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du Bureau des brevets



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# 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Le formulaire de paiements des frais devrait toujours être

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

Download the [Fee Payment Form](#).

### 1.1 Designated Establishments

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

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

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

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

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

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

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

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

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

### 1.1 Établissements désignés

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

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

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

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

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

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

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

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except statutory holiday

l'exception des jours fériés

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### 2. Electronic Correspondence

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

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

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

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

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

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

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

### 2. Correspondance électronique

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

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

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

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

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

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open for business.

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

### 2.1 Facsimile

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

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

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

(819) 934-3833

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

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

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

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

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

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

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

### 2.1 Correspondance par télécopieur

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

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

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

(819) 934-3833

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

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

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

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

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

## 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.

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.

## Avis

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

Format TIFF

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

Format PDF

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

ASCII

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

## Marques de commerce

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

## Dessins industriels

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

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

## Notices

### 4. General Information

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

### 5. Time Period Extensions

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

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

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

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

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

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

### 4. Renseignements généraux

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

### 5. Prorogation des délais

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

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

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

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

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

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

## Avis

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## Notices

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

### Time period extensions under the Patent Cooperation Treaty

Rule 80.5 of the Regulations under the PCT provides:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## Notices

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

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

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

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

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

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

#### Trademarks

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

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

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

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

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

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

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

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

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

#### Marques de commerce

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

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

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

## Avis

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

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

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

The *Canadian Patent Office Record* of March 29, 2022 contains applications open to public inspection from March 13, 2022 to March 19, 2022.

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

La *Gazette du bureau des brevets* du 29 mars 2022 contient les demandes disponibles au public pour consultation pour la période du 13 mars 2022 au 19 mars 2022.

## Notices

### 16. Erratum

All information respecting patent application number 3,127,080 referred to under the section *Canadian Applications Open to Public Inspection* contained in the Vol. 149 No. 41 October 12, 2021, issue of the *Canadian Patent Office Record* was erroneously published, and should be disregarded.

### 16. Erratum

Toutes les informations relatives à la demande de brevet 3,127,080 sous la rubrique *Demandes canadiennes mises à la disponibilité* du publique dans le numéro Vol. 149 No. 41 12 octobre 2021 de la *Gazette du Bureau des brevets* ont été publiées par erreur et doivent être ignorées.

## 17. Erratum

All information respecting patent application number 3, 065, 483 referred to under the section *Canadian Applications Open to Public Inspection* contained in the September 1<sup>st</sup>, 2020 issue of the *Canadian Patent Office Record* was erroneously published, and should be disregarded.

## 17. Erratum

Toutes les informations relatives à la demande de brevet 3, 065, 483 sous la rubrique *Demandes canadiennes mises à la disponibilité* du public dans le numéro du 1<sup>er</sup> septembre, 2020 de la *Gazette du Bureau des brevets* ont été publiées par erreur et doivent être ignorées.

# Canadian Patents Issued

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## Brevets canadiens délivrés

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[13] C  
[51] **Int.Cl. A61K 38/10 (2006.01) A61P 25/02 (2006.01) A61P 25/06 (2006.01) A61P 29/00 (2006.01)**  
[25] EN  
[54] **METHODS FOR TREATMENT OF PAIN**  
[54] **METHODES DE TRAITEMENT DE LA DOULEUR**  
[72] TOLL, LAWRENCE R., US  
[72] YEOMANS, DAVID C., US  
[72] ANGST, MARTIN S., US  
[72] JACOBS, DANIEL I., US  
[73] NOCICEPTA LLC, US  
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[87] (WO2011/017122)  
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[13] C  
[51] **Int.Cl. A61K 31/517 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **USE OF LAPATINIB FOR TREATING CANCER**  
[54] **UTILISATION DE LAPATINIB POUR LE TRAITEMENT DU CANCER**  
[72] BING, NAN, US  
[72] BRILEY, LINDA PERRY, US  
[72] BUDDER, LAURA R., US  
[72] COX, CHARLES J., GB  
[72] SPRAGGS, COLIN F., GB  
[73] NOVARTIS AG, CH  
[85] 2012-02-20  
[86] 2010-08-20 (PCT/US2010/046142)  
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[25] EN  
[54] **HYBRID ELECTRIC GENERATOR SET**  
[54] **ENSEMBLE DE GENERATRICE ELECTRIQUE HYBRIDE**  
[72] APALENEK, THOMAS, US  
[72] LU, GORDON, US  
[72] PASTERSKI, STEPHEN, US  
[72] QUIGLEY, THOMAS, US  
[73] BAE SYSTEMS CONTROLS INC., US  
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[51] **Int.Cl. A61B 18/02 (2006.01) A61F 7/00 (2006.01) A61M 5/14 (2006.01) A61M 16/06 (2006.01) A61M 19/00 (2006.01) A61M 25/01 (2006.01) A61M 31/00 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR NON-INVASIVE ANATOMICAL AND SYSTEMIC COOLING AND NEUROPROTECTION**  
[54] **PROCEDE ET DISPOSITIF POUR UN REFROIDISSEMENT ANATOMIQUE ET SYSTEMIQUE NON-INVASIF ET NEUROPROTECTION**  
[72] HARIKRISHNA, TANDRI, US  
[72] ZVIMAN, MENEKHEM MUZ, US  
[73] THE JOHNS HOPKINS UNIVERSITY, US  
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[13] C  
[51] **Int.Cl. A61K 36/24 (2006.01) A61P 9/10 (2006.01) A61P 25/00 (2006.01) A61P 25/28 (2006.01)**  
[25] EN  
[54] **METHOD OF TREATING NEUROLOGICAL CONDITIONS WITH EXTRACT OF NERIUM SPECIES OR THEVETIA SPECIES**  
[54] **PROCEDE DE TRAITEMENT D'ETATS NEUROLOGIQUES PAR UN EXTRAIT DE L'ESPECE NERIUM OU DE L'ESPECE THEVETIA**  
[72] ADDINGTON, OTIS C., US  
[72] NEWMAN, ROBERT A., US  
[73] PHOENIX BIOTECHNOLOGY, INC., US  
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[25] EN  
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[54] **SYSTEME DE SUIVI ET DE GESTION**  
[72] FAIN, STEVEN A., US  
[72] MANSELL, BRIAN E., US  
[72] WHALLEY, JOHN M., US  
[72] EUGENIDES, JAN G., US  
[72] LEATHAM, DAVID M., US  
[73] TRUCKTRAX, LLC, US  
[85] 2013-09-11  
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SPERM SEPARATION**

[54] **APPAREIL ET PROCÉDES DE  
SEPARATION DE SPERME**

[72] NOSRATI, REZA, CA  
[72] EAMER, LISE MARIE, CA  
[72] VOLLMER, MARION, CA  
[72] SINTON, DAVID, CA  
[72] ZINI, ARMAND, CA  
[73] THE GOVERNING COUNCIL OF  
THE UNIVERSITY OF TORONTO,  
CA  
[73] THE ROYAL INSTITUTION FOR  
THE ADVANCEMENT OF  
LEARNING/MCGILL UNIVERSITY,  
CA

[86] (2834007)  
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[54] **PROCEDE DE PRODUCTION DE  
GAZ DE SYNTHÈSE**

[72] MASS, HANS-JURGEN, DE  
[72] GOKE, VOLKER, DE  
[72] MACHHAMMER, OTTO, DE  
[72] GUZMANN, MARCUS, DE  
[72] SCHNEIDER, CHRISTIAN, DE  
[72] HORMUTH, WOLFGANG ALOIS, DE  
[72] BODE, ANDREAS, DE  
[72] KLINGLER, DIRK, DE  
[72] KERN, MATTHIAS, DE  
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C07J 31/00 (2006.01)**

[25] EN

[54] **NEUROACTIVE STEROIDS,  
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THEREOF**

[54] **STÉROÏDES NEUROACTIFS,  
COMPOSITIONS ET LEURS  
UTILISATIONS**

[72] UPASANI, RAVINDRA B., US  
[72] HARRISON, BOYD L., US  
[72] ASKEW, BENNY C., JR., US  
[72] DODART, JEAN-COSME, US  
[72] SALITURO, FRANCESCO G., US  
[72] ROBICHAUD, ALBERT J., US  
[73] SAGE THERAPEUTICS, INC., US

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[54] **LIGHT-EMITTING APPARATUSES  
FOR TREATING AND/OR  
DIAGNOSING MOTOR-RELATED  
NEUROLOGICAL CONDITIONS**

[54] **APPAREILS D'ÉMISSION DE  
LUMIÈRE POUR TRAITER ET/OU  
DIAGNOSTIQUER DES ÉTATS  
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LA FONCTION MOTRICE**

[72] SAVAGE, KENT W., US  
[72] WILLIS, GREGORY LYNN, US  
[72] ADAMS, DANIEL N., US  
[73] PHOTOPHARMICS, INC., US

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[54] **ADAPTIVE MEDIA  
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[54] **TRAITEMENT D'ÉMISSION DE  
CONTENU MÉDIA ADAPTATIF**

[72] GILSON, ROSS, US  
[73] COMCAST CABLE  
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[86] (2843709)  
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WITH UPSTREAM BRIDGING  
FILAMENTS**

[54] **FILTRE À AIR PLISSE ENCADRÉ  
AVEC FILAMENTS DE PONTAGE  
ASCENDANTS**

[72] SANOCKI, STEPHEN MARK, US  
[72] FOX, ANDREW ROBERT, US  
[72] LISE, JONATHAN MARK, US  
[72] ROGERS, JOHN JOSEPH, US  
[72] SESHADRI, KANNAN, US  
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[72] DUTSON, BRIAN, GB  
[73] ALLISON TRANSMISSION, INC., US  
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[54] **CARTOGRAPHIE STATISTIQUE DANS UN SYSTEME D'IMAGERIE OPTOACOUSTIQUE**  
[72] ZALEV, JASON, CA  
[72] CLINGMAN, BRYAN, US  
[73] SENO MEDICAL INSTRUMENTS, INC., US  
[85] 2014-09-08  
[86] 2013-03-11 (PCT/US2013/030242)  
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[54] **SYSTEMS AND METHODS FOR REAL-TIME ACCOUNT ACCESS**  
[54] **SYSTEMES ET PROCEDES D'ACCES EN TEMPS REEL AUX COMPTES**  
[72] MARCOUS, NEIL, US  
[72] WOODBURY, ROBERT, US  
[72] GORDON, PETER, US  
[73] FIDELITY INFORMATION SERVICES, LLC, US  
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[86] 2013-03-15 (PCT/US2013/032130)  
[87] (WO2013/142334)  
[30] US (61/612,897) 2012-03-19

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[11] **2,869,559**  
[13] C

[51] **Int.Cl. G21C 7/02 (2006.01) G21C 7/34 (2006.01) G21C 23/00 (2006.01)**  
[25] EN  
[54] **AQUEOUS ASSEMBLY AND CONTROL METHOD**  
[54] **ENSEMBLE AQUEUX ET METHODE DE CONTROLE**  
[72] PIEFER, GREGORY, US  
[72] VAN ABEL, ERIC N., US  
[73] SHINE TECHNOLOGIES, LLC, US  
[85] 2014-10-03  
[86] 2013-03-15 (PCT/US2013/031837)  
[87] (WO2013/187974)  
[30] US (61/620,735) 2012-04-05

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[11] **2,870,651**  
[13] C

[51] **Int.Cl. B60W 40/12 (2012.01) B60W 40/09 (2012.01)**  
[25] EN  
[54] **VEHICLE FUEL CONSUMPTION MONITOR AND FEEDBACK SYSTEMS**  
[54] **SYSTEMES DE RETROACTION ET DE SURVEILLANCE DE CONSOMMATION DE CARBURANT D'UN VEHICULE**  
[72] PALMER, JASON, US  
[72] SLJIVAR, SLAVEN, US  
[73] SMARTDRIVE SYSTEMS, INC., US  
[86] (2870651)  
[87] (2870651)  
[22] 2014-11-10  
[30] US (14/076,511) 2013-11-11

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[11] **2,873,788**  
[13] C

[51] **Int.Cl. A61B 17/16 (2006.01) A61B 17/14 (2006.01) B25F 5/00 (2006.01)**  
[25] EN  
[54] **POWERED SURGICAL TOOL ASSEMBLY INCLUDING A TOOL UNIT AND A SEPARATE BATTERY AND CONTROL MODULE THAT ENERGIZES AND CONTROLS THE TOOL UNIT**  
[54] **ENSEMBLE OUTIL CHIRURGICAL ELECTRIQUE COMPRENANT UNE UNITE D'OUTIL ET UNE BATTERIE SEPAREE ET UN MODULE DE COMMANDE QUI ALIMENTE ET COMMANDE L'UNITE D'OUTIL**  
[72] BELAGALI, KRISHNAMURTHY, US  
[72] HASSLER, WILLIAM L., JR., US  
[72] HERSHBERGER, DAVID, US  
[72] IRVINE, MICHAEL, US  
[73] STRYKER CORPORATION, US  
[85] 2014-11-14  
[86] 2013-05-23 (PCT/US2013/042464)  
[87] (WO2013/177423)  
[30] US (61/650,732) 2012-05-23

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[11] **2,874,723**  
[13] C

[51] **Int.Cl. H04N 19/124 (2014.01) H04N 19/122 (2014.01) H04N 19/18 (2014.01) H04N 19/60 (2014.01)**  
[25] EN  
[54] **IMAGE PROCESSING APPARATUS AND METHOD**  
[54] **DISPOSITIF ET PROCEDE DE TRAITEMENT D'IMAGE**  
[72] SATO, KAZUSHI, JP  
[72] MORIGAMI, YOSHITAKA, JP  
[72] LU, SHUO, JP  
[73] SONY CORPORATION, JP  
[85] 2014-11-25  
[86] 2013-06-21 (PCT/JP2013/067109)  
[87] (WO2014/002897)  
[30] JP (2012-147877) 2012-06-29  
[30] JP (2012-153112) 2012-07-06

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[11] **2,877,221**  
[13] C

[51] **Int.Cl. B24B 55/02 (2006.01)**  
[25] EN  
[54] **GRINDING WHEEL AND METHOD**  
[54] **MEULE ET PROCEDE D'UTILISATION**  
[72] ELFIZY, AMR, CA  
[72] PERRON, FRANCOIS, CA  
[73] PRATT & WHITNEY CANADA CORP., CA  
[86] (2877221)  
[87] (2877221)  
[22] 2015-01-07  
[30] US (14/159,121) 2014-01-20

[11] **2,879,637**  
[13] C

[51] **Int.Cl. A01B 29/04 (2006.01)**  
[25] FR  
[54] **WHEEL FORMING AN IMPROVED AGRICULTURAL MACHINE**  
[54] **ROUE FORMANT OUTIL AGRICOLE AMELIORE**  
[72] PHELY, OLIVIER, FR  
[72] PIOU, DENIS, FR  
[73] OTICO, FR  
[86] (2879637)  
[87] (2879637)  
[22] 2015-01-22  
[30] FR (1451001) 2014-02-10

[11] **2,881,466**  
[13] C

[51] **Int.Cl. E21B 29/06 (2006.01)**  
[25] EN  
[54] **WELL BORE CASING MILL WITH EXPANDABLE CUTTER BASES**  
[54] **FRAISE DE TUBAGE DE TROU DE FORAGE DOTE DE BASES DE COUPE EXTENSIBLES**  
[72] RUTTLEY, DAVID J., US  
[73] ABRADO, INC., US  
[85] 2015-02-09  
[86] 2013-08-06 (PCT/US2013/053770)  
[87] (WO2014/025763)  
[30] US (61/681,670) 2012-08-10

