031429)

[87] (WO2019/217618)

[30] US (62/669,532) 2018-05-10

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[21] **3,139,943**  
[13] A1

[51] **Int.Cl. C12Q 1/6809 (2018.01) C12Q 1/6883 (2018.01) G16B 20/00 (2019.01)**

[25] EN

[54] **GENOME-BASED METHODS FOR REDUCING CARDIOVASCULAR RISK**

[54] **PROCEDES BASES SUR LE GENOME POUR REDUIRE LE RISQUE CARDIOVASCULAIRE**

[72] DAMASK, AMY, US

[72] PAULDING, CHARLES, US

[72] BARAS, ARIS, US

[72] ABECASIS, GONCALO, US

[71] REGENERON PHARMACEUTICALS, INC., US

[85] 2021-11-09

[86] 2020-05-16 (PCT/US2020/033315)

[87] (WO2020/236670)

[30] US (62/849,670) 2019-05-17

[30] US (62/933,181) 2019-11-08

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## Demandes PCT entrant en phase nationale

[21] **3,139,944**  
[13] A1

[51] **Int.Cl. A61M 21/02 (2006.01) A61B 5/00 (2006.01) A61B 5/08 (2006.01) A61M 11/00 (2006.01) A61M 11/02 (2006.01) A61M 21/00 (2006.01)**

[25] EN

[54] **DEVICE AND METHOD TO SELECTIVELY PROVIDE AN ODOR STIMULATION**

[54] **DISPOSITIF ET PROCEDE POUR FOURNIR SELECTIVEMENT UNE STIMULATION PAR ODEURS**

[72] AZOULAY, YOSEF, IL  
[72] PORAT, AMOS, IL  
[71] APPSCENT MEDICAL LTD, IL  
[85] 2021-11-09  
[86] 2020-05-15 (PCT/IL2020/050534)  
[87] (WO2020/230143)  
[30] US (62/847,979) 2019-05-15

[21] **3,139,945**  
[13] A1

[51] **Int.Cl. A23D 9/00 (2006.01) A23G 1/36 (2006.01) A23G 9/48 (2006.01)**

[25] EN

[54] **OIL AND FAT COMPOSITION FOR FROZEN DESSERT AND CHOCOLATES FOR FROZEN DESSERT**

[54] **COMPOSITION D'HUILE ET DE MATIERE GRASSE POUR DESSERT GLACE ET CHOCOLATS POUR DESSERT GLACE**

[72] KOJIMA, MAKIKO, JP  
[72] YOKOHIGASHI, YUKAKO, JP  
[72] SAKAMOTO, MAI, JP  
[72] NAKA, TOMOMI, JP  
[71] FUJI OIL HOLDINGS INC., JP  
[85] 2021-11-09  
[86] 2020-02-28 (PCT/JP2020/008322)  
[87] (WO2020/235170)  
[30] JP (2019-095934) 2019-05-22

[21] **3,139,946**  
[13] A1

[51] **Int.Cl. C07K 14/62 (2006.01) A61K 38/28 (2006.01) A61P 3/10 (2006.01)**

[25] EN

[54] **VARIANT SINGLE-CHAIN INSULIN ANALOGUES**

[54] **ANALOGUES DE L'INSULINE MONOCATENAIRE VARIANTE**

[72] WEISS, MICHAEL A., US  
[72] GLIDDEN, MICHAEL D., II, US  
[72] ISMAIL-BEIGI, FARAMARZ, US  
[71] CASE WESTERN RESERVE UNIVERSITY, US  
[85] 2021-11-09  
[86] 2020-05-18 (PCT/US2020/033493)  
[87] (WO2020/236762)  
[30] US (62/849,363) 2019-05-17

[21] **3,139,947**  
[13] A1

[51] **Int.Cl. D03D 25/00 (2006.01) D03D 11/00 (2006.01) D03D 41/00 (2006.01)**

[25] EN

[54] **THREE-DIMENSIONAL WOVEN SUPPORT BEAM AND METHOD OF MAKING THEREOF**

[54] **BRAS SUPPORT TISSE TRIDIMENSIONNEL ET SON PROCEDE DE FABRICATION**

[72] GILBERTSON, BROCK, US  
[71] ALBANY ENGINEERED COMPOSITES, INC., US  
[85] 2021-11-09  
[86] 2020-05-19 (PCT/US2020/033581)  
[87] (WO2020/236805)  
[30] US (62/851,329) 2019-05-22

[21] **3,139,948**  
[13] A1

[51] **Int.Cl. C07D 207/12 (2006.01) A61K 31/4015 (2006.01) A61P 17/00 (2006.01) A61P 43/00 (2006.01)**

[25] EN

[54] **CRYSTALLINE FORM OF SOFPIRONIUM BROMIDE AND PREPARATION METHOD THEREOF**

[54] **FORME CRISTALLINE DE BROMURE DE SOFPIRONIUM ET PROCEDE DE PREPARATION ASSOCIE**

[72] MARUBAYASHI, KASUYOSHI, JP  
[72] WATANABE, MASAHIRO, JP  
[72] BRINKMAN, HERBERT R., US  
[71] KAKEN PHARMACEUTICAL CO., LTD., JP  
[71] BRICKELL BIOTECH, INC., US  
[85] 2021-11-09  
[86] 2020-05-22 (PCT/JP2020/020210)  
[87] (WO2020/235665)  
[30] US (62/851,880) 2019-05-23

[21] **3,139,950**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2012.01) G06F 9/50 (2006.01) G06F 9/455 (2018.01)**

[25] EN

[54] **METHOD TO PERSONALIZE WORKSPACE EXPERIENCE BASED ON THE USERS AVAILABLE TIME**

[54] **PROCEDE DE PERSONNALISATION D'EXPERIENCE D'ESPACE DE TRAVAIL SUR LA BASE DU TEMPS DISPONIBLE D'UN UTILISATEUR**

[72] MAGAZINE, ANUJ, US  
[72] DHANABALAN, PRAVEEN RAJA, US  
[72] NARAYANAN, SANKARA, US  
[71] CITRIX SYSTEMS, INC., US  
[85] 2021-11-09  
[86] 2020-05-19 (PCT/US2020/033589)  
[87] (WO2020/236810)  
[30] US (62/850,321) 2019-05-20  
[30] US (16/547,052) 2019-08-21

## PCT Applications Entering the National Phase

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[21] **3,139,951**  
[13] A1

[51] **Int.Cl. E02D 5/30 (2006.01) E01C 3/00 (2006.01) E01C 15/00 (2006.01) E01D 1/00 (2006.01) E01D 19/02 (2006.01) E02D 5/22 (2006.01) E02D 27/01 (2006.01) E02D 27/16 (2006.01) E02D 27/28 (2006.01) E02D 27/34 (2006.01) E04B 5/02 (2006.01) E04B 5/43 (2006.01)**

[25] EN

[54] **MODULAR SLAB, SLAB SYSTEM, PILES AND METHODS OF USE THEREOF**

[54] **DALLE MODULAIRE, SYSTEME DE DALLE, PIEUX ET LEURS PROCEDES D'UTILISATION**

[72] STRETCH, DAVID JOHN, NZ  
[72] WEBER, WARRICK JOHN, NZ  
[71] JUNCTION7 LIMITED, NZ  
[85] 2021-11-09  
[86] 2020-05-07 (PCT/NZ2020/050043)  
[87] (WO2020/226510)  
[30] NZ (753353) 2019-05-09

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[21] **3,139,952**  
[13] A1

[51] **Int.Cl. B60R 21/015 (2006.01) A61G 3/08 (2006.01)**

[25] EN

[54] **ENERGY MANAGEMENT SYSTEM**

[54] **SYSTEME DE GESTION D'ENERGIE**

[72] GIRARDIN, PATRICK, US  
[72] CUMMING, ROBERT, GB  
[71] VALEDA COMPANY, LLC, US  
[85] 2021-11-09  
[86] 2020-05-22 (PCT/US2020/034186)  
[87] (WO2020/237137)  
[30] US (62/851,466) 2019-05-22

---

[21] **3,139,953**  
[13] A1

[51] **Int.Cl. B01J 20/12 (2006.01) B09C 1/08 (2006.01) C02F 1/28 (2006.01) C02F 1/42 (2006.01)**

[25] EN

[54] **MODIFIED CLAY SORBENTS AND METHODS OF SORBING PFAS USING THE SAME**

[54] **SORBANTS D'ARGILE MODIFIES ET PROCEDES DE SORPTION DE PFAS A L'AIDE DE CEUX-CI**

[72] DONOVAN, MICHAEL, US  
[71] SPECIALTY MINERALS (MICHIGAN) INC., US  
[85] 2021-11-09  
[86] 2020-05-22 (PCT/US2020/034219)  
[87] (WO2020/237153)  
[30] US (62/851,431) 2019-05-22

---

[21] **3,139,954**  
[13] A1

[51] **Int.Cl. A61F 2/12 (2006.01)**

[25] EN

[54] **IMPLANTS ASSEMBLED FROM SKELETAL POLYHEDRON UNIT CELLS, COILED UNIT CELLS OR MESH UNIT CELLS**

[54] **IMPLANTS ASSEMBLES A PARTIR DE CELLULES UNITAIRES DE POLYEDRE SQUELETTIQUE, DE CELLULES UNITAIRES ENROULEES OU DE CELLULES UNITAIRES MAILLEES**

[72] LIMEM, SKANDER, US  
[72] RIZK, SAID, US  
[72] WILLIAMS, SIMON F., US  
[71] TEPHA, INC., US  
[85] 2021-11-10  
[86] 2020-04-27 (PCT/US2020/030141)  
[87] (WO2020/242694)  
[30] US (62/855,835) 2019-05-31

---

[21] **3,139,955**  
[13] A1

[51] **Int.Cl. A61B 1/00 (2006.01) A61B 1/015 (2006.01)**

[25] EN

[54] **MEDICAL VALVE**

[54] **VALVE MEDICALE**

[72] SCUTTI, JAMES J., US  
[72] GAVALIS, ROBB MORSE, US  
[72] JENSRUD, ALLYN NARCISSE, US  
[72] STANTON, LARRY EDWARD, US  
[72] HARRIS, COLBY, US  
[71] BOSTON SCIENTIFIC SCIMED, INC., US  
[85] 2021-11-09  
[86] 2020-05-29 (PCT/US2020/035105)  
[87] (WO2020/243421)  
[30] US (62/854,689) 2019-05-30

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[21] **3,139,956**  
[13] A1

[51] **Int.Cl. C07K 7/08 (2006.01) C07K 14/72 (2006.01)**

[25] EN

[54] **ANTI-MULLERIAN HORMONE RECEPTOR BINDING PEPTIDES**

[54] **PEPTIDES SE LIANT AU RECEPTEUR DE L'HORMONE ANTI-MULLERIEENNE**

[72] DETTI, LAURA, US  
[71] DETTI, LAURA, US  
[85] 2021-11-09  
[86] 2020-05-30 (PCT/US2020/035472)  
[87] (WO2020/243679)  
[30] US (62/855,427) 2019-05-31

## Demandes PCT entrant en phase nationale

[21] **3,139,957**  
[13] A1

[51] **Int.Cl. A61M 5/142 (2006.01) A61B 5/145 (2006.01) A61B 5/1486 (2006.01) A61M 5/145 (2006.01) A61M 5/168 (2006.01) A61M 39/10 (2006.01)**

[25] EN  
[54] **FLUID INFUSION SYSTEMS**  
[54] **SYSTEMES DE PERFUSION DE FLUIDE**

[72] CHEN, SHIXIN, US  
[72] LARSON, ERIC ALLAN, US  
[72] KOW, HSIAO-YU S., US  
[72] GARAI, ELLIS, US  
[72] TROCK, ADAM S., US  
[72] MIYA, ISABELLA ELLA, US  
[72] ZHANG, XINRUI, US  
[72] CHIU, CHIA-HUNG, US  
[72] GOTTLIEB, REBECCA K., US  
[72] SRINIVASAN, AKHIL, US  
[72] VARSAVSKY, ANDREA, US  
[72] RAO, ASHWIN K., US  
[72] WANG, HSIFU, US  
[72] PESANTEZ, DANIEL E., US  
[72] MEENAKSHISUNDARAM, GURUGUHAN, US  
[71] MEDTRONIC MINIMED, INC., US  
[85] 2021-11-09  
[86] 2020-06-05 (PCT/US2020/036290)  
[87] (WO2020/247729)  
[30] US (62/858,304) 2019-06-06  
[30] US (16/893,128) 2020-06-04  
[30] US (16/893,136) 2020-06-04  
[30] US (16/893,141) 2020-06-04  
[30] US (16/893,145) 2020-06-04

[21] **3,139,959**  
[13] A1

[51] **Int.Cl. A61K 38/10 (2006.01) A61P 13/08 (2006.01)**

[25] EN  
[54] **METHOD OF IMPROVING LOWER URINARY TRACT SYMPTOMS**  
[54] **PROCEDE POUR SOULAGER LES SYMPTOMES DES VOIES URINAIRES INFERIEURES**

[72] AVERBACK, PAUL, MC  
[71] NYMOX CORPORATION, US  
[85] 2021-11-10  
[86] 2020-05-06 (PCT/US2020/031592)  
[87] (WO2020/231690)  
[30] US (16/410,685) 2019-05-13

[21] **3,139,961**  
[13] A1

[51] **Int.Cl. D21H 25/14 (2006.01) D21H 19/38 (2006.01) D21H 19/40 (2006.01) D21H 19/54 (2006.01) D21H 19/82 (2006.01)**

[25] EN  
[54] **SMOOTH AND LOW DENSITY PAPERBOARD STRUCTURES AND METHODS FOR MANUFACTURING THE SAME**  
[54] **STRUCTURES EN CARTON LISSE ET A FAIBLE DENSITE ET LEURS PROCEDES DE FABRICATION**

[72] GIUSTE, SERGIO A., US  
[72] PARKER, STEVEN, US  
[72] GREEN, TERRELL J., US  
[71] WESTROCK MWV, LLC, US  
[85] 2021-11-10  
[86] 2020-05-07 (PCT/US2020/031858)  
[87] (WO2020/231736)  
[30] US (62/846,278) 2019-05-10

[21] **3,139,964**  
[13] A1

[51] **Int.Cl. G06F 21/60 (2013.01) H04L 9/06 (2006.01) H04L 9/30 (2006.01)**

[25] EN  
[54] **SYSTEM AND METHOD FOR PERFORMING EQUALITY AND LESS THAN OPERATIONS ON ENCRYPTED DATA WITH QUASIGROUP OPERATIONS**  
[54] **SYSTEME ET PROCEDE POUR EFFECTUER DES OPERATIONS D'EGALITE ET D'INFERIORITE SUR DES DONNEES CHIFFREES AVEC DES OPERATIONS DE QUASI-GROUPE**

[72] KOLTE, PRIYADARSHAN, US  
[72] JACKSON, SPENCE, US  
[72] SHANMUGAVELAYUTHAM, PALANIVEL RAJAN, US  
[72] BELLARE, MIHIR, US  
[72] CHENETTE, NATHAN, US  
[71] BAFFLE, INC., US  
[85] 2021-11-10  
[86] 2020-05-07 (PCT/US2020/031967)  
[87] (WO2020/231762)  
[30] US (16/412,174) 2019-05-14

[21] **3,139,967**  
[13] A1

[51] **Int.Cl. E21B 47/09 (2012.01) E21B 19/086 (2006.01)**

[25] EN  
[54] **MAGNETIC POSITION INDICATOR**  
[54] **INDICATEUR DE POSITION MAGNETIQUE**

[72] INGLIS, PETER DW, GB  
[72] DAVIES, KATHERINE ANN, GB  
[72] FRIPP, MICHAEL LINLEY, US  
[71] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2021-11-10  
[86] 2019-07-31 (PCT/US2019/044488)  
[87] (WO2021/021192)  
[30] US (16/528,117) 2019-07-31

[21] **3,139,969**  
[13] A1

[51] **Int.Cl. A61K 31/519 (2006.01) A61K 31/5377 (2006.01) A61K 31/541 (2006.01)**

[25] EN  
[54] **SMALL MOLECULE INHIBITORS OF SRC TYROSINE KINASE**  
[54] **INHIBITEURS A PETITES MOLECULES DE TYROSINE KINASE SRC**

[72] GRAY, NATHANAEL S., US  
[72] DU, GUANGYAN, US  
[72] ZHANG, TINGHU, US  
[72] HENNING, NATHANIEL, US  
[72] WESTOVER, KENNETH, US  
[72] GURBANI, DEEPAK, US  
[72] RAO, SUMAN, US  
[71] DANA-FARBER CANCER INSTITUTE, INC., US  
[85] 2021-11-10  
[86] 2020-06-18 (PCT/US2020/038325)  
[87] (WO2020/257385)  
[30] US (62/864,216) 2019-06-20

## PCT Applications Entering the National Phase

[21] **3,139,970**  
[13] A1

[51] **Int.Cl. E21B 43/26 (2006.01) E21B 43/267 (2006.01) E21B 44/00 (2006.01)**

[25] EN

[54] **ENCODERLESS VECTOR CONTROL FOR VFD IN HYDRAULIC FRACTURING APPLICATIONS**

[54] **COMMANDE VECTORIELLE SANS CODEUR POUR VARIATEUR DE FREQUENCE DANS DES APPLICATIONS DE FRACTURATION HYDRAULIQUE**

[72] ROBINSON, LON, US  
[72] OEHRING, JARED, US  
[72] HINDERLITER, BRANDON N., US  
[71] U.S. WELL SERVICES, LLC, US  
[85] 2021-11-10  
[86] 2020-05-12 (PCT/US2020/000017)  
[87] (WO2020/231483)  
[30] US (62/847,022) 2019-05-13

[21] **3,139,973**  
[13] A1

[51] **Int.Cl. A61K 8/02 (2006.01) A61Q 11/00 (2006.01) D01D 5/04 (2006.01) D01D 10/00 (2006.01) D01F 1/00 (2006.01)**

[25] EN

[54] **PROCESS FOR MAKING A FIBROUS STRUCTURE**

[54] **PROCEDE DE FABRICATION D'UNE STRUCTURE FIBREUSE**

[72] HARTSIG, DANA ELIZABETH, US  
[72] LYMAN, CHRISTOPHER ROBERT, US  
[72] PAYNE, MELISSA CHERIE, US  
[72] REED, ANTHONY EDWARD, US  
[72] SWARTZ, JEANETTE MARIE, US  
[71] THE PROCTER & GAMBLE COMPANY, US  
[85] 2021-11-10  
[86] 2020-06-11 (PCT/US2020/070135)  
[87] (WO2020/252502)  
[30] US (62/860,826) 2019-06-13

[21] **3,139,974**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) A61K 38/46 (2006.01) A61P 9/04 (2006.01)**

[25] EN

[54] **TREATMENT OF HEART DISEASE BY DISRUPTION OF THE ANCHORING OF PP2A**

[54] **TRAITEMENT DE CARDIOPATHIE PAR RUPTURE DE L'ANCRAGE DE PP2A**

[72] KAPILOFF, MICHAEL S., US  
[72] LI, JINLIANG, US  
[71] UNIVERSITY OF MIAMI, US  
[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US  
[85] 2021-11-10  
[86] 2020-03-13 (PCT/US2020/022721)  
[87] (WO2020/231503)  
[30] US (62/848,156) 2019-05-15

[21] **3,139,975**  
[13] A1

[51] **Int.Cl. A61K 8/19 (2006.01) A41G 5/02 (2006.01) A45D 33/00 (2006.01) A45D 34/00 (2006.01) A45D 44/02 (2006.01) A61K 8/81 (2006.01) A61Q 1/00 (2006.01) A61Q 1/10 (2006.01)**

[25] EN

[54] **LIQUID COSMETIC**

[54] **PRODUIT COSMETIQUE LIQUIDE**

[72] WHEATON, RANDY M., US  
[72] WANG, YEWEL, CN  
[71] PARFUMS DE COEUR, LTD., D/B/A PDC BRANDS, US  
[85] 2021-11-10  
[86] 2020-05-11 (PCT/US2020/032298)  
[87] (WO2020/231898)  
[30] CN (201910393434.5) 2019-05-13

[21] **3,139,976**  
[13] A1

[51] **Int.Cl. A61K 8/02 (2006.01) A61K 8/04 (2006.01) A61K 8/19 (2006.01) A61K 8/21 (2006.01) A61K 8/27 (2006.01) A61K 8/73 (2006.01) A61K 8/81 (2006.01) A61P 1/02 (2006.01) A61Q 11/00 (2006.01)**

[25] EN

[54] **KITS COMPRISING UNIT-DOSE ORAL CARE COMPOSITIONS**

[54] **KITS COMPRENANT DES COMPOSITIONS DE SOINS BUCCAUX A DOSE UNITAIRE**

[72] SAGEL, PAUL ALBERT, US  
[72] JONES, GREGORY T., US  
[72] MAO, MIN, US  
[72] MIDDLETON, PETER, US  
[72] PARNELL, NATOSHA, US  
[72] PAYNE, MELISSA CHERIE, US  
[72] SWARTZ, JEANETTE MARIE, US  
[71] THE PROCTER & GAMBLE COMPANY, US  
[85] 2021-11-10  
[86] 2020-06-11 (PCT/US2020/070134)  
[87] (WO2020/252501)  
[30] US (62/860,824) 2019-06-13

[21] **3,139,979**  
[13] A1

[51] **Int.Cl. A61K 8/02 (2006.01) A61K 8/73 (2006.01) A61Q 11/00 (2006.01)**

[25] EN

[54] **POUCHES COMPRISING ORAL CARE ACTIVE AGENTS**

[54] **POCHES COMPRENANT DES AGENTS ACTIFS POUR SOINS BUCCAUX**

[72] SAGEL, PAUL ALBERT, US  
[71] THE PROCTER & GAMBLE COMPANY, US  
[85] 2021-11-10  
[86] 2020-06-11 (PCT/US2020/070133)  
[87] (WO2020/252500)  
[30] US (62/860,802) 2019-06-13

## Demandes PCT entrant en phase nationale

[21] **3,139,981**  
[13] A1

[51] **Int.Cl. C07K 14/31 (2006.01) A61P 31/04 (2006.01)**

[25] EN

[54] **METHODS AND COMPOSITIONS COMPRISING STAPHYLOCOCCUS PROTEIN A (SPA) VARIANTS**

[54] **METHODES ET COMPOSITIONS COMPRENANT DES VARIANTS DE PROTEINE A (SPA) DE STAPHYLOCOCCUS**

[72] SCHNEEWIND, OLAF, US

[72] MISSIAKAS, DOMINIQUE M., US

[72] SUN, YAN, US

[72] KIM, HWAN KEUN, US

[72] SHI, MIAOMIAO, US

[72] CHEN, XINHAI, US

[71] THE UNIVERSITY OF CHICAGO, US

[85] 2021-11-10

[86] 2020-05-13 (PCT/US2020/070048)

[87] (WO2020/232471)

[30] US (62/847,832) 2019-05-14

[21] **3,139,983**  
[13] A1

[51] **Int.Cl. A61K 38/48 (2006.01) A61K 8/64 (2006.01) A61K 9/00 (2006.01) A61K 9/107 (2006.01) A61K 39/00 (2006.01) A61K 39/395 (2006.01) A61P 17/00 (2006.01) A61Q 19/08 (2006.01)**

[25] EN

[54] **DELAYING PEAK EFFECT AND/OR EXTENDING DURATION OF RESPONSE**

[54] **RETARDEMENT D'UN EFFET DE POINTE ET/OU PROLONGATION DE LA DUREE DE REPONSE**

[72] EDELSON, JONATHAN, US

[71] EIRION THERAPEUTICS, INC., US

[85] 2021-11-10

[86] 2020-05-12 (PCT/US2020/032458)

[87] (WO2020/231983)

[30] US (62/847,901) 2019-05-14

[21] **3,140,026**  
[13] A1

[51] **Int.Cl. A61K 38/00 (2006.01) A61K 47/62 (2017.01) A61K 47/64 (2017.01)**

[25] EN

[54] **POLYPEPTIDES FOR TREATMENT OF CANCER**

[54] **POLYPEPTIDES POUR LE TRAITEMENT DU CANCER**

[72] JASMIN, JEAN-FRANCOIS, US

[72] CHILEWSKI, SHANNON, US

[72] MERCIER, ISABELLE, US

[71] UNIVERSITY OF THE SCIENCES, US

[85] 2021-11-10

[86] 2020-05-13 (PCT/US2020/032638)

[87] (WO2020/232095)

[30] US (62/848,980) 2019-05-16

[21] **3,140,027**  
[13] A1

[51] **Int.Cl. E21B 21/08 (2006.01) E21B 44/00 (2006.01) E21B 45/00 (2006.01) E21B 49/00 (2006.01)**

[25] EN

[54] **AUTOMATED REAL-TIME DRILLING FLUID DENSITY**

[54] **DENSITE DE FLUIDE DE FORAGE EN TEMPS REEL AUTOMATISEE**

[72] AL-RUBAIL, MOHAMMED MURIF, SA

[72] AL-YAMI, ABDULLAH SALEH HUSSAIN, SA

[72] AL GHARBI, SALEM H., SA

[71] SAUDI ARABIAN OIL COMPANY, SA

[85] 2021-11-10

[86] 2020-05-13 (PCT/US2020/032644)

[87] (WO2020/232100)

[30] US (16/413,280) 2019-05-15

[21] **3,140,028**  
[13] A1

[51] **Int.Cl. E21B 21/08 (2006.01) E21B 44/00 (2006.01)**

[25] EN

[54] **REAL-TIME EQUIVALENT CIRCULATING DENSITY OF DRILLING FLUID**

[54] **DENSITE DE CIRCULATION EQUIVALENTE EN TEMPS REEL DE FLUIDE DE FORAGE**

[72] AL-RUBAIL, MOHAMMED MURIF, SA

[72] AL-YAMI, ABDULLAH SALEH HUSSAIN, SA

[72] AL GHARBI, SALEM H., SA

[71] SAUDI ARABIAN OIL COMPANY, SA

[85] 2021-11-10

[86] 2020-05-13 (PCT/US2020/032675)

[87] (WO2020/232122)

[30] US (16/413,303) 2019-05-15

[21] **3,140,029**  
[13] A1

[51] **Int.Cl. C12Q 1/6883 (2018.01) C12Q 1/6876 (2018.01)**

[25] EN

[54] **TL1A PATIENT SELECTION METHODS, SYSTEMS, AND DEVICES**

[54] **METHODES, SYSTEMES ET DISPOSITIFS DE SELECTION DE PATIENT TL1A**

[72] KRUIDENIER, LAURENS, US

[72] SABRIPOUR, MAHYAR, US

[72] BILSBOROUGH, JANINE, US

[72] MCGOVERN, DERMOT P., US

[72] LI, DALIN, US

[71] PROMETHEUS BIOSCIENCES, INC., US

[71] CEDARS-SINAI MEDICAL CENTER, US

[85] 2021-11-10

[86] 2020-05-13 (PCT/US2020/032679)

[87] (WO2020/232125)

[30] US (62/847,798) 2019-05-14

## PCT Applications Entering the National Phase

[21] **3,140,031**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61H 23/00 (2006.01) A61H 23/02 (2006.01) A61M 21/02 (2006.01)**

[25] EN

[54] **SYSTEMS, DEVICES, AND METHODS FOR TREATING VESTIBULAR CONDITIONS**

[54] **SYSTEMES, DISPOSITIFS ET PROCEDES DE TRAITEMENT DE CONDITIONS VESTIBULAIRES**

[72] AKERS, JONATHAN, US

[72] OWEN, SAMUEL, US

[72] DEPIREUX, DIDIER, US

[72] TRUE, ROBERT, US

[71] OTOLITH SOUND INC., US

[85] 2021-11-10

[86] 2020-05-13 (PCT/US2020/032693)

[87] (WO2020/232135)

[30] US (62/847,757) 2019-05-14

[21] **3,140,033**  
[13] A1

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

[25] EN

[54] **MEDICATION MANAGEMENT AMONG A NETWORK OF MEDICAL ENTITIES**

[54] **GESTION DE MEDICAMENTS DANS UN RESEAU D'ENTITES MEDICALES**

[72] ZECH, NEAL, US

[72] URANKAR, JITENDRA, US

[72] RANGANATHAN, KARTHIK, US

[72] WYLY, MONICA, US

[72] LORDEN, ELIZABETH R., US

[72] DRAVES, MARCY, US

[72] MADSEN, MARLA, US

[71] CAREFUSION 303, INC., US

[85] 2021-11-10

[86] 2020-05-13 (PCT/US2020/032744)

[87] (WO2020/232168)

[30] US (62/847,744) 2019-05-14

[21] **3,140,034**  
[13] A1

[51] **Int.Cl. A61K 31/573 (2006.01) A61K 39/395 (2006.01) A61P 35/02 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **METHODS OF ADMINISTERING ANTI-CD38 ANTIBODY TO TREAT MULTIPLE MYELOMA**

[54] **PROCEDES D'ADMINISTRATION D'ANTICORPS ANTI-CD38 POUR TRAITER LE MYELOME MULTIPLE**

[72] CAMPANA ZAMBRANO, FRANK, US

[72] AUDAT, HELOISE, FR

[72] MARION, SYLVIA, US

[71] SANOFI, FR

[85] 2021-11-10

[86] 2020-05-13 (PCT/US2020/032754)

[87] (WO2020/232173)

[30] US (62/847,825) 2019-05-14

[30] US (62/860,739) 2019-06-12

[30] US (62/899,088) 2019-09-11

[30] EP (20305223.8) 2020-03-03

[21] **3,140,036**  
[13] A1

[51] **Int.Cl. B05B 17/06 (2006.01) F21S 10/04 (2006.01)**

[25] EN

[54] **RESONATOR GENERATING A SIMULATED FLAME**

[54] **RESONATEUR GENERATEUR D'UNE FLAMME SIMULEE**

[72] ANGELOTTI, PHILIP, US

[71] ANGELOTTI, PHILIP, US

[85] 2021-11-10

[86] 2020-05-13 (PCT/US2020/032757)