[11] **2,882,745**  
[13] C

[51] **Int.Cl. C07K 16/18 (2006.01) A61P 35/00 (2006.01) C07K 16/00 (2006.01) C07K 19/00 (2006.01) C12N 5/10 (2006.01) C12N 5/16 (2006.01) C12P 21/08 (2006.01)**  
[25] EN  
[54] **ANTIBODY DRUG CONJUGATES (ADC) THAT BIND TO 158P1D7 PROTEINS**  
[54] **CONJUGUES DE MEDICAMENTS ANTICORPS (ADC) QUI SE LIENT AUX PROTEINES 158P1D7**  
[72] MORRISON, ROBERT KENDALL, US  
[72] AN, ZILI, US  
[72] MORRISON, KAREN JANE MEYRICK, US  
[72] SNYDER, JOSH, US  
[72] JIA, XIAO-CHI, US  
[73] AGENSYS, INC., US  
[73] SEAGEN INC., US  
[85] 2015-02-20  
[86] 2013-08-23 (PCT/US2013/056504)  
[87] (WO2014/032021)  
[30] US (61/692,448) 2012-08-23

[11] **2,883,025**  
[13] C

[51] **Int.Cl. B60L 50/00 (2019.01) B60K 1/00 (2006.01) B60L 15/00 (2006.01) B60P 1/28 (2006.01) B62D 33/00 (2006.01)**  
[25] EN  
[54] **WORK MACHINE, IN PARTICULAR DUMP TRUCK OR TRUCK**  
[54] **MACHINE DE TRAVAIL, EN PARTICULIER UN CAMION A BENNE OU UN CAMION**  
[72] KUGELSTADT, KAI, DE  
[72] LEVARAY, ADRIEN, FR  
[72] RICHTHAMMER, BURKARD, DE  
[73] LIEBHERR-MINING EQUIPMENT COLMAR SAS, FR  
[86] (2883025)  
[87] (2883025)  
[22] 2015-02-24  
[30] DE (10 2014 003 203.5) 2014-03-06

[11] **2,883,141**  
[13] C

[51] **Int.Cl. C12P 7/6409 (2022.01) C07C 55/20 (2006.01) C12N 9/88 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PREPARING SEBACIC ACID**  
[54] **PROCEDE DE PREPARATION D'ACIDE SEBACIQUE**  
[72] PIATESI, ANDREA, DE  
[72] BALDENIUS, KAI-UWE, DE  
[72] DITRICH, KLAUS, DE  
[72] KINDLER, ALOIS, DE  
[72] ZAJACZKOWSKI-FISCHER, MARTA, DE  
[72] BOHLING, RALF, DE  
[72] REHFINGER, ALWIN, DE  
[73] BASF SE, DE  
[85] 2015-02-25  
[86] 2013-09-03 (PCT/EP2013/068144)  
[87] (WO2014/037328)  
[30] EP (12183534.2) 2012-09-07

[11] **2,883,157**  
[13] C

[51] **Int.Cl. C23C 4/04 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR THERMAL SPRAYING A HERMETIC RARE EARTH ENVIRONMENTAL BARRIER COATING**  
[54] **COMPOSITIONS ET METHODES DE PULVERISATION THERMIQUE DE REVETEMENT ETANCHE ENVIRONNEMENTAL DE TERRE RARE HERMETIQUE**  
[72] KIRBY, GLEN HAROLD, US  
[72] ANTOLINO, NICHOLAS EDWARD, US  
[72] LEBLANC, LUC STEPHANE, US  
[73] GENERAL ELECTRIC COMPANY, US  
[86] (2883157)  
[87] (2883157)  
[22] 2015-02-26  
[30] US (14/204,367) 2014-03-11

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[11] **2,883,766**  
[13] C

[51] **Int.Cl. B23K 9/04 (2006.01) B23K 9/18 (2006.01) B23K 37/053 (2006.01) B23P 6/00 (2006.01)**

[25] EN

[54] **METHODS OF BUILDING A PIPE WALL**

[54] **METHODES DE CONSTRUCTION D'UNE PAROI DE TUYAU**

[72] LEEB, GERALD, CA

[73] LEEB, GERALD, CA

[86] (2883766)

[87] (2883766)

[22] 2015-03-04

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[11] **2,883,797**  
[13] C

[51] **Int.Cl. A45D 44/00 (2006.01) G01J 3/46 (2006.01)**

[25] EN

[54] **CUSTOM COSMETIC BLENDING MACHINE**

[54] **MACHINE DE MELANGE PERSONNALISE DE PRODUITS COSMETIQUES**

[72] IGARASHI, LARRY Y., US

[73] L'OREAL SA, FR

[85] 2015-03-03

[86] 2013-09-09 (PCT/US2013/058722)

[87] (WO2014/043018)

[30] US (13/621,732) 2012-09-17

[30] US (13/896,557) 2013-05-17

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[11] **2,884,870**  
[13] C

[51] **Int.Cl. C07C 229/12 (2006.01) A61K 9/127 (2006.01) A61K 9/51 (2006.01) A61K 31/496 (2006.01) A61K 47/18 (2017.01) C07C 229/14 (2006.01) C07D 207/09 (2006.01) C07D 211/14 (2006.01) C07D 211/26 (2006.01) C07D 295/13 (2006.01) C07D 319/18 (2006.01) C07D 487/04 (2006.01) C12N 15/11 (2006.01) C12N 15/88 (2006.01)**

[25] EN

[54] **AMINE-CONTAINING LIPIDOIDS AND USES THEREOF**

[54] **LIPIDOIDES CONTENANT DES AMINES ET LEURS UTILISATIONS**

[72] ANDERSON, DANIEL GRIFFITH, US

[72] WHITEHEAD, KATHRYN ANN, US

[72] DORKIN, JOSEPH R., US

[72] VEGAS, ARTURO JOSE, US

[72] ZHANG, YUNLONG, US

[72] LANGER, ROBERT S., US

[73] MASSACHUSETTS INSTITUTE OF TECHNOLOGY, US

[85] 2015-03-12

[86] 2013-08-13 (PCT/US2013/054726)

[87] (WO2014/028487)

[30] US (61/682,468) 2012-08-13

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[11] **2,886,195**  
[13] C

[51] **Int.Cl. A01D 90/10 (2006.01) B60P 1/42 (2006.01)**

[25] EN

[54] **GRAIN CART WITH FOLDING AUGER HAVING ADJUSTABLE ELEVATION**

[54] **CHARIOT A GRAIN DOTE DE VIS SANS FIN PLIANTES OFFRANT UNE ELEVATION AJUSTABLE**

[72] VAN MILL, MICHAEL D., US

[72] SCHLIMGEN, RONALD J., US

[73] UNVERFERTH MANUFACTURING COMPANY, INC., US

[86] (2886195)

[87] (2886195)

[22] 2015-03-26

[30] US (14/231,166) 2014-03-31

[30] US (61/982,693) 2014-04-22

[30] US (14/642,449) 2015-03-09

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[11] **2,886,575**  
[13] C

[51] **Int.Cl. A61K 35/74 (2015.01) A61K 35/66 (2015.01) A61K 36/82 (2006.01) A61P 17/00 (2006.01)**

[25] EN

[54] **COMPOSITION FOR REMOVING KERATINOUS SKIN MATERIAL COMPRISING GREEN TEA LACTOBACILLUS**

[54] **COMPOSITION PERMETTANT D'ELIMINER DES SUBSTANCES KERATINIQUES DE LA PEAU COMPRENANT DES LACTOBACILLUS DE THE VERT**

[72] PARK, JOON HO, KR

[72] HONG, YEON JU, KR

[72] KWACK, IL YOUNG, KR

[72] SHIM, JONG WON, KR

[72] SHIM, JIN SUP, KR

[72] HWANG, KYEONG HWAN, KR

[72] KANG, YOUNG GYU, KR

[72] YEOM, MYEONG HUN, KR

[72] CHO, JUN CHEOL, KR

[73] AMOREPACIFIC CORPORATION, KR

[85] 2015-03-27

[86] 2013-10-29 (PCT/KR2013/009679)

[87] (WO2014/069874)

[30] KR (10-2012-0122143) 2012-10-31

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[11] **2,888,583**  
[13] C

[51] **Int.Cl. A61K 39/395 (2006.01) C07K 16/24 (2006.01)**

[25] EN

[54] **BINDING MEMBERS TO IL-1 BETA**

[54] **ELEMENTS DE LIAISON A IL-1 BETA**

[72] GRABULOVSKI, STEFANIE, CH

[72] KRETZSCHMAR, TITUS, CH

[72] SCHMITT, SIMONE, CH

[72] SHAMSHIEV, ABDIJAPAR, CH

[72] SCHAFFER, THORSTEN ALEXANDER, DE

[73] DELENEX THERAPEUTICS AG, CH

[85] 2015-04-16

[86] 2013-11-05 (PCT/EP2013/073009)

[87] (WO2014/068132)

[30] EP (12007503.1) 2012-11-05

[30] US (61/722,532) 2012-11-05

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[11] **2,891,707**  
[13] C

- [51] **Int.Cl. A61M 25/01 (2006.01)**  
[25] EN  
[54] **CATHETER WITH MARKINGS TO FACILITATE ALIGNMENT**  
[54] **CATHETER DOTE DE REPERES POUR FACILITER L'ALIGNEMENT**  
[72] KLOCKE, STEPHANIE, US  
[72] BEASLEY, JIM C., US  
[72] RANDALL, SCOTT, US  
[73] CLEARSTREAM TECHNOLOGIES LIMITED, IE  
[85] 2015-05-14  
[86] 2013-12-31 (PCT/IB2013/003054)  
[87] (WO2014/102608)  
[30] US (61/747,416) 2012-12-31

[11] **2,892,692**  
[13] C

- [51] **Int.Cl. A47J 31/36 (2006.01) A47J 31/22 (2006.01)**  
[25] EN  
[54] **DEVICE FOR PREPARING A BEVERAGE FROM A CAPSULE WITH A CLOSURE SYSTEM INVOLVING TWO CLOSURE STAGES**  
[54] **DISPOSITIF POUR PREPARER UNE BOISSON A PARTIR D'UNE CAPSULE AVEC UN SYSTEME DE FERMETURE IMPLIQUANT DEUX PHASES DE FERMETURE**  
[72] KAESER, STEFAN, CH  
[72] SCHENK, RUDOLF, CH  
[73] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2015-05-25  
[86] 2013-11-25 (PCT/EP2013/074527)  
[87] (WO2014/082940)  
[30] EP (12194801.2) 2012-11-29

[11] **2,893,222**  
[13] C

- [51] **Int.Cl. A61N 1/365 (2006.01) A61F 2/24 (2006.01) A61N 1/368 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR LOWERING BLOOD PRESSURE THROUGH REDUCTION OF VENTRICLE FILLING**  
[54] **PROCEDES ET SYSTEMES PERMETTANT DE REDUIRE LA PRESSION ARTERIELLE PAR REDUCTION DU REMPLISSAGE VENTRICULAIRE**  
[72] MIKA, YUVAL, US  
[72] SHERMAN, DARREN, US  
[72] SCHWARTZ, ROBERT S., US  
[72] VAN TASSEL, ROBERT A., US  
[72] BURKHOFF, DANIEL, US  
[73] BACKBEAT MEDICAL, LLC, US  
[85] 2015-06-01  
[86] 2013-12-19 (PCT/US2013/076600)  
[87] (WO2014/100429)  
[30] US (61/740,977) 2012-12-21  
[30] US (13/826,215) 2013-03-14

[11] **2,894,014**  
[13] C

- [51] **Int.Cl. G01K 7/16 (2006.01) A62C 3/08 (2006.01) B64D 25/00 (2006.01) B64D 47/00 (2006.01)**  
[25] EN  
[54] **THERMAL SENSOR**  
[54] **CAPTEUR THERMIQUE**  
[72] DING, ZHONGFEN, US  
[72] RHEAUME, JONATHAN, US  
[72] JAWOROWSKI, MARK R., US  
[72] ZAFIRIS, GEORGIOS S., US  
[72] SANGIOVANNI, JOSEPH J., US  
[72] HUGENER-CAMPBELL, THERESA, US  
[73] KIDDE TECHNOLOGIES, INC., US  
[86] (2894014)  
[87] (2894014)  
[22] 2015-06-08  
[30] US (14/308,108) 2014-06-18

[11] **2,897,093**  
[13] C

- [51] **Int.Cl. H02G 5/08 (2006.01) H02G 5/10 (2006.01) H02G 3/04 (2006.01)**  
[25] EN  
[54] **BUS BAR APPARATUS USABLE IN HIGH TEMPERATURE CABLE TERMINATION APPLICATIONS**  
[54] **DISPOSITIF DE BARRE COLLECTRICE CONVENANT AUX APPLICATIONS DE TERMINAISON DE CABLE HAUTE TEMPERATURE**  
[72] YANNIELLO, ROBERT, US  
[72] LOUCKS, DAVID GLENN, US  
[73] EATON INTELLIGENT POWER LIMITED, IE  
[86] (2897093)  
[87] (2897093)  
[22] 2015-07-10  
[30] US (14/471,112) 2014-08-28

[11] **2,901,531**  
[13] C

- [51] **Int.Cl. A61K 39/395 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **CAIX STRATIFICATION BASED CANCER TREATMENT**  
[54] **TRAITEMENT DU CANCER BASE SUR UNE STRATIFICATION CAIX**  
[72] WILHELM, OLAF, DE  
[72] BEVAN, PAUL, GB  
[72] FALL, BARBARA, DE  
[72] KLOPFER, PIA, DE  
[73] WILEX AG, DE  
[85] 2015-08-17  
[86] 2014-02-21 (PCT/EP2014/053420)  
[87] (WO2014/128258)  
[30] US (61/768,084) 2013-02-22  
[30] US (61/829,349) 2013-05-31

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[11] **2,903,266**  
[13] C

[51] **Int.Cl. A61K 33/30 (2006.01) A23B 4/20 (2006.01) A61K 31/194 (2006.01) A61K 31/198 (2006.01) A61P 17/02 (2006.01) A61P 31/02 (2006.01) A61P 31/04 (2006.01) A61P 31/10 (2006.01)**

[25] EN

[54] **ANTIMICROBIAL-ANTIBIOFILM COMPOSITIONS AND METHODS OF USE THEREOF**

[54] **COMPOSITIONS ANTIMICROBIENNES-ANTIBIOFILM ET LEURS PROCEDES D'UTILISATION**

[72] FROEHLICH, GORD, CA

[72] GAWANDE, PURUSHOTTAM V., CA

[72] LOVETRI, KAREN, CA

[72] MADHYASTHA, SRINIVASA, CA

[72] YAKANDAWALA, NANDADEVA, CA

[73] KANE BIOTECH INC., CA

[85] 2015-09-01

[86] 2014-03-06 (PCT/CA2014/050180)

[87] (WO2014/134731)

[30] US (61/773,912) 2013-03-07

[30] CA (PCT/CA2013/050324) 2013-04-26

[30] US (61/834,654) 2013-06-13

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[11] **2,903,848**  
[13] C

[51] **Int.Cl. A61F 2/18 (2006.01) A61F 5/08 (2006.01) A61L 27/14 (2006.01) A61L 27/58 (2006.01) A61M 29/02 (2006.01)**

[25] EN

[54] **SYSTEMS, DEVICES, AND METHOD FOR TREATING A SINUS CONDITION**

[54] **SYSTEMES, DISPOSITIFS ET METHODE DE TRAITEMENT D'UNE AFFECTION SINUSALE**

[72] ABBATE, ANTHONY J., US

[73] INTERSECT ENT, INC., US

[85] 2015-09-02

[86] 2014-03-13 (PCT/US2014/026737)