[87] (WO2020/232175)

[30] US (16/412,051) 2019-05-14

[21] **3,140,037**  
[13] A1

[51] **Int.Cl. A61M 5/32 (2006.01) G21G 4/08 (2006.01)**

[25] EN

[54] **PIERCEABLE PLUG FOR NEEDLE**

[54] **BOUCHON PERCABLE POUR AIGUILLE**

[72] HAEPERS, JOSEPH, US

[72] WENTZ, JACK N. JR., US

[72] HANKARD, VIRGINIA ANN, US

[72] SHAHIDULLAH, KHURSIDA, US

[72] BUTLAND, TRICIA D., US

[72] COROSA, PATRICIA A., US

[72] RICE, DAVID P., US

[72] MORAN, SAMANTHA, US

[71] LANTHEUS MEDICAL IMAGING, INC., US

[85] 2021-11-02

[86] 2020-05-01 (PCT/US2020/031087)

[87] (WO2020/227120)

[30] US (62/843,090) 2019-05-03

[21] **3,140,039**  
[13] A1

[51] **Int.Cl. A61K 31/4162 (2006.01) A61K 31/429 (2006.01) A61P 1/16 (2006.01) A61P 11/00 (2006.01) C07D 231/56 (2006.01) C07D 487/04 (2006.01) C07D 498/18 (2006.01) C07D 513/04 (2006.01)**

[25] EN

[54] **CONDENSED TRICYCLIC PYRROLES AS ALPHA-1 ANTITRYPSIN MODULATORS**

[54] **PYRROLES TRICYCLIQUES CONDENSES UTILISES COMME MODULATEURS DE L'ALPHA-1 ANTITRYPSINE**

[72] BANDARAGE, UPUL KEERTHI, US

[72] BLYGH, CAVAN MCKEON, US

[72] BOUCHER, DIANE, US

[72] BOYD, MICHAEL JOHN, US

[72] BRODNEY, MICHAEL AARON, US

[72] CLARK, MICHAEL PHILIP, US

[72] DAMAGNEZ, VERONIQUE, US

[72] FANNING, LEV TYLER DEWEY, US

[72] FIMOGNARI, ROBERT FRANCIS, US

[72] FLEMING, GABRIELLE SIMONE, US

[72] GAGNON, KEVIN JAMES, US

[72] GARCIA BARRANTES, PEDRO MANUEL, US

[72] GIACOMETTI, ROBERT DANIEL, US

[72] GIROUX, SIMON, US

[72] GREY JR., RONALD LEE, US

[72] GUIDO, SAMANTHA, US

[72] HALL, AMY BETH, US

[72] HOOD, SARAH CAROL, US

[72] HURLEY, DENNIS JAMES, US

[72] JOHNSON, JR., MAC ARTHUR, US

[72] JONES, PETER, US



## Demandes PCT entrant en phase nationale

[72] KESAVAN, SARATHY, US  
 [72] LAI, MEI-HSIU, US  
 [72] LIU, SIYING, US  
 [72] LOOKER, ADAM, US  
 [72] MAXWELL, BRAD, US  
 [72] MAXWELL, JOHN PATRICK, US  
 [72] MEDEK, ALES, US  
 [72] NUHANT, PHILIPPE MARCEL, US  
 [72] OVERHOFF, KIRK ALAN, US  
 [72] RODAY, SETU, US  
 [72] ROEPER, STEFANIE, US  
 [72] RONKIN, STEVEN M., US  
 [72] SAWANT, RUPA, US  
 [72] SHI, YI, US  
 [72] SHRESTHA, MUNA, US  
 [72] SPOSATO, MARISA, US  
 [72] STAVROPOULOS, KATHY, US  
 [72] SWETT, REBECCA JANE, US  
 [72] TANG, QING, US  
 [72] TAPLEY, TIMOTHY LEWIS, US  
 [72] THOMSON, STEPHEN, US  
 [72] XU, JINWANG, US  
 [72] ZAKY, MARIAM, US  
 [72] COTTRELL, KEVIN MICHAEL, US  
 [71] VERTEX PHARMACEUTICALS  
 INCORPORATED, US  
 [85] 2021-11-10  
 [86] 2020-05-14 (PCT/US2020/032832)  
 [87] (WO2020/247160)  
 [30] US (62/847,562) 2019-05-14  
 [30] US (63/004,813) 2020-04-03

[21] **3,140,040**  
 [13] A1

[51] **Int.Cl. B01D 69/12 (2006.01) B01D 61/12 (2006.01) B01D 61/14 (2006.01) B01D 67/00 (2006.01) B01D 71/02 (2006.01) D21C 11/00 (2006.01)**  
 [25] EN  
 [54] **FILTRATION APPARATUS CONTAINING GRAPHENE OXIDE MEMBRANE**  
 [54] **APPAREIL DE FILTRATION CONTENANT UNE MEMBRANE D'OXYDE DE GRAPHENE**  
 [72] MACLEOD, MICHELLE, US  
 [72] FRAYNE, STEPHEN, US  
 [72] MACDONALD, BRANDON IAN, US  
 [72] ORTIZ RIVERA, LYMARIS, US  
 [72] KELLER, BRENT, US  
 [71] VIA SEPARATIONS, INC., US  
 [85] 2021-11-10  
 [86] 2020-05-15 (PCT/US2020/033236)  
 [87] (WO2020/232395)  
 [30] US (62/848,014) 2019-05-15  
 [30] US (62/910,789) 2019-10-04

[21] **3,140,041**  
 [13] A1

[51] **Int.Cl. E21B 41/00 (2006.01) E21B 43/12 (2006.01)**  
 [25] EN  
 [54] **AUTOMATED PRODUCTION OPTIMIZATION TECHNIQUE FOR SMART WELL COMPLETIONS USING REAL-TIME NODAL ANALYSIS**  
 [54] **TECHNIQUE D'OPTIMISATION DE PRODUCTION AUTOMATISEE POUR DES COMPLETIONS DE Puits INTELLIGENTES A L'AIDE D'UNE ANALYSE NODALE EN TEMPS REEL**  
 [72] ALANAZI, AMER, SA  
 [72] AL-QASIM, ABDULAZIZ, SA  
 [72] BUKHAMSEEN, AHMED Y., SA  
 [71] SAUDI ARABIAN OIL COMPANY, SA  
 [85] 2021-11-10  
 [86] 2020-05-14 (PCT/US2020/032835)  
 [87] (WO2020/232221)  
 [30] US (16/414,611) 2019-05-16

[21] **3,140,042**  
 [13] A1

[51] **Int.Cl. A23L 33/00 (2016.01) A23L 33/20 (2016.01) A61K 45/06 (2006.01) C07C 229/34 (2006.01) C07C 229/36 (2006.01)**  
 [25] EN  
 [54] **COMPOSITIONS AND METHODS FOR TREATING CANCER**  
 [54] **COMPOSITIONS ET METHODES DE TRAITEMENT DU CANCER**  
 [72] HOFFMAN, STEVEN, US  
 [71] TYME, INC, US  
 [85] 2021-11-10  
 [86] 2020-05-14 (PCT/US2020/032847)  
 [87] (WO2020/232227)  
 [30] US (62/847,570) 2019-05-14

[21] **3,140,043**  
 [13] A1

[51] **Int.Cl. A61K 31/055 (2006.01) A61K 31/12 (2006.01) A61K 31/122 (2006.01)**  
 [25] EN  
 [54] **COMPOSITIONS COMPRISING EPHEDRINE OR AN EPHEDRINE SALT AND METHODS OF MAKING AND USING SAME**  
 [54] **COMPOSITIONS COMPRENANT DE L'EPHEDRINE OU UN SEL D'EPHEDRINE ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION**  
 [72] AHMED, SHAHID, US  
 [71] NEXUS PHARMACEUTICALS, INC., US  
 [85] 2021-11-10  
 [86] 2020-05-16 (PCT/US2020/033310)  
 [87] (WO2020/232424)  
 [30] US (62/849,125) 2019-05-16

[21] **3,140,044**  
 [13] A1

[51] **Int.Cl. A61K 31/352 (2006.01) A61K 31/426 (2006.01) A61K 31/437 (2006.01) A61K 31/4709 (2006.01) A61K 31/473 (2006.01) A61K 31/502 (2006.01) A61K 31/5025 (2006.01) A61K 31/519 (2006.01) A61P 3/00 (2006.01) A61P 25/28 (2006.01) A61P 43/00 (2006.01) C07D 215/00 (2006.01) C07D 277/00 (2006.01)**  
 [25] EN  
 [54] **COMPOUNDS FOR THE TREATMENT OF NEURODEGENERATIVE AND METABOLIC DISORDERS**  
 [54] **COMPOSES POUR LE TRAITEMENT DE TROUBLES NEURODEGENERATIFS ET METABOLIQUES**  
 [72] LASMEZAS, CORINNE, US  
 [72] ZHOU, MINGHAI, US  
 [72] BANNISTER, THOMAS D., US  
 [71] THE SCRIPPS RESEARCH INSTITUTE, US  
 [85] 2021-11-10  
 [86] 2020-05-14 (PCT/US2020/032903)  
 [87] (WO2020/232255)  
 [30] US (62/847,600) 2019-05-14

## PCT Applications Entering the National Phase

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[21] **3,140,046**  
[13] A1

[51] **Int.Cl. A61K 31/135 (2006.01) C07C 225/20 (2006.01)**  
[25] EN  
[54] **KETAMINE FORMULATION FOR SUBCUTANEOUS INJECTION**  
[54] **FORMULATION DE KETAMINE POUR INJECTION SOUS-CUTANEE**  
[72] BECKER, JEFFREY, US  
[72] PETERSON, GREGG, US  
[72] WALLACH, JASON, US  
[71] BEXSON BIOMEDICAL, INC., US  
[85] 2021-11-10  
[86] 2020-05-14 (PCT/US2020/032941)  
[87] (WO2020/232274)  
[30] US (62/848,420) 2019-05-15

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[21] **3,140,048**  
[13] A1

[51] **Int.Cl. F02D 41/06 (2006.01) F02D 41/00 (2006.01) F02D 41/30 (2006.01) F02D 41/38 (2006.01) F02D 41/40 (2006.01)**  
[25] EN  
[54] **COLD-START FOR HIGH-OCTANE FUELS IN A DIESEL ENGINE ARCHITECTURE**  
[54] **DEMARRAGE A FROID POUR CARBURANTS A INDICE D'OCTANE ELEVE DANS UNE ARCHITECTURE DE MOTEUR DIESEL**  
[72] BLUMREITER, JULIE, US  
[72] JOHNSON, BERNARD, US  
[71] CLEARFLAME ENGINES, INC., US  
[85] 2021-11-10  
[86] 2020-05-14 (PCT/US2020/032961)  
[87] (WO2020/232287)  
[30] US (62/848,087) 2019-05-15

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[21] **3,140,049**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR THE TREATMENT OF ATPASE-MEDIATED DISEASES**  
[54] **COMPOSITIONS ET PROCEDES POUR LE TRAITEMENT DE MALADIES MEDIEES PAR L'ATPASE**  
[72] MIKATI, MOHAMAD, US  
[72] HUNANYAN, ARSEN, US  
[72] KANTOR, BORIS, US  
[72] ASOKAN, ARAVIND, US  
[72] PURANAM, RAM, US  
[72] KOEBERL, DWIGHT, US  
[71] DUKE UNIVERSITY, US  
[85] 2021-11-10  
[86] 2020-05-14 (PCT/US2020/032978)  
[87] (WO2020/232297)  
[30] US (62/847,416) 2019-05-14

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[21] **3,140,052**  
[13] A1

[51] **Int.Cl. E01F 13/06 (2006.01) E01F 9/615 (2016.01) E01F 9/662 (2016.01) E01F 9/669 (2016.01) H05B 47/165 (2020.01) H05B 47/19 (2020.01) F21L 4/08 (2006.01) H02J 7/00 (2006.01)**  
[25] EN  
[54] **TRAFFIC CONTROL, SITE OBSERVATION, AND DATA MANAGEMENT SYSTEM AND APPARATUS INCLUDING A REMOTELY-CONTROLLABLE ARM**  
[54] **CONTROLE DE LA CIRCULATION, OBSERVATION DE SITE, ET SYSTEME ET APPAREIL DE GESTION DE DONNEES COMPRENANT UN BRAS POUVANT ETRE COMMANDE A DISTANCE**  
[72] ADLER, RICHARD S., US  
[72] DOLAND, GEORGE, US  
[72] SALO, RISTO, US  
[71] RSA PROTECTIVE TECHNOLOGIES, LLC, US  
[85] 2021-11-10  
[86] 2020-05-14 (PCT/US2020/033002)  
[87] (WO2020/236535)  
[30] US (62/920,846) 2019-05-17

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[21] **3,140,054**  
[13] A1

[51] **Int.Cl. H01R 13/639 (2006.01) H02B 1/52 (2006.01) H02G 3/08 (2006.01) H02G 3/14 (2006.01) H02G 3/06 (2006.01) H02G 15/10 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR RAPIDLY CHANGING AN ACCESSORY FOR AN AMUSEMENT ATTRACTION**  
[54] **SYSTEME ET PROCEDE POUR CHANGER RAPIDEMENT UN ACCESSOIRE POUR UNE ATTRACTION FORAINE**  
[72] GRAHAM, MARTIN EVAN, US  
[72] GOERGEN, PATRICK JOHN, US  
[72] TRUJILLO, TOMAS MANUEL, US  
[71] UNIVERSAL CITY STUDIOS LLC, US  
[85] 2021-11-10  
[86] 2020-05-26 (PCT/US2020/034541)  
[87] (WO2020/243086)  
[30] US (62/854,376) 2019-05-30  
[30] US (16/580,537) 2019-09-24

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[21] **3,140,056**  
[13] A1

[51] **Int.Cl. A01G 9/14 (2006.01)**  
[25] EN  
[54] **STRUCTURE FOR MODULES OF A PLANT GROWING FACILITY**  
[54] **STRUCTURE POUR MODULES D'UNE INSTALLATION DE CULTURE DE PLANTES**  
[72] D'AOUST, YVES, CA  
[72] MONTPETIT, MARIE-JOSE, US  
[72] RAINVILLE, STEPHANE, CA  
[71] FERME D'HIVER TECHNOLOGIES INC., CA  
[85] 2021-11-11  
[86] 2020-06-10 (PCT/CA2020/050795)  
[87] (WO2020/248052)  
[30] US (62/859,846) 2019-06-11

## Demandes PCT entrant en phase nationale

[21] <b>3,140,058</b> [13] A1	[21] <b>3,140,060</b> [13] A1	[21] <b>3,140,063</b> [13] A1
[51] <b>Int.Cl. A61M 25/01 (2006.01) A61M 60/135 (2021.01) A61M 60/139 (2021.01) A61M 60/857 (2021.01) A61M 25/09 (2006.01) A61M 25/10 (2013.01)</b>	[51] <b>Int.Cl. A61B 5/145 (2006.01) A61B 5/00 (2006.01)</b>	[51] <b>Int.Cl. A61K 47/60 (2017.01) A61K 47/65 (2017.01) A61K 47/68 (2017.01) A61K 31/00 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>INTRAVASCULARLY DELIVERED BLOOD PUMPS AND ASSOCIATED DEVICES, SYSTEMS, AND METHODS</b>	[54] <b>BLOOD SUGAR MEASUREMENT DEVICE AND METHOD</b>	[54] <b>ANTIBODY DRUG CONJUGATES HAVING LINKERS COMPRISING HYDROPHILIC GROUPS</b>
[54] <b>POMPES SANGUINES POSEES PAR VOIE INTRAVASCULAIRE ET DISPOSITIFS, SYSTEMES ET METHODES ASSOCIES</b>	[54] <b>DISPOSITIF ET METHODE DE MESURE DE GLYCEMIE</b>	[54] <b>CONJUGUES ANTICORPS-MEDICAMENT AYANT DES LIEURS COMPRENANT DES GROUPES HYDROPHILES</b>
[72] SMITH, ROBERT M, US	[72] BIEN, FRANKLIN DON, KR	[72] CHEN, ZHUOLIANG, US
[72] GIRIDHARAN, GURUPRASAD ANAPATHUR, US	[71] UNIST(ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY), KR	[72] NAKAJIMA, KATSUMASA, US
[72] PINTO, DUANE, US	[85] 2021-11-09	[72] BURGER, MATTHEW T., US
[72] WOOLLEY, JOSHUA RYAN, US	[86] 2020-04-22 (PCT/KR2020/005334)	[72] D'ALESSIO, JOSEPH ANTHONY, US
[72] NOVACK, BRIAN HOWARD, US	[87] (WO2020/242061)	[72] MCNEILL, ERIC, US
[72] ALTSCHULER, DOUGLAS, US	[30] KR (10-2019-0061153) 2019-05-24	[72] PALERMO, MARK G., US
[71] NUPULSECY, INC., US	[30] KR (10-2020-0048191) 2020-04-21	[72] YU, BING, US
[85] 2021-11-10		[72] ZHANG, QIANG, US
[86] 2020-05-17 (PCT/US2020/033339)	[21] <b>3,140,061</b> [13] A1	[71] NOVARTIS AG, CH
[87] (WO2020/236681)	[51] <b>Int.Cl. A61K 35/741 (2015.01) A23L 33/135 (2016.01) A61P 1/16 (2006.01) C12N 1/20 (2006.01)</b>	[85] 2021-11-08
[30] US (62/849,646) 2019-05-17	[25] EN	[86] 2020-05-19 (PCT/US2020/033648)
	[54] <b>STRAIN SHOWING LIVER FUNCTION IMPROVING ACTIVITY, AND USE THEREOF</b>	[87] (WO2020/236841)
	[54] <b>SOUCHE PRESENTANT UNE ACTIVITE AMELIORANT LA FONCTION HEPATIQUE, ET SON UTILISATION</b>	[30] US (62/850,094) 2019-05-20
[21] <b>3,140,059</b> [13] A1		
[51] <b>Int.Cl. H02G 3/14 (2006.01) H01R 13/52 (2006.01) H02B 1/38 (2006.01) H02B 1/44 (2006.01)</b>	[54] <b>SOUCHE PRESENTANT UNE ACTIVITE AMELIORANT LA FONCTION HEPATIQUE, ET SON UTILISATION</b>	[21] <b>3,140,064</b> [13] A1
[25] EN	[72] PARK, HO YOUNG, KR	[51] <b>Int.Cl. C07K 19/00 (2006.01) C12N 15/09 (2006.01)</b>
[54] <b>A JUNCTION BOX LID AND A JUNCTION BOX INCORPORATING THE LID</b>	[72] KIM, YOON SOOK, KR	[25] EN
[54] <b>COUVERCLE DE BOITE DE JONCTION ET BOITE DE JONCTION INCORPORANT LE COUVERCLE</b>	[72] OH, MI JIN, KR	[54] <b>LOCKR-MEDIATED RECRUITMENT OF CAR T CELLS</b>
[72] SHANAHAN, DARREN, AU	[72] LEE, SANG HOON, KR	[54] <b>RECRUTEMENT DE CELLULES CAR T A MEDIATION PAR UN COMMUTATEUR "LOCKR"</b>
[71] WOODSIDE ENERGY TECHNOLOGIES PTY LTD, AU	[72] LEE, HYUN HEE, KR	[72] BAKER, DAVID, US
[85] 2021-11-11	[72] HA, SANG KEUN, KR	[72] BOYKEN, SCOTT, US
[86] 2020-06-12 (PCT/AU2020/050598)	[72] HUR, JIN YOUNG, KR	[72] LAJOIE, MARC, JOSEPH, US
[87] (WO2020/248022)	[71] KOREA FOOD RESEARCH INSTITUTE, KR	[72] LANGAN, ROBERT A., US
[30] AU (2019902042) 2019-06-12	[85] 2021-11-09	[72] RIDDELL, STANLEY R., US
	[86] 2020-05-11 (PCT/KR2020/006172)	[72] SALTER, ALEXANDER, US
	[87] (WO2020/231127)	[71] UNIVERSITY OF WASHINGTON, US
	[30] KR (10-2019-0056228) 2019-05-14	[71] FRED HUTCHINSON CANCER RESEARCH CENTER, US
	[30] KR (10-2020-0042863) 2020-04-08	[85] 2021-11-10
		[86] 2020-05-18 (PCT/US2020/033463)
		[87] (WO2020/232447)
		[30] US (62/848,840) 2019-05-16
		[30] US (62/964,024) 2020-01-21

## PCT Applications Entering the National Phase

[21] **3,140,065**  
[13] A1

[51] **Int.Cl. C07H 19/048 (2006.01) A23L 33/10 (2016.01) A23L 33/175 (2016.01) C07C 51/41 (2006.01) C07C 59/245 (2006.01) C07C 59/265 (2006.01) C07C 59/42 (2006.01) C07H 1/00 (2006.01)**

[25] EN

[54] **ORGANIC ACID SALT OF NICOTINAMIDE RIBOSIDE, COMPOSITION INCLUDING ORGANIC ACID SALT, AND PREPARATION METHODS OF ORGANIC ACID SALT AND COMPOSITION**

[54] **SEL D'ACIDE ORGANIQUE DE NICOTINAMIDE RIBOSIDE, COMPOSITION ASSOCIEE ET PROCEDE DE PREPARATION CORRESPONDANT**

[72] YANG, CHAOWEN, CN  
[72] WANG, LEI, CN  
[72] SONG, JIALIANG, CN  
[72] FU, DINGLIANG, CN  
[71] SHENZHEN DIECKMANN TECH CO., LTD, CN  
[85] 2021-11-11  
[86] 2020-05-11 (PCT/CN2020/089566)  
[87] (WO2021/196349)  
[30] CN (202010258334.4) 2020-04-03

[21] **3,140,066**  
[13] A1

[51] **Int.Cl. G16B 20/20 (2019.01) C12Q 1/6858 (2018.01) C12Q 1/6886 (2018.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR EVALUATING TUMOR FRACTION**

[54] **SYSTEMES ET PROCEDES D'EVALUATION D'UNE FRACTION TUMORALE**

[72] FENDLER, BERNARD, US  
[72] HUGHES, JASON D., US  
[72] ROELS, STEVEN, US  
[71] FOUNDATION MEDICINE, INC., US  
[85] 2021-11-08  
[86] 2020-05-20 (PCT/US2020/033821)  
[87] (WO2020/236941)  
[30] US (62/850,474) 2019-05-20

[21] **3,140,067**  
[13] A1

[51] **Int.Cl. A61K 31/517 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01) C07D 471/08 (2006.01) C07D 487/04 (2006.01) C07D 491/048 (2006.01) C07D 495/04 (2006.01)**

[25] EN

[54] **N-CONTAINING HETEROARYL DERIVATIVE AND PHARMACEUTICAL COMPOSITION COMPRISING SAME AS ACTIVE INGREDIENT FOR PREVENTION OR TREATMENT OF CANCER**

[54] **DERIVE HETEROARYLE CONTENANT DE L'AZOTE ET COMPOSITION PHARMACEUTIQUE LE COMPRENANT EN TANT QUE PRINCIPE ACTIF POUR PREVENIR OU TRAITER LE CANCER**

[72] JO, SEO HYUN, KR  
[72] LI, HUA, KR  
[72] RYU, HEE SUN, KR  
[72] KIM, HWAN, KR  
[72] SEOK, JI YOON, KR  
[72] LEE, SUN HWA, KR  
[72] SON, JUNG BEOM, KR  
[72] KIM, NAM DOO, KR  
[71] VORONOI INC., KR  
[71] VORONOIBIO INC., KR  
[85] 2021-11-09  
[86] 2020-05-21 (PCT/KR2020/006648)  
[87] (WO2020/235945)  
[30] KR (10-2019-0059476) 2019-05-21

[21] **3,140,069**  
[13] A1

[51] **Int.Cl. A61C 7/00 (2006.01) G06T 19/20 (2011.01) A61B 34/10 (2016.01) A61C 9/00 (2006.01) G06T 7/00 (2017.01)**

[25] EN

[54] **VISUAL PRESENTATION OF GINGIVAL LINE GENERATED BASED ON 3D TOOTH MODEL**

[54] **PRESENTATION VISUELLE D'UNE LIGNE GINGIVALE GENEREE SUR LA BASE D'UN MODELE DE DENT 3D**

[72] GAO, YUN, US  
[72] SHI, CHAO, US  
[72] LI, YINGJIE, US  
[72] BUSHEV, ANDREY, US  
[71] ALIGN TECHNOLOGY, INC., US  
[85] 2021-11-10  
[86] 2020-05-12 (PCT/US2020/032462)  
[87] (WO2020/231984)  
[30] US (62/847,780) 2019-05-14

[21] **3,140,070**  
[13] A1

[51] **Int.Cl. C07F 9/564 (2006.01) A61K 31/664 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **FLUORINE-CONTAINING COMPOUND AND ANTI-CANCER MEDICAL USE THEREOF**

[54] **COMPOSE FLUORE ET SON UTILISATION COMME MEDICAMENT ANTICANCEREUX**

[72] DUAN, JIANXIN, CN  
[72] LI, ANRONG, CN  
[72] MENG, FANYING, US  
[72] CAI, XIAOHONG, CN  
[71] ASCENTAWITS PHARMACEUTICALS, LTD., CN  
[85] 2021-11-11  
[86] 2020-05-12 (PCT/CN2020/089692)  
[87] (WO2020/228685)  
[30] CN (201910392606.7) 2019-05-13  
[30] CN (201911324466.6) 2019-12-20

## Demandes PCT entrant en phase nationale

[21] **3,140,071**  
[13] A1

[51] **Int.Cl. C07K 16/22 (2006.01) A61K 39/395 (2006.01) C12N 15/13 (2006.01)**

[25] EN

[54] **ANTI-ANGPT2 ANTIBODIES**

[54] **ANTICORPS ANTI-ANGPT2**

[72] FRYER, RYAN MICHAEL, US

[72] ZHENG, CHAO, US

[72] DZIEGELEWSKI, MICHAEL, US

[72] GUPTA, PANKAJ, US

[72] BOUYSSOU, THIERRY, DE

[72] NICKLIN, PAUL, DE

[71] BOEHRINGER INGELHEIM INTERNATIONAL GMBH, DE

[85] 2021-11-11

[86] 2020-06-25 (PCT/US2020/039477)

[87] (WO2020/264065)

[30] US (62/867,253) 2019-06-27

[30] US (63/013,022) 2020-04-21

[21] **3,140,072**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2012.01) H04M 3/523 (2006.01) H04M 3/53 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR MULTIMEDIA CONTACT CENTER INTERACTIONS VIA AN AUDIOVISUAL ASYNCHRONOUS CHANNEL**

[54] **SYSTEME ET PROCEDE POUR INTERACTIONS DE CENTRE DE CONTACT MULTIMEDIA PAR L'INTERMEDIAIRE D'UN CANAL AUDIOVISUEL ASYNCHRONE**

[72] SEKAR, ARCHANA, IN

[72] GOPAL, RAVIKUMAR, IN

[72] MURALI, PADMAPRIYA, IN

[72] JAYARAGHAVENDRAN, VIDHYASIMHAN, IN

[71] GREENEDEN U.S. HOLDINGS II, LLC, US

[85] 2021-11-08

[86] 2020-05-21 (PCT/US2020/033904)

[87] (WO2020/236996)

[30] US (16/420,258) 2019-05-23

[21] **3,140,075**  
[13] A1

[51] **Int.Cl. A61K 39/40 (2006.01) A61P 31/04 (2006.01) C07K 16/12 (2006.01)**

[25] EN

[54] **ANTI-PCR-V ANTIBODIES THAT BIND PCR-V, COMPOSITIONS COMPRISING ANTI-PCR-V ANTIBODIES, AND METHODS OF USE THEREOF**

[54] **ANTICORPS ANTI-PCR-V QUI SE LIENT A PCR-V, COMPOSITIONS COMPRENANT DES ANTICORPS ANTI-PCR-V, ET LEURS METHODES D'UTILISATION**

[72] KYRATSOUS, CHRISTOS, US

[72] COPPI, ALIDA, US

[71] REGENERON PHARMACEUTICALS, INC., US

[85] 2021-11-08

[86] 2020-06-10 (PCT/US2020/037008)

[87] (WO2020/252029)

[30] US (62/860,146) 2019-06-11

[21] **3,140,076**  
[13] A1

[51] **Int.Cl. A61K 36/185 (2006.01) A23L 33/105 (2016.01) A61K 8/9789 (2017.01) A23L 2/52 (2006.01) A61K 9/00 (2006.01) A61K 31/05 (2006.01) A61K 31/352 (2006.01) B01D 11/02 (2006.01) B01D 15/00 (2006.01) B01D 39/00 (2006.01) B01J 20/20 (2006.01) C07C 39/23 (2006.01) C07D 311/80 (2006.01)**

[25] EN

[54] **METHODS AND RELATED SYSTEMS FOR EXTRACTING ONE OR MORE CHEMICAL COMPOUNDS FROM CANNABIS PLANT MATERIAL**

[54] **PROCEDES ET SYSTEMES ASSOCIES POUR EXTRAIRE UN OU PLUSIEURS COMPOSES CHIMIQUES D'UN MATERIAU VEGETAL DE CANNABIS**

[72] JADHAV, PRAMODKUMAR DINKAR, CA

[71] 1769474 ALBERTA LTD., CA

[85] 2021-11-11

[86] 2020-05-13 (PCT/CA2020/050648)

[87] (WO2020/227830)