[87] (WO2014/151963)

[30] US (61/785,939) 2013-03-14

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[11] **2,903,970**  
[13] C

[51] **Int.Cl. A61K 38/10 (2006.01) A61K 38/17 (2006.01) C07K 7/08 (2006.01) C07K 14/47 (2006.01)**

[25] EN

[54] **NEW STABLE PENTADECAPETIDE SALTS, A PROCESS FOR PREPARATION THEREOF, A USE THEREOF IN THE MANUFACTURE OF PHARMACEUTICAL PREPARATIONS AND A USE THEREOF IN THERAPY**

[54] **NOUVEAUX SELS PENTADECAPETIDES STABLES, PROCEDE DE PREPARATION ASSOCIE, LEUR UTILISATION DANS LA FABRICATION DE PREPARATIONS PHARMACEUTIQUES ET LEUR UTILISATION EN THERAPIE**

[72] RUCMAN, RUDOLF, SI

[73] DIAGEN D.O.O., SI

[85] 2015-09-03

[86] 2013-05-09 (PCT/SI2013/000026)

[87] (WO2014/142764)

[30] SI (P-201300055) 2013-03-13

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[11] **2,904,045**  
[13] C

[51] **Int.Cl. A61K 9/14 (2006.01) A61K 9/16 (2006.01) A61K 9/20 (2006.01) A61K 9/24 (2006.01) A61K 9/28 (2006.01) A61K 9/50 (2006.01) A61K 31/09 (2006.01) A61K 31/216 (2006.01)**

[25] EN

[54] **BENZONATATE MODIFIED RELEASE SOLID TABLETS AND CAPSULES**

[54] **COMPRIMES ET CAPSULES SOLIDES A LIBERATION MODIFIEE DE BENZONATATE**

[72] NELSON, ANDREA, US

[72] CHEN, QUIN-ZENE, US

[72] MEHTA, HARSH, US

[72] TU, YU-HSING, US

[73] TRIS PHARMA, INC., US

[85] 2015-09-03

[86] 2014-03-11 (PCT/US2014/023106)

[87] (WO2014/159340)

[30] US (61/780,689) 2013-03-13

[30] US (61/872,019) 2013-08-30

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[11] **2,904,335**  
[13] C

[51] **Int.Cl. A61L 31/12 (2006.01) A61K 9/00 (2006.01) A61K 47/36 (2006.01) A61L 31/04 (2006.01) A61L 31/16 (2006.01) A61M 37/00 (2006.01)**

[25] EN

[54] **MICROSTRUCTURE ARRAY FOR DELIVERY OF ACTIVE AGENTS**

[54] **RESEAU DE MICROSTRUCTURES POUR LA DISTRIBUTION D'AGENTS ACTIFS**

[72] CHEN, GUOHUA, US

[72] DING, ZHONGLI, US

[72] GHARTEY-TAGOE, ESI, US

[72] SINGH, PARMINDER, US

[73] CORIUM, INC., US

[85] 2015-09-04

[86] 2014-03-07 (PCT/US2014/022087)

[87] (WO2014/150069)

[30] US (61/800,543) 2013-03-15

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[11] **2,904,879**  
[13] C

[51] **Int.Cl. B65D 88/28 (2006.01) A01F 25/14 (2006.01)**

[25] EN

[54] **GRAIN BIN HOPPER SUPPORT CONE WITH SUPPORT LEGS WHICH ARE UNINTERRUPTED ALONG THEIR RESPECTIVE LENGTHS BETWEEN TOP AND BOTTOM JUNCTIONS**

[54] **CONE DE SUPPORT DE TREMIE DE BAC A GRAINS DOTE DE PATTES DE SUPPORT QUI SONT ININTERROMPUES LE LONG DE LEURS LONGUEURS RESPECTIVES ENTRE DES JONCTIONS DU HAUT ET DU BAS**

[72] THIESSEN, LESTER JAMES, CA

[73] FOREMOST UNIVERSAL LP BY ITS GENERAL PARTNER, UNIVERSAL INDUSTRIES (FOREMOST) CORP., CA

[86] (2904879)

[87] (2904879)

[22] 2015-09-22

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[11] **2,904,946**  
[13] C

[51] **Int.Cl. C07C 2/28 (2006.01) C08F 10/14 (2006.01) C10G 50/02 (2006.01)**  
[25] EN  
[54] **PROCESSES FOR PREPARING LOW VISCOSITY LUBRICANTS**  
[54] **PROCEDES POUR LA PREPARATION DE LUBRIFIANTS DE FAIBLE VISCOSITE**  
[72] YANG, HU, US  
[72] HOPE, KENNETH, US  
[72] GEE, JEFFERY, US  
[73] CHEVRON PHILLIPS CHEMICAL COMPANY LP, US  
[85] 2015-09-09  
[86] 2014-03-10 (PCT/US2014/022636)  
[87] (WO2014/164506)  
[30] US (13/798,253) 2013-03-13

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[11] **2,906,705**  
[13] C

[51] **Int.Cl. F16L 37/091 (2006.01) F16L 37/084 (2006.01) F16L 37/098 (2006.01)**  
[25] EN  
[54] **PIPE COUPLING**  
[54] **RACCORD DE TUYAUTERIES**  
[72] HENNEMANN, THOMAS L., US  
[72] BERGER, THOMAS JAMES, US  
[73] AQSEPTENCE GROUP, INC., US  
[85] 2015-09-14  
[86] 2014-03-14 (PCT/US2014/028259)  
[87] (WO2014/144026)  
[30] US (61/802,142) 2013-03-15

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[11] **2,907,492**  
[13] C

[51] **Int.Cl. B29C 70/70 (2006.01) B33Y 30/00 (2015.01) D01F 8/04 (2006.01)**  
[25] EN  
[54] **THREE DIMENSIONAL PRINTING**  
[54] **IMPRESSIION TRIDIMENSIONNELLE**  
[72] MARK, GREGORY THOMAS, US  
[72] GOZDZ, ANTONI S., US  
[73] MARKFORGED, INC., US  
[85] 2015-09-15  
[86] 2014-03-21 (PCT/US2014/031493)  
[87] (WO2014/153535)  
[30] US (61/804,235) 2013-03-22  
[30] US (61/815,531) 2013-04-24  
[30] US (61/831,600) 2013-06-05  
[30] US (61/847,113) 2013-07-17  
[30] US (61/878,029) 2013-09-15  
[30] US (61/880,129) 2013-09-19  
[30] US (61/881,946) 2013-09-24  
[30] US (61/883,440) 2013-09-27  
[30] US (61/902,256) 2013-11-10  
[30] US (61/907,431) 2013-11-22

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[11] **2,907,830**  
[13] C

[51] **Int.Cl. A61K 47/69 (2017.01) A61K 9/10 (2006.01)**  
[25] EN  
[54] **HYDROGEL-LINKED PRODRUGS RELEASING TAGGED DRUGS**  
[54] **PROMEDICAMENTS A LIAISON HYDROGEL LIBERANT DES MEDICAMENTS ETIQUETES**  
[72] RAU, HARALD, DE  
[72] KALUZA, NORA, DE  
[72] HERSEL, ULRICH, DE  
[72] KNAPPE, THOMAS, DE  
[72] LAUFER, BURKHARDT, DE  
[73] ASCENDIS PHARMA A/S, DK  
[85] 2015-09-22  
[86] 2014-04-16 (PCT/EP2014/057753)  
[87] (WO2014/173759)  
[30] EP (13164669.7) 2013-04-22  
[30] EP (13187784.7) 2013-10-08

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[11] **2,908,347**  
[13] C

[51] **Int.Cl. B22D 15/04 (2006.01)**  
[25] EN  
[54] **LIQUID COOLED DIE CASTING MOLD WITH HEAT SINKS**  
[54] **MOULE DE MATRICE DE COULEE REFROIDI PAR LIQUIDE DOTE DE DISSIPATEURS DE CHALEUR**  
[72] FLANNERY, STEPHEN JOSEPH, US  
[72] ADAMS, KENNETH RAY, US  
[72] BLOW, MICHAEL DOUGLAS, CA  
[73] MAGNA INTERNATIONAL INC., CA  
[85] 2015-09-30  
[86] 2014-04-15 (PCT/US2014/034124)  
[87] (WO2014/172333)  
[30] US (61/811,912) 2013-04-15

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[11] **2,909,906**  
[13] C

[51] **Int.Cl. H04N 21/236 (2011.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR TRANSMITTING MEDIA DATA IN MULTIMEDIA TRANSPORT SYSTEM**  
[54] **PROCEDE ET APPAREIL POUR TRANSMETTRE DES DONNEES MULTIMEDIAS DANS UN SYSTEME DE TRANSPORT MULTIMEDIA**  
[72] PARK, KYUNG-MO, KR  
[72] HWANG, SUNG-OH, KR  
[72] RHYU, SUNG-RYEUL, KR  
[72] SONG, JAE-YEON, KR  
[73] SAMSUNG ELECTRONICS CO., LTD., KR  
[85] 2015-10-19  
[86] 2014-04-21 (PCT/KR2014/003470)  
[87] (WO2014/171806)  
[30] KR (10-2013-0043855) 2013-04-19

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[11] **2,910,683**  
[13] C

[51] **Int.Cl. A61M 1/18 (2006.01) A61M 1/34 (2006.01) B01D 67/00 (2006.01) G01N 33/49 (2006.01) B01D 69/08 (2006.01) B01D 71/02 (2006.01)**

[25] EN

[54] **CERAMIC WHOLE BLOOD HOLLOW FIBER MEMBRANE FILTER MEDIUM AND USE THEREOF FOR SEPARATING BLOOD PLASMA / SERUM FROM WHOLE BLOOD**

[54] **MILIEU CERAMIQUE DE FILTRE DE SANG TOTAL A MEMBRANE A FIBRES CREUSES ET SON UTILISATION POUR LA SEPARATION DE PLASMA/SERUM SANGUIN A PARTIR DE SANG TOTAL**

[72] SCHUTZ, STEFFEN, DE  
[72] RUPP, HEIKE, DE  
[72] WORZ, TOBIAS, DE  
[72] WINKLER, DAGMAR, DE  
[72] FISCHER, KATHRIN, DE  
[72] EHLEN, FRANK, DE  
[72] MUNKEL, KARLHEINZ, DE  
[72] STINZENDORFER, JOACHIM, DE  
[73] MANN+HUMMEL GMBH, DE  
[85] 2015-10-30  
[86] 2014-06-26 (PCT/EP2014/063590)  
[87] (WO2014/207140)  
[30] DE (102013010735.0) 2013-06-27

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[11] **2,911,179**  
[13] C

[51] **Int.Cl. A61B 17/03 (2006.01) A61B 17/04 (2006.01) A61B 17/068 (2006.01)**

[25] EN

[54] **SURGICAL INSTRUMENT WITH LOCKOUT MECHANISM**

[54] **INSTRUMENT CHIRURGICAL PRESENTANT UN MECANISME DE VERROUILLAGE**

[72] SHI, SHAOHUI, CN  
[72] YANG, QIANHONG, CN  
[72] XU, SEAN, CN  
[73] COVIDIEN LP, US  
[85] 2015-11-02  
[86] 2013-06-17 (PCT/CN2013/077331)  
[87] (WO2014/201608)

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[11] **2,912,129**  
[13] C

[51] **Int.Cl. C08G 18/48 (2006.01) C08G 18/42 (2006.01)**

[25] EN

[54] **A METHOD FOR IMPROVING TOUGHNESS OF POLYISOCYANATE POLYADDITION REACTION PRODUCTS**

[54] **PROCEDE POUR AMELIORER LA TENACITE DE PRODUITS DE REACTION DE POLYADDITION DE POLYISOCYANATE**

[72] VERBEKE, HUGO, BE  
[72] VERBEKE, HANS GODELIEVE GUIDO, BE  
[72] ESBELIN, CHRISTIAN, BE  
[72] ASTABURUAGA GUTIERREZ, AINARA, BE  
[73] HUNTSMAN INTERNATIONAL LLC, US  
[85] 2015-11-10  
[86] 2014-04-09 (PCT/EP2014/057102)  
[87] (WO2014/191131)  
[30] EP (13170081.7) 2013-05-31

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[11] **2,913,330**  
[13] C

[51] **Int.Cl. A63C 9/00 (2012.01) A63C 10/00 (2012.01) A43B 5/04 (2006.01)**

[25] EN

[54] **CONVERTIBLE SKI BOOT ATTACHMENT**

[54] **FIXATION DE BOTTE DE SKI CONVERTIBLE**

[72] LEFSRUD, KEVIN, CA  
[73] LEFSRUD, KEVIN, CA  
[86] (2913330)  
[87] (2913330)  
[22] 2015-03-26

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[11] **2,913,915**  
[13] C

[51] **Int.Cl. A61M 5/36 (2006.01) A61M 5/142 (2006.01) A61M 5/172 (2006.01)**

[25] EN

[54] **INFUSION SYSTEM WHICH UTILIZES ONE OR MORE SENSORS AND ADDITIONAL INFORMATION TO MAKE AN AIR DETERMINATION REGARDING THE INFUSION SYSTEM**

[54] **SYSTEME DE PERFUSION QUI EMPLOIE UN OU PLUSIEURS CAPTEURS ET DES INFORMATIONS ADDITIONNELLES POUR FAIRE UNE DETERMINATION D'AIR CONCERNANT LE SYSTEME DE PERFUSION**

[72] ORUKLU, MERIYAN, US  
[72] RUCHTI, TIMOTHY L., US  
[72] KOTNIK, PAUL T., US  
[72] BELKIN, ANATOLY S., US  
[73] ICU MEDICAL, INC., US  
[85] 2015-11-27  
[86] 2014-05-29 (PCT/US2014/040022)  
[87] (WO2014/194089)  
[30] US (61/828,522) 2013-05-29  
[30] US (14/289,848) 2014-05-29

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[11] **2,914,068**  
[13] C

[51] **Int.Cl. G01V 1/38 (2006.01) G01V 1/02 (2006.01)**

[25] EN

[54] **COMPACT SEISMIC SOURCE FOR LOW FREQUENCY, HUMMING SEISMIC ACQUISITION**

[54] **SOURCE SISMIQUE COMPACTE POUR ACQUISITION SISMIQUE DE BOURDONNEMENT A BASSE FREQUENCE**

[72] DELLINGER, JOSEPH ANTHONY, US  
[72] HARPER, MARK FRANCIS LUCIEN, US  
[72] OPENSHAW, GRAHAM ANTHONY, US  
[73] BP CORPORATION NORTH AMERICA INC., US  
[85] 2015-11-30  
[86] 2015-02-19 (PCT/US2015/016617)  
[87] (WO2015/127079)  
[30] US (61/942,001) 2014-02-19

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[11] **2,914,114**  
[13] C

- [51] **Int.Cl. A01G 23/083 (2006.01) F21S 41/141 (2018.01) H05B 45/10 (2020.01) H05B 47/10 (2020.01) A01G 23/093 (2006.01) B60Q 1/24 (2006.01) E02F 9/22 (2006.01) F21V 21/15 (2006.01)**
- [25] EN
- [54] **SYSTEM FOR CONTROLLING WORK LIGHTS IN A FORESTRY MACHINE**
- [54] **SYSTEME DE COMMANDE DE LAMPES BALADEUSES DANS UNE MACHINE FORESTIERE**
- [72] KAATRASALO, TERO, FI
- [72] HOTTI, EERO, FI
- [73] PONSSE OYJ, FI
- [85] 2015-12-01
- [86] 2014-05-16 (PCT/FI2014/050375)
- [87] (WO2014/195568)
- [30] FI (20135611) 2013-06-03