[30] US (62/847,681) 2019-05-14

[21] **3,140,077**  
[13] A1

[51] **Int.Cl. E21B 17/042 (2006.01) F16L 58/04 (2006.01)**

[25] EN

[54] **CASING WITH EXTERNAL THREAD AND METHODS OF MANUFACTURE**

[54] **TUBAGE A FILET EXTERNE ET PROCEDES DE FABRICATION**

[72] MUSSO, SIMONE, US

[72] MOELLENDICK, TIMOTHY ERIC, US

[72] ZHAN, GUODONG, SA

[71] SAUDI ARABIAN OIL COMPANY, SA

[85] 2021-11-08

[86] 2020-05-28 (PCT/US2020/034983)

[87] (WO2020/243351)

[30] US (62/853,347) 2019-05-28

[21] **3,140,078**  
[13] A1

[51] **Int.Cl. A61K 31/407 (2006.01) A61P 11/00 (2006.01) A61P 25/28 (2006.01) A61P 35/00 (2006.01) C07D 401/04 (2006.01) C07D 495/04 (2006.01)**

[25] EN

[54] **COMPOUNDS TARGETING PROTEINS AND PHARMACEUTICAL COMPOSITIONS THEREOF, AND THEIR THERAPEUTIC APPLICATIONS**

[54] **COMPOSES CIBLANT DES PROTEINES ET LEURS COMPOSITIONS PHARMACEUTIQUES, ET LEURS APPLICATIONS THERAPEUTIQUES**

[72] CHAN, KYLE W.H., US

[72] ERDMAN, PAUL E., US

[72] FUNG, LEAH, US

[72] HECHT, DAVID AARON, US

[72] CHOURASIA, APARAJITA HOSKOTE, US

[72] LAM, IMELDA, US

[72] MERCURIO, FRANK, US

[72] SULLIVAN, ROBERT, US

[72] TORRES, EDUARDO, US

[71] BIOTHERYX, INC., US

[85] 2021-11-08

[86] 2020-05-22 (PCT/US2020/034264)

[87] (WO2020/242960)

[30] US (62/852,844) 2019-05-24

## PCT Applications Entering the National Phase

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[21] **3,140,079**  
[13] A1

[51] **Int.Cl. C07K 14/415 (2006.01)**  
[25] EN  
[54] **OPTIMIZED CANNABINOID SYNTHASE POLYPEPTIDES**  
[54] **POLYPEPTIDES DE SYNTHASE CANNABINOIDE OPTIMISES**  
[72] HORWITZ, ANDREW, US  
[72] WONG, JEFF, US  
[72] PLATT, DARREN, US  
[72] UBERSAX, JEFF, US  
[71] DEMETRIX, INC., US  
[85] 2021-11-10  
[86] 2020-05-19 (PCT/US2020/033555)  
[87] (WO2020/236789)  
[30] US (62/851,560) 2019-05-22  
[30] US (62/906,017) 2019-09-25  
[30] US (62/906,551) 2019-09-26

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[21] **3,140,080**  
[13] A1

[51] **Int.Cl. G10L 21/16 (2013.01) B60W 50/16 (2020.01) G10L 19/26 (2013.01) A47C 7/62 (2006.01) A47C 31/00 (2006.01) B06B 1/02 (2006.01) G06F 3/01 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS APPLIED TO TRANSPOSING AUDIO SIGNALS TO HAPTIC STIMULI IN THE BODY FOR MULTICHANNEL IMMERSION**  
[54] **PROCEDES ET SYSTEMES APPLIQUES POUR TRANSPOSER DES SIGNAUX AUDIO A DES STIMULI HAPTQUES DANS LE CORPS EN VUE D'UNE IMMERSION MULTICANAL**  
[72] LAMY, JEAN-YVES, CA  
[71] AUDIO HOSPITALITY INC., CA  
[85] 2021-11-11  
[86] 2019-09-09 (PCT/CA2019/051262)  
[87] (WO2020/047679)  
[30] US (62/728,603) 2018-09-07  
[30] US (62/789,574) 2019-01-08

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[21] **3,140,081**  
[13] A1

[51] **Int.Cl. B65G 21/20 (2006.01)**  
[25] EN  
[54] **MANUALLY ADJUSTABLE CONVEYOR BELT GUIDERAIL AND RELATED METHODS**  
[54] **RAIL DE GUIDAGE DE BANDE TRANSPORTEUSE AJUSTABLE MANUELLEMENT ET PROCEDES ASSOCIES**  
[72] LAYNE, JAMES L., US  
[71] SPAN TECH LLC, US  
[85] 2021-11-08  
[86] 2020-06-15 (PCT/US2020/037707)  
[87] (WO2020/252443)  
[30] US (62/861,633) 2019-06-14

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[21] **3,140,082**  
[13] A1

[51] **Int.Cl. C02F 9/02 (2006.01) A01K 63/04 (2006.01) A01K 67/033 (2006.01) C02F 1/00 (2006.01) C02F 1/20 (2006.01) C02F 3/08 (2006.01) C02F 9/14 (2006.01)**  
[25] EN  
[54] **COMBINED MIXED-CELL AND RACEWAY AQUACULTURE DEVICE, SYSTEM AND METHOD OF USE THEREOF, AND METHOD FOR GROWING FISH THEREBY**  
[54] **DISPOSITIF D'AQUACULTURE COMBINE A CELLULES MIXTES ET RACEWAYS, SYSTEME ET PROCEDE D'UTILISATION DE CELUI-CI, ET PROCEDE DE PISCICULTURE ASSOCIE**  
[72] HOLDER, JOHN PEARSON, CA  
[72] HOLDER, JOHN LESLIE, CA  
[71] JLH CONSULTING INC., CA  
[85] 2021-11-11  
[86] 2020-05-13 (PCT/CA2020/050649)  
[87] (WO2020/227831)  
[30] US (62/846,861) 2019-05-13

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[21] **3,140,083**  
[13] A1

[51] **Int.Cl. C07K 16/46 (2006.01) A61K 39/00 (2006.01) C07K 16/28 (2006.01) C07K 16/30 (2006.01)**  
[25] EN  
[54] **USE OF BISPECIFIC ANTIGEN-BINDING MOLECULES THAT BIND MUC16 AND CD3 IN COMBINATION WITH 4-1BB CO-STIMULATION**  
[54] **UTILISATION DE MOLECULES DE LIAISON A L'ANTIGENE BISPECIFIQUES QUI SE LIENT A MUC16 ET CD3 EN COMBINAISON AVEC UNE CO-STIMULATION DE 4-1BB**  
[72] KIRSHNER, JESSICA R., US  
[72] CRAWFORD, ALISON, US  
[72] CHIU, DANICA, GB  
[71] REGENERON PHARMACEUTICALS, INC., US  
[85] 2021-11-08  
[86] 2020-06-19 (PCT/US2020/038669)  
[87] (WO2020/257604)  
[30] US (62/864,960) 2019-06-21

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[21] **3,140,084**  
[13] A1

[51] **Int.Cl. G06Q 30/02 (2012.01)**  
[25] EN  
[54] **MARKETING INFERENCE ENGINE AND METHOD THEREFOR**  
[54] **MOTEUR D'INFERENCE DE MARKETING ET PROCEDE ASSOCIE**  
[72] RENAUD, PHILIP JOSEPH, CA  
[71] AFFINIO INC., CA  
[85] 2021-11-11  
[86] 2020-05-22 (PCT/CA2020/050699)  
[87] (WO2020/232560)  
[30] US (62/851,289) 2019-05-22  
[30] US (62/937,333) 2019-11-19  
[30] IB (PCT/IB2019/061346) 2019-12-24

## Demandes PCT entrant en phase nationale

[21] **3,140,085**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/496 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) A61P 35/04 (2006.01) C07D 417/14 (2006.01)**

[25] EN

[54] **BCL-2 PROTEIN INHIBITORS**

[54] **INHIBITEURS DE PROTEINE BCL-2**

[72] PINCHMAN, JOSEPH ROBERT, US

[72] BUNKER, KEVIN DUANE, US

[72] HUANG, PETER QINHUA, US

[71] RECURIUM IP HOLDINGS, LLC, US

[85] 2021-11-08

[86] 2020-07-08 (PCT/US2020/041175)

[87] (WO2021/007307)

[30] US (62/872,593) 2019-07-10

[21] **3,140,086**  
[13] A1

[51] **Int.Cl. H01M 8/0208 (2016.01) H01M 8/0228 (2016.01) H01M 8/1018 (2016.01)**

[25] EN

[54] **LAYER SYSTEM FOR COATING A BIPOLAR PLATE, BIPOLAR PLATE, AND FUEL CELL**

[54] **SYSTEME DE COUCHE SERVANT A RECOUVRIR UNE PLAQUE BIPOLAIRE, AINSI QUE PLAQUE BIPOLAIRE ET PILE A COMBUSTIBLE**

[72] VIVEKANANTHAN, JEEVANTHI, DE

[72] BAGCIVAN, NAZLIM, DE

[72] BRUGNARA, RICARDO HENRIQUE, DE

[71] SCHAEFFLER TECHNOLOGIES AG & CO. KG, DE

[85] 2021-11-11

[86] 2020-05-11 (PCT/DE2020/100395)

[87] (WO2020/249154)

[30] DE (10 2019 116 000.6) 2019-06-12

[21] **3,140,087**  
[13] A1

[51] **Int.Cl. G05D 1/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR SECURE, LOW BANDWIDTH REPLICATED VIRTUAL WORLDS FOR SHARED SPACE COMPUTING ENABLING VEHICLE FLOCKING**

[54] **SYSTEMES ET PROCEDES POUR DES MONDES VIRTUELS REPLIQUES A FAIBLE LARGEUR DE BANDE POUR UN FLOCAGE DE VEHICULES PERMETTANT DE L'INFORMATIQUE A ESPACE PARTAGE**

[72] SMITH, DAVID A., US

[72] UPTON, BRIAN, US

[72] FREUDENBERG, BERT, US

[72] LUNZER, ARAN, US

[72] OHSHIMA, YOSHIKI, US

[72] EICKHOFF, ANSELM, DE

[71] CEO VISION, INC (DBA CROQUET STUDIOS), US

[85] 2021-11-10

[86] 2020-05-28 (PCT/US2020/034986)

[87] (WO2020/243354)

[30] US (62/854,232) 2019-05-29

[30] US (62/988,781) 2020-03-12

[30] US (16/883,804) 2020-05-26

[30] US (16/885,057) 2020-05-27

[21] **3,140,088**  
[13] A1

[51] **Int.Cl. G16H 20/10 (2018.01) G16H 20/17 (2018.01)**

[25] EN

[54] **ELECTRONICALLY SUPERVISED ADMINISTRATION OF A PHARMACEUTICAL COMPOSITION**

[54] **ADMINISTRATION SUPERVISEE PAR VOIE ELECTRONIQUE D'UNE COMPOSITION PHARMACEUTIQUE**

[72] WIECZOREK, MACIEJ, PL

[72] WIECZOREK, ARTUR, PL

[72] TRATKIEWICZ, EWA, PL

[72] MAJSTRUK, MACIEJ, PL

[71] CELON PHARMA S.A., PL

[85] 2021-11-11

[86] 2019-05-31 (PCT/EP2019/064243)

[87] (WO2020/239243)

[21] **3,140,089**  
[13] A1

[51] **Int.Cl. H02G 3/06 (2006.01)**

[25] EN

[54] **WIREWAY AND WIREWAY CONNECTOR FOR WIREWAY SYSTEM**

[54] **GOULOTTE ET CONNECTEUR DE GOULOTTE POUR SYSTEME DE GOULOTTE**

[72] KHALKAR, AMOL, IN

[72] GRAHEK, NICHOLAS R., US

[71] EATON INTELLIGENT POWER LIMITED, IE

[85] 2021-11-11

[86] 2020-05-12 (PCT/EP2020/025218)

[87] (WO2020/228987)

[30] US (62/847,098) 2019-05-13

[21] **3,140,092**  
[13] A1

[51] **Int.Cl. B32B 7/12 (2006.01) B32B 7/06 (2019.01) B32B 37/12 (2006.01) B32B 38/10 (2006.01)**

[25] EN

[54] **PROCESS FOR MAKING MULTILAYER STRUCTURE WITH BARRIER PROPERTIES**

[54] **PROCEDE DE FABRICATION DE STRUCTURE MULTICOUCHE A PROPRIETES BARRIERE**

[72] JAHROMI, SHAHAB, NL

[71] KNOWFORT HOLDING B.V., NL

[85] 2021-11-11

[86] 2020-05-15 (PCT/EP2020/063666)

[87] (WO2020/229675)

[30] NL (2023146) 2019-05-15

## PCT Applications Entering the National Phase

[21] **3,140,093**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) C12N 15/113 (2010.01) C12N 9/22 (2006.01) C12N 9/78 (2006.01)**

[25] EN

[54] **METHODS OF EDITING A SINGLE NUCLEOTIDE POLYMORPHISM USING PROGRAMMABLE BASE EDITOR SYSTEMS**

[54] **PROCEDES D'EDITION D'UN POLYMORPHISME MONONUCLEOTIDIQUE AU MOYEN DE SYSTEMES D'EDITEUR DE BASE PROGRAMMABLES**

[72] GEHRKE, JASON MICHAEL, US  
[72] PETROSSIAN, NATALIE, US  
[71] BEAM THERAPEUTICS INC., US  
[85] 2021-11-10  
[86] 2020-05-20 (PCT/US2020/033807)  
[87] (WO2020/236936)  
[30] US (62/850,919) 2019-05-21

[21] **3,140,095**  
[13] A1

[51] **Int.Cl. C23C 14/06 (2006.01) C23C 14/32 (2006.01) C23C 14/35 (2006.01)**

[25] EN

[54] **PVD COATINGS COMPRISING MULTI-ANION HIGH ENTROPY ALLOY OXY-NITRIDES**

[54] **REVETEMENTS OBTENUS PAR PVD COMPRENANT DES OXYNITRURES D'ALLIAGES A ENTROPIE ELEVEE MULTI-ANIONS**

[72] YALAMANCHILI, SIVA PHANI KUMAR, CH  
[72] RUDIGIER, HELMUT, CH  
[72] FOPP-SPORI, DORIS, CH  
[71] OERLIKON SURFACE SOLUTIONS AG, PFAFFIKON, CH  
[85] 2021-11-11  
[86] 2020-05-25 (PCT/EP2020/064441)  
[87] (WO2020/234484)

[21] **3,140,096**  
[13] A1

[51] **Int.Cl. C12N 1/20 (2006.01) A23L 33/135 (2016.01) A61K 9/14 (2006.01) A61K 35/74 (2015.01)**

[25] EN

[54] **METHODS AND COMPOSITIONS FOR TREATING LIVER DISORDERS**

[54] **PROCEDES ET COMPOSITIONS POUR LE TRAITEMENT DE TROUBLES HEPATIQUES**

[72] KOLTERMAN, ORVILLE, US  
[72] PERRAUDEAU, FANNY, US  
[72] BULLARD, JAMES, US  
[72] EID, JOHN, US  
[72] CUTCLIFFE, COLLEEN, US  
[71] PENDULUM THERAPEUTICS, INC., US  
[85] 2021-11-10  
[86] 2020-05-20 (PCT/US2020/033870)  
[87] (WO2020/236979)  
[30] US (62/850,773) 2019-05-21

[21] **3,140,098**  
[13] A1

[51] **Int.Cl. A61K 49/06 (2006.01) A61K 49/18 (2006.01)**

[25] EN

[54] **COMPRESSED SOLID COMPOSITION FOR MRI**

[54] **COMPOSITION SOLIDE COMPRIMEE POUR IRM**

[72] HOJGAARD, BENT, DK  
[72] CORFITZEN, MAGNUS OLAFSSON, DK  
[72] DA GRACA COUTO THRIGE, DORTHE, DK  
[71] ASCELIA PHARMA AB, SE  
[85] 2021-11-11  
[86] 2020-06-08 (PCT/EP2020/065805)  
[87] (WO2020/245453)  
[30] EP (19179015.3) 2019-06-07

[21] **3,140,099**  
[13] A1

[51] **Int.Cl. B65G 53/24 (2006.01) B65G 53/22 (2006.01) B65G 67/60 (2006.01)**

[25] EN

[54] **SUCTION DEVICE FOR DISCHARGING AND CONVEYING MATERIAL**

[54] **DISPOSITIF D'ASPIRATION DESTINE A EVACUER ET TRANSPORTER UN MATERIAU**

[72] ERNST, PATRIK, CH  
[72] FLUELER, STEFAN, CH  
[72] SCHULER, GUIDO, CH  
[71] REEL ALESA AG, CH  
[85] 2021-11-11  
[86] 2020-06-10 (PCT/EP2020/066078)  
[87] (WO2020/249610)  
[30] EP (19179830.5) 2019-06-12

[21] **3,140,100**  
[13] A1

[51] **Int.Cl. C08K 5/20 (2006.01) C09D 179/08 (2006.01) H01B 3/30 (2006.01)**

[25] EN

[54] **POLYMER COMPOSITIONS FOR FORMING AN ENAMEL COATING ON A WIRE**

[54] **COMPOSITIONS POLYMERES POUR FORMER UN REVETEMENT D'EMAIL SUR UN FIL**

[72] ASIRVATHAM, EDWARD, US  
[72] MOUDGIL, KARTTIKAY, US  
[71] ADVANSIX RESINS & CHEMICALS LLC, US  
[85] 2021-11-10  
[86] 2020-05-21 (PCT/US2020/033941)  
[87] (WO2020/237018)  
[30] US (62/851,215) 2019-05-22



## Demandes PCT entrant en phase nationale

[21] **3,140,101**  
[13] A1

[51] **Int.Cl. H04L 9/08 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR QUANTUM KEY DISTRIBUTION OVER HYBRID QUANTUM CHANNEL**  
[54] **SYSTEME ET PROCEDE DE DISTRIBUTION DE CLE QUANTIQUE SUR UN CANAL QUANTIQUE HYBRIDE**  
[72] RICHDALE, KELLY, CH  
[72] HUTTNER, BRUNO, CH  
[71] ID QUANTIQUE SA, CH  
[85] 2021-11-11  
[86] 2020-05-06 (PCT/EP2020/062517)  
[87] (WO2020/233988)  
[30] EP (19176090.9) 2019-05-23

[21] **3,140,103**  
[13] A1

[51] **Int.Cl. A61K 9/14 (2006.01) A61K 9/16 (2006.01) A61K 9/20 (2006.01) A61K 31/00 (2006.01) A61P 1/16 (2006.01) A61P 31/12 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITIONS FOR THE TREATMENT OF HBV**  
[54] **COMPOSITIONS PHARMACEUTIQUES POUR LE TRAITEMENT DU VHB**  
[72] ARNOLD, LEE D., US  
[72] WONG, GEORGE KOAN, US  
[72] HENNE, KIRK, US  
[72] HULVAT, JAMES FRANCIS, US  
[72] KONAGURTHU, SANJAY, US  
[72] MCINTOSH, IAN SCOTT, US  
[72] WESSEL, MATTHEW DAVID, US  
[72] REYNOLDS, THOMAS, US  
[72] COLONNO, RICHARD J., US  
[72] LOPATIN, URI A., US  
[71] ASSEMBLY BIOSCIENCES, INC., US  
[85] 2021-11-10  
[86] 2020-05-22 (PCT/US2020/034367)  
[87] (WO2020/242999)  
[30] US (62/852,705) 2019-05-24  
[30] US (63/020,927) 2020-05-06

[21] **3,140,108**  
[13] A1

[51] **Int.Cl. A61M 5/168 (2006.01) A61M 5/145 (2006.01) A61M 5/158 (2006.01) A61M 39/22 (2006.01)**  
[25] EN  
[54] **VALVE ASSEMBLY FOR DRUG DELIVERY DEVICE**  
[54] **ENSEMBLE VALVE POUR DISPOSITIF D'ADMINISTRATION DE MEDICAMENT**  
[72] FALKOVICH, MARGARITA, US  
[72] SANTHANAM, VENKATESWARAN, US  
[72] SKUTNIK, PETER, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2021-11-10  
[86] 2020-05-29 (PCT/US2020/035058)  
[87] (WO2020/243387)  
[30] US (62/854,587) 2019-05-30

[21] **3,140,109**  
[13] A1

[25] EN  
[54] **CACHE MANAGEMENT IN CONTENT DELIVERY SYSTEMS**  
[54] **GESTION DE MEMOIRE CACHE DANS DES SYSTEMES DE DISTRIBUTION DE CONTENU**  
[72] CROWDER, WILLIAM, US  
[71] LEVEL 3 COMMUNICATIONS, LLC, US  
[85] 2021-11-11  
[86] 2020-03-12 (PCT/US2020/022490)  
[87] (WO2020/231502)  
[30] US (62/847,890) 2019-05-14

[21] **3,140,110**  
[13] A1

[51] **Int.Cl. C12N 7/00 (2006.01) C12N 5/071 (2010.01) C12N 5/10 (2006.01) C12N 7/01 (2006.01) C12N 7/02 (2006.01) C12N 15/864 (2006.01)**  
[25] EN  
[54] **OPTIMIZED PARVOVIRUS H-1 PRODUCTION**  
[54] **PRODUCTION OPTIMISEE DE PARVOVIRUS H-1**  
[72] LEUCHS, BARBARA, DE  
[72] FREHTMAN, VERONIKA, DE  
[72] MULLER, MARCUS, DE  
[72] ROMMELAERE, JEAN, DE  
[72] DAHM, MICHAEL, DE  
[72] KREBS, OTTHEINZ, DE  
[71] DEUTSCHES KREBSFORSCHUNGSZENTRUM STIFTUNG DES OFFENTILICHEN RECHTS, DE  
[85] 2021-11-11  
[86] 2020-06-17 (PCT/EP2020/066748)  
[87] (WO2020/254395)  
[30] EP (19180628.0) 2019-06-17

[21] **3,140,112**  
[13] A1

[51] **Int.Cl. C12Q 1/6876 (2018.01) C12Q 1/6813 (2018.01) C12Q 1/686 (2018.01) C12Q 1/689 (2018.01)**  
[25] EN  
[54] **DETECTION OF ANTIBIOTIC RESISTANCE GENES**  
[54] **DETECTION DE GENES DE RESISTANCE AUX ANTIBIOTIQUES**  
[72] COSSETTE, STEPHANIE, US  
[72] CONNELLY, CHRISTOPHER, US  
[72] TORRES-GONZALEZ, MARIA, US  
[72] ALAO, ESTHER, US  
[71] STRECK, INC., US  
[85] 2021-11-10  
[86] 2020-05-29 (PCT/US2020/035422)  
[87] (WO2020/243644)  
[30] US (62/855,709) 2019-05-31  
[30] US (62/855,684) 2019-05-31  
[30] US (62/872,655) 2019-07-10

## PCT Applications Entering the National Phase

[21] **3,140,113**  
[13] A1

[51] **Int.Cl. A61K 9/107 (2006.01) A61K 9/48 (2006.01) A61K 31/05 (2006.01) A61K 47/44 (2017.01)**

[25] EN

[54] **SELF-EMULSIFYING CANNABIDIOL FORMULATIONS**

[54] **FORMULATIONS DE CANNABIDIOL AUTO-EMULSIFIANTES**

[72] VANGARA, KIRAN KUMAR, US

[72] POTTA, THRIMOORTHY, US

[72] GOSKONDA, VENKAT, US

[71] BENUVIA MANUFACTURING, LLC, US

[85] 2021-11-11

[86] 2020-05-14 (PCT/IB2020/000610)

[87] (WO2020/260956)

[30] US (62/847,991) 2019-05-15

[21] **3,140,114**  
[13] A1

[51] **Int.Cl. B60L 50/90 (2019.01) B60K 25/08 (2006.01) B60L 8/00 (2006.01) F03G 7/08 (2006.01)**

[25] EN

[54] **METHODS AND APPARATUS FOR POWERING A VEHICLE**

[54] **PROCEDES ET APPAREIL D'ALIMENTATION D'UN VEHICULE**

[72] MACALUSO, ANTHONY, US

[71] MACALUSO, ANTHONY, US

[85] 2021-11-10

[86] 2020-06-04 (PCT/US2020/036172)

[87] (WO2020/247666)

[30] US (62/858,902) 2019-06-07

[30] US (62/883,523) 2019-08-06

[30] US (62/967,406) 2020-01-29

[30] US (16/847,538) 2020-04-13

[30] US (16/861,110) 2020-04-28

[21] **3,140,115**  
[13] A1

[51] **Int.Cl. C07K 14/47 (2006.01) C12N 15/86 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **LIGAND DISCOVERY AND GENE DELIVERY VIA RETROVIRAL SURFACE DISPLAY**

[54] **DECOUVERTE DE LIGANDS ET APPORT DE GENES PAR L'INTERMEDIAIRE D'UNE PRESENTATION A LA SURFACE DE RETROVIRUS**

[72] BIRNBAUM, MICHAEL, US

[72] DOBSON, CONNOR, US

[71] MASSACHUSETTS INSTITUTE OF TECHNOLOGY, US

[85] 2021-11-11

[86] 2020-03-23 (PCT/US2020/024175)

[87] (WO2020/236263)

[30] US (62/851,889) 2019-05-23

[21] **3,140,116**  
[13] A1

[51] **Int.Cl. E04B 1/74 (2006.01) E04F 15/18 (2006.01)**

[25] EN

[54] **INSULATING MODULAR PANEL CONFIGURATION**

[54] **CONFIGURATION DE PANNEAUX MODULAIRES ISOLANTS**

[72] BENNETT, RODGER, US

[72] VAUGHN, CELESTE, US

[71] BENNETT, RODGER, US

[71] VAUGHN, CELESTE, US

[85] 2021-11-10

[86] 2020-06-12 (PCT/US2020/037334)

[87] (WO2020/252219)

[30] US (62/860,491) 2019-06-12

[21] **3,140,117**  
[13] A1

[51] **Int.Cl. C21D 8/02 (2006.01)**

[25] EN

[54] **A COLD ROLLED MARTENSITIC STEEL AND A METHOD OF MARTENSITIC STEEL THEREOF**

[54] **ACIER MARTENSITIQUE LAMINE A FROID ET PROCEDE D'ACIER MARTENSITIQUE S'Y RAPPORANT**

[72] SIEBENTRITT, MATTHIEU, FR

[72] LHOIST, VINCENT, BE

[71] ARCELORMITTAL, LU

[85] 2021-11-11

[86] 2020-03-30 (PCT/IB2020/052999)

[87] (WO2020/229898)

[30] IB (PCT/IB2019/054022) 2019-05-15

[21] **3,140,118**  
[13] A1

[25] EN

[54] **SERVICE GRAPH HIGHLIGHTS MISSING NODES AND LINKS**

[54] **GRAPHE DE SERVICE METTANT EN EVIDENCE DES NŌUDS ET DES LIAISONS MANQUANTS**

[72] VITAL, CHIRADEEP, US

[71] CITRIX SYSTEMS, INC., US

[85] 2021-11-11

[86] 2020-04-22 (PCT/US2020/029271)

[87] (WO2020/236388)

[30] US (16/415,810) 2019-05-17

[21] **3,140,119**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01)**

[25] EN

[54] **CHEMICAL PROCESS**

[54] **PROCEDE CHIMIQUE**

[72] BLANK, JARRED, CH

[72] KOECHER, CHRISTIAN, CH

[72] PACHINGER, WERNER HEINZ, CH

[72] PAREDES, GALATEA, CH

[72] SPAETI, MARKUS, CH

[71] NOVARTIS AG, CH

[85] 2021-11-11

[86] 2020-05-15 (PCT/IB2020/054629)

[87] (WO2020/230100)

[30] US (62/848,869) 2019-05-16

[30] US (62/929,995) 2019-11-04

[21] **3,140,120**  
[13] A1

[51] **Int.Cl. A61K 38/10 (2006.01) A61P 13/02 (2006.01)**

[25] EN

[54] **METHOD OF TREATING LOWER URINARY TRACT SYMPTOMS WITH FEXAPOTIDE TRIFLUTATE**

[54] **PROCEDE DE TRAITEMENT DE SYMPTOMES DU TRACTUS URINAIRE INFERIEUR AVEC DU TRIFLUTATE DE FEXAPOTIDE**

[72] AVERBACK, PAUL, MC

[71] NYMOX CORPORATION, US

[85] 2021-11-11

[86] 2020-05-08 (PCT/US2020/032017)

[87] (WO2020/231777)

[30] US (16/410,658) 2019-05-13

## Demandes PCT entrant en phase nationale

[21] **3,140,121**  
[13] A1

[51] **Int.Cl. G01N 21/00 (2006.01) A61B 5/1455 (2006.01) G01N 21/65 (2006.01) G01N 33/48 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR NON-INVASIVE MEASUREMENT OF ANALYTES IN VIVO**

[54] **SYSTEME ET PROCEDE DE MESURE NON INVASIVE D'ANALYTES IN VIVO**

[72] KATZ, JEFFREY OWEN, US

[71] SANGUIS CORPORATION, US

[85] 2021-11-10

[86] 2020-07-23 (PCT/US2020/043189)

[87] (WO2021/016416)

[30] US (62/878,074) 2019-07-24

[30] US (16/927,804) 2020-07-13

[21] **3,140,123**  
[13] A1

[51] **Int.Cl. A61K 31/5377 (2006.01) C12Q 1/6883 (2018.01) A61P 35/04 (2006.01)**

[25] EN

[54] **METHODS OF TREATING CANCER USING CHK1 INHIBITORS**

[54] **METHODES DE TRAITEMENT DU CANCER AVEC DES INHIBITEURS DE CHK1**

[72] HASSIG, CHRISTIAN ANDREW, US

[72] STROUSE, BRYAN WILLIAM, US

[72] HANSEN, RYAN JAMES, US

[72] ANDERES, KENNA LYNN, US

[72] MILUTINOVIC, SNEZANA, US

[72] YOU, ANGIE J., US

[72] KLENCKE, BARBARA, US

[72] KOWALSKI, MARK, US

[71] SIERRA ONCOLOGY, INC., US

[85] 2021-11-11

[86] 2020-05-13 (PCT/US2020/032722)