[11] **2,915,313**  
[13] C

- [51] **Int.Cl. G01S 19/29 (2010.01) G01S 19/37 (2010.01)**
- [25] EN
- [54] **RECEIVER AND METHOD FOR DIRECT SEQUENCE SPREAD SPECTRUM SIGNALS**
- [54] **RECEPTEUR ET PROCEDE POUR SIGNAUX DE SPECTRE ETALE A SEQUENCE DIRECTE (DSSS)**
- [72] TURNER, MICHAEL, GB
- [72] MAK, KWOK, GB
- [73] AIRBUS DEFENCE AND SPACE LIMITED, GB
- [85] 2015-12-07
- [86] 2014-06-05 (PCT/GB2014/051738)
- [87] (WO2014/195712)
- [30] EP (13275134.8) 2013-06-05

[11] **2,915,564**  
[13] C

- [51] **Int.Cl. B66C 23/687 (2006.01) B66C 23/36 (2006.01) B66C 23/42 (2006.01)**
- [25] EN
- [54] **METHOD FOR CONTROLLING AN AERIAL APPARATUS, AND AERIAL APPARATUS WITH CONTROLLER IMPLEMENTING THIS METHOD**
- [54] **PROCEDE DE COMMANDE D'APPAREIL AERIEN ET APPAREIL AERIEN DOTE DU DISPOSITIF DE COMMANDE POUR LA MISE EN OEUVRE DE CE PROCEDE**
- [72] SAWODNY, OLIVER, DE
- [72] PERTSCH, ALEXANDER, DE
- [73] IVECO MAGIRUS AG, DE
- [86] (2915564)
- [87] (2915564)
- [22] 2015-12-17
- [30] EP (14199073.9) 2014-12-18

[11] **2,915,695**  
[13] C

- [51] **Int.Cl. G06F 9/455 (2018.01) G06F 8/60 (2018.01)**
- [25] EN
- [54] **METHOD AND APPARATUS FOR FIRMWARE VIRTUALIZATION**
- [54] **PROCEDE ET APPAREIL POUR UNE VIRTUALISATION DE MICROLOGICIEL**
- [72] CHANDARIA, TRISALA, US
- [72] LEONELLI, JEAN-BAPTISTE, US
- [73] CIAMBELLA LTD., VG
- [85] 2015-12-15
- [86] 2014-07-10 (PCT/US2014/046215)
- [87] (WO2015/006599)
- [30] US (61/845,395) 2013-07-12

[11] **2,916,183**  
[13] C

- [51] **Int.Cl. A61K 9/70 (2006.01) A61F 13/02 (2006.01)**
- [25] EN
- [54] **TRANSDERMAL THERAPEUTIC SYSTEM WITH ELECTRONIC COMPONENT**
- [54] **SYSTEME THERAPEUTIQUE TRANSDERMIQUE DOTE D'UN COMPOSANT ELECTRONIQUE**
- [72] LAUX, WOLFGANG, DE
- [72] PLATT, BEATRIX, DE
- [72] REUM, NICO, DE
- [73] LTS LOHMANN THERAPIE-SYSTEME AG, DE
- [85] 2015-12-18
- [86] 2014-07-03 (PCT/EP2014/064166)
- [87] (WO2015/001012)
- [30] EP (13174880.8) 2013-07-03

[11] **2,916,560**  
[13] C

- [51] **Int.Cl. A61B 3/107 (2006.01) A61B 3/103 (2006.01)**
- [25] EN
- [54] **SYSTEMS AND METHODS FOR PROVIDING ASTIGMATISM CORRECTION**
- [54] **SYSTEMES ET PROCEDES PERMETTANT DE CORRIGER L'ASTIGMATISME**
- [72] KASTHURIRANGAN, SANJEEV, US
- [72] BENTOW, STANLEY, S., US
- [73] JOHNSON & JOHNSON SURGICAL VISION, INC., US
- [85] 2015-12-21
- [86] 2014-08-29 (PCT/US2014/053382)
- [87] (WO2015/031740)
- [30] US (61/871,423) 2013-08-29

[11] **2,916,590**  
[13] C

- [51] **Int.Cl. B23K 11/14 (2006.01) B23K 11/30 (2006.01) F16B 35/04 (2006.01)**
- [25] EN
- [54] **PROJECTION BOLT WELDING METHOD**
- [54] **PROCEDE DE SOUDAGE DE BOULON DE PROJECTION**
- [72] AOYAMA, SHOJI, JP
- [72] AOYAMA, YOSHITAKA, JP
- [73] AOYAMA, SHOJI, JP
- [85] 2015-12-22
- [86] 2014-05-27 (PCT/JP2014/063958)
- [87] (WO2015/001872)
- [30] JP (2013-152065) 2013-07-02
- [30] JP (2013-170770) 2013-08-01

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[11] **2,916,828**  
[13] C

[51] **Int.Cl. C05B 1/04 (2006.01) C05B 7/00 (2006.01) C05B 13/06 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PREPARING A MICRONUTRIENT-ENRICHED AMMONIUM PHOSPHATE FERTILISER**  
[54] **PROCEDE DE PREPARATION D'UN ENGRAIS A BASE DE PHOSPHATE D'AMMONIUM ENRICHI EN MICRONUTRIMENTS**  
[72] ALLAIS, CYRILLE PAUL, NL  
[72] GARCIA MARTINEZ, RAFAEL ALBERTO, CA  
[72] HUTTER, KLAAS JAN, US  
[72] INGOLDSBY, CHARLES JAMES, CA  
[72] O'BRIEN, JASON TREVOR, AU  
[72] TOMAZ, CARLOS, BR  
[73] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL  
[85] 2015-12-23  
[86] 2014-07-02 (PCT/EP2014/064124)  
[87] (WO2015/000996)  
[30] US (61/842,536) 2013-07-03

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[11] **2,917,371**  
[13] C

[51] **Int.Cl. B65F 5/00 (2006.01) B65G 53/46 (2006.01) B65G 53/52 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR FEEDING IN AND HANDLING WASTE MATERIAL**  
[54] **PROCEDE ET APPAREIL D'APPORT ET DE MANIPULATION DE MATERIAUX DE DECHETS**  
[72] SUNDHOLM, GORAN, FI  
[73] MARICAP OY, FI  
[85] 2016-01-05  
[86] 2014-07-29 (PCT/FI2014/050596)  
[87] (WO2015/015053)  
[30] FI (20135801) 2013-07-30

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[11] **2,917,882**  
[13] C

[51] **Int.Cl. G02B 7/00 (2021.01) H02S 20/32 (2014.01) F24S 30/40 (2018.01) F16D 1/02 (2006.01)**  
[25] EN  
[54] **SINGLE AXIS SOLAR TRACKING SYSTEM**  
[54] **SYSTEME MONOAXIAL DE POURSUITE SOLAIRE**  
[72] CORIO, RONALD P., US  
[73] ARRAY TECHNOLOGIES PATENT HOLDING CO., LLC, US  
[85] 2015-11-26  
[86] 2014-04-11 (PCT/US2014/033762)  
[87] (WO2014/186079)  
[30] US (13/895,117) 2013-05-15

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[11] **2,919,337**  
[13] C

[51] **Int.Cl. G06Q 40/04 (2012.01)**  
[25] EN  
[54] **AN APPARATUS AND A METHOD FOR CREATING A HIGH SPEED FINANCIAL MARKET DATA MESSAGE STREAM**  
[54] **APPAREIL ET PROCEDE PERMETTANT DE CREER UN FLUX DE MESSAGES DE DONNEES DE MARCHE FINANCIER A HAUTE VITESSE**  
[72] PANISCOTTI, DOMINICK, US  
[72] FAY, THOMAS, US  
[73] NASDAQ, INC., US  
[85] 2016-01-25  
[86] 2014-06-04 (PCT/SE2014/050677)  
[87] (WO2015/012754)  
[30] US (13/950,680) 2013-07-25

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[11] **2,919,726**  
[13] C

[51] **Int.Cl. G01V 3/40 (2006.01)**  
[25] EN  
[54] **A HIGH PRECISION FIELD MEASUREMENT METHOD FOR GEOMAGNETIC VECTORS AND A DEVICE THEREOF**  
[54] **METHODE DE MESURE DE CHAMP HAUTE PRECISION DES VECTEURS GEOMAGNETIQUES ET UN DISPOSITIF ASSOCIE**  
[72] GAO, JIANDONG, CN  
[73] CHINA METALLURGICAL GEOLOGY BUREAU GEOLOGICAL EXPLORATION INSTITUTE OF SHANDONG ZHENGYUAN, CN  
[85] 2016-01-28  
[86] 2014-06-09 (PCT/CN2014/079467)  
[87] (WO2015/014161)  
[30] CN (201310324884.1) 2013-07-30

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[11] **2,920,702**  
[13] C

[51] **Int.Cl. C08H 7/00 (2011.01) C08H 8/00 (2010.01)**  
[25] EN  
[54] **METHOD FOR EXTRACTING LIGNIN FROM BLACK LIQUOR AND PRODUCTS PRODUCED THEREBY**  
[54] **PROCEDE PERMETTANT D'OBTENIR DE LA LIGNINE A PARTIR DE LIQUEUR NOIRE ET PRODUITS FABRIQUES PAR LEDIT PROCEDE**  
[72] WITTMANN, TOBIAS, DE  
[72] RICHTER, ISABELLA, DE  
[73] SUNCOAL INDUSTRIES GMBH, DE  
[85] 2016-02-08  
[86] 2014-08-08 (PCT/EP2014/067134)  
[87] (WO2015/018944)  
[30] DE (10 2013 013 189.8) 2013-08-09

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[11] **2,921,651**  
[13] C

[51] **Int.Cl. B60K 7/00 (2006.01) B60K 17/04 (2006.01) F16H 3/44 (2006.01) H02K 7/116 (2006.01)**

[25] EN

[54] **AN ELECTRICAL MOTOR CONSTRUCTION PROVIDED WITH A PLANETARY GEAR SYSTEM**

[54] **CONSTRUCTION DE MOTEUR ELECTRIQUE AYANT UN TRAIN PLANETAIRE**

[72] SINKKO, SIMO, FI  
[72] NUMMELIN, TOMMI, FI  
[72] SUURONEN, ANSSI, FI  
[72] PYRHONEN, JUHA, FI  
[73] LAPPEENRANNAN TEKNILLINEN YLIOPISTO, FI

[85] 2016-02-17  
[86] 2014-08-18 (PCT/FI2014/050633)  
[87] (WO2015/025081)  
[30] FI (20135841) 2013-08-19

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[11] **2,922,438**  
[13] C

[51] **Int.Cl. H04W 24/10 (2009.01)**

[25] EN

[54] **CSI REPORTING FOR LTE-TDD EIMTA**

[54] **RAPPORT DE CSI POUR EIMTA LTE-TDD**

[72] CHENG, PENG, CN  
[72] WANG, NENG, CN  
[72] WEI, CHAO, CN  
[72] CHEN, WANSHI, US  
[72] GAAL, PETER, US  
[72] XU, HAO, US  
[72] HOU, JILEI, CN  
[73] QUALCOMM INCORPORATED, US

[85] 2016-02-25  
[86] 2014-09-22 (PCT/CN2014/087054)  
[87] (WO2015/043427)  
[30] CN (PCT/CN2013/084454) 2013-09-27

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[11] **2,923,116**  
[13] C

[51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6813 (2018.01) C12Q 1/6844 (2018.01) C12Q 1/6886 (2018.01)**

[25] FR

[54] **METHOD FOR DIAGNOSING HEMATOLOGICAL MALIGNANCIES AND ASSOCIATED KIT**

[54] **METHODE DE DIAGNOSTIC DES HEMOPATHIES MALIGNES ET KIT ASSOCIE**

[72] RUMINY, PHILIPPE, FR  
[72] MARCHAND, VINCIANE, FR  
[72] JARDIN, FABRICE, FR  
[73] UNIVERSITE DE ROUEN, FR  
[73] CENTRE HENRI BECQUEREL, FR  
[73] INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, FR

[85] 2016-03-03  
[86] 2014-09-11 (PCT/FR2014/052255)  
[87] (WO2015/036705)  
[30] FR (13 58721) 2013-09-11

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[11] **2,924,768**  
[13] C

[51] **Int.Cl. B60B 33/02 (2006.01) B60B 33/00 (2006.01) B62B 3/00 (2006.01)**

[25] EN

[54] **WHEEL UNIT AND STEERING UNIT FOR CONVEYING DEVICES ON WHEELS SUCH AS BEDS, STRETCHERS OR TROLLEYS**

[54] **UNITE DE ROUE ET UNITE DE DIRECTION POUR DISPOSITIFS DE TRANSPORT SUR ROUES TELS QUE DES LITS, DES BRANCARDS OU DES CHARIOTS**

[72] RASPANTI, LUCA, IT  
[72] MOROTTI, MAURO, IT  
[73] RASPANTI, LUCA, IT  
[73] MOROTTI, MAURO, IT

[85] 2016-03-17  
[86] 2015-02-03 (PCT/IB2015/050819)  
[87] (WO2015/118449)  
[30] IT (BO2014A000056) 2014-02-07

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[11] **2,925,220**  
[13] C

[51] **Int.Cl. B60K 6/46 (2007.10) B60W 10/184 (2012.01) B60W 10/196 (2012.01) B60W 10/06 (2006.01) B60W 10/08 (2006.01) B60W 10/30 (2006.01) B60W 20/00 (2016.01) B60W 30/18 (2012.01) E02F 9/20 (2006.01)**

[25] EN

[54] **SELF-PROPELLING WORK MACHINE AND METHOD FOR BRAKING SUCH A WORK MACHINE**

[54] **ENGIN DE TRAVAIL AUTOMOTEUR ET PROCEDE DE FREINAGE D'UN TEL ENGIN DE TRAVAIL**

[72] MERKLE, MARKUS, DE  
[72] RESCH, JURGEN, DE  
[72] HOFFMANN, SEBASTIEN NICOLAS, FR

[72] RICHTHAMMER, BURKHARD EMANUEL, DE  
[72] SOMMER, BERND, DE  
[72] DUELLI, STEFEN, DE  
[73] LIEBHERR-COMPONENTS BIBERACH GMBH, DE

[85] 2016-03-23  
[86] 2014-09-09 (PCT/EP2014/002436)  
[87] (WO2015/043714)  
[30] DE (10 2013 016 126.6) 2013-09-27  
[30] DE (10 2013 016 915.1) 2013-10-11  
[30] DE (10 2013 021 607.9) 2013-12-19

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[11] **2,925,449**  
[13] C

[51] **Int.Cl. H04N 21/2362 (2011.01) H04H 20/95 (2009.01) H04N 21/438 (2011.01)**

[25] EN

[54] **TRANSMISSION DEVICE, TRANSMISSION METHOD, RECEPTION DEVICE, RECEPTION METHOD, AND COMPUTER PROGRAM**

[54] **DISPOSITIF ET PROCEDE DE TRANSMISSION, DISPOSITIF ET PROCEDE DE RECEPTION ET PROGRAMME D'ORDINATEUR**

[72] KITAHARA, JUN, JP  
[72] KITAZATO, NAOHISA, JP  
[73] SONY CORPORATION, JP

[85] 2016-03-24  
[86] 2014-06-23 (PCT/JP2014/066594)  
[87] (WO2015/049900)  
[30] JP (2013-207711) 2013-10-02

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[11] **2,925,501**  
[13] C

[51] **Int.Cl. G01N 21/91 (2006.01) C09B 67/22 (2006.01) C09B 67/42 (2006.01) G01M 3/22 (2006.01)**

[25] EN

[54] **PENETRANT TESTING MEDIUM, METHOD FOR THE PRODUCTION THEREOF, AND USE OF THE PENETRANT TESTING MEDIUM**

[54] **AGENT DE DETECTION DE CRIQUES, PROCEDE POUR LE FABRIQUER ET UTILISATION DE L'AGENT DE DETECTION DE CRIQUES**

[72] BONS, PETER, DE  
[72] REIN, RUDIGER, DE  
[72] WORNER, JORG, DE  
[72] AISTON, FINLAY, DE  
[73] CHEMETALL GMBH, DE  
[85] 2016-03-17  
[86] 2014-10-07 (PCT/EP2014/071407)  
[87] (WO2015/052164)  
[30] DE (102013016674.8) 2013-10-09

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[11] **2,925,809**  
[13] C

[51] **Int.Cl. E04H 12/22 (2006.01) E02D 5/54 (2006.01)**

[25] EN

[54] **STRUCTURAL POST AND BEAM CONNECTION DEVICE WITH FRICTION RELEASE BRACKET**

[54] **MONTANT STRUCTURAL ET DISPOSITIF DE CONNEXION DE MONTANT DOTE D'UN SUPPORT DE LIBERATION DE FRICTION**

[72] BERGMAN, RICHARD, CA  
[73] BERGMAN, RICHARD, CA  
[86] (2925809)  
[87] (2925809)  
[22] 2016-04-01

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[11] **2,925,909**  
[13] C

[51] **Int.Cl. H04N 19/30 (2014.01) H04N 19/42 (2014.01)**

[25] EN

[54] **THREE-DIMENSIONAL LOOKUP TABLE BASED COLOR GAMUT SCALABILITY IN MULTI-LAYER VIDEO CODING**

[54] **EXTENSIBILITE DE GAMME DE COULEURS BASEE SUR UNE TABLE DE CONVERSION TRIDIMENSIONNELLE EN CODAGE VIDEO MULTICOUCHE**

[72] LI, XIANG, US  
[72] RAPAKA, KRISHNAKANTH, US  
[72] CHEN, JIANLE, US  
[72] KARCZEWICZ, MARTA, US  
[73] QUALCOMM INCORPORATED, US  
[85] 2016-03-29  
[86] 2014-10-14 (PCT/US2014/060413)  
[87] (WO2015/057656)  
[30] US (61/890,843) 2013-10-14  
[30] US (14/512,177) 2014-10-10

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[11] **2,926,021**  
[13] C

[51] **Int.Cl. A61M 25/01 (2006.01) A61M 25/09 (2006.01)**

[25] EN

[54] **CATHETER ADVANCEMENT DEVICE**

[54] **DISPOSITIF POUR FAIRE PROGRESSER UN CATHETER**

[72] KHALAJ, STEVE SAEED, US  
[73] AVENT, INC., US  
[85] 2016-03-31  
[86] 2014-09-16 (PCT/IB2014/064566)  
[87] (WO2015/059588)  
[30] US (14/061,825) 2013-10-24

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[11] **2,926,211**  
[13] C

[51] **Int.Cl. A61K 31/519 (2006.01) A61P 13/12 (2006.01)**

[25] EN

[54] **{4-[5-(3-CHLORO-PHENOXY)-OXAZOLO[5,4-D]PYRIMIDIN-2-YL]-2,6-DIMETHYL-PHENOXY}-ACETIC ACID FOR USE IN THE PREVENTION OR TREATMENT OF ACUTE KIDNEY INJURY**

[54] **{4-[5-(3-CHLORO-PHENOXY)-OXAZOLO[5,4-D]PYRIMIDIN-2-YL]-2,6-DIMETHYL-PHENOXY}-ACIDE ACETIQUE A UTILISER DANS LA PREVENTION OU LE TRAITEMENT DE L'INSUFFISANCE RENALE AIGUE**

[72] BRIAND, VERONIQUE, FR  
[72] GRATZER, SABINE, FR  
[72] HUEBSCHLE, THOMAS, DE  
[72] JANIAK, PHILIP, FR  
[72] KADEREIT, DIETER, DE  
[72] PARKAR, ASHFAQ, US  
[72] POIRIER, BRUNO, FR  
[72] SCHAEFER, MATTHIAS, DE  
[72] WOHLFART, PAULUS, DE  
[73] SANOFI, FR  
[85] 2016-04-04  
[86] 2014-10-15 (PCT/EP2014/072078)  
[87] (WO2015/055694)  
[30] EP (13306417.0) 2013-10-15

**Brevets canadiens délivrés  
29 mars 2022**

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[11] **2,927,027**  
[13] C

[51] **Int.Cl. C12M 3/00 (2006.01) B33Y 30/00 (2015.01) B33Y 50/00 (2015.01) B25J 9/18 (2006.01) C12N 5/00 (2006.01) G05B 17/02 (2006.01)**

[25] EN

[54] **SYSTEM AND WORKSTATION FOR THE DESIGN, FABRICATION AND ASSEMBLY OF BIO-MATERIAL CONSTRUCTS**

[54] **SYSTEME ET POSTE DE TRAVAIL POUR LA CONCEPTION, LA FABRICATION ET L'ASSEMBLAGE DE STRUCTURES DE BIOMATERIAUX**

[72] GOLWAY, MICHAEL, US

[72] PALMER, JUSTIN C., US

[72] ELI, JEFFREY KYLE, US

[72] BARTLETT, JOSHUA D., US

[72] COLLINS, ELLSWORTH H., US

[73] ADVANCED SOLUTIONS LIFE SCIENCES, LLC, US

[85] 2016-04-08

[86] 2014-10-10 (PCT/US2014/060042)

[87] (WO2015/054577)

[30] US (61/889,856) 2013-10-13

[30] US (62/016,815) 2014-06-25

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[11] **2,927,034**  
[13] C

[51] **Int.Cl. H04N 21/418 (2011.01) H04N 21/434 (2011.01) H04N 21/439 (2011.01) H04N 21/4402 (2011.01) H04N 21/8358 (2011.01) H04N 21/845 (2011.01)**

[25] EN

[54] **DEVICE AND METHOD TO MARK DIGITAL AUDIO OR AUDIO AND/OR VIDEO CONTENT**

[54] **DISPOSITIF ET PROCEDE DE MARQUAGE D'UN CONTENU AUDIO NUMERIQUE OU D'UN CONTENU AUDIO ET/OU VIDEO**

[72] SARDA, PIERRE, CH

[72] AUMASSON, JEAN-PHILIPPE, CH

[72] TRAN, MINH SON, FR

[73] NAGRAVISION S.A., CH

[85] 2016-04-11

[86] 2014-11-03 (PCT/EP2014/073605)

[87] (WO2015/063308)

[30] EP (13191459.0) 2013-11-04

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[11] **2,927,059**  
[13] C

[51] **Int.Cl. H01H 71/56 (2006.01)**

[25] EN

[54] **BUCKET ASSEMBLIES FOR MOTOR CONTROL CENTERS (MCC) WITH DISCONNECT ASSEMBLIES AND RELATED MCC CABINETS AND METHODS**

[54] **ENSEMBLES SOUS-UNITES POUR CENTRES DE COMMANDE DE MOTEURS (MCC) COMPRENANT DES ENSEMBLES DE DECONNEXION, ET ARMOIRES ET PROCEDES DE MCC CONNEXES**

[72] ONEUFER, STEPHEN W., US

[72] MORRIS, ROBERT A., US

[72] KROUSHL, DANIEL B., US

[73] EATON INTELLIGENT POWER LIMITED, IE

[85] 2016-04-11

[86] 2014-10-08 (PCT/US2014/059642)

[87] (WO2015/057446)

[30] US (61/890,495) 2013-10-14

[30] US (14/501,969) 2014-09-30

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[11] **2,927,289**  
[13] C

[51] **Int.Cl. B81C 1/00 (2006.01) B81B 1/00 (2006.01) G01N 1/00 (2006.01) H01J 49/04 (2006.01)**

[25] EN

[54] **PRINTED DIGITAL MICROFLUIDIC DEVICES METHODS OF USE AND MANUFACTURE THEREOF**

[54] **DISPOSITIFS MICROFLUIDIQUES NUMERIQUES IMPRIMES ET PROCEDES D'UTILISATION ET DE FABRICATION DE CES DERNIERS**

[72] FOBEL, RYAN, CA

[72] KIRBY, ANDREA, CA

[72] WHEELER, AARON, CA

[73] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA

[85] 2016-04-13

[86] 2014-02-27 (PCT/CA2014/050142)

[87] (WO2015/058292)

[30] US (61/894,827) 2013-10-23

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[11] **2,928,572**  
[13] C

[51] **Int.Cl. E04B 1/68 (2006.01)**

[25] EN

[54] **ANTI-SNAKING SWELLABLE WATER-STOPS**

[54] **DISPOSITIFS D'ETANCHEITE DILATABLES ET ANTI-ONDULATION**

[72] DE RUIJTER, MICHEL J., BE

[72] GEUDENS, PASCAL A., BE

[72] KEMPENAERS, PETER J., BE

[73] GCP APPLIED TECHNOLOGIES INC., US

[85] 2016-04-22

[86] 2014-10-01 (PCT/US2014/058597)

[87] (WO2015/061012)

[30] EP (13190130.8) 2013-10-24

[30] US (14/099,932) 2013-12-07

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[11] **2,928,695**  
[13] C

[51] **Int.Cl. A61K 9/72 (2006.01) A61K 31/167 (2006.01) A61K 31/58 (2006.01)**

[25] EN

[54] **METHOD FOR PREPARING DRY POWDER INHALATION COMPOSITIONS**

[54] **PROCEDE PERMETTANT DE PREPARER DES COMPOSITIONS D'INHALATION DE POUDRE SECHE**

[72] MATTILA, TERHI, FI

[72] HAPPONEN, ANITA, FI

[72] HAIKARAINEN, JUSSI, FI

[73] ORION CORPORATION, FI

[85] 2016-04-25

[86] 2014-12-05 (PCT/FI2014/000038)

[87] (WO2015/082756)

[30] US (61/913,024) 2013-12-06

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[11] **2,928,805**  
[13] C

[51] **Int.Cl. C07K 1/00 (2006.01)**

[25] EN

[54] **METHOD FOR REDUCING COLOUR OF A BIOTECHNOLOGICAL LIQUID**

[54] **PROCEDE DE REDUCTION DE LA COULEUR D'UN LIQUIDE BIOTECHNOLOGIQUE**

[72] HOLAPPA, SUSANNA, FI

[72] RECKTENWALD, MICHAEL, FI

[73] KEMIRA OYJ, FI

[85] 2016-04-26

[86] 2014-11-05 (PCT/FI2014/050831)

[87] (WO2015/075302)

[30] FI (20136148) 2013-11-19

**Canadian Patents Issued  
March 29, 2022**

[11] **2,928,822**  
[13] C

[51] **Int.Cl. C12Q 1/56 (2006.01) C12Q 1/02 (2006.01) G01N 33/48 (2006.01) G01N 33/50 (2006.01) G01N 33/53 (2006.01) G01N 33/88 (2006.01)**

[25] EN

[54] **METHOD OF DETECTING PLATELET ACTIVATING ANTIBODIES THAT CAUSE HEPARIN-INDUCED THROMBOCYTOPENIA/THROMBOSIS**

[54] **PROCEDE DE DETECTION D'ANTICORPS D'ACTIVATION PLAQUETTAIRE QUI CAUSENT UNE THROMBOCYTOPENIE/THROMBOSE INDUITE PAR L'HEPARINE**

[72] ASTER, RICHARD H., US  
[72] BOUGIE, DANIEL W., US  
[72] JONES, CURTIS GERALD, US  
[72] PADMANABHAN, ANAND, US  
[73] VERSITI BLOOD RESEARCH INSTITUTE FOUNDATION, INC., US  
[85] 2016-04-26  
[86] 2014-10-28 (PCT/US2014/062591)  
[87] (WO2015/065986)  
[30] US (61/896,951) 2013-10-29

[11] **2,929,032**  
[13] C

[51] **Int.Cl. A61M 5/20 (2006.01) A61M 5/24 (2006.01)**

[25] EN

[54] **MEDICAMENT DELIVERY DEVICE SUB-ASSEMBLY**

[54] **SOUS-ENSEMBLE DE DISPOSITIF DE DISTRIBUTION DE MEDICAMENT**

[72] WILLOUGHBY, ALASTAIR, GB  
[72] VILAPLANA, MARTA, GB  
[73] CONSORT MEDICAL LIMITED, GB  
[85] 2016-04-28  
[86] 2014-11-03 (PCT/GB2014/053250)  
[87] (WO2015/063506)  
[30] GB (1319380.0) 2013-11-01

[11] **2,929,532**  
[13] C

[51] **Int.Cl. B60R 3/02 (2006.01)**

[25] EN

[54] **RETRACTABLE STAIR SYSTEM WITH PRECISION ELEVATION CONTROL**

[54] **MECANISME D'ESCALIER RETRACTABLE A COMMANDE D'ELEVATION DE PRECISION**

[72] KAY, JACK, US  
[72] CRAWFORD, JOEL, US  
[73] TORKLIFT INTERNATIONAL INC., US  
[86] (2929532)  
[87] (2929532)  
[22] 2016-05-10  
[30] US (62/246,601) 2015-10-26  
[30] US (15/149,138) 2016-05-08

[11] **2,929,833**  
[13] C

[51] **Int.Cl. F01D 21/02 (2006.01) F01D 21/14 (2006.01) F02C 9/28 (2006.01)**

[25] EN

[54] **SHAFT FAILURE DETECTION USING PASSIVE CONTROL METHODS**

[54] **DETECTION DE DEFAILLANCE D'ARBRE AU MOYEN DE METHODES DE CONTROLE PASSIVES**

[72] ARGOTE, CHRISTOPHER, US  
[72] HARVELL, JOHN K., US  
[72] ROWE, ARTHUR L., GB  
[73] ROLLS-ROYCE NORTH AMERICAN TECHNOLOGIES, INC., US  
[86] (2929833)  
[87] (2929833)  
[22] 2016-05-12  
[30] US (62/194,582) 2015-07-20  
[30] US (15/149,256) 2016-05-09

[11] **2,929,858**  
[13] C

[51] **Int.Cl. A61K 31/5513 (2006.01) A61P 1/04 (2006.01) A61P 19/10 (2006.01)**

[25] EN

[54] **GASTRIN ANTAGONISTS (EG YF476), NETAZEPIDE) FOR TREATMENT AND PREVENTION OF OSTEOPOROSIS**

[54] **ANTAGONISTES DE GASTRINE (EG YF476), NETAZEPIDE) POUR LE TRAITEMENT ET LA PREVENTION DE L'OSTEOPOROSE**

[72] MODLIN, IRVIN MARK, US  
[72] KIDD, MARK, US  
[73] CL BIOSCIENCES LLC, KN  
[85] 2016-05-05  
[86] 2014-11-21 (PCT/US2014/066832)  
[87] (WO2015/077572)  
[30] US (61/907,980) 2013-11-22

[11] **2,929,987**  
[13] C

[51] **Int.Cl. C08L 61/04 (2006.01) C08L 33/04 (2006.01) C10L 1/19 (2006.01)**

[25] EN

[54] **IMPROVEMENTS TO ADDITIVE COMPOSITIONS AND TO FUEL OILS**

[54] **AMELIORATIONS DE COMPOSITIONS D'ADDITIF ET D'HUILES DE PETROLE**

[72] THEAKER, GILES WILLIAM, GB  
[72] HOPKINS, SALLY ANN, GB  
[72] GOBERDHAN, DHANESH, GB  
[73] INFINEUM INTERNATIONAL LIMITED, GB  
[86] (2929987)  
[87] (2929987)  
[22] 2016-05-13  
[30] EP (15167746.5) 2015-05-14