[87] (WO2020/232154)

[30] US (62/847,810) 2019-05-14

[30] US (62/855,910) 2019-05-31

[21] **3,140,124**  
[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01) G16B 20/00 (2019.01)**

[25] EN

[54] **EPIAGING: NOVEL ECOSYSTEM FOR MANAGING HEALTHY AGING**

[54] **EPIVIEILLISSEMENT : NOUVEL ECOSYSTEME POUR LA GESTION DU VIEILLISSEMENT EN BONNE SANTE**

[72] CHEISHVILI, DAVID, CA

[72] SZYF, MOSHE, CA

[72] WONG, CHI FAT, CN

[72] LI, HUI, CN

[71] HKG EPITHERAPEUTICS LIMITED, CN

[85] 2021-11-11

[86] 2020-05-29 (PCT/IB2020/055146)

[87] (WO2020/240511)

[30] US (62/854,226) 2019-05-29

[21] **3,140,125**  
[13] A1

[51] **Int.Cl. G06Q 50/06 (2012.01) C02F 1/00 (2006.01) C02F 1/42 (2006.01) C02F 5/08 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR SENSORLESS ESTIMATION OF WATER SOFTENER SALT LEVEL AND REGENERATION CYCLING**

[54] **SYSTEMES ET PROCEDES D'ESTIMATION SANS CAPTEUR DE NIVEAU DE SEL D'ADOUCCISSEUR D'EAU ET DE CYCLE DE REGENERATION**

[72] VELOO, BALAGRU, US

[72] PODELLA, MATTHEW, US

[71] PENTAIR RESIDENTIAL FILTRATION, LLC, US

[85] 2021-11-10

[86] 2020-05-11 (PCT/US2020/070040)

[87] (WO2020/232468)

[30] US (62/846,259) 2019-05-10

[21] **3,140,126**  
[13] A1

[51] **Int.Cl. E21B 41/00 (2006.01) E21B 43/12 (2006.01)**

[25] EN

[54] **AUTOMATED PRODUCTION OPTIMIZATION TECHNIQUE FOR SMART WELL COMPLETIONS USING REAL-TIME NODAL ANALYSIS**

[54] **TECHNIQUE D'OPTIMISATION DE PRODUCTION AUTOMATISEE POUR DES COMPLETIONS DE Puits INTELLIGENTES AU MOYEN D'ANALYSE NODALE EN TEMPS REEL**

[72] ALANAZI, AMER, SA

[72] AL-QASIM, ABDULAZIZ, SA

[72] BUKHAMSEEN, AHMED Y., SA

[71] SAUDI ARABIAN OIL COMPANY, SA

[85] 2021-11-11

[86] 2020-05-14 (PCT/US2020/032831)

[87] (WO2020/232218)

[30] US (16/414,535) 2019-05-16

[21] **3,140,127**  
[13] A1

[51] **Int.Cl. E04B 9/20 (2006.01) E04B 9/30 (2006.01) E06B 9/42 (2006.01)**

[25] EN

[54] **BUILDING PERIMETER SYSTEMS**

[54] **SYSTEME DE PERIMETRE DE BATIMENT**

[72] UNDERKOFER, ABRAHAM M., US

[72] GULBRANDSEN, PEDER J., US

[71] USG INTERIORS, LLC, US

[85] 2021-11-08

[86] 2020-05-18 (PCT/US2020/033384)

[87] (WO2020/236704)

[30] US (16/420,438) 2019-05-23

[21] **3,140,128**  
[13] A1

[51] **Int.Cl. F16B 43/02 (2006.01)**

[25] EN

[54] **ADJUSTABLE TAPERED WASHER**

[54] **RONDELLE CONIQUE REGLABLE**

[72] O'REILLY, DAVID WAYNE, US

[71] AGCO CORPORATION, US

[85] 2021-11-11

[86] 2020-06-08 (PCT/IB2020/055365)

[87] (WO2021/009577)

[30] US (62/875,018) 2019-07-17

## PCT Applications Entering the National Phase

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[21] **3,140,129**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) C07K 14/47 (2006.01)**

[25] EN

[54] **MPS MODIFIED PEPTIDES AND USE THEREOF**

[54] **PEPTIDES MODIFIES PAR MPS ET LEUR UTILISATION**

[72] WU, REEN, US

[72] CHEN, CHING-HSIEN, US

[72] YANG, DAVID C., US

[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US

[85] 2021-11-11

[86] 2020-05-15 (PCT/US2020/033188)

[87] (WO2020/236615)

[30] US (62/849,637) 2019-05-17

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[21] **3,140,130**  
[13] A1

[51] **Int.Cl. C10G 75/04 (2006.01) C11D 1/22 (2006.01)**

[25] EN

[54] **ANTIFOULANT FORMULATION AND APPLICATIONS THEREOF**

[54] **FORMULATION ANTISALISSURE ET SES APPLICATIONS**

[72] ESWARARAO, DONI, IN

[72] RAGHAVA KRISHNA, KANALA, IN

[72] SAIRAMU, MADALA, IN

[72] RAMKUMAR, MANGALA, IN

[72] RAMACHANDRARAO, BOJJA, IN

[72] VENKATESWARLU CHOUDARY, NETTAM, IN

[72] SRIGANESH, GANDHAM, IN

[71] HINDUSTAN PETROLEUM CORPORATION LIMITED, IN

[85] 2021-11-11

[86] 2020-03-31 (PCT/IN2020/050307)

[87] (WO2020/255155)

[30] IN (201941024435) 2019-06-19

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[21] **3,140,131**  
[13] A1

[51] **Int.Cl. B64G 1/44 (2006.01) H01Q 1/28 (2006.01) H01Q 9/04 (2006.01)**

[25] EN

[54] **SOLAR, ELECTRONIC, RF RADIATOR FOR A SELF-CONTAINED STRUCTURE FOR SPACE APPLICATION ARRAY**

[54] **RADIATEUR SOLAIRE, ELECTRONIQUE, RF POUR UNE STRUCTURE AUTONOME POUR RESEAU D'APPLICATIONS SPATIALES**

[72] HERNANDEZ BAHLESEN, JAVIER, ES

[72] MARTINEZ DE OSABA FERNANDEZ, AITOR, ES

[72] HONOUR, RYAN D., US

[72] AVELLAN, ABEL, US

[72] YAO, HUIWEN, US

[72] HALPERIN, ADAM H., US

[71] AST & SCIENCE, LLC, US

[85] 2021-11-11

[86] 2020-05-15 (PCT/US2020/033225)

[87] (WO2020/232388)

[30] US (62/848,317) 2019-05-15

[30] ES (202030123) 2020-02-13

[30] ES (202030124) 2020-02-13

[30] ES (202030125) 2020-02-13

[30] US (62/977,860) 2020-02-18

[30] US (62/977,864) 2020-02-18

[30] US (62/978,081) 2020-02-18

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[21] **3,140,132**  
[13] A1

[51] **Int.Cl. C12N 15/11 (2006.01) G16B 30/00 (2019.01) A61K 48/00 (2006.01) C12N 9/22 (2006.01) C12N 15/09 (2006.01)**

[25] EN

[54] **DIRECTED GENOME ENGINEERING USING ENHANCED TARGETED EDITING TECHNOLOGIES**

[54] **INGENIERIE GENOMIQUE DIRIGEE UTILISANT DES TECHNOLOGIES D'EDITION CIBLEES AMELIOREES**

[72] CARGILL, EDWARD JAMES, US

[72] KOURANOV, ANDREI Y., US

[72] RYMARQUIS, LINDA ANN, US

[71] MONSANTO TECHNOLOGY LLC, US

[85] 2021-11-11

[86] 2020-05-28 (PCT/US2020/034998)

[87] (WO2020/243365)

[30] US (62/854,146) 2019-05-29

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[21] **3,140,134**  
[13] A1

[51] **Int.Cl. H01L 31/04 (2014.01) H01Q 1/00 (2006.01)**

[25] EN

[54] **THERMAL MANAGEMENT SYSTEM FOR STRUCTURES IN SPACE**

[54] **SYSTEME DE GESTION THERMIQUE POUR STRUCTURES DANS L'ESPACE**

[72] HONOUR, RYAN D., US

[72] HERNANDEZ BAHLESEN, JAVIER, ES

[72] YAO, HUIWEN, US

[72] HALPERIN, ADAM H., US

[72] AVELLAN, ABEL, US

[71] AST & SCIENCE, LLC, US

[85] 2021-11-11

[86] 2020-05-15 (PCT/US2020/033231)

[87] (WO2020/232391)

[30] US (62/848,317) 2019-05-15

[30] ES (202030123) 2020-02-13

[30] ES (202030124) 2020-02-13

[30] ES (202030125) 2020-02-13

[30] US (62/977,860) 2020-02-18

[30] US (62/977,864) 2020-02-18

[30] US (62/978,081) 2020-02-18

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[21] **3,140,135**  
[13] A1

[51] **Int.Cl. C23C 14/00 (2006.01)**

[25] EN

[54] **POUCH HAVING TRANSPARENT WINDOW WITH ANTI-COUNTERFEITING FEATURE**

[54] **SACHET COMPORTANT UNE FENETRE TRANSPARENTE A ELEMENT ANTI-CONTREFAÇON**

[72] CHATURVEDI, ASHOK, IN

[71] CHATURVEDI, ASHOK, IN

[85] 2021-11-11

[86] 2020-05-09 (PCT/IN2020/050420)

[87] (WO2020/230155)

[30] IN (201911018899) 2019-05-11

## Demandes PCT entrant en phase nationale

[21] **3,140,136**  
[13] A1

[51] **Int.Cl. E04B 1/99 (2006.01) E04B 1/82 (2006.01) E04B 9/00 (2006.01) E04B 9/04 (2006.01) E04B 9/36 (2006.01)**

[25] EN

[54] **DYNAMIC ACOUSTIC CEILING SYSTEM**

[54] **SYSTEME DE PLAFOND ACOUSTIQUE DYNAMIQUE**

[72] IMMORDINO, SALVATORE, US

[72] ROSENSTIEL, TERRY, US

[72] JOSEPH, MARK, US

[72] LUHTALA, ERIK, US

[72] SCHMIDT, ANDREW, US

[72] NATESAIYER, KUMAR, US

[71] USG INTERIORS, LLC, US

[85] 2021-11-11

[86] 2020-05-19 (PCT/US2020/033514)

[87] (WO2020/242815)

[30] US (62/852,672) 2019-05-24

[30] US (16/788,607) 2020-02-12

[21] **3,140,140**  
[13] A1

[51] **Int.Cl. A23L 2/00 (2006.01) A23L 2/38 (2021.01) A23L 2/44 (2006.01)**

[25] EN

[54] **BEER TASTE BEVERAGE**

[54] **BOISSON AROMATISEE A LA BIERE**

[72] KUBOTA, JUN, JP

[72] MAEKAWA, SYOTARO, JP

[71] ASAHI GROUP HOLDINGS, LTD., JP

[85] 2021-11-11

[86] 2020-01-24 (PCT/JP2020/002520)

[87] (WO2021/005816)

[30] JP (2019-128626) 2019-07-10

[21] **3,140,142**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **TRISPECIFIC BINDING MOLECULES AGAINST BCMA AND USES THEREOF**

[54] **MOLECULES DE LIAISON TRISPECIFIQUES DIRIGÉES CONTRE LE BCMA ET UTILISATIONS ASSOCIÉES**

[72] GRANDA, BRIAN, US

[72] BLANKENSHIP, JOHN, US

[72] ABUJOUR, AIDA, US

[72] FLEMING, TONY, US

[72] LU, HAIHUI, US

[72] HONG, CONNIE, US

[72] HOLMBERG, BRIAN, US

[71] NOVARTIS AG, CH

[85] 2021-11-11

[86] 2020-05-19 (PCT/US2020/033563)

[87] (WO2020/236795)

[30] US (62/850,889) 2019-05-21

[30] US (62/854,667) 2019-05-30

[21] **3,140,143**  
[13] A1

[51] **Int.Cl. C12C 12/04 (2006.01) A23L 2/38 (2021.01) C12C 11/00 (2006.01) C12H 3/00 (2019.01)**

[25] EN

[54] **BEER-TASTE FERMENTED MALT BEVERAGE**

[54] **BOISSON MALTEE FERMENTEE AYANT UN GOUT DE BIÈRE**

[72] KUBOTA, JUN, JP

[72] MAEKAWA, SYOTARO, JP

[71] ASAHI GROUP HOLDINGS, LTD., JP

[85] 2021-11-11

[86] 2021-01-27 (PCT/JP2021/002868)

[87] (WO2021/153625)

[30] JP (2020-011736) 2020-01-28

[21] **3,140,145**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01) C12Q 1/686 (2018.01) C12Q 1/6876 (2018.01) C12Q 1/70 (2006.01)**

[25] EN

[54] **ULTRA-HIGH-PRECISION VIRAL VECTOR ASSAY**

[54] **DOSAGE DE VECTEUR VIRAL A TRES HAUTE PRECISION**

[72] MYKKANNEN, JENNI, FI

[72] PELTONEN, HANNA, FI

[72] HASSINEN, MINNA, FI

[72] YLA-HERTTUALA, SEPPO, FI

[72] PARKER, NIGEL, GB

[71] TRIZELL LTD., GB

[85] 2021-11-11

[86] 2020-05-22 (PCT/US2020/034146)

[87] (WO2020/242913)

[30] US (16/426,124) 2019-05-30

[21] **3,140,148**  
[13] A1

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

[25] EN

[54] **PROSTHETIC HEART VALVE**

[54] **VALVE CARDIAQUE PROTHÉTIQUE**

[72] LEVI, TAMIR S., IL

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2021-11-11

[86] 2020-05-22 (PCT/US2020/034314)

[87] (WO2020/242980)

[30] US (62/854,244) 2019-05-29

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[21] **3,140,206**  
[13] A1

[51] **Int.Cl. A61K 35/618 (2015.01)**

[25] FR

[54] **METHOD FOR ISOLATING MOLECULES CONTAINED IN THE ORGANOMINERAL LAYERS OF SHELLS OF BIVALVE MARINE MOLLUSKS**

[54] **PROCEDE D'ISOLATION DES MOLECULES CONTENUES DANS LES COUCHES ORGANO-MINÉRALES DES COQUILLES DE MOLLUSQUES MARINS BIVALVES**

[72] CAMPRASSE, SERGE, FR

[72] CAMPRASSE, GEORGES, FR

[71] MBP (MAURITIUS) LTD., MU

[85] 2021-11-08

[86] 2020-05-12 (PCT/FR2020/050786)

[87] (WO2020/229771)

[30] FR (19 04913) 2019-05-13

## PCT Applications Entering the National Phase

[21] **3,140,207**  
[13] A1

[51] **Int.Cl. A61M 25/01 (2006.01) A61L 2/18 (2006.01) A61M 25/00 (2006.01)**

[25] EN

[54] **REUSABLE URINARY CATHETER PRODUCTS**

[54] **PRODUITS DE TYPE CATHETER URINAIRE REUTILISABLE**

[72] MURRAY, MICHAEL G., US

[72] MONTES DE OCA, HORACIO, US

[72] INGLESE, GARY W., US

[72] LEECE, REBECCA M., US

[72] BALASKI, DARCY R., US

[72] CLARKE, JOHN T., US

[72] O'MAHONY, JOHN P., US

[72] SHEREMETIEV, DMITRY, US

[72] GAMBLIN, DENISE, US

[72] RENEHAN, THOMAS, US

[72] MEANEY, RICHARD J., US

[72] MCNULTY, VIVIENNE, US

[71] HOLLISTER INCORPORATED, US

[85] 2021-11-11

[86] 2020-06-10 (PCT/US2020/036969)

[87] (WO2020/252003)

[30] US (62/861,130) 2019-06-13

[21] **3,140,208**  
[13] A1

[51] **Int.Cl. C07K 14/47 (2006.01) A61P 25/00 (2006.01) A61P 25/28 (2006.01) A61P 43/00 (2006.01) C07K 16/00 (2006.01) C07K 16/18 (2006.01) C07K 16/28 (2006.01) C07K 16/46 (2006.01) C07K 19/00 (2006.01) C12N 5/10 (2006.01) C12N 15/12 (2006.01) C12N 15/62 (2006.01) C12P 21/02 (2006.01)**

[25] EN

[54] **MULTISPECIFIC TRANSTHYRETIN IMMUNOGLOBULIN FUSIONS**

[54] **FUSIONS D'IMMUNOGLOBULINES DE TRANSTHYRETINE MULTISPECIFIQUES**

[72] WALKER, KENNETH WILLIAM, US

[71] AMGEN INC., US

[85] 2021-11-11

[86] 2020-07-06 (PCT/US2020/040873)

[87] (WO2021/007150)

[30] US (62/871,247) 2019-07-08

[21] **3,140,209**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 48/00 (2006.01)**

[25] EN

[54] **MODULATORS AND MODULATION OF THE RECEPTOR FOR ADVANCED GLYCATION END-PRODUCTS RNA**

[54] **MODULATEURS ET MODULATION DU RECEPTEUR POUR L'ARN DE PRODUITS FINAUX DE GLYCATION AVANCEE**

[72] WILTON, STEPHEN, AU

[72] THOMAS, MERLIN CHRISTOPHER, AU

[72] ROSADO, CARLOS, AU

[72] PICKERING, RAELENE JANE, AU

[71] MONASH UNIVERSITY, AU

[71] MURDOCH UNIVERSITY, AU

[85] 2021-11-12

[86] 2020-05-07 (PCT/AU2020/050449)

[87] (WO2020/227758)

[30] AU (2019901641) 2019-05-14

[30] AU (2019902095) 2019-06-17

[30] AU (2019902772) 2019-08-02

[30] AU (2019903900) 2019-10-16

[21] **3,140,210**  
[13] A1

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

[25] EN

[54] **SODIUM FLUORESCHEIN AS A REVERSAL AGENT FOR AN ANTI-FLUORESCHEIN CAR T CELLS AND FLUORESCHEIN-PHOSPHOLIPID-ETHERS OR PROFLUORESCHEIN-PHOSPHOLIPID-ETHERS**

[54] **FLUORESCHEINE SODIQUE EN TANT QU'AGENT D'INVERSION POUR DES CELLULES CAR-T ANTI-FLUORESCHEINE ET DES ETHERS DE FLUORESCHEINE-PHOSPHOLIPIDE OU DES ETHERS DE PHOSPHOLIPIDES-PHOSPHOLIPIDES**

[72] JENSON, MICHAEL C., US

[72] MATTHAEI, JAMES, US

[71] SEATTLE CHILDREN'S HOSPITAL (DBA SEATTLE CHILDREN'S RESEARCH INSTITUTE), US

[85] 2021-09-10

[86] 2020-03-11 (PCT/US2020/022130)

[87] (WO2020/185917)

[30] US (62/818,030) 2019-03-13

[21] **3,140,212**  
[13] A1

[51] **Int.Cl. A23L 33/185 (2016.01) A23J 3/14 (2006.01) A23J 3/16 (2006.01)**

[25] FR

[54] **CO-ATOMISED LEGUME PROTEIN WITH REDUCED FLAVOUR**

[54] **PROTEINE DE LEGUMINEUSE CO-ATOMISEE A FLAVEUR REDUITE**

[72] CAULIER, BERNARD, FR

[72] LAROCHE, CHRISTOPHE, FR

[72] IBERT, MATHIAS, FR

[71] ROQUETTE FRERES, FR

[85] 2021-11-12

[86] 2020-05-29 (PCT/FR2020/050925)

[87] (WO2020/240144)

[30] FR (FR1905754) 2019-05-29

[21] **3,140,213**  
[13] A1

[25] EN

[54] **PROCESS AND APPARATUS FOR ESTIMATING REAL-TIME QUALITY OF EXPERIENCE**

[54] **PROCEDE ET APPAREIL POUR L'ESTIMATION D'UNE QUALITE D'EXPERIENCE EN TEMPS REEL**

[72] MADANAPALLI, SHARAT CHANDRA, AU

[72] GHARAKHEILI, HASSAN HABIBI, AU

[72] SIVARAMAN, VIJAY, AU

[71] CANOPUS NETWORKS PTY LTD, AU

[85] 2021-11-12

[86] 2020-05-15 (PCT/AU2020/050483)

[87] (WO2020/227781)

[30] AU (2019901667) 2019-05-16

[21] **3,140,214**  
[13] A1

[51] **Int.Cl. B60B 25/00 (2006.01) B60B 25/22 (2006.01)**

[25] EN

[54] **BOLT TOGETHER WHEEL WITH DEFLATION SYSTEM**

[54] **ROUE BOULONNEE A SYSTEME DE DEGONFLAGE**

[72] HENSEL, LEONARD AUSTIN, US

[71] OTR WHEEL ENGINEERING, INC., US

[85] 2021-09-29

[86] 2020-04-02 (PCT/US2020/026422)

[87] (WO2020/206144)

[30] US (62/829,692) 2019-04-05

## Demandes PCT entrant en phase nationale

[21] **3,140,215**  
[13] A1

[51] **Int.Cl. A61M 25/14 (2006.01) A61M 25/01 (2006.01)**  
[25] EN  
[54] **CATHETER**  
[54] **CATHETER**  
[72] DOYLE, BARRY, AU  
[72] KELSEY, LACHLAN, AU  
[72] SHELVERTON, CAROLINE, AU  
[71] SHELVERTON HOLDINGS PTY LTD, AU  
[85] 2021-11-12  
[86] 2020-05-21 (PCT/AU2020/050497)  
[87] (WO2020/237286)  
[30] AU (2019901780) 2019-05-24

[21] **3,140,216**  
[13] A1

[51] **Int.Cl. G01J 5/10 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR INDICATING TEMPERATURE OF A LIQUID INSIDE A BOTTLE**  
[54] **APPAREIL POUR INDIQUER LA TEMPERATURE D'UN LIQUIDE A L'INTERIEUR D'UNE BOUTEILLE**  
[72] SEWELL, SAMUEL JOHN, AU  
[71] SEWELL INSTRUMENTS PTY LTD, AU  
[85] 2021-11-12  
[86] 2020-05-27 (PCT/AU2020/050531)  
[87] (WO2020/232514)  
[30] AU (2019203533) 2019-05-20

[21] **3,140,217**  
[13] A1

[51] **Int.Cl. A61K 31/5415 (2006.01) A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 31/167 (2006.01) A61K 31/245 (2006.01) A61K 31/445 (2006.01) A61K 31/485 (2006.01) A61P 23/00 (2006.01) A61P 29/00 (2006.01)**  
[25] EN  
[54] **PAIN RELIEVING METHOD**  
[54] **PROCEDE ANALGESIQUE**  
[72] SHEIL, MEREDITH, AU  
[71] ANIMAL ETHICS PTY LTD, AU  
[85] 2021-11-12  
[86] 2020-06-05 (PCT/AU2020/050575)  
[87] (WO2020/248010)  
[30] AU (2019902023) 2019-06-11

[21] **3,140,218**  
[13] A1

[51] **Int.Cl. B01D 53/02 (2006.01) B01J 20/20 (2006.01)**  
[25] EN  
[54] **CATALYZED PARTICULATE FILTER FOR SOOT REMOVAL FROM ENGINE EXHAUST**  
[54] **FILTRE A PARTICULES CATALYSE POUR ELIMINER LA SUIE DE L'ECHAPPEMENT D'UN MOTEUR**  
[72] NOSSOVA, LIUDMILA, CA  
[72] CARAVAGGIO, GIANNI, CA  
[71] HER MAJESTY THE QUEEN IN RIGHT OF CANADA AS REPRESENTED BY THE MINISTER OF NATURAL RESOURCES, CA  
[85] 2021-11-12  
[86] 2020-04-16 (PCT/CA2020/050506)  
[87] (WO2020/257919)  
[30] US (62/865,356) 2019-06-24

[21] **3,140,219**  
[13] A1

[51] **Int.Cl. G01N 1/22 (2006.01) C12Q 1/6806 (2018.01) C12M 1/26 (2006.01) C12Q 1/68 (2018.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR COLLECTING BIOAEROSOLS**  
[54] **SYSTEMES ET PROCEDES DE COLLECTE DE BIOAEROSOLS**  
[72] SALEH, MICHAEL, CA  
[72] WHITE, KRISTINE, CA  
[72] SCOTT, JAMES, CA  
[71] SPORNADO INC., CA  
[85] 2021-11-12  
[86] 2019-12-23 (PCT/CA2019/051901)  
[87] (WO2020/227807)  
[30] US (62/848,441) 2019-05-15

[21] **3,140,220**  
[13] A1

[51] **Int.Cl. H04R 9/06 (2006.01)**  
[25] EN  
[54] **SPEAKER AND TERMINAL DEVICE**  
[54] **HAUT-PARLEUR ET DISPOSITIF TERMINAL**  
[72] JIANG, GUOZHU, CN  
[72] LONG, LIFENG, CN  
[71] VIVO MOBILE COMMUNICATION CO., LTD., CN  
[85] 2021-11-12  
[86] 2020-04-15 (PCT/CN2020/084915)  
[87] (WO2020/228472)  
[30] CN (201910402735.X) 2019-05-15

[21] **3,140,221**  
[13] A1

[51] **Int.Cl. H04W 12/02 (2009.01) G06F 21/62 (2013.01) H04L 9/06 (2006.01)**  
[25] EN  
[54] **A COMPUTER-IMPLEMENTED METHOD OF PERFORMING FEISTEL-NETWORK-BASED BLOCK-CIPHER ENCRYPTION OF PLAINTEXT**  
[54] **PROCEDE MIS EN ŒUVRE PAR ORDINATEUR PERMETTANT D'EFFECTUER UN CHIFFREMENT PAR CHIFFREMENT PAR BLOC BASE SUR UN RESEAU DE FEISTEL DE TEXTE EN CLAIR**  
[72] BOESGAARD, MARTIN STAAL, DK  
[71] PII GUARD APS, DK  
[85] 2021-11-12  
[86] 2020-05-12 (PCT/EP2020/063110)  
[87] (WO2020/229436)  
[30] EP (19174176.8) 2019-05-13

[21] **3,140,222**  
[13] A1

[51] **Int.Cl. C07D 261/04 (2006.01) A01N 43/80 (2006.01) A01P 7/04 (2006.01)**  
[25] EN  
[54] **HIGH-PURITY THERMOSTABLE CRYSTAL FORM OF SUBSTITUTED 3-ISOXAZOLIDINONE COMPOUND, PREPARATION METHOD THEREFOR, AND APPLICATION THEREOF**  
[54] **FORME CRISTALLINE THERMOSTABLE DE HAUTE PURETE DE COMPOSE 3-ISOXAZOLIDINONE SUBSTITUE, SON PROCEDE DE PREPARATION ET SON APPLICATION**  
[72] CHEN, BANGCHI, CN  
[72] GUAN, BAOCHUAN, CN  
[72] SHENG, QIUJU, CN  
[72] ZHANG, HONGWEI, CN  
[72] XU, XIANBO, CN  
[72] ZHANG, YONGLIN, CN  
[72] XU, XIAOYAN, CN  
[72] MU, HAIPING, CN  
[72] ZHANG, ZHUOYA, CN  
[71] ZHEJIANG ZHUJI UNITED CHEMICALS CO., LTD., CN  
[85] 2021-11-12  
[86] 2019-05-13 (PCT/CN2019/086559)  
[87] (WO2020/227875)

## PCT Applications Entering the National Phase

[21] **3,140,223**  
[13] A1

[51] **Int.Cl. G01N 27/416 (2006.01) G01N 27/414 (2006.01)**  
[25] EN  
[54] **DEVICES AND METHODS FOR SELECTIVE DETECTION OF CANNABINOIDS**  
[54] **DISPOSITIFS ET PROCEDES DE DETECTION SELECTIVE DE CANNABINOIDES**  
[72] SHUHENDLER, ADAM, CA  
[72] LESSARD, BENOIT, CA  
[72] HARRIS, CORY, CA  
[72] COMEAU, ZACHARY JOHN, CA  
[72] BOILEAU, NICHOLAS TYLER, CA  
[71] UNIVERSITY OF OTTAWA, CA  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/CA2020/050652)  
[87] (WO2020/232532)  
[30] US (62/849,340) 2019-05-17

[21] **3,140,224**  
[13] A1

[51] **Int.Cl. A61K 8/02 (2006.01) A61K 8/06 (2006.01) A61K 8/25 (2006.01) A61K 8/26 (2006.01) A61K 8/73 (2006.01) A61Q 1/00 (2006.01) A61Q 19/08 (2006.01)**  
[25] EN  
[54] **COSMETIC COMPOSITIONS FOR SOFT-FOCUS**  
[54] **COMPOSITIONS COSMETIQUES POUR FLOU ARTISTIQUE**  
[72] CAO, XIUJUAN, CN  
[72] WANG, LIN, CN  
[71] UNILEVER GLOBAL IP LIMITED, GB  
[85] 2021-11-12  
[86] 2020-05-12 (PCT/EP2020/063136)  
[87] (WO2020/234038)  
[30] CN (PCT/CN2019/087738) 2019-05-21  
[30] EP (19183831.7) 2019-07-02

[21] **3,140,225**  
[13] A1

[51] **Int.Cl. C08L 23/04 (2006.01) C08K 7/22 (2006.01)**  
[25] EN  
[54] **CROSSLINKED POLYMERIC COMPOSITION AND COATED CONDUCTOR**  
[54] **COMPOSITION POLYMERE RETICULEE ET CONDUCTEUR REVETU**  
[72] HE, CHAO, CN  
[72] MIAO, WENKE, CN  
[72] XU, XIANMIN, CN  
[72] ESSEGHIR, MOHAMED, US  
[72] MIAO, XIAOXING, CN  
[72] CHEN, HONGYU, CN  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2021-11-12  
[86] 2019-05-24 (PCT/CN2019/088291)  
[87] (WO2020/237416)

[21] **3,140,226**  
[13] A1

[51] **Int.Cl. B01J 21/18 (2006.01) C07C 59/265 (2006.01) C07C 67/03 (2006.01) C07C 229/08 (2006.01) C10G 3/00 (2006.01)**  
[25] EN  
[54] **CARBON DOTS, METHODS OF MANUFACTURE THEREOF, AND USES THEREOF IN THE PRODUCTION OF BIOFUEL**  
[54] **POINTS DE CARBONE, LEURS PROCEDES DE FABRICATION ET LEURS UTILISATIONS DANS LA PRODUCTION DE BIOCARBURANT**  
[72] MACINA, ALEXIA, CA  
[72] DE MEDEIROS, TAYLINE VIANA, CA  
[72] NACCACHE, RAFIK, CA  
[72] RODRIGUEZ, MIGUEL MARIANO, CA  
[71] VALORBEC, SEC, CA  
[85] 2021-11-12  
[86] 2020-05-19 (PCT/CA2020/050670)  
[87] (WO2020/232542)  
[30] US (62/849,576) 2019-05-17  
[30] US (62/868,677) 2019-06-28  
[30] US (62/896,011) 2019-09-05

[21] **3,140,227**  
[13] A1

[51] **Int.Cl. A61K 31/05 (2006.01) A23K 20/111 (2016.01) A23K 20/121 (2016.01) A23L 33/00 (2016.01) A23L 33/105 (2016.01) A23L 33/16 (2016.01) A61K 31/085 (2006.01) A61K 31/351 (2006.01) A61K 31/7048 (2006.01) A61P 21/00 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS USING A COMBINATION OF CALCIUM AND AT LEAST ONE OF OLEUROPEIN OR METABOLITE THEREOF**  
[54] **COMPOSITIONS ET PROCEDES FAISANT APPEL A UNE COMBINAISON DE CALCIUM ET D'OLEUROPEINE ET/OU D'UN METABOLITE DE CELLE-CI**  
[72] DE MARCHI, UMBERTO, CH  
[72] HORCAJADA, MARIE NOELLE, FR  
[72] FEIGE, JEROME, CH  
[71] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2021-11-12  
[86] 2020-05-13 (PCT/EP2020/063330)  
[87] (WO2020/229539)  
[30] US (62/847,083) 2019-05-13

[21] **3,140,228**  
[13] A1

[51] **Int.Cl. F04B 43/08 (2006.01) A61J 1/20 (2006.01) B65B 3/12 (2006.01) B65B 55/02 (2006.01) F04B 49/06 (2006.01)**  
[25] EN  
[54] **PERISTALTIC PUMP-BASED APPARATUS AND METHOD FOR THE CONTROLLED DISPENSING OF FLUIDS**  
[54] **APPAREIL BASE SUR UNE POMPE PERISTALTIQUE ET PROCEDE DE DISTRIBUTION REGLEE DE FLUIDES**  
[72] CICHY, MARCIN, CA  
[72] GUERRERO, CARLOS ALBERTO DIAZ, CA  
[71] VANRX PHARMASYSTEMS INC., CA  
[85] 2021-11-12  
[86] 2020-06-01 (PCT/CA2020/050749)  
[87] (WO2020/243824)  
[30] US (16/430,383) 2019-06-03



## Demandes PCT entrant en phase nationale

[21] **3,140,229**  
[13] A1

[51] **Int.Cl. A63B 71/12 (2006.01) A63B 24/00 (2006.01)**  
[25] FR  
[54] **SMART SHIN GUARD**  
[54] **PROTEGE-TIBIA INTELLIGENT**  
[72] KAMARA, BAKARY, FR  
[71] VBKAM, FR  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/EP2020/063403)  
[87] (WO2020/229574)  
[30] FR (FR1905051) 2019-05-15

[21] **3,140,230**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61P 31/14 (2006.01) A61P 31/16 (2006.01)**  
[25] EN  
[54] **CO-ADMINISTRATION OF SEASONAL INFLUENZA VACCINE AND AN ADENOVIRUS BASED RESPIRATORY SYNCYTIAL VIRUS VACCINE**  
[54] **CO-ADMINISTRATION D'UN VACCIN CONTRE LA GRIPPE SAISONNIERE ET VACCIN CONTRE LE VIRUS RESPIRATOIRE SYNCYTIAL A BASE D'ADENOVIRUS**  
[72] CALLENDRET, BENOIT CHRISTOPHE STEPHAN, NL  
[72] SADOFF, JERALD C., NL  
[72] DE PAEPE, ELS, BE  
[71] JANSSEN VACCINES & PREVENTION B.V., NL  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/EP2020/063406)  
[87] (WO2020/229577)  
[30] US (62/848,036) 2019-05-15

[21] **3,140,231**  
[13] A1

[51] **Int.Cl. C07D 409/12 (2006.01) A61K 31/381 (2006.01) A61K 31/397 (2006.01) A61K 31/4025 (2006.01) A61K 31/4525 (2006.01) A61K 31/496 (2006.01) A61K 31/5377 (2006.01) A61P 1/00 (2006.01) A61P 1/04 (2006.01) A61P 11/00 (2006.01) A61P 11/06 (2006.01) A61P 13/02 (2006.01) A61P 17/04 (2006.01) A61P 29/00 (2006.01) C07D 343/00 (2006.01) C07D 407/12 (2006.01)**  
[25] EN  
[54] **3-ARYLOXYL-3-FIVE-MEMBERED HETEROARYL-PROPYLAMINE COMPOUND, AND CRYSTAL FORM AND USE THEREOF**  
[54] **COMPOSE PROPYLAMINE HETEROARYLE 3-ARYLOXYL-3 A CINQ CHAINONS, FORME CRISTALLINE ET UTILISATION ASSOCIEE**  
[72] WANG, YOUXIN, CN  
[72] ZHANG, LINGLING, CN  
[72] DING, QIANG, CN  
[71] SHANGHAI LEADO PHARMATECH CO. LTD., CN  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/CN2020/090354)  
[87] (WO2020/228789)  
[30] CN (201910411311.X) 2019-05-16  
[30] CN (PCT/CN2019/100846) 2019-08-15  
[30] CN (202010093736.3) 2020-02-14

[21] **3,140,232**  
[13] A1

[51] **Int.Cl. C01D 5/14 (2006.01) C01B 17/62 (2006.01) C30B 7/08 (2006.01) C30B 29/46 (2006.01)**  
[25] EN  
[54] **PROCESS AND SYSTEM FOR PRODUCING SODIUM HYDROSULFITE CRYSTALS**  
[54] **PROCEDE ET SYSTEME DE PRODUCTION DE CRISTAUX D'HYDROSULFITE DE SODIUM**  
[72] DOUVILLE, PATRICE, CA  
[71] HYDRO TECHNOLOGIES (CANADA) INC., CA  
[85] 2021-11-12  
[86] 2020-06-04 (PCT/CA2020/050769)  
[87] (WO2020/248045)  
[30] US (62/859,381) 2019-06-10

[21] **3,140,233**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) C12N 15/113 (2010.01) A61P 21/04 (2006.01) A61P 37/00 (2006.01)**  
[25] EN  
[54] **NUCLEIC ACID, PHARMACEUTICAL COMPOSITION AND CONJUGATE, PREPARATION METHOD AND USE**  
[54] **ACIDE NUCLEIQUE, COMPOSITION ET CONJUGUE PHARMACEUTIQUES, LEUR PROCEDE DE PREPARATION ET LEUR UTILISATION**  
[72] ZHANG, HONGYAN, CN  
[72] GAO, SHAN, CN  
[72] KANG, DAIWU, CN  
[71] SUZHOU RIBO LIFE SCIENCE CO., LTD., CN  
[85] 2021-11-12  
[86] 2020-05-21 (PCT/CN2020/091624)  
[87] (WO2020/238763)  
[30] CN (201910440575.8) 2019-05-24

[21] **3,140,234**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61P 31/14 (2006.01)**  
[25] EN  
[54] **PROPHYLACTIC TREATMENT OF RESPIRATORY SYNCYTIAL VIRUS INFECTION WITH AN ADENOVIRUS BASED VACCINE**  
[54] **TRAITEMENT PROPHYLACTIQUE D'UNE INFECTION PAR LE VIRUS RESPIRATOIRE SYNCYTIAL AVEC UN VACCIN A BASE D'ADENOVIRUS**  
[72] CALLENDRET, BENOIT CHRISTOPHE STEPHAN, NL  
[72] SADOFF, JERALD C., NL  
[72] DE PAEPE, ELS, BE  
[71] JANSSEN VACCINES & PREVENTION B.V., NL  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/EP2020/063408)  
[87] (WO2020/229579)  
[30] US (62/848,186) 2019-05-15

## PCT Applications Entering the National Phase

[21] **3,140,235**  
[13] A1

[51] **Int.Cl. G01N 33/48 (2006.01) G01N 1/42 (2006.01) G01N 33/49 (2006.01)**  
[25] EN  
[54] **METHODS FOR DETERMINING BLOOD GAS OR METABOLIC PARAMETERS**  
[54] **PROCEDES DE DETERMINATION DE PARAMETRES DE GAZ SANGUIN OU METABOLIQUES**  
[72] HANSEN, THOMAS STEEN, DK  
[72] HOLLESEN, IDA, DK  
[72] BURKHARDT, MELANIE ANDREA, DK  
[71] RADIOMETER MEDICAL APS, DK  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/EP2020/063409)  
[87] (WO2020/229580)  
[30] DK (PA 2019 00579) 2019-05-14

[21] **3,140,236**  
[13] A1

[51] **Int.Cl. A23L 3/3418 (2006.01) A23L 2/44 (2006.01) A23L 2/54 (2006.01) A23L 3/00 (2006.01) A23L 3/3409 (2006.01) B65B 3/00 (2006.01) B65B 7/28 (2006.01) B65B 25/00 (2006.01) B65B 31/00 (2006.01) B65B 31/04 (2006.01) B65B 61/20 (2006.01) B65D 1/00 (2006.01) B67C 3/22 (2006.01)**  
[25] EN  
[54] **METHOD AND PACKAGING FOR PRESERVING A FOODSTUFF IN A HYDROGEN ATMOSPHERE**  
[54] **PROCEDE ET EMBALLAGE POUR CONSERVER UN PRODUIT ALIMENTAIRE DANS UNE ATMOSPHERE D'HYDROGENE**  
[72] POHLHAUSEN, MARKUS, DE  
[72] SUTER, DAVID, CH  
[71] VIAWA GMBH, DE  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/EP2020/063418)  
[87] (WO2020/229583)  
[30] DE (10 2019 112 844.7) 2019-05-16

[21] **3,140,238**  
[13] A1

[51] **Int.Cl. B65D 43/00 (2006.01) A61L 9/04 (2006.01) B01D 53/04 (2006.01) B01D 53/26 (2006.01) B65D 51/16 (2006.01)**  
[25] EN  
[54] **RECEPTACLE FOR HOLDING AN ACTIVE SUBSTANCE AND CORRESPONDING CLOSURE AND CONTAINER WITH SUCH A RECEPTACLE**  
[54] **RECIPIENT DESTINE A CONTENIR UNE SUBSTANCE ACTIVE AINSI QUE FERMETURE ET CONTENANT CORRESPONDANTS DOTES DUDIT RECIPIENT**  
[72] LEBON, JACQUY, FR  
[72] LOGEL, VALERE, FR  
[72] BOIS, DOMINIQUE, FR  
[71] AIRNOV, INC., US  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/EP2020/063467)  
[87] (WO2020/229601)  
[30] EP (19305616.5) 2019-05-14

[21] **3,140,239**  
[13] A1

[51] **Int.Cl. A01K 61/60 (2017.01) A01K 61/10 (2017.01)**  
[25] EN  
[54] **CAGE FOR FISH FARMING**  
[54] **CAGE POUR PISCICULTURE**  
[72] NYBO, GUNNAR, NO  
[71] FIIZK CLOSED SYSTEMS AS, NO  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/EP2020/063539)  
[87] (WO2020/229631)  
[30] NO (20190612) 2019-05-15

[21] **3,140,241**  
[13] A1

[51] **Int.Cl. B61G 11/00 (2006.01) B61G 7/00 (2006.01) B61G 7/10 (2006.01) B61G 9/04 (2006.01) B61G 9/06 (2006.01) B61G 11/18 (2006.01)**  
[25] EN  
[54] **A RAILCAR ENERGY ABSORPTION SYSTEM AND RELATED METHOD FOR ABSORBING ENERGY ON A RAILCAR**  
[54] **SYSTEME D'ABSORPTION D'ENERGIE DE VEHICULE FERROVIAIRE ET PROCEDE ASSOCIE POUR ABSORBER DE L'ENERGIE SUR UN VEHICULE FERROVIAIRE**  
[72] KRIES, ANDY R., US  
[72] SCHOEDL, ERICH A., US  
[72] HAYMOND, BRADLEY J., US  
[72] JAMES, KENNETH A., US  
[71] MINER ENTERPRISES, INC., US  
[85] 2021-11-12  
[86] 2020-04-29 (PCT/US2020/030361)  
[87] (WO2020/247120)  
[30] US (62/857,560) 2019-06-05

[21] **3,140,243**  
[13] A1

[51] **Int.Cl. C08F 120/36 (2006.01) C08F 220/34 (2006.01)**  
[25] EN  
[54] **POLYMER WITH UPPER CRITICAL SOLUTION TEMPERATURE IN AQUEOUS SOLUTION**  
[54] **POLYMERE AYANT UNE TEMPERATURE DE SOLUTION CRITIQUE SUPERIEURE DANS UNE SOLUTION AQUEUSE**  
[72] MONTEIRO, MICHAEL, US  
[72] HOSSAIN, DALOAR, US  
[71] THE BOEING COMPANY, US  
[85] 2021-11-12  
[86] 2020-05-06 (PCT/US2020/031690)  
[87] (WO2020/231703)  
[30] US (62/848,132) 2019-05-15  
[30] US (16/867,955) 2020-05-06

## Demandes PCT entrant en phase nationale

[21] **3,140,244**  
[13] A1

[51] **Int.Cl. C12N 15/54 (2006.01) C12Q 1/6844 (2018.01) C12Q 1/6869 (2018.01) C12N 9/12 (2006.01) C12P 19/34 (2006.01)**

[25] EN

[54] **PHI29 DNA POLYMERASE MUTANTS WITH IMPROVED PRIMER RECOGNITION**

[54] **MUTANTS D'ADN POLYMERASE DE PHI29 A RECONNAISSANCE D'AMORCE AMELIOREE**

[72] BLANCO DAVILA, LUIS, ES  
[72] PICHER SERANTES, ANGEL JOAQUIN, ES

[71] 4BASEBIO SL, ES

[85] 2021-11-12

[86] 2020-05-15 (PCT/EP2020/063740)

[87] (WO2020/234200)

[30] US (62/849,252) 2019-05-17

[21] **3,140,245**  
[13] A1

[51] **Int.Cl. A47F 3/04 (2006.01) F25D 23/02 (2006.01)**

[25] EN

[54] **REFRIGERATORS**

[54] **REFRIGERATEURS**

[72] MCANDREW, PAUL, GB

[71] AEROFOIL ENERGY LIMITED, GB

[85] 2021-11-12

[86] 2020-05-14 (PCT/GB2020/051182)

[87] (WO2020/229832)

[30] GB (1906935.0) 2019-05-16

[21] **3,140,246**  
[13] A1

[51] **Int.Cl. A61M 37/00 (2006.01) A61N 1/30 (2006.01)**

[25] EN

[54] **IONTOPHORESIS ADMINISTRATION DEVICE**

[54] **DISPOSITIF D'ADMINISTRATION PAR IONTOPHORESE**

[72] YANG, FENG, CN

[71] SHANGHAI FUTAI TECHNOLOGY CO., LTD., CN

[85] 2021-11-12

[86] 2020-06-02 (PCT/CN2020/093888)

[87] (WO2020/224664)

[30] CN (201910370935.1) 2019-05-06

[21] **3,140,247**  
[13] A1

[51] **Int.Cl. H01M 10/6569 (2014.01) H01M 10/617 (2014.01) H01M 10/653 (2014.01) H01M 50/24 (2021.01) H02J 7/00 (2006.01) H02J 15/00 (2006.01)**

[25] EN

[54] **TEMPERATURE CONTROLLED BATTERY PACK BATH TUB (BPBT), AND A METHOD OF PROTECTING A LARGE BATTERY PACK FROM THERMAL STRESSES**

[54] **CUVE DE BAIN DE BLOC-BATTERIE (BPBT) REGULEE EN TEMPERATURE, ET PROCEDE DE PROTECTION D'UN GRAND BLOC-BATTERIE CONTRE DES CONTRAINTES THERMIQUES**

[72] GUPTA, SANJAY, GB

[71] GUPTA, SANJAY, GB

[85] 2021-11-12

[86] 2020-05-27 (PCT/GB2020/000052)

[87] (WO2020/240148)

[30] GB (1907480.6) 2019-05-28

[30] GB (1907486.3) 2019-05-28

[30] GB (1907490.5) 2019-05-28

[30] GB (1907492.1) 2019-05-28

[30] GB (1907497.0) 2019-05-28

[30] GB (1907504.3) 2019-05-28

[21] **3,140,248**  
[13] A1

[51] **Int.Cl. A61K 8/72 (2006.01) A61Q 11/00 (2006.01)**

[25] EN

[54] **LEAVE-ON ORAL CARE COMPOSITIONS**

[54] **COMPOSITIONS DE SOINS BUCCAUX SANS RINCAGE**

[72] STRAND, ROSS, SG

[72] SU, YANG, CN

[72] SHI, YUNMING, CN

[72] SHANMUGAM, THANIGAIVEL, CN

[72] WANG, GUANNAN, CN

[72] LI, XIAOXIAO, CN

[71] THE PROCTER & GAMBLE COMPANY, US

[85] 2021-11-12

[86] 2020-06-11 (PCT/CN2020/095575)

[87] (WO2020/249040)

[30] CN (PCT/CN2019/091294) 2019-06-14

[21] **3,140,249**  
[13] A1

[51] **Int.Cl. C12N 5/0793 (2010.01) C12N 5/00 (2006.01)**

[25] EN

[54] **TRANSPLANTABLE CELL COMPOSITION COMPRISING EUKARYOTIC CELLS IN A NANOFIBRILLAR CELLULOSE HYDROGEL, METHOD FOR PREPARING THEREOF AND USE OF NANOFIBRILLAR CELLULOSE**

[54] **COMPOSITION DE CELLULES TRANSPLANTABLES COMPRENANT DES CELLULES EUCARYOTES DANS UN HYDROGEL DE CELLULOSE NANOFIBRILLAIRE, SON PROCEDE DE PREPARATION ET UTILISATION DE CELLULOSE NA NOFIBRILLAIRE**

[72] NUOPPONEN, MARKUS, FI

[72] KIURU, TONY, FI

[71] UPM-KYMMENE CORPORATION, FI

[85] 2021-11-12

[86] 2019-06-24 (PCT/FI2019/050488)

[87] (WO2020/260741)

[21] **3,140,250**  
[13] A1

[51] **Int.Cl. A61K 8/9789 (2017.01) A61K 8/34 (2006.01) A61K 8/365 (2006.01) A61K 8/44 (2006.01) A61K 8/60 (2006.01) A61K 8/73 (2006.01) A61P 1/02 (2006.01) A61Q 11/00 (2006.01)**

[25] EN

[54] **LEAVE-ON ORAL CARE COMPOSITIONS**

[54] **COMPOSITIONS DE SOINS BUCCO-DENTAIRES SANS RINCAGE**

[72] STRAND, ROSS, SG

[72] SU, YANG, CN

[72] SHI, YUNMING, CN

[72] LI, XIAOXIAO, CN

[72] WANG, GUANNAN, CN

[71] THE PROCTER & GAMBLE COMPANY, US

[85] 2021-11-12

[86] 2020-06-11 (PCT/CN2020/095578)

[87] (WO2020/249042)

[30] CN (PCT/CN2019/091325) 2019-06-14

## PCT Applications Entering the National Phase

[21] **3,140,251**  
[13] A1

[51] **Int.Cl. A23C 3/027 (2006.01) A23L 2/46 (2006.01) A23L 3/00 (2006.01) A23L 3/02 (2006.01) A23L 3/04 (2006.01) A23L 3/358 (2006.01) C02F 1/00 (2006.01) C02F 1/44 (2006.01) C02F 1/50 (2006.01) C02F 1/76 (2006.01) C02F 5/14 (2006.01) C02F 9/00 (2006.01) C12H 1/00 (2006.01)**

[25] EN

[54] **METHOD FOR OPERATING A PASTEURIZING DEVICE**

[54] **PROCEDE POUR FAIRE FONCTIONNER UN DISPOSITIF DE PASTEURISATION**

[72] CONCIN, ROLAND, AT

[72] RINDERER, CHRISTIAN, AT

[72] HANS, KLEMENS, AT

[72] EDER, HARALD, AT

[72] THONHAUSER, PHILIP, AT

[72] HERZOG, DANIEL, AT

[71] RED BULL GMBH, AT

[85] 2021-11-12

[86] 2020-06-18 (PCT/EP2020/066998)

[87] (WO2020/254511)

[30] EP (19180981.3) 2019-06-18

[21] **3,140,253**  
[13] A1

[51] **Int.Cl. F01K 13/02 (2006.01) F01K 11/02 (2006.01) F01K 23/10 (2006.01) F22B 35/10 (2006.01) F22B 37/26 (2006.01) F22D 11/00 (2006.01)**

[25] EN

[54] **POWER PLANT AND WATER CLEANING METHOD FOR A ONCE-THROUGH WATER/STEAM CYCLE OF A POWER PLANT**

[54] **CENTRALE ELECTRIQUE ET PROCEDE DE NETTOYAGE D'EAU POUR UN CYCLE EAU/VAPEUR A PASSAGE UNIQUE D'UNE CENTRALE ELECTRIQUE**

[72] DYLLUS, RONALD, DE

[72] ROP, PETER SIMON, NL

[72] VOIT, KAI, DE

[71] SIEMENS ENERGY GLOBAL GMBH & CO. KG, DE

[85] 2021-11-12

[86] 2020-02-17 (PCT/EP2020/054074)

[87] (WO2020/229001)

[30] EP (19174635.3) 2019-05-15

[21] **3,140,267**  
[13] A1

[51] **Int.Cl. A61K 38/00 (2006.01) A61K 31/5575 (2006.01) A61K 31/565 (2006.01) A61P 15/08 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR INCREASING REPRODUCTION PERFORMANCE IN NON-HUMAN MAMMALS USING RECOMBINANT LUTEINIZING HORMONE**

[54] **COMPOSITIONS ET METHODES POUR AUGMENTER LA PERFORMANCE DE REPRODUCTION CHEZ DES MAMMIFERES NON HUMAINS A L'AIDE D'UNE HORMONE LUTEINISANTE RECOMBINANTE**

[72] VALENZA, ALESSIO, FR

[72] SOUZA, ALEXANDRE, FR

[72] COLGIN, MARK, FR

[71] CEVA SANTE ANIMALE, FR

[85] 2021-11-12

[86] 2020-05-18 (PCT/EP2020/063799)

[87] (WO2020/229699)

[30] EP (19305630.6) 2019-05-16

[21] **3,140,252**  
[13] A1

[51] **Int.Cl. A61K 8/72 (2006.01) A61Q 11/00 (2006.01)**

[25] EN

[54] **LEAVE-ON ORAL CARE COMPOSITIONS**

[54] **COMPOSITIONS DE SOINS BUCCO-DENTAIRE SANS RINCAGE**

[72] STRAND, ROSS, SG

[72] SU, YANG, CN

[72] SHI, YUNMING, CN

[72] SHANMUGAM, THANIGAIVEL, CN

[72] LI, XIAOWEI, CN

[72] WANG, GUANNAN, CN

[71] THE PROCTER & GAMBLE COMPANY, US

[85] 2021-11-12

[86] 2020-06-11 (PCT/CN2020/095595)

[87] (WO2020/249045)

[30] CN (PCT/CN2019/091272) 2019-06-14

[21] **3,140,255**  
[13] A1

[51] **Int.Cl. C12N 7/02 (2006.01) C12N 15/86 (2006.01)**

[25] EN

[54] **EFFICIENT IMPURITY REMOVAL USING A DIAFILTRATION PROCESS**

[54] **ELIMINATION EFFICACE D'IMPURETES A L'AIDE D'UN PROCEDE DE DIAFILTRATION**

[72] KO, HSU-FENG, US

[72] BHATIA, RAVINDER, US

[72] KRISHNATHU, SOUMYA MOHANAN, US

[72] YANNONE, VAISHALI, US

[72] LANDAU, JEFFREY EDWARD, US

[72] DIEPENBROEK, BAS, NL

[72] ERKENS, GUUS BJORN, NL

[72] MEULENBROEK, ELISABETH, NL

[72] ALAZI, FERAS NACHMI, NL

[71] JANSSEN BIOTECH, INC., US

[85] 2021-11-12

[86] 2020-04-21 (PCT/IB2020/053775)

[87] (WO2020/229906)

[30] US (62/847,420) 2019-05-14

[21] **3,140,269**  
[13] A1

[51] **Int.Cl. C12N 5/074 (2010.01) C12N 5/071 (2010.01) C07K 14/705 (2006.01) C07K 14/78 (2006.01)**

[25] EN

[54] **IMPROVED CULTURE METHOD USING INTEGRIN AGONIST**

[54] **PROCEDE DE CULTURE AMELIORE UTILISANT UN AGONISTE D'INTEGRINE**

[72] DE LAU, WILLIBRORDUS BAREND MARIA, NL

[72] CLEVERS, JOHANNES CAROLUS, NL

[71] KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN, NL

[85] 2021-11-12

[86] 2020-05-18 (PCT/EP2020/063855)

[87] (WO2020/234250)

[30] GB (1906978.0) 2019-05-17

## Demandes PCT entrant en phase nationale

[21] **3,140,271**  
[13] A1

[51] **Int.Cl. A61N 1/05 (2006.01) A61N 1/36 (2006.01) A61N 1/372 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR ELECTRICAL NERVE STIMULATION**  
[54] **PROCEDE ET SYSTEME DE NEUROSTIMULATION ELECTRIQUE**  
[72] TSUKRAN, ROI MOSHE, IL  
[71] NYXOAH SA, BE  
[85] 2021-11-12  
[86] 2020-05-18 (PCT/EP2020/063859)  
[87] (WO2020/234253)  
[30] US (62/850,077) 2019-05-20

[21] **3,140,275**  
[13] A1

[51] **Int.Cl. D01F 13/02 (2006.01)**  
[25] EN  
[54] **PROCESS AND DEVICE FOR REGENERATING A SOLVENT FOR CELLULOSE FROM A SPINNING PROCESS**  
[54] **PROCEDE ET DISPOSITIF POUR REGENERER UN SOLVANT DE CELLULOSE ISSU D'UN PROCESSUS DE FILAGE**  
[72] ZIKELI, STEFAN, AT  
[72] ECKER, FRIEDRICH, AT  
[72] ZAUNER, PHILIPP, AT  
[71] AUROTEC GMBH, AT  
[85] 2021-11-12  
[86] 2020-05-20 (PCT/EP2020/064019)  
[87] (WO2020/234330)  
[30] EP (19175647.7) 2019-05-21

[21] **3,140,276**  
[13] A1

[51] **Int.Cl. H01B 13/32 (2006.01) H01B 7/288 (2006.01) H01B 7/14 (2006.01) H01B 9/00 (2006.01)**  
[25] EN  
[54] **HVDC POWER CABLE WITH WATER-BLOCKING CAPABILITY**  
[54] **CABLE ELECTRIQUE CCHT A FONCTION DE BLOCAGE DE L'EAU**  
[72] GUSTAFSSON, KRISTIAN, SE  
[72] ABBASI, AMIRHOSSEIN, SE  
[72] JOHANSSON, TOMMY, SE  
[71] NKT HV CABLES AB, SE  
[85] 2021-11-12  
[86] 2020-05-20 (PCT/EP2020/064139)  
[87] (WO2020/234391)  
[30] EP (19175461.3) 2019-05-20

[21] **3,140,278**  
[13] A1

[51] **Int.Cl. B26D 7/18 (2006.01)**  
[25] EN  
[54] **TOOL SET FOR MANUFACTURING ADHESIVE PATCHES, METHOD OF MANUFACTURING AN ADHESIVE PATCH AND ADHESIVE LAYERING**  
[54] **ENSEMBLE D'OUTILS POUR LA FABRICATION DE TIMBRES ADHESIFS, PROCEDE DE FABRICATION D'UN TIMBRE ADHESIF ET STRATIFICATION ADHESIVE**  
[72] BEE, MARKUS, DE  
[72] GALLINGER, HELENA, DE  
[72] SAIFERT, ALEXANDER, DE  
[72] WEBER-STEBLIWEZ, ANDREAS, DE  
[72] SCHLOGEL, GEORG, DE  
[72] NISHIURA, AKIO, JP  
[72] SASAKI, AKINORI, JP  
[72] GOTO, MASAOKI, JP  
[71] LTS LOHMANN THERAPIE-SYSTEME AG, DE  
[71] ONO PHARMACEUTICAL CO. LTD., JP  
[71] KM TRANSDERM LTD., JP  
[85] 2021-11-12  
[86] 2020-05-26 (PCT/EP2020/064527)  
[87] (WO2020/239738)  
[30] EP (19176758.1) 2019-05-27