**Brevets canadiens délivrés  
29 mars 2022**

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[11] **2,930,142**  
[13] C

[51] **Int.Cl. C07D 235/12 (2006.01) A61K 31/4184 (2006.01) A61P 29/00 (2006.01)**

[25] EN

[54] **TETRAHYDROBENZIMIDAZOLE DERIVATIVES AS MODULATORS OF TNF ACTIVITY**

[54] **DERIVES DE TETRAHYDROBENZIMIDAZOLE SUBSTITUES COMME MODULATEURS DE L'ACTIVITE DU TNF-A**

[72] HEER, JAG PAUL, BE

[72] JACKSON, VICTORIA ELIZABETH, GB

[72] KROEPLIEN, BORIS, GB

[72] LECOMTE, FABIEN CLAUDE, GB

[72] PORTER, JOHN ROBERT, GB

[73] UCB BIOPHARMA SRL, BE

[85] 2016-05-10

[86] 2014-12-08 (PCT/EP2014/076854)

[87] (WO2015/086513)

[30] GB (1321744.3) 2013-12-09

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[11] **2,930,207**  
[13] C

[51] **Int.Cl. E21B 17/042 (2006.01) F16L 15/00 (2006.01)**

[25] EN

[54] **ASSEMBLY FOR PRODUCING A THREADED CONNECTION FOR DRILLING AND OPERATING HYDROCARBON WELLS, AND RESULTING THREADED CONNECTION**

[54] **ENSEMBLE POUR PRODUIRE UNE LIAISON FILETEE POUR FORAGE ET FONCTIONNEMENT DE PUIITS D'HYDROCARBURES, ET LIAISON FILETEE RESULTANTE**

[72] MARTIN, PIERRE, FR

[72] PORQUER, GUILLAUME, FR

[73] VALLOUREC OIL AND GAS FRANCE, FR

[73] NIPPON STEEL CORPORATION, JP

[85] 2016-05-10

[86] 2014-12-05 (PCT/EP2014/076765)

[87] (WO2015/086466)

[30] FR (1362379) 2013-12-10

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[11] **2,930,345**  
[13] C

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/5025 (2006.01) A61P 29/00 (2006.01)**

[25] EN

[54] **TRIAZOLOPYRIDAZINE DERIVATIVES AS MODULATORS OF TNF ACTIVITY**

[54] **DERIVES DE TRIAZOLOPYRIDAZINE A TITRE DE MODULATEURS DE L'ACTIVITE DU TNF**

[72] BROOKINGS, DANIEL CHRISTOPHER, GB

[73] UCB BIOPHARMA SRL, BE

[85] 2016-05-11

[86] 2014-12-08 (PCT/EP2014/076852)

[87] (WO2015/086511)

[30] GB (1321745.0) 2013-12-09

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[11] **2,931,017**  
[13] C

[51] **Int.Cl. A61M 5/28 (2006.01) A61M 5/31 (2006.01) A61M 5/34 (2006.01) A61M 39/20 (2006.01)**

[25] EN

[54] **MEDICANT INJECTION DEVICE**

[54] **DISPOSITIF D'INJECTION DE MEDICAMENTS**

[72] GARDNER, CHRISTOPHER, US

[72] BANIK, ROBERT, US

[72] MCGURK, THOMAS LEO, US

[73] MEDLINE INDUSTRIES, INC., US

[85] 2016-05-17

[86] 2014-11-18 (PCT/US2014/066244)

[87] (WO2015/074087)

[30] US (61/905,621) 2013-11-18

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[11] **2,932,396**  
[13] C

[51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/451 (2006.01) A61P 3/04 (2006.01) A61P 35/00 (2006.01) C07D 401/10 (2006.01) C07D 401/12 (2006.01) C07D 403/10 (2006.01) C07D 405/14 (2006.01) C07D 409/14 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **BENZAMIDE DERIVATIVE USEFUL AS FASN INHIBITORS FOR THE TREATMENT OF CANCER**

[54] **DERIVE DE BENZAMIDE UTILE EN TANT QU'INHIBITEUR DE FAS POUR LE TRAITEMENT DU CANCER**

[72] CONNOLLY, PETER J., US

[72] LU, TIANBAO, US

[73] JANSSEN PHARMACEUTICA NV, BE

[85] 2016-06-01

[86] 2014-11-21 (PCT/US2014/066743)

[87] (WO2015/084606)

[30] US (61/911,016) 2013-12-03

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[11] **2,932,397**  
[13] C

[51] **Int.Cl. H04R 3/00 (2006.01) H04M 3/00 (2006.01) H04M 9/08 (2006.01) H04S 7/00 (2006.01)**

[25] EN

[54] **ESTIMATING A ROOM IMPULSE RESPONSE FOR ACOUSTIC ECHO CANCELLING**

[54] **ESTIMATION DE REPONSE IMPULSIONNELLE D'UNE PIECE POUR ANNULER UN ECHO ACOUSTIQUE**

[72] FLORENCIO, DINEL, US

[72] YELLEPEDDI, ATULYA, US

[73] MICROSOFT TECHNOLOGY LICENSING, LLC, US

[85] 2016-06-01

[86] 2014-11-28 (PCT/US2014/067803)

[87] (WO2015/084683)

[30] US (14/098,283) 2013-12-05

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[11] **2,933,357**  
[13] C

[51] **Int.Cl. F02C 6/02 (2006.01) B64D 31/06 (2006.01) F02C 6/20 (2006.01) F02C 9/28 (2006.01)**

[25] FR

[54] **METHOD FOR AUTOMATICALLY CONTROLLING THE OPERATING SPEED OF A HELICOPTER TURBOSHAFT ENGINE, CORRESPONDING CONTROL DEVICE AND HELICOPTER PROVIDED WITH SUCH A DEVICE**

[54] **PROCEDE DE COMMANDE AUTOMATIQUE DU REGIME DE FONCTIONNEMENT D'UN TURBOMOTEUR D'UN HELICOPTERE, DISPOSITIF DE COMMANDE CORRESPONDANT ET HELICOPTERE EQUIPE D'UN TEL DISPOSITIF**

[72] SEVE, CAROLINE, FR  
[72] POUmarede, VINCENT, FR  
[72] THIRIET, ROMAIN, FR  
[73] TURBOMECA, FR  
[85] 2016-06-09  
[86] 2014-12-15 (PCT/FR2014/053351)  
[87] (WO2015/092252)  
[30] FR (1363316) 2013-12-20

[11] **2,933,403**  
[13] C

[51] **Int.Cl. A61K 9/20 (2006.01) A61K 31/506 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL COMPOSITIONS COMPRISING AZD9291**

[54] **COMPOSITIONS PHARMACEUTIQUES COMPRENANT AZD9291**

[72] WILSON, DAVID, GB  
[72] FINNIE, CINDY, GB  
[72] RAW, STEVEN ANTHONY, GB  
[73] ASTRAZENECA AB, SE  
[85] 2016-06-10  
[86] 2015-01-02 (PCT/GB2015/050001)  
[87] (WO2015/101791)  
[30] GB (1400034.3) 2014-01-02

[11] **2,933,953**  
[13] C

[51] **Int.Cl. A23K 20/158 (2016.01) A23K 20/10 (2016.01) A23K 20/142 (2016.01) A23K 20/163 (2016.01) A23K 30/00 (2016.01) A23K 40/00 (2016.01) A23K 50/00 (2016.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR INCREASING THE PALATABILITY OF DRY PET FOOD**

[54] **COMPOSITIONS ET PROCEDES D'AMELIORATION DE LA RAPIDITE D'ALIMENTS SECS POUR ANIMAUX DOMESTIQUES**

[72] VANACKER, PASCAL, FR  
[72] LORCY, GWENDAL, FR  
[72] KULKER-THERON, CATHERINE, FR  
[72] BRETON, CHLOE, IT  
[72] LABORBE, JEAN-MARIE, FR  
[73] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2016-06-15  
[86] 2014-12-16 (PCT/IB2014/066969)  
[87] (WO2015/092680)  
[30] US (61/918,407) 2013-12-19

[11] **2,934,498**  
[13] C

[51] **Int.Cl. B09B 3/00 (2022.01) B09B 3/40 (2022.01) B08B 15/00 (2006.01) C21C 7/00 (2006.01) C22C 33/04 (2006.01)**

[25] EN

[54] **ASBESTOS PROCESSING**

[54] **TRAITEMENT DE L'AMIANTE**

[72] JANSEN, KLAAS, NL  
[73] PMC INTERNATIONAL B.V., NL  
[85] 2016-06-17  
[86] 2014-12-23 (PCT/NL2014/050900)  
[87] (WO2015/099529)  
[30] NL (PCT/NL2013/050950) 2013-12-23

[11] **2,934,611**  
[13] C

[51] **Int.Cl. C08L 77/06 (2006.01) C08K 3/24 (2006.01) C08K 3/32 (2006.01) C08K 7/14 (2006.01) C08L 71/12 (2006.01)**

[25] EN

[54] **POLYAMIDE MOLDING COMPOUND AND USE THEREOF**

[54] **MATIERE A MOULER A BASE DE POLYAMIDES ET SON UTILISATION**

[72] AEPLI, ETIENNE, CH  
[73] EMS-PATENT AG, CH  
[85] 2016-06-20  
[86] 2014-12-16 (PCT/EP2014/077880)  
[87] (WO2015/091429)  
[30] EP (13199136.6) 2013-12-20

[11] **2,935,439**  
[13] C

[51] **Int.Cl. C25C 3/08 (2006.01)**

[25] FR

[54] **ELECTROLYSIS TANK COMPRISING AN ANODIC ASSEMBLY HOISTING DEVICE**

[54] **CUVE D'ELECTROLYSE COMPORTANT UN DISPOSITIF DE LEVAGE D'ENSEMBLES ANODIQUES**

[72] BRUN, FREDERIC, FR  
[72] ROCHET, YVES, FR  
[72] RENAUDIER, STEEVE, FR  
[73] RIO TINTO ALCAN INTERNATIONAL LIMITED, CA  
[85] 2016-06-29  
[86] 2015-01-23 (PCT/IB2015/000068)  
[87] (WO2015/110901)  
[30] FR (1400172) 2014-01-27

[11] **2,935,446**  
[13] C

[51] **Int.Cl. C25C 3/10 (2006.01)**

[25] FR

[54] **DEVICE FOR STORING A LOAD ABOVE AN ELECTROLYTIC CELL**

[54] **DISPOSITIF DE STOCKAGE D'UNE CHARGE AU-DESSUS D'UNE CUVE D'ELECTROLYSE**

[72] BEYSSON, MARC, FR  
[72] PETIT, STEPHANE, FR  
[73] RIO TINTO ALCAN INTERNATIONAL LIMITED, CA  
[85] 2016-06-29  
[86] 2015-01-23 (PCT/IB2015/000069)  
[87] (WO2015/110902)  
[30] FR (1400178) 2014-01-27

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[11] **2,935,684**  
[13] C

[51] **Int.Cl. E06B 9/88 (2006.01) E05F 15/40 (2015.01)**  
[25] EN  
[54] **PANEL SHUTTER WITH A DEFORMATION DETECTION ARRANGEMENT**  
[54] **PANNEAU DE VOLET AYANT UN AGENCEMENT DE DETECTION DE DEFORMATION**  
[72] FREDE, FRIEDHELM, DE  
[73] ASSA ABLOY ENTRANCE SYSTEMS AB, SE  
[85] 2016-06-30  
[86] 2015-02-17 (PCT/EP2015/053321)  
[87] (WO2015/124572)  
[30] SE (1450205-8) 2014-02-19

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[11] **2,935,688**  
[13] C

[51] **Int.Cl. H04L 9/06 (2006.01) H04L 12/22 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR BIOMETRIC PROTOCOL STANDARDS**  
[54] **SYSTEME ET PROCEDE POUR STANDARDS DE PROTOCOLES BIOMETRIQUES**  
[72] HOYOS, HECTOR, US  
[72] STREIT, SCOTT, US  
[72] BRAVERMAN, JASON, US  
[73] VERIDIUM IP LIMITED, GB  
[85] 2016-06-30  
[86] 2014-12-31 (PCT/US2014/072985)  
[87] (WO2015/147945)  
[30] US (61/922,438) 2013-12-31  
[30] US (14/201,438) 2014-03-07

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[11] **2,936,751**  
[13] C

[51] **Int.Cl. C12Q 1/6869 (2018.01) C12Q 1/6806 (2018.01) C12Q 1/6844 (2018.01) C12Q 1/686 (2018.01)**  
[25] EN  
[54] **AMPLICON PREPARATION AND SEQUENCING ON SOLID SUPPORTS**  
[54] **PREPARATION ET SEQUENCAGE D'AMPLICONS SUR SUPPORTS SOLIDES**  
[72] XU, HONGXIA, US  
[72] ARAVANIS, ALEX, US  
[72] LIN, SHENGRONG, US  
[73] ILLUMINA, INC., US  
[85] 2016-07-13  
[86] 2014-12-18 (PCT/US2014/071263)  
[87] (WO2015/108663)  
[30] US (61/928,368) 2014-01-16

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[11] **2,936,792**  
[13] C

[51] **Int.Cl. A61K 9/107 (2006.01) A61K 49/00 (2006.01)**  
[25] EN  
[54] **LIQUID COMPOSITION IN THE FORM OF EMULSION OR MICROEMULSION FOR RECTAL ADMINISTRATION CONTAINING AT LEAST ONE DYE, AND ITS USE IN A DIAGNOSTIC ENDOSCOPIC PROCEDURE OF SIGMOID COLON AND/OR RECTUM**  
[54] **COMPOSITION LIQUIDE SOUS FORME D'EMULSION OU DE MICROEMULSION POUR ADMINISTRATION RECTALE CONTENANT AU MOINS UN COLORANT, ET SON UTILISATION DANS UNE PROCEDURE ENDOSCOPIQUE DE DIAGNOSTIC DU COLON SIGMOIDE ET/OU DU RECTUM**  
[72] MORO, LUIGI, IT  
[72] FRIMONTI, ENRICO, IT  
[72] LONGO, LUIGI MARIA, IT  
[73] COSMO TECHNOLOGIES LIMITED, IE  
[85] 2016-07-12  
[86] 2015-01-29 (PCT/IB2015/050667)  
[87] (WO2015/114548)  
[30] IT (MI2014A000121) 2014-01-29

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[11] **2,937,275**  
[13] C

[51] **Int.Cl. C07C 225/28 (2006.01) A61K 31/122 (2006.01) A61K 31/136 (2006.01) A61K 31/235 (2006.01) C07C 50/28 (2006.01) C07C 69/757 (2006.01)**  
[25] EN  
[54] **NOVEL CANNABIGEROL DERIVATIVES**  
[54] **NOUVEAUX DERIVES DE CANNABIGEROL**  
[72] APPENDINO, GIOVANNI, IT  
[72] BELLIDO CABELLO DE ALBA, MARIA LUZ, ES  
[72] MUNOZ BLANCO, EDUARDO, ES  
[73] EMERALD HEALTH PHARMACEUTICALS INC., US  
[85] 2016-07-19  
[86] 2015-02-12 (PCT/EP2015/053032)  
[87] (WO2015/128200)  
[30] EP (14156954.1) 2014-02-27