[21] **3,140,280**  
[13] A1

[51] **Int.Cl. A01N 63/22 (2020.01) C07K 14/32 (2006.01) C12N 1/20 (2006.01) C12N 1/36 (2006.01) C12N 9/16 (2006.01) C12N 15/01 (2006.01)**  
[25] EN  
[54] **COMPOSITION COMPRISING BIOFILM FORMING BACILLUS**  
[54] **COMPOSITION COMPRENANT UN BACILLUS FORMANT UN BIOFILM**  
[72] CUEVAS, PATRICIA DOMINGUEZ, DK  
[72] NEVES, RUTE, DK  
[72] AZEVEDO, RAQUEL, DK  
[72] MOELBAK, LARS, DK  
[72] FIMOIGNARI, LORENZO, DK  
[71] CHR. HANSEN A/S, DK  
[85] 2021-11-12  
[86] 2020-05-28 (PCT/EP2020/064892)  
[87] (WO2020/239936)  
[30] EP (19177378.7) 2019-05-29

[21] **3,140,281**  
[13] A1

[51] **Int.Cl. F27D 7/00 (2006.01) C10L 9/08 (2006.01) F23G 5/027 (2006.01) F23G 5/04 (2006.01) F27B 5/00 (2006.01)**  
[25] EN  
[54] **TORREFACTION REACTOR AND PROCESS**  
[54] **REACTEUR ET PROCEDE DE TORREFACTION**  
[72] JOSHI, YASH, IN  
[72] KRISHNAMURTHY, EASWARAN, IN  
[71] TORRGREEN B.V., NL  
[85] 2021-11-12  
[86] 2020-06-05 (PCT/EP2020/065597)  
[87] (WO2020/245337)  
[30] IN (201941022657) 2019-06-07  
[30] NL (2023553) 2019-07-23  
[30] NL (2023554) 2019-07-23  
[30] NL (2023555) 2019-07-23

[21] **3,140,282**  
[13] A1

[51] **Int.Cl. B29C 49/48 (2006.01) B29C 49/06 (2006.01) B29C 49/36 (2006.01)**  
[25] EN  
[54] **SUPPORT APPARATUS FOR SUPPORTING AT LEAST ONE NECK MOLD OF A CONTAINER IN AN INJECTION BLOW MOLDING MACHINE**  
[54] **APPAREIL DE SUPPORT POUR SUPPORTER AU MOINS UN MOULE DE GOULOT D'UN CONTENANT DANS UNE MACHINE DE MOULAGE PAR INJECTION-SOUFFLAGE**  
[72] CORAN, MASSIMO, IT  
[72] FRARE, MARCO, IT  
[72] ZOPPAS, MATTEO, IT  
[71] S.I.P.A. SOCIETA' INDUSTRIALIZZAZIONE PROGETTAZIONE E AUTOMAZIONE S.P.A., IT  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/IB2020/054559)  
[87] (WO2020/234699)  
[30] IT (102019000006961) 2019-05-17

## PCT Applications Entering the National Phase

[21] <b>3,140,285</b> [13] A1	[21] <b>3,140,286</b> [13] A1	[21] <b>3,140,291</b> [13] A1
[51] <b>Int.Cl. A61K 31/711 (2006.01) A61P 9/10 (2006.01) A61P 21/00 (2006.01) A61P 25/28 (2006.01)</b>	[51] <b>Int.Cl. F04C 14/24 (2006.01) F01M 1/16 (2006.01) F04C 2/344 (2006.01) F04C 14/22 (2006.01)</b>	[51] <b>Int.Cl. A61K 47/68 (2017.01) A61K 31/337 (2006.01) A61P 35/00 (2006.01)</b>
[25] EN	[25] EN	[25] FR
[54] <b>TREATMENT OF TLR-4 MEDIATED DISEASES AND CONDITIONS WITH APTAMERS TARGETING TLR-4</b>	[54] <b>SPOOL VALVE USED IN A VARIABLE VANE PUMP</b>	[54] <b>ADC FOR A TREATMENT CONCOMITANT WITH OR SUBSEQUENT TO DOCETAXEL</b>
[54] <b>TRAITEMENT DE MALADIES ET D'ETATS MEDIES PAR TLR-4 AVEC DES APTAMERES CIBLANT TLR-4</b>	[54] <b>DISTRIBUTEUR A TIROIR UTILISE DANS UNE POMPE A PALETTES VARIABLE</b>	[54] <b>ADC POUR UN TRAITEMENT CONCOMITANT OU POSTERIEUR AU DOCETAXEL</b>
[72] SEGARRA DE LA PENA, DAVID, ES	[72] MORTON, PAUL, CA	[72] JOUHANNEAUD, ALEXANDRA, FR
[72] BOSCA GOMAR, LISARDO, ES	[72] HUGHES, MATTHEW TYLER, CA	[72] GOETSCH, LILIANE, FR
[72] LIZASOAIN HERNANDEZ, IGNACIO, ES	[72] CHAN, THERESA KAM LUN, CA	[71] PIERRE FABRE MEDICAMENT, FR
[72] DE CASTRO SOUBRIET, FERNANDO, ES	[72] SY, MICHAEL BENJAMIN, CA	[85] 2021-11-05
[72] ZARAGOZA, CARLOS, ES	[71] STACKPOLE INTERNATIONAL ENGINEERED PRODUCTS, LTD., CA	[86] 2020-05-06 (PCT/EP2020/062520)
[72] HERNANDEZ JIMENEZ, MACARENA, ES	[85] 2021-11-12	[87] (WO2020/225282)
[72] PINEIRO DEL RIO, DAVID, ES	[86] 2020-05-19 (PCT/IB2020/054733)	[30] EP (19305578.7) 2019-05-06
[72] FERNANDEZ GOMEZ, BEATRIZ, ES	[87] (WO2020/234765)	
[72] MORO SANCHEZ, MARIA ANGELES, ES	[30] US (62/850,074) 2019-05-20	[21] <b>3,140,319</b> [13] A1
[72] PEREZ RODRIGUEZ, DIEGO, ES		[51] <b>Int.Cl. B01D 21/26 (2006.01) A61M 1/36 (2006.01)</b>
[72] ZARABOZO LEAL, MARIA EUGENIA, ES	[21] <b>3,140,290</b> [13] A1	[25] EN
[71] APTATARGETS, S.L., ES	[51] <b>Int.Cl. A61K 31/05 (2006.01) A61K 31/192 (2006.01) A61K 31/353 (2006.01) A61P 35/00 (2006.01)</b>	[54] <b>A METHOD TO MANUFACTURE A COMPOSITION COMPRISING PLATELET-RICH PLASMA, AN APPARATUS FOR CENTRIFUGATION AND A KIT UTILISABLE FOR ACTUATING THE METHOD, THE COMPOSITION, AND USE OF THE COMPOSITION</b>
[85] 2021-11-12	[25] EN	[54] <b>PROCEDE DE FABRICATION D'UNE COMPOSITION COMPRENANT DU PLASMA RICHE EN PLAQUETTES, APPAREIL DE CENTRIFUGATION ET KIT UTILISABLE POUR LA MISE EN OEUVRE DU PROCEDE, COMPOSITION ET UTILISATION DE LA COMPOSITION</b>
[86] 2020-05-16 (PCT/IB2020/054655)	[54] <b>CANNABINOIDS AND USES THEREOF</b>	[54] <b>PROCEDE DE FABRICATION D'UNE COMPOSITION COMPRENANT DU PLASMA RICHE EN PLAQUETTES, APPAREIL DE CENTRIFUGATION ET KIT UTILISABLE POUR LA MISE EN OEUVRE DU PROCEDE, COMPOSITION ET UTILISATION DE LA COMPOSITION</b>
[87] (WO2020/230109)	[54] <b>CANNABINOIDES ET UTILISATIONS ASSOCIEES</b>	[54] <b>PROCEDE DE FABRICATION D'UNE COMPOSITION COMPRENANT DU PLASMA RICHE EN PLAQUETTES, APPAREIL DE CENTRIFUGATION ET KIT UTILISABLE POUR LA MISE EN OEUVRE DU PROCEDE, COMPOSITION ET UTILISATION DE LA COMPOSITION</b>
[30] US (62/849,068) 2019-05-16	[72] MEIRI, DAVID, IL	[72] DELLA RAGIONE, RICCARDO, IT
[30] US (62/849,072) 2019-05-16	[72] BESSER, ELAZAR, IL	[72] MENOZZI, VALENTINA, IT
[30] EP (19382425) 2019-05-27	[72] LOURIA-HAYON, IGAL, IL	[72] MICHELANGELI, ALICE, IT
[30] EP (19382424) 2019-05-27	[72] BERMAN, PAULA, IL	[71] PROMETHEUS S.R.L., IT
	[72] LEWITUS, GIL MOSHE, IL	[85] 2021-11-12
	[72] BRODAY, LIMOR, IL	[86] 2020-05-13 (PCT/IB2020/054534)
	[71] TECHNION RESEARCH & DEVELOPMENT FOUNDATION LIMITED, IL	[87] (WO2020/230055)
	[71] RAMOT AT TEL-AVIV UNIVERSITY LTD., IL	[30] IT (102019000006867) 2019-05-15
	[85] 2021-11-12	
	[86] 2020-05-17 (PCT/IL2020/050538)	
	[87] (WO2020/230145)	
	[30] US (62/848,695) 2019-05-16	

## Demandes PCT entrant en phase nationale

[21] **3,140,360**  
[13] A1

[51] **Int.Cl. A61K 31/4155 (2006.01) A61K 31/395 (2006.01) A61K 31/5355 (2006.01) C07D 413/14 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **COMBINATION THERAPIES WITH BISPECIFIC ANTI-EGFR/C-MET ANTIBODIES AND 3RD GENERATION EGFR TYROSINE KINASE INHIBITORS**

[54] **POLYTHERAPIES AVEC DES ANTICORPS ANTI-EGFR/C-MET BISPECIFIQUES ET DES INHIBITEURS DE TYROSINE KINASE EGFR DE TROISIEME GENERATION**

[72] LAQUERRE, SYLVIE, US  
[72] LORENZI, MATTHEW, US  
[72] MOORES, SHERI, US  
[71] JANSSEN BIOTECH, INC., US  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/IB2020/054594)  
[87] (WO2020/230091)  
[30] US (62/847,605) 2019-05-14

[21] **3,140,361**  
[13] A1

[51] **Int.Cl. C04B 7/43 (2006.01) B01D 53/62 (2006.01) F27B 7/20 (2006.01) F27B 7/38 (2006.01) F27D 17/00 (2006.01)**

[25] EN

[54] **CALCINER USING RECIRCULATED GASES**

[54] **CALCINATEUR UTILISANT DES GAZ RECYCLES**

[72] BITTNER, JEFFREY, US  
[72] MAUST, CONNOR, US  
[72] KOHL, JOZEF, US  
[71] CARMEUSE NORTH AMERICA, US  
[85] 2021-11-12  
[86] 2020-05-13 (PCT/US2020/032629)  
[87] (WO2020/232091)  
[30] US (62/846,950) 2019-05-13  
[30] US (62/954,816) 2019-12-30

[21] **3,140,362**  
[13] A1

[51] **Int.Cl. G06F 16/2453 (2019.01) G06F 16/901 (2019.01) G06F 17/16 (2006.01)**

[25] EN

[54] **METHODS, SYSTEMS, AND MEDIA FOR RESOLVING GRAPH DATABASE QUERIES**

[54] **PROCEDES, SYSTEMES ET SUPPORTS DE RESOLUTION D'INTERROGATIONS DE BASE DE DONNEES DE GRAPHIQUES**

[72] LIPMAN, ROI, IL  
[71] REDIS LTD, IL  
[85] 2021-11-12  
[86] 2020-04-06 (PCT/IL2020/050413)  
[87] (WO2020/230116)  
[30] US (62/847,211) 2019-05-13  
[30] US (62/854,316) 2019-05-29  
[30] US (16/454,993) 2019-06-27

[21] **3,140,363**  
[13] A1

[51] **Int.Cl. B64C 39/02 (2006.01) E02F 3/28 (2006.01) E02F 9/28 (2006.01)**

[25] EN

[54] **MONITORING TOOL, SYSTEM AND METHOD FOR EARTH WORKING EQUIPMENT AND OPERATIONS**

[54] **OUTIL DE SURVEILLANCE, SYSTEME ET PROCEDE POUR EQUIPEMENT ET OPERATIONS DE TERRASSEMENT**

[72] COWGILL, NOAH D., US  
[71] ESCO GROUP LLC, US  
[85] 2021-11-12  
[86] 2020-05-13 (PCT/US2020/032617)  
[87] (WO2020/232082)  
[30] US (62/847,842) 2019-05-14

[21] **3,140,364**  
[13] A1

[51] **Int.Cl. E21B 47/113 (2012.01) E21B 47/125 (2012.01) E21B 47/13 (2012.01) E21B 43/20 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR ELECTROMAGNETIC WATERFRONT SURVEILLANCE IN A VICINITY OF AN OIL WELL**

[54] **SYSTEMES ET PROCEDES DE SURVEILLANCE DE FRONT D'EAU ELECTROMAGNETIQUE A PROXIMITE D'UN Puits DE PETROLE**

[72] COLOMBO, DANIELE, SA  
[72] MCNEICE, GARY W., SA  
[72] SANDOVAL-CURIEL, ERNESTO, SA  
[71] SAUDI ARABIAN OIL COMPANY, SA  
[85] 2021-11-12  
[86] 2020-05-13 (PCT/US2020/032587)  
[87] (WO2020/232062)  
[30] US (16/410,804) 2019-05-13

[21] **3,140,365**  
[13] A1

[51] **Int.Cl. G16B 40/30 (2019.01) G16H 20/10 (2018.01) G16H 20/40 (2018.01) G16B 40/00 (2019.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR MULTI-LABEL CANCER CLASSIFICATION**

[54] **SYSTEMES ET PROCEDES DE CLASSIFICATION DE CANCER MULTI-ETIQUETTE**

[72] MICHUDA, JACKSON, US  
[72] BEAUCHAMP, KYLE ASHLEY, US  
[72] KAPILISKY, JOSHUAH, US  
[72] MCCARTER, CALVIN, US  
[72] BEAUBIER, NIKE, US  
[72] STUMPE, MARTIN CHRISTIAN, US  
[72] IGARTUA, CATHERINE, US  
[72] BELL, JOSHUA SK, US  
[72] TAXTER, TIMOTHY, US  
[72] PELOSSOF, RAPHAEL, US  
[71] TEMPUS LABS, INC., US  
[85] 2021-11-12  
[86] 2020-05-12 (PCT/US2020/032542)  
[87] (WO2020/232033)  
[30] US (62/847,859) 2019-05-14  
[30] US (62/855,750) 2019-05-31  
[30] US (62/902,950) 2019-09-19  
[30] US (62/983,488) 2020-02-28

## PCT Applications Entering the National Phase

[21] **3,140,366**  
[13] A1

[51] **Int.Cl. A61F 2/12 (2006.01) A61B 50/30 (2016.01) A61F 2/02 (2006.01)**  
[25] EN  
[54] **BIOFILM PROTECTION IMPLANT SHIELD**  
[54] **BARRIERE DE PROTECTION CONTRE LE BIOFILM POUR IMPLANTS**  
[72] BRESNICK, STEPHEN DAVID, US  
[71] BRESNICK, STEPHEN DAVID, US  
[85] 2021-11-12  
[86] 2020-05-12 (PCT/US2020/032528)  
[87] (WO2020/232026)  
[30] US (62/847,151) 2019-05-13  
[30] US (62/946,376) 2019-12-10

[21] **3,140,367**  
[13] A1

[51] **Int.Cl. C09D 5/02 (2006.01) C09D 7/20 (2018.01) C09D 7/43 (2018.01) B05D 1/02 (2006.01) B05D 1/38 (2006.01) B05D 3/02 (2006.01) C09D 11/30 (2014.01) C08J 7/04 (2020.01)**  
[25] EN  
[54] **COATING COMPOSITIONS AND SYSTEMS AND METHODS OF APPLYING SUCH COATING COMPOSITIONS**  
[54] **COMPOSITIONS DE REVETEMENT ET SYSTEMES ET PROCEDES D'APPLICATION DE TELLES COMPOSITIONS DE REVETEMENT**  
[72] REIL, SVEN, DE  
[72] BUCHHOLZ, MARIA E., DE  
[72] FURAR, JOHN M., US  
[72] KLAEGER, WOLFGANG, DE  
[72] KLENK, JUERGEN, DE  
[72] VON KUERTHY, GEROLF M., DE  
[72] LEFFRANG, LISA, DE  
[72] OSSWALD, SIMONE A., DE  
[72] SADVARY, RICHARD J., US  
[72] SCHOCH, STEPHANE, DE  
[72] SEEMANN, MARCO, DE  
[72] STOEHR, CHRISTOPHER, DE  
[71] PPG INDUSTRIES OHIO, INC., US  
[85] 2021-11-12  
[86] 2020-05-12 (PCT/US2020/032505)  
[87] (WO2020/232011)  
[30] US (62/846,888) 2019-05-13

[21] **3,140,368**  
[13] A1

[51] **Int.Cl. B60L 53/30 (2019.01)**  
[25] EN  
[54] **CHARGING STATION WITH ARTICULATING PANELS**  
[54] **STATION DE CHARGE MUNIE DE PANNEAUX ARTICULES**  
[72] MERCER, SCOTT, US  
[72] MATHEUS, KAYLA, US  
[71] VOLTA CHARGING, LLC, US  
[85] 2021-11-12  
[86] 2020-05-11 (PCT/US2020/032324)  
[87] (WO2020/231911)  
[30] US (62/847,165) 2019-05-13

[21] **3,140,369**  
[13] A1

[51] **Int.Cl. B60L 53/10 (2019.01) B60L 53/22 (2019.01) B60L 53/30 (2019.01) B60L 53/31 (2019.01) B60L 53/60 (2019.01) B60L 53/66 (2019.01)**  
[25] EN  
[54] **INDICATOR LIGHTS FOR AN ELECTRIC VEHICLE CHARGING STATION**  
[54] **VOYANTS LUMINEUX D'UNE STATION DE CHARGE POUR VEHICULE ELECTRIQUE**  
[72] MERCER, SCOTT, US  
[72] PRODANIUK, ALEXANDRA, US  
[72] MATHEUS, KAYLA, US  
[71] VOLTA CHARGING, LLC, US  
[85] 2021-11-12  
[86] 2020-05-11 (PCT/US2020/032319)  
[87] (WO2020/231908)  
[30] US (62/847,160) 2019-05-13

[21] **3,140,370**  
[13] A1

[51] **Int.Cl. B60G 17/019 (2006.01) B60G 1/00 (2006.01) B60G 23/00 (2006.01) B60Q 1/00 (2006.01)**  
[25] EN  
[54] **LOAD SENSOR SYSTEM**  
[54] **SYSTEME DE CAPTEUR DE CHARGE**  
[72] SCOTT, TIMOTHY JAMES, US  
[71] DRIVING INNOVATIONS, LLC, US  
[85] 2021-11-12  
[86] 2020-05-08 (PCT/US2020/032214)  
[87] (WO2020/231857)  
[30] US (16/410,861) 2019-05-13

[21] **3,140,371**  
[13] A1

[51] **Int.Cl. B62D 55/21 (2006.01)**  
[25] EN  
[54] **MASTER LINK FOR A TRACK CHAIN**  
[54] **MAILLON MAITRE POUR UNE CHAINE DE CHENILLE**  
[72] LONGANBACH, DAVID, US  
[71] CATERPILLAR INC., US  
[85] 2021-11-12  
[86] 2020-04-21 (PCT/US2020/029046)  
[87] (WO2020/242643)  
[30] US (16/422,581) 2019-05-24

[21] **3,140,372**  
[13] A1

[51] **Int.Cl. G01S 19/07 (2010.01) G01S 19/01 (2010.01) G01S 19/08 (2010.01) G01S 19/40 (2010.01) H04B 7/185 (2006.01)**  
[25] EN  
[54] **SATELLITE FOR BROADCASTING HIGH PRECISION DATA**  
[54] **SATELLITE POUR LA DIFFUSION DE DONNEES DE HAUTE PRECISION**  
[72] REID, TYLER GERALD RENE, CA  
[72] GUNNING, KAZUMA, US  
[72] PERKINS, ADRIEN LOUIS HENRY, US  
[72] NEISH, ANDREW MICHAEL, US  
[71] XONA SPACE SYSTEMS INC., US  
[85] 2021-11-12  
[86] 2020-03-09 (PCT/US2020/021687)  
[87] (WO2020/251635)  
[30] US (62/853,398) 2019-05-28  
[30] US (16/804,961) 2020-02-28

[21] **3,140,373**  
[13] A1

[51] **Int.Cl. F16H 7/08 (2006.01) B60K 25/02 (2006.01) F16H 7/12 (2006.01)**  
[25] EN  
[54] **TENSIONER**  
[54] **TENDEUR**  
[72] GUCLU, AHMET, TR  
[72] DEMIR, ERMAN, TR  
[72] CANKUL, SARP, TR  
[72] YILDIZ, SENOL, TR  
[72] KULA, RIZA, TR  
[71] GATES CORPORATION, US  
[85] 2021-11-12  
[86] 2020-05-15 (PCT/US2020/033233)  
[87] (WO2020/232392)  
[30] US (16/413,073) 2019-05-15



## Demandes PCT entrant en phase nationale

[21] **3,140,374**  
[13] A1

[51] **Int.Cl. A61M 15/08 (2006.01) A61M 11/00 (2006.01) A61M 11/02 (2006.01) A61M 11/08 (2006.01) A61M 15/00 (2006.01)**

[25] EN

[54] **SINGLE-USE NASAL DELIVERY DEVICE**

[54] **DISPOSITIF D'ADMINISTRATION NASALE A USAGE UNIQUE**

[72] HOEKMAN, JOHN D., US

[72] LAVIN, ALBERT KENNETH, US

[72] FULLER, CHRISTOPHER WILLIAM, US

[72] KOHRING, CRAIG FREDERICK, US

[71] IMPEL NEUROPHARMA, INC., US

[85] 2021-11-12

[86] 2020-05-15 (PCT/US2020/033282)

[87] (WO2020/236658)

[30] US (62/849,735) 2019-05-17

[21] **3,140,378**  
[13] A1

[51] **Int.Cl. A61N 1/24 (2006.01) A61N 1/04 (2006.01) A61N 1/06 (2006.01)**

[25] EN

[54] **DEVICES AND METHODS FOR NEUROMODULATION**

[54] **DISPOSITIFS ET PROCEDES DE NEUROMODULATION**

[72] ROMERO-ORTEGA, MARIO I., US

[72] MARTINEZ-GOMEZ, MARGARITA, MX

[71] BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, US

[71] NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO, MX

[85] 2021-11-12

[86] 2019-05-16 (PCT/US2019/032691)

[87] (WO2020/231440)

[21] **3,140,380**  
[13] A1

[51] **Int.Cl. H04W 4/021 (2018.01) H04W 4/08 (2009.01) H04W 4/44 (2018.01)**

[25] EN

[54] **NETWORK NODE, VEHICLE TO EVERYTHING WIRELESS DEVICE AND METHODS PERFORMED THEREIN**

[54] **NOEUD DE RESEAU, DISPOSITIF SANS FIL V2X ET PROCEDES EXECUTES DANS CEUX-CI**

[72] EL ESSAILI, ALI, DE

[72] ZANG, YUNPENG, DE

[71] TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE

[85] 2021-11-12

[86] 2019-12-23 (PCT/SE2019/051338)

[87] (WO2020/231308)

[30] US (62/846,774) 2019-05-13

[21] **3,140,375**  
[13] A1

[51] **Int.Cl. H02S 40/10 (2014.01) F24S 40/20 (2018.01)**

[25] EN

[54] **CLEANING METHODS FOR SOLAR PANELS**

[54] **PROCEDES DE NETTOYAGE POUR PANNEAUX SOLAIRES**

[72] STEWART, PAUL A., US

[71] PASCO VENTURES LLC, US

[85] 2021-11-12

[86] 2020-02-26 (PCT/US2020/019802)

[87] (WO2020/214244)

[30] US (16/386,349) 2019-04-17

[21] **3,140,379**  
[13] A1

[51] **Int.Cl. H04N 19/577 (2014.01)**

[25] EN

[54] **ENCODER, DECODER, ENCODING METHOD AND DECODING METHOD**

[54] **DISPOSITIF DE CODAGE, DISPOSITIF DE DECODAGE, PROCEDE DE CODAGE ET PROCEDE DE DECODAGE**

[72] TOMA, TADAMASA, JP

[71] PANASONIC INTELLECTUAL PROPERTY CORPORATION OF AMERICA, US

[85] 2021-11-05

[86] 2020-06-15 (PCT/JP2020/023329)

[87] (WO2020/255903)

[30] US (62/864,728) 2019-06-21

[21] **3,140,382**  
[13] A1

[51] **Int.Cl. G16H 20/10 (2018.01) A61B 5/00 (2006.01) A61J 7/04 (2006.01) A61M 15/00 (2006.01)**

[25] EN

[54] **SUBSTANCE DELIVERY PLANNING SYSTEM**

[54] **SYSTEME DE PLANIFICATION D'ADMINISTRATION DE SUBSTANCE**

[72] DAVIDSON, PERRY, IL

[72] EISENSCHER, IANIV YOSEF, IL

[72] HOFFMANN, YOTAM, IL

[71] SYQE MEDICAL LTD., IL

[85] 2021-11-12

[86] 2020-05-21 (PCT/IL2020/050559)

[87] (WO2020/234883)

[30] US (62/850,580) 2019-05-21

[21] **3,140,377**  
[13] A1

[51] **Int.Cl. A41D 27/20 (2006.01) A41D 1/00 (2018.01) A41D 1/04 (2006.01)**

[25] EN

[54] **UPPER TORSO GARMENT**

[54] **VETEMENT DE TORSO SUPERIEUR**

[72] PLANT, ANDREW M., US

[72] HARRIS, MARLON J., US

[71] HBI BRANDED APPAREL ENTERPRISES, LLC, US

[85] 2021-11-12

[86] 2019-06-11 (PCT/US2019/036621)

[87] (WO2020/231451)

[30] US (16/412,153) 2019-05-14

[21] **3,140,383**  
[13] A1

[51] **Int.Cl. B66F 9/22 (2006.01) B25B 5/06 (2006.01) B25J 13/08 (2006.01)**

[25] EN

[54] **HYBRID CLAMP FORCE CONTROL FOR LIFT TRUCK ATTACHMENT**

[54] **COMMANDE DE FORCE DE SERRAGE HYBRIDE POUR ACCESSOIRE DE CHARIOT ELEVATEUR**

[72] WALTHERS, CHRISTOPHER M., US

[71] CASCADE CORPORATION, US

[85] 2021-11-12

[86] 2020-05-22 (PCT/US2020/034298)

[87] (WO2020/237179)

[30] US (16/420,000) 2019-05-22

## PCT Applications Entering the National Phase

[21] **3,140,384**  
[13] A1

[51] **Int.Cl. C12N 5/07 (2010.01) C12N 5/079 (2010.01) A61K 35/30 (2015.01) A61P 27/02 (2006.01)**

[25] EN

[54] **METHOD FOR PURIFYING NEURAL CREST CELLS OR CORNEAL EPITHELIAL CELLS**

[54] **PROCEDE DE PURIFICATION DE CELLULES DE CRETE NEURALE OU DE CELLULES EPITHELIALES CORNEENNES**

[72] BABA, SHIZUKA, JP

[72] TAKAHASHI, KAZUMA, JP

[72] KONISHI, ATSUSHI, JP

[71] AJINOMOTO CO., INC., JP

[85] 2021-11-12

[86] 2020-05-14 (PCT/JP2020/019173)

[87] (WO2020/230832)

[30] JP (2019-091988) 2019-05-15

[30] JP (2019-186280) 2019-10-09

[21] **3,140,385**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61K 47/55 (2017.01) A61K 47/56 (2017.01) A61K 47/62 (2017.01) A61K 47/68 (2017.01) A61K 49/00 (2006.01) A61P 35/00 (2006.01) C07K 16/18 (2006.01) C07K 16/28 (2006.01) C07K 16/46 (2006.01) C12N 1/15 (2006.01) C12N 1/19 (2006.01) C12N 1/21 (2006.01) C12N 5/10 (2006.01) C12N 15/13 (2006.01) C12N 15/62 (2006.01) C12N 15/63 (2006.01) C12P 21/08 (2006.01) G01N 33/53 (2006.01) G01N 33/574 (2006.01)**

[25] EN

[54] **BISPECIFIC ANTIBODY BINDING TO CD40 AND FAP**

[54] **ANTICORPS BISPECIFIQUE SE LIANT A CD40 ET FAP**

[72] TEZUKA, YUTA, JP

[72] OSANAI, AYA, JP

[72] USAMI, KATSUAKI, JP

[72] NISHIYA, HARUE, JP

[71] KYOWA KIRIN CO., LTD., JP

[85] 2021-11-12

[86] 2020-05-15 (PCT/JP2020/019545)

[87] (WO2020/230899)

[30] JP (2019-092298) 2019-05-15

[21] **3,140,386**  
[13] A1

[51] **Int.Cl. C12N 15/50 (2006.01) A61K 48/00 (2006.01) C07K 14/165 (2006.01) C07K 19/00 (2006.01) C12N 5/10 (2006.01) C12N 7/00 (2006.01) C12N 7/01 (2006.01) C12N 15/85 (2006.01) C12N 15/864 (2006.01)**

[25] EN

[54] **MODIFIED VIRAL PARTICLES AND USES THEREOF**

[54] **PARTICULES VIRALES MODIFIEES ET LEURS UTILISATIONS**

[72] SABIN, LEAH, US

[72] KYRATSOUS, CHRISTOS, US

[72] MOLLER-TANK, SVEN, US

[71] REGENERON PHARMACEUTICALS, INC., US

[85] 2021-11-12

[86] 2020-05-22 (PCT/US2020/034328)

[87] (WO2020/242984)

[30] US (62/852,791) 2019-05-24

[21] **3,140,388**  
[13] A1

[51] **Int.Cl. H02J 13/00 (2006.01) H05B 47/25 (2020.01) H02H 3/08 (2006.01) H03K 17/0812 (2006.01) H03K 17/16 (2006.01) H03K 17/687 (2006.01)**

[25] EN

[54] **LOAD CONTROL DEVICE HAVING A CLOSED-LOOP GATE DRIVE CIRCUIT**

[54] **DISPOSITIF DE COMMANDE DE CHARGE AYANT UN CIRCUIT D'ATTAQUE DE GRILLE EN BOUCLE FERMEE**

[72] BOLLINGER, BRIAN J., US

[72] CHITTA, VENKATESH, US

[72] WALDRON, JONATHAN, US

[72] CHOLASHARI, FIROZBABU, US

[71] LUTRON TECHNOLOGY COMPANY LLC, US

[85] 2021-11-12

[86] 2020-05-15 (PCT/US2020/033285)

[87] (WO2020/236659)

[30] US (62/849,494) 2019-05-17

[21] **3,140,389**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2012.01) G01N 33/487 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR OPTIMIZING AN INSTRUMENT SYSTEM WORKFLOW**

[54] **SYSTEMES ET PROCEDES D'OPTIMISATION D'UN FLUX DE TRAVAIL DE SYSTEME D'INSTRUMENT**

[72] THAKER, DARSHAN, US

[72] FOWLER, MATTHEW E., US

[72] NEDUNGADI, SAMIRA A., US

[72] BANDA VILLANUEVA, DANIEL A., US

[72] BRUHN, BRANDON R., US

[72] BOZINOVIC, NENAD, US

[72] MOBILIA, KELLEN C., US

[71] BERKELEY LIGHTS, INC., US

[85] 2021-11-12

[86] 2020-05-22 (PCT/US2020/034407)

[87] (WO2020/243015)

[30] US (62/852,955) 2019-05-24

[21] **3,140,390**  
[13] A1

[51] **Int.Cl. A61F 5/441 (2006.01) A61F 5/445 (2006.01)**

[25] EN

[54] **OSTOMY POUCH WITH FILTER PATH AND FILTER**

[54] **POCHE DE STOMIE AVEC TRAJET DE FILTRE ET FILTRE**

[72] BOTTEN, RONALD S., US

[72] CZAPLEWSKI, GREGORY J., US

[71] HOLLISTER INCORPORATED, US

[85] 2021-11-12

[86] 2020-05-29 (PCT/US2020/035257)

[87] (WO2020/247268)

[30] US (62/857,009) 2019-06-04

## Demandes PCT entrant en phase nationale

[21] **3,140,391**  
[13] A1

[51] **Int.Cl. A61B 17/16 (2006.01) A61B 90/98 (2016.01)**  
[25] EN  
[54] **POWERED SURGICAL DRILL HAVING ROTATING FIELD BIT IDENTIFICATION**  
[54] **FORET CHIRURGICAL MOTORISE A IDENTIFICATION DE TREPAN DE CHAMP ROTATIF**  
[72] LAMBERT, TREVOR JONATHAN, US  
[72] CARUSILLO, STEVEN, J., US  
[72] SHARMA, RAHUL, IN  
[72] SCHNEIDER, BRENDAN, US  
[71] STRYKER CORPORATION, US  
[85] 2021-11-12  
[86] 2020-05-15 (PCT/US2020/033288)  
[87] (WO2020/232413)  
[30] US (62/848,029) 2019-05-15  
[30] US (62/848,038) 2019-05-15

[21] **3,140,392**  
[13] A1

[51] **Int.Cl. C07D 471/04 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **SOLID STATE FORMS**  
[54] **FORMES A L'ETAT SOLIDE**  
[72] CHAVES, MARY, US  
[72] LOPEZ, PATRICIA, US  
[72] AGARWAL, PRASHANT, US  
[72] AMEGADZIE, ALBERT, US  
[72] AZALI, STEPHANIE, US  
[72] SHIMANOVICH, ROMAN, US  
[72] KELLY, RON C., US  
[72] REID, DARREN LEONARD, US  
[71] AMGEN INC., US  
[85] 2021-11-12  
[86] 2020-05-20 (PCT/US2020/033831)  
[87] (WO2020/236947)  
[30] US (62/851,044) 2019-05-21

[21] **3,140,393**  
[13] A1

[51] **Int.Cl. C07K 14/54 (2006.01) C07K 14/705 (2006.01) C12N 5/00 (2006.01) C12N 5/10 (2006.01)**  
[25] EN  
[54] **COMBINATIONS OF ENGINEERED NATURAL KILLER CELLS AND ENGINEERED T CELLS FOR IMMUNOTHERAPY**  
[54] **COMBINAISONS DE CELLULES TUEUSES NATURELLES MODIFIEES ET DE CELLULES T MODIFIEES POUR UNE IMMUNOTHERAPIE**  
[72] TRAGER, JAMES, BARNABY, US  
[72] BUREN, LUXUAN, GUO, US  
[72] GUO, CHAO, US  
[72] LI, GUANGNAN, US  
[72] LIU, DAOFENG, US  
[72] CHAN, IVAN, US  
[71] NKARTA, INC., US  
[85] 2021-11-12  
[86] 2020-06-02 (PCT/US2020/035752)  
[87] (WO2020/247392)  
[30] US (62/857,167) 2019-06-04  
[30] US (62/943,697) 2019-12-04

[21] **3,140,394**  
[13] A1

[51] **Int.Cl. C07D 471/04 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **SOLID STATE FORMS**  
[54] **FORMES A L'ETAT SOLIDE**  
[72] CHAVES, MARY, US  
[72] KELLY, RON C., US  
[72] AGARWAL, PRASHANT, US  
[72] PARENT, STEPHAN D., US  
[72] REID, DARREN LEONARD, US  
[72] SHIMANOVICH, ROMAN, US  
[71] AMGEN INC., US  
[85] 2021-11-12  
[86] 2020-05-20 (PCT/US2020/033832)  
[87] (WO2020/236948)  
[30] US (62/851,049) 2019-05-21

[21] **3,140,395**  
[13] A1

[51] **Int.Cl. A61F 2/14 (2006.01) A61F 2/16 (2006.01) A61L 27/36 (2006.01) A61L 27/38 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR FABRICATING A CORNEA**  
[54] **SYSTEME ET PROCEDE DE FABRICATION D'UNE CORNEE**  
[72] MOSS, SARAH, US  
[72] HOYING, JAMES, US  
[72] STROBEL, HANNAH, US  
[71] ADVANCED SOLUTIONS LIFE SCIENCES, LLC, US  
[85] 2021-11-12  
[86] 2020-06-03 (PCT/US2020/035813)  
[87] (WO2020/247420)  
[30] US (62/856,380) 2019-06-03

[21] **3,140,396**  
[13] A1

[51] **Int.Cl. E04H 17/26 (2006.01) E04H 17/00 (2006.01) E06B 9/01 (2006.01) E06B 9/02 (2006.01) E06B 9/08 (2006.01)**  
[25] EN  
[54] **REPLACEMENT LINK FOR A ROLLING GRILL ENCLOSURE AND METHOD THEREOF**  
[54] **LIAISON DE REMPLACEMENT POUR UNE ENCEINTE DE GRIL A ENROULEMENT ET PROCEDE ASSOCIE**  
[72] FERNANDO, BRIAN RISHI KACHCHAKADUGE, US  
[72] WHEAT, MICHAEL RICHARD, US  
[72] CARROLL, RICHARD RYAN, US  
[72] MOYER, THOMAS HUGH, US  
[71] CORNELLCOOKSON, LLC, US  
[85] 2021-11-12  
[86] 2020-05-21 (PCT/US2020/034019)  
[87] (WO2020/237062)  
[30] US (62/850,594) 2019-05-21

## PCT Applications Entering the National Phase

[21] **3,140,397**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **SYSTEMS, DEVICES, AND METHODS FOR TREATING HEART VALVES**  
[54] **SYSTEMES, DISPOSITIFS ET PROCEDES DE TRAITEMENT DE VALVULES CARDIAQUES**  
[72] PATEL, DARSHIN S., US  
[72] BETTENCOURT, HANNAH REED, US  
[72] SCHWARTZ, EVAN T., US  
[72] CHOW, SEAN, GB  
[72] CHAU, JOCELYN, US  
[72] TRAN, TRI D., US  
[72] GROSS, ALYSSA JOY, US  
[72] DU, YUANLONG, US  
[72] LAM, JASON SENG-CHE, US  
[72] COOPER, ALEXANDER H., US  
[72] NGUYEN, TRAM NGOC, US  
[72] NGUYEN, NGOC HUONG THI, US  
[72] REED, KURT KELLY, US  
[72] MARSHALL, COREY MAURICE, US  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-11-12  
[86] 2020-06-08 (PCT/US2020/036577)  
[87] (WO2020/247907)  
[30] US (62/858,875) 2019-06-07  
[30] US (62/908,402) 2019-09-30

[21] **3,140,399**  
[13] A1

[51] **Int.Cl. A01G 9/02 (2018.01) A01G 13/02 (2006.01) A01G 13/10 (2006.01)**  
[25] EN  
[54] **APPARATUS, SYSTEM AND METHOD FOR PLANTING**  
[54] **APPAREIL, SYSTEME ET PROCEDE DE PLANTATION**  
[72] STEWART, MARK DAMIEN, NZ  
[72] LOW, TOBIAS DANIEL, NZ  
[71] SKYGROW PTY LTD, NZ  
[85] 2021-11-15  
[86] 2020-05-15 (PCT/AU2020/050486)  
[87] (WO2020/227783)  
[30] AU (2019901651) 2019-05-15

[21] **3,140,401**  
[13] A1

[51] **Int.Cl. A63B 71/12 (2006.01)**  
[25] EN  
[54] **LIMB PROTECTOR**  
[54] **DISPOSITIF DE PROTECTION DE MEMBRE**  
[72] BELAND, JEAN-FRANCOIS, CA  
[71] SPORT MASKA INC., CA  
[85] 2021-11-15  
[86] 2019-06-12 (PCT/CA2019/050827)  
[87] (WO2020/248039)

[21] **3,140,404**  
[13] A1

[51] **Int.Cl. H01M 4/131 (2010.01) H01M 4/1391 (2010.01) H01M 10/0525 (2010.01) C01G 53/00 (2006.01) H01M 4/62 (2006.01)**  
[25] EN  
[54] **STABILIZED HIGH NICKEL NMC CATHODE MATERIALS FOR IMPROVED BATTERY PERFORMANCE**  
[54] **MATERIAUX DE CATHODE NMC A HAUTE TENEUR EN NICKEL STABILISES POUR DES PERFORMANCES DE BATTERIE AMELIOREES**  
[72] CAMPBELL, STEPHEN A., CA  
[72] TALAIE, ELAHE, CA  
[72] ESMAEILIRAD, AHMAD, CA  
[71] NANO ONE MATERIALS CORP., CA  
[85] 2021-11-15  
[86] 2020-05-07 (PCT/CA2020/050623)  
[87] (WO2020/232531)  
[30] US (62/850,777) 2019-05-21

[21] **3,140,405**  
[13] A1

[51] **Int.Cl. G06F 3/147 (2006.01) H04W 12/02 (2009.01) H04W 84/02 (2009.01) G06F 9/00 (2006.01) G09G 3/20 (2006.01) H02J 7/00 (2006.01)**  
[25] EN  
[54] **ELECTRONIC PAPER DISPLAY SYSTEM**  
[54] **SYSTEME D'AFFICHAGE DE PAPIER ELECTRONIQUE**  
[72] MCDANIEL, ADAM RYAN, CA  
[72] BEAN, CHARLES ALFRED, CA  
[71] FENOTO TECHNOLOGIES INC., CA  
[85] 2021-11-15  
[86] 2020-05-15 (PCT/CA2020/050659)  
[87] (WO2020/232537)  
[30] US (62/849,281) 2019-05-17

[21] **3,140,406**  
[13] A1

[51] **Int.Cl. C07K 16/18 (2006.01) A61P 17/00 (2006.01) A61P 27/16 (2006.01)**  
[25] EN  
[54] **COMPOSITION AND METHODS TO TREAT ECTODERMAL DYSPLASIA 2, CLOUSTON TYPE**  
[54] **COMPOSITION ET METHODES POUR LE TRAITEMENT D'UNE DYSPLASIE ECTODERMIQUE 2, TYPE CLOUSTON**  
[72] MAMMANO, FABIO, IT  
[72] YANG, GUANG, CN  
[72] ZONTA, FRANCESCO, CN  
[71] SHANGHAI TECH UNIVERSITY, CN  
[85] 2021-11-15  
[86] 2019-05-28 (PCT/CN2019/088689)  
[87] (WO2020/237491)

[21] **3,140,408**  
[13] A1

[51] **Int.Cl. G16H 20/00 (2018.01) G06Q 20/06 (2012.01) G16H 10/60 (2018.01) G16H 20/10 (2018.01) G06F 16/27 (2019.01) A61B 5/00 (2006.01)**  
[25] EN  
[54] **COMPUTER-IMPLEMENTED SYSTEM AND METHODS FOR PREDICTING THE HEALTH AND THERAPEUTIC BEHAVIOR OF INDIVIDUALS USING ARTIFICIAL INTELLIGENCE, SMART CONTRACTS AND BLOCKCHAIN**  
[54] **SYSTEME MIS EN ŒUVRE PAR ORDINATEUR ET PROCEDES DE PREDICTION DE LA SANTE ET DU COMPORTEMENT THERAPEUTIQUE D'INDIVIDUS A L'AIDE DE L'INTELLIGENCE ARTIFICIELLE, DE CONTRATS INTELLIGENTS ET D'UNE CHAINE DE BLOCS**  
[72] KUTZKO, JOHN D., US  
[72] WRIGHT, WAYNE C. A., GB  
[71] KUTZKO, JOHN D., US  
[71] WRIGHT, WAYNE C. A., GB  
[85] 2021-11-12  
[86] 2020-05-13 (PCT/US2020/032636)  
[87] (WO2020/236481)  
[30] US (16/415,597) 2019-05-17  
[30] US (15/930,136) 2020-05-12

## Demandes PCT entrant en phase nationale

[21] **3,140,409**  
[13] A1

[51] **Int.Cl. C08G 59/18 (2006.01) C08J 3/28 (2006.01) C08K 3/20 (2006.01) C08K 5/55 (2006.01) C09D 5/08 (2006.01) C09D 163/00 (2006.01)**

[25] EN  
[54] **HIGH TEMPERATURE PROTECTIVE COATING**  
[54] **REVETEMENT PROTECTEUR A HAUTE TEMPERATURE**

[72] RAMAKRISHNAN, MUNI, US  
[71] A.W. CHESTERTON COMPANY, US  
[85] 2021-11-12  
[86] 2020-05-13 (PCT/US2020/032670)  
[87] (WO2020/232118)  
[30] US (62/848,423) 2019-05-15

[21] **3,140,412**  
[13] A1

[51] **Int.Cl. A61K 31/433 (2006.01) A61K 31/435 (2006.01) A61K 31/4439 (2006.01)**

[25] EN  
[54] **COMPOUND FOR TREATING GOUT OR HYPERURICEMIA**  
[54] **COMPOSE POUR LE TRAITEMENT DE LA GOUTTE OU DE L'HYPERURICEMIE**

[72] YAN, SHUNQI, US  
[72] YEH, LITAIN, US  
[72] YAN, RONGZI, US  
[72] SHEN, ZANCONG, US  
[71] ARTHROSI THERAPEUTICS, INC., US  
[85] 2021-11-12  
[86] 2020-05-13 (PCT/US2020/032725)  
[87] (WO2020/232156)  
[30] US (62/847,519) 2019-05-14

[21] **3,140,414**  
[13] A1

[51] **Int.Cl. A61M 25/09 (2006.01) A61B 5/0215 (2006.01)**

[25] EN  
[54] **PRESSURE SENSING GUIDEWIRES, SYSTEMS AND METHODS FOR STRUCTURAL HEART PROCEDURES**  
[54] **FILS-GUIDES DE DETECTION DE PRESSION, SYSTEMES ET METHODES POUR PROCEDURES CARDIAQUES STRUCTURALES**

[72] DELAND, MAXIME PICARD, CA  
[72] LALANCETTE, SEBASTIEN, CA  
[72] BELLEVILLE, CLAUDE, CA  
[71] OPSENS, INC., CA  
[85] 2021-11-12  
[86] 2020-05-13 (PCT/US2020/032742)  
[87] (WO2020/236492)  
[30] US (62/849,768) 2019-05-17  
[30] US (62/926,737) 2019-10-28

[21] **3,140,416**  
[13] A1

[51] **Int.Cl. A61B 5/02 (2006.01)**

[25] EN  
[54] **PRESSURE BASED STRUCTURAL HEART ASSESSMENT SYSTEMS AND METHODS**  
[54] **SYSTEMES ET METHODES D'EVALUATION CARDIAQUE STRUCTURELLE BASES SUR LA PRESSION**

[72] BELLEVILLE, CLAUDE, CA  
[72] DELAND, MAXIME PICARD, CA  
[72] GOODHART, THOMAS, CA  
[72] LALANCETTE, SEBASTIEN, CA  
[71] OPSENS INC., CA  
[85] 2021-11-12  
[86] 2020-05-13 (PCT/US2020/032748)  
[87] (WO2020/236494)  
[30] US (62/849,768) 2019-05-17  
[30] US (62/849,798) 2019-05-17  
[30] US (62/849,806) 2019-05-17

[21] **3,140,417**  
[13] A1

[51] **Int.Cl. C07D 233/68 (2006.01) A61K 31/4184 (2006.01) A61P 1/16 (2006.01) A61P 3/06 (2006.01) A61P 25/28 (2006.01) A61P 35/00 (2006.01)**

[25] EN  
[54] **SUBSTITUTED FLUORINE-CONTAINING IMIDAZOLE SALT COMPOUND, PREPARATION METHOD THEREFOR, PHARMACEUTICAL COMPOSITION THEREOF AND USE THEREOF**  
[54] **COMPOSE DE SEL D'IMIDAZOLE SUBSTITUE CONTENANT DU FLUOR, PROCEDE DE PREPARATION CORRESPONDANT, COMPOSITION PHARMACEUTIQUE ET UTILISATION ASSOCIEES**

[72] DENG, XIANMING, CN  
[72] LIN, SHENGCAI, CN  
[72] ZHANG, CHENSONG, CN  
[71] XIAMEN VIVOHEALTHS TECHNOLOGY CO., LTD., CN  
[85] 2021-11-08  
[86] 2020-05-08 (PCT/CN2020/089128)  
[87] (WO2020/228596)  
[30] CN (201910387619.5) 2019-05-10

[21] **3,140,418**  
[13] A1

[51] **Int.Cl. G06F 15/16 (2006.01) G06N 3/04 (2006.01) G06N 3/08 (2006.01)**

[25] EN  
[54] **SYSTEMS AND METHODS FOR GENERATING DATASETS FOR MODEL RETRAINING**  
[54] **SYSTEMES ET PROCEDES DE PRODUCTION D'ENSEMBLES DE DONNEES POUR NOUVELLE INSTRUCTION DE MODELE**

[72] DWIVEDI, ANAND, US  
[72] JEONG, HYUNSOO, US  
[71] NASDAQ, INC., US  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/US2020/032780)  
[87] (WO2020/232188)  
[30] US (62/847,621) 2019-05-14  
[30] US (15/931,369) 2020-05-13

## PCT Applications Entering the National Phase

[21] **3,140,419**  
[13] A1

[51] **Int.Cl. F04C 2/107 (2006.01) F04C 2/08 (2006.01)**  
[25] EN  
[54] **MUD MOTOR OR PROGRESSIVE CAVITY PUMP WITH VARYING PITCH AND TAPER**  
[54] **MOTEUR A BOUE OU POMPE A CAVITE PROGRESSIVE A PAS ET CONICITE VARIABLES**  
[72] KOLYSHKIN, ANTON, US  
[72] PUSHKAREV, MAXIM, CA  
[72] BA, SAMBA, CN  
[72] GUO, LI, US  
[72] LITTLE, ROBERT, US  
[72] DOWNTON, GEOFFREY CHARLES, GB  
[71] SCHLUMBERGER CANADA LIMITED, CA  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/US2020/032852)  
[87] (WO2020/232231)  
[30] US (62/847,531) 2019-05-14

[21] **3,140,421**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR ARTIFICIAL PANCREAS WITH MULTI-STAGE MODEL PREDICTIVE CONTROL**  
[54] **SYSTEME ET PROCEDE POUR PANCREAS ARTIFICIEL AVEC COMMANDE PREDICTIVE DE MODELE A ETAGES MULTIPLES**  
[72] BRETON, MARC D., US  
[72] GARCIA-TIRADO, JOSE, US  
[72] COLMEGNA, PATRICIO, US  
[72] CORBETT, JOHN, US  
[71] UNIVERSITY OF VIRGINIA PATENT FOUNDATION, US  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/US2020/032855)  
[87] (WO2020/232232)  
[30] US (62/847,714) 2019-05-14  
[30] US (62/873,066) 2019-07-11  
[30] US (62/884,479) 2019-08-08

[21] **3,140,422**  
[13] A1

[51] **Int.Cl. G06Q 10/00 (2012.01) G06Q 10/08 (2012.01) G06Q 50/12 (2012.01)**  
[25] EN  
[54] **METHODS FOR ENHANCED FOOD SAFETY FOR FOOD STORAGE AND PREPARATION**  
[54] **PROCEDES PERMETTANT D'AMELIORER L'HYGIENE ALIMENTAIRE LORS DU STOCKAGE ET DE LA PREPARATION D'ALIMENTS**  
[72] DUCKETT, JEANNE, US  
[71] AVERY DENNISON RETAIL INFORMATION SERVICES, LLC, US  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/US2020/032869)  
[87] (WO2020/236510)  
[30] US (62/849,351) 2019-05-17

[21] **3,140,423**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/127 (2006.01) A61K 9/16 (2006.01) A61K 38/00 (2006.01)**  
[25] EN  
[54] **IMPROVED PROCESS OF PREPARING MRNA-LOADED LIPID NANOPARTICLES**  
[54] **PROCEDE AMELIORE DE PREPARATION DE NANOPARTICULES LIPIDIQUES CHARGEES D'ARNM**  
[72] KARVE, SHRIRANG, US  
[72] DEROSA, FRANK, US  
[72] HEARTLEIN, MICHAEL, US  
[72] SARODE, ASHISH, US  
[72] PATEL, ZARNA, US  
[72] BALL, REBECCA L., US  
[72] MONTOYA, NATALIA VARGAS, US  
[72] PATEL, PRIYAL, US  
[72] KHANMOHAMMED, ASAD, US  
[71] TRANSLATE BIO, INC., US  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/US2020/032943)  
[87] (WO2020/232276)  
[30] US (62/847,837) 2019-05-14

[21] **3,140,425**  
[13] A1

[51] **Int.Cl. C07D 473/18 (2006.01) C07D 473/34 (2006.01) C07H 21/02 (2006.01)**  
[25] EN  
[54] **TRANSLOCATION CONTROL ELEMENTS, REPORTER CODES, AND FURTHER MEANS FOR TRANSLOCATION CONTROL FOR USE IN NANOPORE SEQUENCING**  
[54] **ELEMENTS DE COMMANDE DE TRANSLOCATION, CODES RAPPORTEURS, ET AUTRES MOYENS DE COMMANDE DE TRANSLOCATION DESTINES A ETRE UTILISES DANS LE SEQUENCAGE DE NANOPORES**  
[72] O'CONNELL, DYLAN, US  
[72] JACOBS, AARON, US  
[72] VELLUCCI, JESSICA, US  
[72] BANASIK, BRENT, US  
[72] LOPEZ, MATTHEW, US  
[72] GOODMAN, DREW, US  
[72] NABAVI, MELUD, US  
[72] TABONE, JOHN, US  
[72] KOKORIS, MARK STAMATIOS, US  
[72] MACHACEK, CARA, US  
[72] MERRILL, LACEY, US  
[72] CHANDRASEKAR, JAGADEESWARAN, US  
[72] KRITZER, SVETLANA, US  
[72] CECH, CYNTHIA, US  
[71] STRATOS GENOMICS, INC., US  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/US2020/032950)  
[87] (WO2020/236526)  
[30] US (62/852,262) 2019-05-23  
[30] US (62/877,183) 2019-07-22  
[30] US (62/885,746) 2019-08-12

[21] **3,140,426**  
[13] A1

[51] **Int.Cl. A01M 21/00 (2006.01) G01N 21/17 (2006.01) G01N 21/25 (2006.01) G01N 21/29 (2006.01) G01N 21/84 (2006.01)**  
[25] EN  
[54] **MULTI-SPECTRAL PLANT TREATMENT**  
[54] **TRAITEMENT DE PLANTE MULTISPECTRAL**  
[72] GEIGER, ALLEN R., US  
[71] GEIGER, ALLEN R., US  
[85] 2021-11-12  
[86] 2020-05-14 (PCT/US2020/032979)  
[87] (WO2020/232298)  
[30] US (62/847,386) 2019-05-14

## Demandes PCT entrant en phase nationale

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[21] **3,140,430**

[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61P  
35/00 (2006.01) C12N 15/62 (2006.01)**

[25] EN

[54] **EPCAM BINDING PROTEINS AND  
METHODS OF USE**

[54] **PROTEINES DE LIAISON A  
EPCAM ET METHODES  
D'UTILISATION**

[72] WESCHE, HOLGER, US

[72] AUSTIN, RICHARD J., US

[72] LIN, SHUOYEN JACK, US

[72] LEMON, BRYAN, US

[72] WRIGHT, KEVIN, US

[72] ROCHA, SONY, US

[72] KWANT, KATHRYN, US

[71] HARPOON THERAPEUTICS, INC.,  
US

[85] 2021-11-12

[86] 2020-05-14 (PCT/US2020/032985)

[87] (WO2020/232303)

[30] US (62/847,778) 2019-05-14

[30] US (PCT/US2019/032224) 2019-05-14

[30] US (PCT/US2019/032307) 2019-05-14

[30] US (PCT/US2019/032302) 2019-05-14

[30] US (PCT/US2019/032306) 2019-05-14

# 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] **3,112,109**  
[13] A1

[51] **Int.Cl. A61B 17/04 (2006.01) A61B 17/56 (2006.01) A61F 2/08 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR SECURING TISSUE TO BONE**  
[54] **SYSTEME ET PROCEDE POUR FIXER UN TISSU A UN OS**  
[72] HEAVEN, MALCOLM, US  
[72] GREELIS, JOHN P., US  
[72] SIRIVONG, MIKXAY, US  
[72] YUREK, MATTHEW T., US  
[71] CONMED CORPORATION, US  
[22] 2014-03-07  
[41] 2014-09-25  
[62] 2,904,717  
[30] US (61/801,255) 2013-03-15

[21] **3,138,083**  
[13] A1

[51] **Int.Cl. C07K 16/46 (2006.01) C07K 16/28 (2006.01) C12N 15/13 (2006.01) C12P 21/08 (2006.01)**  
[25] EN  
[54] **BISPECIFIC TETRAVALENT ANTIBODIES AND METHODS OF MAKING AND USING THEREOF**  
[54] **ANTICORPS TETRAVALENTS BISPECIFIQUES ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION**  
[72] GAO, ZEREN, US  
[72] TAN, PHIL, US  
[72] KOVACEVICH, BRIAN, US  
[72] RENSHAW, BLAIR, US  
[72] ADAMO, JEFFREY, US  
[72] MAK, NGA SZE AMANDA, US  
[72] ZHOU, SHI, CN  
[72] CHEN, LAN, CN  
[72] ZHU, YI, CN  
[71] SYSTIMMUNE, INC., US  
[71] BAILI-BIO (CHENGDU) PHARMACEUTICAL CO., LTD., CN  
[22] 2015-12-19  
[41] 2016-06-30  
[62] 2,969,867  
[30] US (62/095,348) 2014-12-22

[21] **3,138,091**  
[13] A1

[51] **Int.Cl. G06F 21/31 (2013.01) G16H 40/40 (2018.01)**  
[25] EN  
[54] **EXTENSIBLE DEPLOYMENT SYSTEM**  
[54] **SYSTEME DE DEPLOIEMENT EXTENSIBLE**  
[72] BARNEFIHER, GERALD E., US  
[72] LAM, WILLIS, US  
[72] MASSEY, RICHARD W., US  
[72] NGUYEN, NICK T., US  
[72] NGUYEN, RYAN, US  
[71] CAREFUSION 303, INC., US  
[22] 2013-11-12  
[41] 2014-05-22  
[62] 2,890,195  
[30] US (13/678,472) 2012-11-15

[21] **3,138,116**  
[13] A1

[25] EN  
[54] **NOVEL COMPOSITIONS, COMBINATIONS, AND METHODS THEREOF**  
[54] **NOUVELLES COMPOSITIONS, COMBINAISONS ET METHODES CONNEXES**  
[72] VEPACHEDU, SREENIVASARAO, US  
[72] MOEBIUS, HANS,J., CH  
[72] BESPALOV, ANTON, DE  
[71] EXCIVA GMBH, DE  
[71] VEPACHEDU, SREENIVASARAO, US  
[22] 2018-05-03  
[41] 2018-11-08  
[62] 3,062,452  
[30] US (62/501,696) 2017-05-04  
[30] US (PCT/US2017/048748) 2017-08-25  
[30] TW (106129169) 2017-08-28  
[30] US (62/634,162) 2018-02-22  
[30] US (62/635,554) 2018-02-27  
[30] US (62/636,099) 2018-02-27  
[30] US (62/636,171) 2018-02-28