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[11] **2,937,466**  
[13] C

[51] **Int.Cl. E21B 49/08 (2006.01) E21B 47/002 (2012.01) G01N 1/10 (2006.01)**  
[25] EN  
[54] **FLUID ANALYSIS BY OPTICAL SPECTROSCOPY WITH PHOTOACOUSTIC DETECTION**  
[54] **ANALYSE DE FLUIDE PAR SPECTROSCOPIE OPTIQUE AVEC UNE DETECTION PHOTOACOUSTIQUE**  
[72] SPECK, ANDREW J., US  
[72] POMERANTZ, ANDREW E., US  
[72] MULLINS, OLIVER C., US  
[73] SCHLUMBERGER CANADA LIMITED, CA  
[85] 2016-07-20  
[86] 2014-12-11 (PCT/US2014/069770)  
[87] (WO2015/116316)  
[30] US (14/166,593) 2014-01-28

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[11] **2,937,871**  
[13] C

[51] **Int.Cl. B42D 25/328 (2014.01) G03H 1/02 (2006.01) G09F 19/12 (2006.01)**  
[25] EN  
[54] **IMAGE DISPLAY DEVICE AND IMAGE DISPLAY MEDIUM**  
[54] **DISPOSITIF D'AFFICHAGE D'IMAGE ET SUPPORT D'AFFICHAGE D'IMAGE**  
[72] INOKUCHI, MASAMI, JP  
[73] TOPPAN PRINTING CO., LTD., JP  
[85] 2016-07-25  
[86] 2015-01-29 (PCT/JP2015/052571)  
[87] (WO2015/115564)  
[30] JP (2014-014737) 2014-01-29

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[11] **2,938,394**  
[13] C

[51] **Int.Cl. A61K 47/02 (2006.01) A61K 9/36 (2006.01) A61K 47/10 (2017.01) A61K 47/26 (2006.01)**  
[25] EN  
[54] **COATING AGENT FOR SOLID PREPARATION, AND FILM AND COATED SOLID PREPARATION FORMED THEREWITH**  
[54] **AGENT DE REVETEMENT DESTINE A DES PREPARATIONS SOLIDES, ET PELLICULE ET PREPARATION SOLIDE AINSI REVETUE**  
[72] TAKAKI, SUGURU, JP  
[72] OHTA, KOTOE, JP  
[72] HORIUCHI, YASUhide, JP  
[73] TORAY INDUSTRIES, INC., JP  
[85] 2016-07-29  
[86] 2015-03-31 (PCT/JP2015/060039)  
[87] (WO2015/152195)  
[30] JP (2014-072607) 2014-03-31

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[11] **2,938,631**  
[13] C

[51] **Int.Cl. A61B 17/32 (2006.01) A61B 17/34 (2006.01) A61B 18/04 (2006.01)**  
[25] EN  
[54] **MINIMALLY INVASIVE METHODS FOR SPINAL FACET THERAPY TO ALLEVIATE PAIN AND ASSOCIATED SURGICAL TOOLS, KITS AND INSTRUCTIONAL MEDIA**  
[54] **METHODES MINIMALEMENT INVASIVES POUR UNE THERAPIE DE FACETTE VERTEBRALE PERMETTANT DE SOULAGER LA DOULEUR, INSTRUMENTS CHIRURGICAUX, TROUSSES ET SUPPORTS D'ENSEIGNEMENT ASSOCIES**  
[72] HAUFE, SCOTT M. W., US  
[72] GULLICKSON, ADAM L., US  
[72] CARTER, ROBERT D., US  
[73] MEDOVEX CORP., US  
[85] 2016-08-03  
[86] 2014-04-21 (PCT/US2014/034743)  
[87] (WO2014/176141)  
[30] US (61/815,416) 2013-04-24  
[30] US (61/977,817) 2014-04-10

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[11] **2,939,215**  
[13] C

[51] **Int.Cl. H04N 21/431 (2011.01) H04N 21/462 (2011.01) H04N 5/445 (2011.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR GENERATING AND PROVIDING PROGRAM GUIDES AND CONTENT**  
[54] **PROCEDES ET SYSTEMES DE GENERATION ET DE FOURNITURE DE GUIDES DE PROGRAMMES ET DE CONTENU**  
[72] GROUF, NICHOLAS A., US  
[72] POZIN, ILYA, US  
[72] SIEVERDING, THOMAS, US  
[72] PRICE, MICHAEL, US  
[72] EMERSON, LINDSEY, US  
[72] GABBAY, LYNN D., US  
[72] RYAN, THOMAS V., US  
[72] GOLD, AUDRA E., US  
[72] HOU, CHAN V., US  
[73] PLUTO INC., US  
[85] 2016-08-09  
[86] 2015-02-13 (PCT/US2015/015902)  
[87] (WO2015/123572)  
[30] US (61/940,096) 2014-02-14

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[11] **2,940,272**  
[13] C

[51] **Int.Cl. C07C 235/50 (2006.01) A61K 31/165 (2006.01) A61K 31/166 (2006.01) A61K 31/351 (2006.01) A61K 31/4045 (2006.01) A61K 31/437 (2006.01) A61P 1/16 (2006.01) A61P 9/10 (2006.01) A61P 11/00 (2006.01) A61P 13/04 (2006.01) A61P 19/02 (2006.01) A61P 19/10 (2006.01) A61P 25/00 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) A61P 43/00 (2006.01) C07C 233/36 (2006.01) C07C 233/62 (2006.01) C07C 233/78 (2006.01) C07C 235/48 (2006.01) C07C 235/60 (2006.01) C07C 237/22 (2006.01) C07C 237/42 (2006.01) C07D 209/14 (2006.01) C07D 213/81 (2006.01) C07D 309/08 (2006.01)**  
[25] EN  
[54] **AMIDE DERIVATIVE**  
[54] **DERIVE D'AMIDE**  
[72] KIKUCHI, HARUHISA, JP  
[72] OSHIMA, YOSHITERU, JP  
[72] HATTORI, TOSHIO, JP  
[72] KUBOHARA, YUZURU, JP  
[72] YAMADA, OSAMU, JP  
[72] ZHANG, JING, JP  
[72] MATSUSHITA, YOSHIHISA, JP  
[72] KIDA, SHINYA, JP  
[73] TOHOKU UNIVERSITY, JP  
[73] NATIONAL UNIVERSITY CORPORATION GUNMA UNIVERSITY, JP  
[73] FUSO PHARMACEUTICAL INDUSTRIES, LTD., JP  
[85] 2016-08-19  
[86] 2015-02-27 (PCT/JP2015/055873)  
[87] (WO2015/129860)  
[30] JP (2014-038919) 2014-02-28

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[11] **2,940,795**  
[13] C

[51] **Int.Cl. A61M 1/06 (2006.01)**  
[25] EN  
[54] **SERVICE SYSTEM**  
[54] **SYSTEME DE SERVICE**  
[72] HAAS, MATTHIAS, CH  
[72] WEBER, BEDA, CH  
[73] MEDELA HOLDING AG, CH  
[85] 2016-08-25  
[86] 2015-03-04 (PCT/EP2015/054457)  
[87] (WO2015/132278)  
[30] EP (14158098.5) 2014-03-06

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[11] **2,941,023**  
[13] C

[51] **Int.Cl. G01V 9/00 (2006.01) E21B 41/00 (2006.01) E21B 43/00 (2006.01)**  
[25] EN  
[54] **GENERATING UNCONSTRAINED VORONOI GRIDS IN A DOMAIN CONTAINING COMPLEX INTERNAL BOUNDARIES**  
[54] **GENERATION DE GRILLES VORONOI SANS CONTRAINTES DANS UN DOMAINE CONTENANT DES LIMITES INTERNES COMPLEXES**  
[72] DING, XIANG YANG, SA  
[72] FUNG, LARRY SIU-KUEN, SA  
[72] DOGRU, ALI H., SA  
[73] SAUDI ARABIAN OIL COMPANY, SA  
[85] 2016-08-26  
[86] 2015-03-16 (PCT/US2015/020690)  
[87] (WO2015/142711)  
[30] US (14/215,851) 2014-03-17

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[11] **2,942,471**  
[13] C

[51] **Int.Cl. H01M 8/248 (2016.01) H01M 8/0258 (2016.01) H01M 8/241 (2016.01)**  
[25] EN  
[54] **FUEL CELL STACK ASSEMBLY WITH ACTIVE AND INACTIVE FUEL CELL STACK REPEAT LAYERS**  
[54] **ENSEMBLE D'EMPILEMENT DE PILES A COMBUSTIBLE AYANT DES COUCHES REPETEES D'EMPILEMENTS ACTIFS ET INACTIFS**  
[72] LEAH, ROBERT, GB  
[72] BONE, ADAM, GB  
[72] REES, LEE, GB  
[73] CERES INTELLECTUAL PROPERTY COMPANY LIMITED, GB  
[85] 2016-09-12  
[86] 2015-03-12 (PCT/GB2015/050729)  
[87] (WO2015/136295)  
[30] GB (1404373.1) 2014-03-12  
[30] GB (1406586.6) 2014-04-11

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[11] **2,942,491**  
[13] C

[51] **Int.Cl. G01N 33/483 (2006.01) C12M 1/00 (2006.01) G01N 33/487 (2006.01)**  
[25] EN  
[54] **PORTED PARALLEL PLATE FLOW CHAMBER AND METHODS FOR USE THEREOF**  
[54] **CHAMBRE D'ECOULEMENT A PLAQUES PARALLELES A ORIFICES ET LEURS PROCEDES D'UTILISATION**  
[72] RINKER, KRISTINA D., CA  
[72] SHEPHERD, ROBERT D., CA  
[73] SYANTRA INC., CA  
[85] 2016-09-12  
[86] 2014-03-14 (PCT/US2014/027764)  
[87] (WO2014/143696)  
[30] US (61/791,770) 2013-03-15

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[11] **2,942,554**  
[13] C

[51] **Int.Cl. A01K 15/02 (2006.01) G01S 19/14 (2010.01) A01K 29/00 (2006.01) H04B 7/26 (2006.01)**  
[25] EN  
[54] **INTEGRATED DOG TRACKING AND STIMULUS DELIVERY SYSTEM**  
[54] **SYSTEME INTEGRE DE TRACAGE ET DE DELIVRANCE DE STIMULI POUR CHIEN**  
[72] GOETZL, BRENT, US  
[72] PILTONEN, HARRI, US  
[72] EDWARDS, JASON, US  
[72] ZINN, KEVIN, US  
[72] WACASEY, KENNETH, US  
[73] RADIO SYSTEMS CORPORATION, US  
[85] 2016-09-12  
[86] 2015-01-09 (PCT/US2015/010864)  
[87] (WO2015/106133)  
[30] US (61/926,797) 2014-01-13  
[30] US (14/340,493) 2014-07-24

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[11] **2,942,846**  
[13] C

[51] **Int.Cl. F16D 65/095 (2006.01)**  
[25] EN  
[54] **BRAKE PAD ASSEMBLY WITH UNIVERSAL SHIM**  
[54] **ENSEMBLE DE PLAQUETTES DE FREIN AVEC CALE UNIVERSELLE**  
[72] AFANEH, ABDUL-HAFIZ AHMED, US  
[72] BHATTI, IRFAN A., US  
[73] WOLVERINE ADVANCED MATERIALS, LLC, US  
[85] 2016-09-14  
[86] 2015-02-10 (PCT/US2015/015244)  
[87] (WO2015/147998)  
[30] US (14/225,008) 2014-03-25

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[11] **2,944,321**  
[13] C

[51] **Int.Cl. A01J 9/00 (2006.01) A01J 5/007 (2006.01) A01J 5/04 (2006.01) A01J 7/02 (2006.01) A01J 9/06 (2006.01) A01J 9/08 (2006.01)**  
[25] EN  
[54] **MILK TANK SYSTEM, INTERMEDIATE MILK STORAGE VESSEL FOR THIS, MILKING SYSTEM FOR THIS, AND METHOD FOR CLEANING THIS**  
[54] **SYSTEME DE CUVE A LAIT, RECIPIENT DE STOCKAGE INTERMEDIAIRE DU LAIT POUR CELUI-CI, SYSTEME DE TRAITE CORRESPONDANT, ET PROCEDE POUR LE NETTOYER**  
[72] VAN TILBURG, RUBEN ALEXANDER, NL  
[72] DE HULLU, MATTHEUS JACOB, NL  
[72] DIJKSHOORN, DIRK, NL  
[73] LELY PATENT N.V., NL  
[85] 2016-09-28  
[86] 2015-05-04 (PCT/NL2015/050307)  
[87] (WO2015/170974)  
[30] NL (2012791) 2014-05-09

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[11] **2,944,656**  
[13] C

[51] **Int.Cl. F28F 13/12 (2006.01) F23D 14/10 (2006.01) F28D 7/00 (2006.01)**  
[25] EN  
[54] **MULTIPLE STAGE MODULATING GAS FIRED HEAT EXCHANGER**  
[54] **ECHANGEUR DE CHALEUR ALIMENTE AU GAZ MODULANT PLUSIEURS ETAGES**  
[72] PEREZ, ERIC, US  
[72] SCHNEIDER, STEVEN, US  
[72] SMITH, BRYAN, US  
[72] TRAN, JOHN, US  
[73] LENNOX INDUSTRIES INC., US  
[86] (2944656)  
[87] (2944656)  
[22] 2016-10-06  
[30] US (14/976,354) 2015-12-21  
[30] US (14/976,485) 2015-12-21

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[11] **2,944,957**  
[13] C

[51] **Int.Cl. C12P 19/14 (2006.01) C12P 7/10 (2006.01) C12P 19/02 (2006.01) D21C 3/26 (2006.01)**  
[25] EN  
[54] **PROCESS FOR ENZYMATIC HYDROLYSIS OF LIGNOCELLULOSIC MATERIAL AND FERMENTATION OF SUGARS**  
[54] **PROCEDE PERMETTANT L'HYDROLYSE ENZYMATIQUE DE MATIERE LIGNOCELLULOSIQUE ET LA FERMENTATION DE SUCRES**  
[72] NOORDAM, BERTUS, NL  
[72] BERKHOUT, MICHAEL PETRUS JOZEF, NL  
[73] DSM IP ASSETS B.V., NL  
[85] 2016-10-05  
[86] 2015-04-29 (PCT/EP2015/059317)  
[87] (WO2015/165952)  
[30] EP (14166538.0) 2014-04-30  
[30] EP (14166539.8) 2014-04-30  
[30] EP (14166545.5) 2014-04-30  
[30] EP (14167284.0) 2014-05-07  
[30] EP (14167483.8) 2014-05-08

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[11] **2,945,610**  
[13] C

[51] **Int.Cl. G06F 3/01 (2006.01) G06Q 30/02 (2012.01) A63F 13/21 (2014.01) A63F 13/219 (2014.01) A63F 13/426 (2014.01) A63F 13/428 (2014.01) A63F 13/52 (2014.01) G06F 3/14 (2006.01)**  
[25] EN  
[54] **DISPLAY DEVICE VIEWER GAZE ATTRACTION**  
[54] **ATTRACTION DU REGARD DE L'OBSERVATEUR D'UN DISPOSITIF D'AFFICHAGE**  
[72] EDEN, IBRAHIM, US  
[73] MICROSOFT TECHNOLOGY LICENSING, LLC, US  
[85] 2016-10-12  
[86] 2015-04-23 (PCT/US2015/027186)  
[87] (WO2015/167907)  
[30] US (14/265,103) 2014-04-29