[21] **3,138,121**  
[13] A1

[51] **Int.Cl. B62D 33/037 (2006.01) B60J 5/10 (2006.01)**  
[25] EN  
[54] **VEHICLE CONTAINER, VEHICLE CONTAINER DOOR AND SYSTEM FOR ASSEMBLING A DOOR TO A VEHICLE CONTAINER**  
[54] **CONTENEUR POUR VEHICULE, PORTE DE CONTENEUR POUR VEHICULE ET SYSTEME D'ASSEMBLAGE D'UNE PORTE A UN CONTENEUR POUR VEHICULE**  
[72] LEMAIRE, BENOIT, CA  
[72] LEIB, STEFANE, CA  
[72] GIROUX-BERNIER, DOMINIC, CA  
[71] INDUSTRIES FABKOR INC., CA  
[22] 2020-02-28  
[41] 2020-09-10  
[62] 3,132,246  
[30] US (62/812,675) 2019-03-01

[21] **3,138,143**  
[13] A1

[25] EN  
[54] **CELL CULTURE MEDIA COMPOSITIONS FOR PRIMARY CELLS**  
[54] **CELL CULTURE MEDIA COMPOSITIONS FOR PRIMARY CELLS**  
[72] DIETZ, ALLAN B., US  
[72] KNUTSON, GAYLORD, US  
[71] MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH, US  
[22] 2015-05-14  
[41] 2015-11-19  
[62] 2,949,225  
[30] US (61/994,637) 2014-05-16



**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,138,227**  
[13] A1

[51] **Int.Cl. H04N 19/31 (2014.01) H04N 19/109 (2014.01) H04N 19/112 (2014.01)**

[25] EN

[54] **VIDEO ENCODING METHOD, VIDEO ENCODING DEVICE, VIDEO DECODING METHOD, VIDEO DECODING DEVICE, PROGRAM, AND VIDEO SYSTEM**

[54]

[72] ISHIDA, TAKAYUKI, JP

[72] CHONO, KEIICHI, JP

[71] NEC CORPORATION, JP

[22] 2016-11-14

[41] 2017-06-08

[62] 3,077,470

[30] JP (2015-235525) 2015-12-02

[21] **3,138,321**  
[13] A1

[51] **Int.Cl. G06F 21/85 (2013.01) G06F 21/50 (2013.01)**

[25] EN

[54] **SYSTEMS, METHODS AND APPARATUSES FOR DEVICE ATTESTATION BASED ON SPEED OF COMPUTATION**

[54] **SYSTEMES, PROCEDES ET APPAREILS POUR ATTESTER UN DISPOSITIF SUR LA BASE DE LA VITESSE DE CALCUL**

[72] IGNATCHENKO, SERGEY, AT

[71] OLOGN TECHNOLOGIES AG, LI

[22] 2014-03-07

[41] 2014-09-18

[62] 2,902,296

[30] US (61/792,392) 2013-03-15

[30] US (61/832,464) 2013-06-07

[21] **3,138,339**  
[13] A1

[51] **Int.Cl. A61M 16/00 (2006.01) A61M 16/12 (2006.01) A61M 16/20 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR INTELLIGENT GAS SOURCE MANAGEMENT AND/OR SYSTEMS AND METHODS FOR DELIVERY OF THERAPEUTIC GAS AND/OR ENHANCED PERFORMANCE VERIFICATION FOR THERAPEUTIC GAS DELIVERY**

[54] **SYSTEMES ET PROCEDES DE GESTION DE SOURCE DE GAZ INTELLIGENTE, ET/OU SYSTEMES ET PROCEDES D'ADMINISTRATION DE GAZ THERAPEUTIQUE ET/OU DE VERIFICATION DE PERFORMANCE AMELIOREE POUR L'ADMINISTRATION DE GAZ THERAPEUTIQUE**

[72] ACKER, JARON M., US

[72] FALLIGANT, JOHN C., US

[72] MILSAP, JEFF, US

[72] ROEHL, ROBIN, US

[72] SCHMIDT, JEFFREY, US

[72] TOLMIE, CRAIG R., US

[71] MALLINCKRODT HOSPITAL PRODUCTS IP LIMITED, IE

[22] 2015-05-11

[41] 2015-11-12

[62] 2,941,761

[30] US (61/991,032) 2014-05-09

[30] US (61/991,028) 2014-05-09

[30] US (61/991,083) 2014-05-09

[30] US (14/709,298) 2015-05-11

[30] US (14/709,316) 2015-05-11

[30] US (14/709,308) 2015-05-11

[21] **3,138,243**  
[13] A1

[51] **Int.Cl. G06T 7/70 (2017.01) G06Q 10/08 (2012.01)**

[25] EN

[54] **TRACKING VEHICLES IN A WAREHOUSE ENVIRONMENT**

[54] **SUIVI DE VEHICULES DANS UN ENVIRONNEMENT D'ENTREPOT**

[72] ECKMAN, CHRISTOPHER FRANK, US

[71] LINEAGE LOGISTICS, LLC, US

[22] 2019-05-30

[41] 2019-12-05

[62] 3,101,978

[30] US (15/993,343) 2018-05-30

[30] US (16/277,338) 2019-02-15

[21] **3,138,282**  
[13] A1

[25] EN

[54] **XBPI, CD138, AND CS1 PEPTIDES**

[54] **PEPTIDES DERIVES DE XBPI, CD138 ET CS1**

[72] MUNSHI, NIKHIL C., US

[72] ANDERSON, KENNETH C., US

[72] BAE, JOOEUN, US

[71] DANA-FARBER CANCER INSTITUTE, INC., US

[22] 2009-06-01

[41] 2009-12-10

[62] 2,726,804

[30] US (61/058,180) 2008-06-02

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

[21] **3,138,342**  
[13] A1

[51] **Int.Cl. A61M 16/00 (2006.01) A61M 16/12 (2006.01) A61M 16/20 (2006.01) G01M 3/26 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR INTELLIGENT GAS SOURCE MANAGEMENT AND/OR SYSTEMS AND METHODS FOR DELIVERY OF THERAPEUTIC GAS AND/OR ENHANCED PERFORMANCE VERIFICATION FOR THERAPEUTIC GAS DELIVERY**

[54] **SYSTEMES ET PROCEDES DE GESTION DE SOURCE DE GAZ INTELLIGENTE, ET/OU SYSTEMES ET PROCEDES D'ADMINISTRATION DE GAZ THERAPEUTIQUE ET/OU DE VERIFICATION DE PERFORMANCE AMELIOREE POUR L'ADMINISTRATION DE GAZ THERAPEUTIQUE**

[72] ACKER, JARON M., US  
[72] FALLIGANT, JOHN C., US  
[72] MILSAP, JEFF, US  
[72] ROEHL, ROBIN, US  
[72] SCHMIDT, JEFFREY, US  
[72] TOLMIE, CRAIG R., US  
[71] MALLINCKRODT HOSPITAL PRODUCTS IP LIMITED, IE

[22] 2015-05-11  
[41] 2015-11-12  
[62] 2,941,761  
[30] US (61/991,032) 2014-05-09  
[30] US (61/991,028) 2014-05-09  
[30] US (61/991,083) 2014-05-09  
[30] US (14/709,298) 2015-05-11  
[30] US (14/709,316) 2015-05-11  
[30] US (14/709,308) 2015-05-11

[21] **3,138,390**  
[13] A1

[51] **Int.Cl. G16C 20/00 (2019.01) G16C 20/90 (2019.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR PHARMACEUTICAL COMPOUNDING**

[54] **PROCEDES ET SYSTEMES DE PRODUCTION DE COMPOSES PHARMACEUTIQUES**

[72] DANOPOULOS, PANAGIOTA, CA  
[71] MEDISCA PHARMACEUTIQUE, INC., CA

[22] 2019-06-07  
[41] 2019-12-26  
[62] 3,104,359  
[30] US (62/686,984) 2018-06-19  
[30] US (62/750,453) 2018-10-25

[21] **3,138,409**  
[13] A1

[51] **Int.Cl. C01B 17/775 (2006.01) C01B 17/69 (2006.01) C01B 17/76 (2006.01)**

[25] EN

[54] **RECOVERY OF SULFUR TRIOXIDE HEAT OF ABSORPTION**

[54] **RECUPERATION DE LA CHALEUR D'ABSORPTION DE TRIOXYDE DE SOUFRE**

[72] VERA-CASTANEDA, ERNESTO, US  
[71] MECS, INC., US

[22] 2014-03-14  
[41] 2014-09-18  
[62] 2,902,562  
[30] US (61/794,855) 2013-03-15

[21] **3,138,437**  
[13] A1

[25] EN

[54] **HYBRID UTILITY VEHICLE**

[54] **VEHICULE UTILITAIRE HYBRIDE**

[72] BORUD, ERIC J., US  
[72] MATKO, CHRISTOPHER P., US  
[72] BUEHLER, DAVID F., CH  
[72] VAN BATAVIA, BRIAN L., US  
[72] COMANA, BENJAMIN M., CH  
[71] POLARIS INDUSTRIES INC., US

[22] 2017-06-05  
[41] 2017-12-21  
[62] 3,027,367  
[30] US (62/349,998) 2016-06-14  
[30] US (15/613,483) 2017-06-05

[21] **3,138,439**  
[13] A1

[25] EN

[54] **COMPOSITION FOR PREVENTING OR TREATING NEURODEGENERATIVE DISEASES, CONTAINING DITERPENE-BASED COMPOUND**

[54] **COMPOSITION DESTINEE A PREVENIR OU A TRAITER DES MALADIES NEURODEGENERATIVES, CONTENANT UN COMPOSE A BASE DE DITERPENE**

[72] KIM, WON GON, KR  
[72] HAN, BAEK SOO, KR  
[72] BYUN, JEONG SU, KR  
[72] NGUYEN, VAN MINH, KR  
[72] CHOI, HA YOUNG, KR  
[71] KOREA RESEARCH INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY, KR

[22] 2018-11-15  
[41] 2019-05-23  
[62] 3,084,139  
[30] KR (10-2017-0152487) 2017-11-15  
[30] KR (10-2017-0153861) 2017-11-17

[21] **3,138,549**  
[13] A1

[25] EN

[54] **APPARATUS FOR OPTICAL SEETHROUGH HEAD MOUNTED DISPLAY WITH MUTUAL OCCLUSION AND OPAQUENESS CONTROL CAPABILITY**

[54] **APPAREIL DESTINE A UN VISIOCASQUE TRANSPARENT OPTIQUE POSSEDANT UNE CAPACITE DE COMMANDE MUTUELLE D'OCCLUSION ET D'OPACITE**

[72] GAO, CHUNYU, US  
[72] LIN, YUXIANG, US  
[72] HUA, HONG, US  
[71] MAGIC LEAP, INC., US

[22] 2013-04-05  
[41] 2014-01-16  
[62] 2,874,576  
[30] US (61/620,574) 2012-04-05  
[30] US (61/620,581) 2012-04-05

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,138,602**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR NETWORKED MUSIC PLAYBACK**  
[54] **SYSTEMES ET PROCEDES POUR REPRODUCTION DE MUSIQUE EN RESEAU**  
[72] COBURN, ARTHUR, US  
[72] HOADLEY, JONI, US  
[71] SONOS, INC., US  
[22] 2012-12-21  
[41] 2013-07-04  
[62] 3,077,786  
[30] US (13/341,237) 2011-12-30

[21] **3,138,610**  
[13] A1

[51] **Int.Cl. A61K 31/047 (2006.01) A61P 25/00 (2006.01)**  
[25] EN  
[54] **TREATMENT OF AUTISTIC SPECTRUM DISORDER**  
[54] **TRAITEMENT D'UN TROUBLE DU SPECTRE DE L'AUTISME (ASD)**  
[72] PRICE, RICHARD LOUIS, US  
[71] PRICE, RICHARD LOUIS, US  
[22] 2014-04-04  
[41] 2014-10-16  
[62] 2,909,302  
[30] US (13/860,824) 2013-04-11  
[30] US (14/166,483) 2014-01-28

[21] **3,138,618**  
[13] A1

[25] EN  
[54] **OFF-HIGHWAY RECREATIONAL VEHICLE**  
[54] **VEHICULE DE LOISIRS HORS ROUTES**  
[72] ECK, BRIAN, US  
[72] ESALA, MARK, US  
[72] HUGHES, RYAN, US  
[72] HULSTEIN, ANDREW, US  
[72] KENNEDY, CRAIG, US  
[72] MAZOUR, SCOTT, US  
[72] SCHOENECKER, PETER, US  
[72] SEAL, JOHN, US  
[72] SORENSON, DEREK, US  
[72] SPINDLER, JARED, US  
[71] ARCTIC CAT INC., US  
[22] 2014-02-20  
[41] 2014-08-28  
[62] 2,903,168  
[30] US (13/775,133) 2013-02-23

[21] **3,138,639**  
[13] A1

[51] **Int.Cl. G06T 19/00 (2011.01) G06T 15/00 (2011.01)**  
[25] EN  
[54] **SYSTEMS FOR A GENERATING AN INTERACTIVE 3D ENVIRONMENT USING VIRTUAL DEPTH**  
[54]  
[72] ESKANDER, TAMER, US  
[72] STEELE, ISAAC, US  
[71] VIACOM INTERNATIONAL INC., US  
[22] 2017-08-02  
[41] 2018-02-15  
[62] 3,033,059  
[30] US (15/233,823) 2016-08-10

[21] **3,138,651**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2012.01) G06Q 50/02 (2012.01) A01C 21/00 (2006.01) B65D 85/00 (2006.01) B65D 90/48 (2006.01) G06K 19/07 (2006.01)**  
[25] EN  
[54] **TAGGED CONTAINER TRACKING**  
[54]  
[72] WINTEMUTE, ERIC G., US  
[72] RICE, RICHARD L., US  
[72] JAMES, KENT, US  
[72] RICHARDSON, JOHN J., US  
[71] AMVAC HONG KONG LIMITED, CN  
[22] 2018-05-16  
[41] 2018-11-22  
[62] 3,062,442  
[30] US (62/508,145) 2017-05-18

[21] **3,138,656**  
[13] A1

[51] **Int.Cl. C01B 32/196 (2017.01) C01B 32/184 (2017.01) C01B 32/19 (2017.01)**  
[25] EN  
[54] **METHOD FOR PREPARATION AND SEPARATION OF ATOMIC LAYER THICKNESS PLATELETS FROM GRAPHITE OR OTHER LAYERED MATERIALS**  
[54]  
[72] SAVSUNENKO, OLEKSANDR, UA  
[72] POLYAKOVA, ELENA, US  
[72] STOLYAROV, DANIEL, US  
[71] GRAPHENE LABORATORIES INC., US  
[22] 2015-09-28  
[41] 2016-04-07  
[62] 2,963,247  
[30] US (62/058,313) 2014-10-01

[21] **3,138,670**  
[13] A1

[25] EN  
[54] **SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR MOBILE DEVICE TRANSACTIONS**  
[54]  
[72] KAJA, VENKATA NAGA PRADEEP KUMAR, US  
[72] KONKATHI, VIJAYARAJU, US  
[71] VISA INTERNATIONAL SERVICE ASSOCIATION, US  
[22] 2018-08-21  
[41] 2020-02-21  
[62] 3,065,034

[21] **3,138,737**  
[13] A1

[25] EN  
[54] **ALL-TERRAIN VEHICLE**  
[54] **VEHICULE TOUT-TERRAIN**  
[72] FISCHER, BURTON D., US  
[72] BARBREY, WILLIAM L., US  
[71] POLARIS INDUSTRIES INC., US  
[22] 2019-05-22  
[41] 2019-12-05  
[62] 3,044,002  
[30] US (16/000395) 2018-06-05

[21] **3,138,740**  
[13] A1

[51] **Int.Cl. F28D 20/00 (2006.01) F03D 9/18 (2016.01) F24T 50/00 (2018.01) B65G 5/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR ON DEMAND POWER PRODUCTION UTILIZING GEOLOGIC THERMAL RECOVERY**  
[54] **METHODE DE PRODUCTION D'ALIMENTATION SUR DEMANDE AU MOYEN DE RECUPERATION THERMIQUE GEOLOGIQUE**  
[72] TOEWS, MATTHEW, CA  
[72] SCHWARZ, BAILEY, CA  
[72] REDFERN, JOHN, CA  
[72] CAIRNS, PAUL, CA  
[71] EAVOR TECHNOLOGIES INC, CA  
[22] 2020-11-09  
[41] 2021-02-12  
[62] 3,098,406  
[30] US (62/965833) 2020-01-25

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[21] **3,138,752**  
[13] A1  
[51] **Int.Cl. G01N 1/00 (2006.01) C12Q 1/6869 (2018.01) C12M 1/34 (2006.01) G01N 21/05 (2006.01) G01N 21/64 (2006.01)**  
[25] EN  
[54] **INTEGRATED OPTOELECTRONIC READ HEAD AND FLUIDIC CARTRIDGE USEFUL FOR NUCLEIC ACID SEQUENCING**  
[54]  
[72] BUERMANN, DALE, US  
[72] MOON, JOHN A., US  
[72] CRANE, BRYAN, US  
[72] WANG, MARK, US  
[72] HONG, STANLEY S., US  
[72] HARRIS, JASON, US  
[72] HAGE, MATTHEW, US  
[72] NIBBE, MARK J., US  
[71] ILLUMINA, INC., US  
[22] 2013-02-13  
[41] 2013-10-10  
[62] 2,867,665  
[30] US (61/619,784) 2012-04-03

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[21] **3,139,142**  
[13] A1  
[51] **Int.Cl. C12Q 1/6869 (2018.01) C12M 1/34 (2006.01) G01M 11/02 (2006.01) G01N 21/64 (2006.01) G01N 21/84 (2006.01) G02B 3/00 (2006.01) G02B 21/36 (2006.01) G02B 27/32 (2006.01)**  
[25] EN  
[54] **OPTICAL DISTORTION CORRECTION FOR IMAGED SAMPLES**  
[54] **CORRECTION DE DISTORSION OPTIQUE DESTINEE A DES ECHANTILLONS IMAGES**  
[72] LANGLOIS, ROBERT, US  
[72] BELITZ, PAUL, US  
[71] ILLUMINA, INC., US  
[22] 2018-02-26  
[41] 2018-09-07  
[62] 2,996,541  
[30] US (62/468,347) 2017-03-07  
[30] NL (N2018852) 2017-05-05

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[21] **3,138,758**  
[13] A1  
[25] EN  
[54] **HIGHLY SOLUBLE LEPTINS**  
[54] **LEPTINES HAUTEMENT SOLUBLES**  
[72] ERICKSON, MARY, US  
[71] AMYLIN PHARMACEUTICALS, LLC, US  
[71] ASTRAZENECA PHARMACEUTICALS LP, US  
[22] 2011-09-28  
[41] 2012-04-19  
[62] 2,813,038  
[30] US (61/387,402) 2010-09-28  
[30] US (61/422,091) 2010-12-10

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CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	2,918,363	CORDANT RESEARCH SOLUTIONS, LLC	2,909,814	DONG-A ST CO., LTD.	3,037,118
CHAN, PAUL MON-WAH	2,910,929	CORNELL UNIVERSITY	2,863,257	DONGGUAN ZHENXING- BEITE MEDICINE TECHNOLOGY CO., LTD.	3,050,188
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CHAOU, JEAN	2,927,086	CORTES, LEONARDO	2,976,761	DOUCET, JOCELYN	3,032,242
CHARFI, CYNDIA	3,071,494	COTTON, PAUL WILLIAM	2,962,931	DOUGLAS, JONATHAN	2,918,085
CHARLES, SCOTT	2,925,732	COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH	2,929,431	DOW GLOBAL TECHNOLOGIES LLC	2,918,949
CHARLESWORTH, AARON	3,007,692	COURTEMANCHE, FRANCOIS	2,977,429	DOW GLOBAL TECHNOLOGIES LLC	2,924,640
CHASSIN, DAVID P.	3,044,873	COVIDIEN LP	2,846,490	DOW GLOBAL TECHNOLOGIES LLC	2,969,002
CHEM&P GMBH & CO. KG	3,045,527	COVIDIEN LP	2,861,127	DOW GLOBAL TECHNOLOGIES LLC	2,969,005
CHEN, MING	3,061,140	CRIOU, OLIVIER	2,915,618	DREXEL UNIVERSITY	3,021,449
CHEN, QIAO	3,027,663	CRISTALENS INDUSTRIE	3,076,789	DROUADAINE, YVES	2,962,348
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CHOI, SUN-HO	3,037,118			EDMONDS, ANDREW MARK	3,044,522
CHOI, SUNG-HAK	3,037,118			EDWARDS LIFESCIENCES CORPORATION	3,063,780
CHONO, KEIICHI	3,077,470				

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NARAYAN, KARTHIK	3,119,678	QIAO, WEIHUA	3,121,361	SEPULVEDA, JAIME E.	3,120,049
NASR, NADER	3,131,676	QIN, CHENGRONG	3,081,435	SHAIKH, SHOEBREZA	3,119,681
NASR, NADER	3,131,683	RAMANATHAN, RAMANATHAN	3,117,006	SHARMA, PANKAJ	3,119,643
NICOL, OLIVIER	3,117,003	RAMANATHAN, RAMANATHAN	3,117,039	SHARMA, SHIV K.	3,120,831
NITSCH, PETER	3,103,112	RAMANATHAN, RAMANATHAN	3,117,189	SHEA, BRADFORD A.	3,117,006
NTAIS, SPYRIDON	3,082,211	RANDS, PETER	3,118,556	SHEA, BRADFORD A.	3,117,039
NYAMAGOUDAR, VINAYAK M.	3,116,057	RAO, ABHIJIT	3,117,006	SHEA, BRADFORD A.	3,117,189
O'NEIL, BRIAN	3,120,311	RAO, ABHIJIT	3,117,039	SHOGHI, FATEMEH (NATASHA)	3,081,969
OCIEPKA, MICHAEL	3,119,337	RAO, ABHIJIT	3,117,189	SHOPIFY INC.	3,103,112
OLDCASTLE BUILDINGENVELOPE, INC.	3,120,257	RAUTIO, TANIA	3,119,347	SHOR, ROMAN JGOREVICH	3,120,306
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ORZECOWSKI, ANNA A.	3,081,835	RICE, JASON	3,131,676	SKYYFISH LLC	3,082,217
OSBAK, GORDON A.	3,120,269	RICE, JASON	3,131,683	SKYYFISH LLC	3,090,641
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OVH	3,116,055	ROCHOLL, JOSHUA D.	3,131,676	SMITH, CHAD K.	3,131,683
OVH	3,116,225	ROCHOLL, JOSHUA D.	3,131,683	SNAP-ON INCORPORATED	3,119,261
OVH	3,116,228	RODRIGUEZ, GUILLERMO	3,114,300	SNAP-ON INCORPORATED	3,119,263
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		ZHANG, JIAN	3,119,944
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ABELS, GIDEON	3,139,889	ALCON INC.	3,139,636	ASIRVATHAM, EDWARD	3,140,100
ABIOMED, INC.	3,134,584	ALFA LAVAL CORPORATE AB	3,139,876	ASKVIK AQUA AS	3,139,644
ABU-SHANAB, OMAR L.	3,139,840	ALFARO, ARTHUR	3,139,659	ASOKAN, ARAVIND	3,140,049
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ADAMS, AUSTIN	3,139,264	ALTUS INTERVENTION (TECHNOLOGIES) AS	3,139,927	AUDAT, HELOISE	3,140,034
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AEROFOIL ENERGY LIMITED	3,140,245	AMGEN INC.	3,139,506	AVELLAN, ABEL	3,140,134
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NETWORK, INC.	3,139,932	PENTH, FELIX	3,139,858	PROFILI, JACOPO	3,139,824
OTOLITH SOUND INC.	3,140,031	PERALTA, DOMINIC	3,139,670	PROMETHEUS BIOSCIENCES,	
OTR WHEEL ENGINEERING,		PEREZ DIAZ, PETER L.	3,139,831	INC.	3,140,029
INC.	3,140,214	PEREZ RODRIGUEZ, DIEGO	3,140,285	PROMETHEUS S.R.L.	3,140,319
OU, ZHENQUAN	3,137,039	PERFECT DAY, INC.	3,134,725	PROMIDIS S.R.L.	3,139,816
OURY, CECILE	3,139,256	PERFECT DAY, INC.	3,134,754	PROVOST, ROXANE	3,139,892
OVERHOFF, KIRK ALAN	3,140,039	PERFORMANCE PULSATION		PSZOLLA, CHRISTIAN	3,139,798
OWEN, SAMUEL	3,140,031	CONTROL, INC.	3,139,699	PSZOLLA, CHRISTIAN	3,139,800
OXFORD NANOPORE		PERIER, VALERIE	3,139,892	PSZOLLA, CHRISTIAN	3,139,807
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RAO, SUMAN	3,139,969	MARIANO	3,140,226	ERNESTO	3,140,364
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RAPYUTA ROBOTICS CO.,		ROELS, STEVEN	3,140,066	CONSTRUCTION OY	3,135,016
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RAPYUTA ROBOTICS CO.,		ROGERS, ANTHONY	3,139,234	CONSTRUCTION OY	3,135,091
LTD.	3,139,625	ROGERS, EVAN	3,139,284	SANDVIK MINING AND	
RASHIDINEJAD, AMIR	3,139,667	ROGERS, JOHN THOMAS	3,139,699	CONSTRUCTION OY	3,135,114
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REGENERON		ROY, RAKESH	3,139,301	COMPANY	3,140,041
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INC.	3,140,075	ROZBICKI, ROBERT T.	3,139,813	COMPANY	3,140,077
REGENERON		RSA PROTECTIVE		SAUDI ARABIAN OIL	
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SEATRIEVER INTERNATIONAL HOLDINGS LIMITED	3,139,792	SHIBAYAMA, MASAMI	3,139,639	SPORNADO INC.	3,140,219
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SEEN, DONGSEUNG	3,139,912	SHIMANOVICH, ROMAN	3,140,394	SRIGANESH, GANDHAM	3,140,130
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SEREGIN, VADIM	3,139,825	SIDDHARTH, JAY	3,139,871	STAFFORD-ALLEN, REBECCA ANNE	3,139,866
SERRE, AUDREY	3,134,570	SIEBENTRITT, MATTHIEU	3,139,633	STANNERS, ALEXANDER	3,139,568
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SHANGHAI FUTAI TECHNOLOGY CO., LTD.	3,140,246	SKELTON, TYSON J.	3,134,583	STAVROPOULOS, KATHY	3,140,039
SHANGHAI GP BIOTECH CO. LTD.	3,139,833	SKELTON, TYSON J.	3,135,002	STEAD, BRENT E.	3,139,581
SHANGHAI LEADO PHARMATECH CO. LTD.	3,140,231	SKOCEK, JAN	3,138,976	STECK, ALEXANDER	3,135,019
SHANGHAI TECH UNIVERSITY	3,140,406	SKUBCH, HENDRIK	3,139,624	STEELE, DAVID JOE	3,139,837
		SKUBCH, HENDRIK	3,139,625	STEEPER ENERGY APS	3,139,859
		SKUTNIK, PETER	3,140,108	STEEPER ENERGY APS	3,139,861
		SKYGROW PTY LTD	3,140,399	STENDALS EL AB	3,135,042
		SKYSAFE, INC.	3,139,822	STENDALS EL AB	3,135,061
		SLIOZBERG, KIRILL	3,135,019	STEPHENSON, KATE	3,139,670
		SMALLEY, ADAM PETER	3,138,940	STERN, DAVID	3,135,206
		SMITH COLLEGE	3,134,387	STEWART, MARK DAMIEN	3,140,399
		SMITH, CAMERON M.	3,139,679		
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STRATOS GENOMICS, INC.	3,140,425	TAPLEY, TIMOTHY LEWIS	3,140,039	UNIVERSITY OF	
STREB, ANNE	3,134,718	TAVOR, AMON	3,134,422	PENNSYLVANIA	3,134,485
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STRIETER, ROBERT MARTIN	3,139,634	TAYLOR, RICHARD DAVID	3,138,940	PENNSYLVANIA	3,134,507
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SULLIVAN, ROBERT	3,140,078	THAKUR, RAVIRAJ	3,139,845	THIFALT, JONATHAN	3,139,781
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SUSAL, CANER	3,139,853	THE CHEMOURS COMPANY		TIAN, XIANBIN	3,139,634
SUTER, DAVID	3,140,236	FC, LLC	3,138,904	TICE, JESSE B.	3,139,900
SUZHOU RIBO LIFE SCIENCE		THE CLEVELAND CLINIC		TIHONEN, TOMMI	3,135,091
CO., LTD.	3,140,233	FOUNDATION	3,139,294	TKACZ, KRISTINA M.	3,139,840
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FALLIGANT, JOHN C.	3,138,342	MECS, INC.	3,138,409	ZHU, YI	3,138,083
FISCHER, BURTON D.	3,138,737	MEDISCA PHARMACEUTIQUE, INC.	3,138,390		
GAO, CHUNYU	3,138,549	MILSAP, JEFF	3,138,339		
GAO, ZEREN	3,138,083	MILSAP, JEFF	3,138,342		
GIROUX-BERNIER, DOMINIC	3,138,121	MOEBIUS, HANS,J.	3,138,116		
GRAPHENE LABORATORIES INC.	3,138,656	MOON, JOHN A.	3,138,752		
GREELIS, JOHN P.	3,112,109	MUNSHI, NIKHIL C.	3,138,282		
HAGE, MATTHEW	3,138,752	NEC CORPORATION	3,138,227		
		NGUYEN, NICK T.	3,138,091		
		NGUYEN, RYAN	3,138,091		
		NGUYEN, VAN MINH	3,138,439		