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[11] **2,946,465**  
[13] C

[51] **Int.Cl. C02F 1/467 (2006.01) C01B 13/10 (2006.01) C02F 1/461 (2006.01) C02F 1/78 (2006.01) C25B 1/13 (2006.01)**  
[25] EN  
[54] **OZONE GENERATOR FOR A FAUCET**  
[54] **GENERATEUR D'OZONE DESTINE A UN ROBINET**  
[72] JONTE, PATRICK B., US  
[72] THOMAS, KURT JUDSON, US  
[72] ROSKO, MICHAEL SCOT, US  
[72] BROWN, DEREK ALLEN, US  
[72] HUFFINGTON, TODD ANDREW, US  
[73] DELTA FAUCET COMPANY, US  
[86] (2946465)  
[87] (2946465)  
[22] 2016-10-26  
[30] US (62/254,667) 2015-11-12

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[11] **2,946,756**  
[13] C

[51] **Int.Cl. C07D 417/10 (2006.01)**  
[25] EN  
[54] **PROCESSES AND INTERMEDIATES FOR THE PREPARATION OF A PDE10 INHIBITOR**  
[54] **PROCEDES ET INTERMEDIAIRES POUR LA PREPARATION D'UN INHIBITEUR DE LA PDE10**  
[72] CUTSHALL, NEIL S., US  
[72] GAGE, JENNIFER LYNN, US  
[72] LITTLE, THOMAS L., US  
[72] LUKE, WAYNE DOUGLAS, US  
[72] BROT, ELISABETH C.A., US  
[72] JONAS, MARCO, US  
[72] MCDERMOTT, MICHAEL JAMES, US  
[72] REINEKE, KARL E., US  
[73] OMEROS CORPORATION, US  
[85] 2016-10-21  
[86] 2015-04-24 (PCT/US2015/027647)  
[87] (WO2015/167969)  
[30] US (61/985,400) 2014-04-28

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[11] **2,950,339**  
[13] C

[51] **Int.Cl. A61K 9/14 (2006.01) A61K 47/02 (2006.01) A61K 47/32 (2006.01) A61K 47/34 (2017.01) A61K 47/42 (2017.01)**  
[25] EN  
[54] **COATED CALCIUM PHOSPHATE NANOPARTICLES COMPRISING A CATIONIC POLYMER LAYER**  
[54] **NANOPARTICULES DE PHOSPHATE DE CALCIUM ENROBEES COMPRENANT UNE COUCHE DE POLYMERE CATIONIQUE**  
[72] LIZIO, ROSARIO, DE  
[72] GRIMM, SILKO, DE  
[72] PETEREIT, HANS-ULRICH, DE  
[72] EPPLE, MATTHIAS, DE  
[72] DORDELMANN, GREGOR, DE  
[73] EVONIK OPERATIONS GMBH, DE  
[85] 2016-11-25  
[86] 2015-05-26 (PCT/EP2015/061538)  
[87] (WO2015/181138)  
[30] EP (14170333.0) 2014-05-28

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[11] **2,950,820**  
[13] C

[51] **Int.Cl. A01B 45/02 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR TREATING A LAWN SURFACE**  
[54] **APPAREIL POUR LE TRAITEMENT D'UNE SURFACE DE GAZON**

[72] ALBAEK, MICHAEL, DK  
[73] ENGBAKKEN HOLDING 2012 APS, DK  
[85] 2016-11-30  
[86] 2014-08-27 (PCT/DK2014/050253)  
[87] (WO2015/028024)  
[30] DK (PA 2013 70469) 2013-08-28

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[11] **2,953,455**  
[13] C

[51] **Int.Cl. F04C 25/02 (2006.01) F04C 18/344 (2006.01) F04C 28/02 (2006.01)**  
[25] FR  
[54] **METHOD OF PUMPING IN A SYSTEM OF VACUUM PUMPS AND SYSTEM OF VACUUM PUMPS**  
[54] **METHODE DE POMPAGE DANS UN SYSTEME DE POMPES A VIDE ET SYSTEME DE POMPES A VIDE**

[72] MULLER, DIDIER, CH  
[72] LARCHER, JEAN ERIC, FR  
[72] ILTCHEV, THEODORE, FR  
[73] ATELIERS BUSCH SA, CH  
[85] 2016-12-22  
[86] 2014-06-27 (PCT/EP2014/063725)  
[87] (WO2015/197138)

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[11] **2,954,207**  
[13] C

[51] **Int.Cl. G01B 11/16 (2006.01)**  
[25] EN  
[54] **A DEVICE AND SYSTEM FOR DETECTING DYNAMIC STRAIN**  
[54] **DISPOSITIF ET SYSTEME DE DETECTION DE CONTRAINTE DYNAMIQUE**

[72] HULL, JOHN, CA  
[72] JALILIAN, SEYED EHSAN, CA  
[73] HIFI ENGINEERING INC., CA  
[85] 2017-01-04  
[86] 2014-07-04 (PCT/CA2014/050644)  
[87] (WO2016/000063)

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[11] **2,956,406**  
[13] C

[51] **Int.Cl. A61J 19/00 (2006.01) A61G 9/00 (2006.01)**  
[25] FR  
[54] **POUCH COMPRISING A SAFETY VALVE**  
[54] **POCHE COMPORTANT UN CLAPET DE SECURITE**

[72] CAILLETEAU, BENOIT, CH  
[73] SWISS SAFE COLLECT SA, CH  
[85] 2017-01-25  
[86] 2015-07-29 (PCT/EP2015/067362)  
[87] (WO2016/016296)  
[30] FR (1457343) 2014-07-29

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[11] **2,957,366**  
[13] C

[51] **Int.Cl. G09F 1/06 (2006.01) A47F 5/11 (2006.01)**  
[25] EN  
[54] **AN ADVERTISING DISPLAY**  
[54] **DISPOSITIF D'AFFICHAGE PUBLICITAIRE**

[72] LOPEZ FERNANDEZ, FRANCISCO, ES  
[73] FASTER DISPLAYS LLC, US  
[85] 2017-02-06  
[86] 2015-02-25 (PCT/US2015/017511)  
[87] (WO2016/057067)  
[30] US (62/060,646) 2014-10-07

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[11] **2,957,499**  
[13] C

[51] **Int.Cl. G01D 7/00 (2006.01)**  
[25] FR  
[54] **INDICATING DEVICE, IN PARTICULAR A PRESSURE GAUGE**  
[54] **DISPOSITIF INDICATEUR, NOTAMMENT MANOMETRE**

[72] SOLET, DANIEL, FR  
[72] LONGPRE, GONZAGUE, FR  
[73] ASCO SAS, FR  
[85] 2017-02-07  
[86] 2014-08-07 (PCT/IB2014/063776)  
[87] (WO2016/020725)

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[11] **2,957,731**  
[13] C

[51] **Int.Cl. A62B 7/14 (2006.01)**  
[25] EN  
[54] **EMERGENCY OXYGEN SUPPLY SYSTEM**  
[54] **SYSTEME D'ALIMENTATION EN OXYGENE D'URGENCE**

[72] CAMPBELL, COLIN IAN, GB  
[72] TREVENA, PAUL NORMAN, GB  
[72] WOOD, BARRY, GB  
[72] CAZENAVE, JEAN-MICHEL, FR  
[73] L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCESSES GEORGES CLAUDE, FR  
[85] 2016-12-15  
[86] 2015-06-22 (PCT/EP2015/063953)  
[87] (WO2015/197542)  
[30] GB (1411199.1) 2014-06-24

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[11] **2,957,992**  
[13] C

[51] **Int.Cl. A61K 31/405 (2006.01) A61P 25/00 (2006.01)**  
[25] EN  
[54] **USE OF L-TRYPTOPHAN FOR THE TREATMENT OF PARASOMNIAS**  
[54] **UTILISATION DE L-TRYPTOPHANE POUR LE TRAITEMENT DE PARASOMNIES**

[72] SHAPIRO, COLIN, CA  
[72] VAN ZYL, LOUIS, CA  
[73] ZZEEMAG INC., CA  
[85] 2017-03-01  
[86] 2014-09-10 (PCT/CA2014/000677)  
[87] (WO2015/035500)  
[30] US (61/876,545) 2013-09-11

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[11] **2,957,859**  
[13] C

[51] **Int.Cl. B26D 1/547 (2006.01) B26D 7/26 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR CUTTING OUT A VEHICLE GLAZING PANEL**  
[54] **APPAREIL ET PROCEDE DE DECOUPE D'UN PANNEAU DE VITRAGE DE VEHICULE**

[72] RODGER, SCOTT DAVID, GB  
[73] BELRON INTERNATIONAL LIMITED, GB  
[85] 2017-02-10  
[86] 2015-10-12 (PCT/EP2015/073563)  
[87] (WO2016/058989)  
[30] GB (1418184.6) 2014-10-14

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[11] **2,958,731**  
[13] C

[51] **Int.Cl. A62B 7/14 (2006.01)**  
[25] EN  
[54] **EMERGENCY OXYGEN SUPPLY SYSTEM**  
[54] **SYSTEME D'ALIMENTATION EN OXYGENE D'URGENCE**

[72] CAMPBELL, COLIN IAN, GB  
[72] TREVENA, PAUL NORMAN, GB  
[72] WOOD, BARRY, GB  
[72] CAZENAVE, JEAN-MICHEL, FR  
[73] L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCESSES GEORGES CLAUDE, FR  
[85] 2016-12-15  
[86] 2015-06-22 (PCT/EP2015/063953)  
[87] (WO2015/197542)  
[30] GB (1411199.1) 2014-06-24

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[11] **2,959,792**  
[13] C

[51] **Int.Cl. A61K 31/405 (2006.01) A61P 25/00 (2006.01)**  
[25] EN  
[54] **USE OF L-TRYPTOPHAN FOR THE TREATMENT OF PARASOMNIAS**  
[54] **UTILISATION DE L-TRYPTOPHANE POUR LE TRAITEMENT DE PARASOMNIES**

[72] SHAPIRO, COLIN, CA  
[72] VAN ZYL, LOUIS, CA  
[73] ZZEEMAG INC., CA  
[85] 2017-03-01  
[86] 2014-09-10 (PCT/CA2014/000677)  
[87] (WO2015/035500)  
[30] US (61/876,545) 2013-09-11

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[11] **2,963,990**  
[13] C

[51] **Int.Cl. B03C 1/10 (2006.01) B03B 7/00 (2006.01) B03B 9/00 (2006.01) B03C 1/247 (2006.01) B03C 1/30 (2006.01)**

[25] EN

[54] **PROCESS AND SYSTEM FOR TOTALLY DRY ORE-DRESSING THROUGH A MAGNETIC SEPARATION UNIT**

[54] **PROCEDE ET SYSTEME DE TRAITEMENT DU MINERAI OXYDE DE FER TOTALEMENT A SEC AU MOYEN D'UNE UNITE DE SEPARATION MAGNETIQUE**

[72] FUMYO YAMAMOTO, MAURO, BR

[73] NEW STEEL S.A., BR

[85] 2017-04-07

[86] 2015-09-14 (PCT/BR2015/050150)

[87] (WO2016/054707)

[30] BR (BR102014025420-0) 2014-10-10

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[11] **2,965,335**  
[13] C

[51] **Int.Cl. C08F 210/02 (2006.01) C08F 4/00 (2006.01) C08J 3/24 (2006.01)**

[25] EN

[54] **POLYMERS WITH IMPROVED PROCESSABILITY FOR PIPE APPLICATIONS**

[54] **POLYMERES PRESENTANT UNE APTITUDE A LA MISE EN OEUVRE AMELIOREE POUR DES APPLICATIONS DE TUYAU**

[72] ROHATI, VIVEK, US

[72] INN, YONGWOO, US

[72] SUKHADIA, ASHISH M, US

[72] YANG, QING, US

[72] DESLAURIERS, PAUL J., US

[73] CHEVRON PHILLIPS CHEMICAL COMPANY LP, US

[85] 2017-04-20

[86] 2015-10-21 (PCT/US2015/056630)

[87] (WO2016/064984)

[30] US (14/522,991) 2014-10-24

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[11] **2,966,688**  
[13] C

[51] **Int.Cl. F01D 5/20 (2006.01) F01D 5/14 (2006.01) F01D 11/08 (2006.01)**

[25] FR

[54] **TURBINE BLADE HAVING AN END CAP**

[54] **AUBE DE TURBINE AVEC CAPUCHON D'EXTREMITE**

[72] OLIVE, REMI PHILIPPE OSWALD, FR

[72] DE MAESSCHALCK, CIS GUY MONIQUE, BE

[72] LAVAGNOLI, SERGIO, BE

[72] PANIAGUA, GUILLERMO, BE

[73] SAFRAN AIRCRAFT ENGINES, FR

[85] 2017-05-03

[86] 2015-11-03 (PCT/FR2015/052954)

[87] (WO2016/071620)

[30] FR (1460618) 2014-11-04

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[11] **2,969,701**  
[13] C

[51] **Int.Cl. B29C 45/47 (2006.01)**

[25] EN

[54] **INJECTION MOLDING SYSTEM AND METHOD OF FABRICATING A COMPONENT**

[54] **SYSTEME DE MOULAGE PAR INJECTION ET PROCEDE DE FABRICATION D'UNE PIECE**

[72] FITZPATRICK, RICHARD ERNEST, US

[73] EXTRUDE TO FILL, INC., US

[85] 2017-06-02

[86] 2015-12-04 (PCT/US2015/064045)

[87] (WO2016/090274)

[30] US (62/087,414) 2014-12-04

[30] US (62/087,449) 2014-12-04

[30] US (62/087,480) 2014-12-04

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[11] **2,970,208**  
[13] C

[51] **Int.Cl. A23G 1/54 (2006.01) A23G 1/04 (2006.01) A23G 1/50 (2006.01)**

[25] EN

[54] **METHOD FOR PRINTING ON MULTI-LAYERED, HOLLOW, CHOCOLATE FIGURES**

[54] **PROCEDE D'IMPRESSION SUR DES FIGURINES EN CHOCOLAT CREUSES, MULTICOUCHES**

[72] PATYN, LUK, BE

[73] C&B LOGISTICS BVBA, BE

[85] 2017-06-08

[86] 2015-12-21 (PCT/IB2015/059827)

[87] (WO2016/103149)

[30] BE (BE2014/5144) 2014-12-22

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[11] **2,970,256**  
[13] C

[51] **Int.Cl. C07D 401/06 (2006.01) A61K 31/445 (2006.01) A61P 25/04 (2006.01) C07D 417/06 (2006.01)**

[25] EN

[54] **DIARYLMETHYLIDENE PIPERIDINE DERIVATIVES AND THEIR USE AS DELTA OPIOID RECEPTOR AGONISTS**

[54] **DERIVES DE DIARYLMETHYLIDENE PIPERIDINE ET LEUR UTILISATION COMME AGONISTES DU RECEPTEUR OPIOIDE DELTA**

[72] VON MENTZER, BENGT, SE

[72] STARKE, INGEMAR, SE

[72] BRANDT, PETER, SE

[73] PHARMNOVO AB, SE

[85] 2017-06-08

[86] 2015-12-17 (PCT/SE2015/051363)

[87] (WO2016/099393)

[30] SE (1451616-5) 2014-12-19

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[11] **2,970,323**  
[13] C

[51] **Int.Cl. A61B 34/30 (2016.01) A61B 34/20 (2016.01) A61C 1/08 (2006.01)**

[25] EN

[54] **ROBOTIC DEVICE FOR DENTAL SURGERY**

[54] **DISPOSITIF ROBOTIQUE POUR CHIRURGIE DENTAIRE**

[72] SUTTIN, ZACHARY B., US

[72] PORTER, STEPHAN S., US

[73] BIOMET 3I, LLC, US

[85] 2017-03-09

[86] 2015-11-03 (PCT/US2015/058881)

[87] (WO2016/093984)

[30] US (62/089,580) 2014-12-09

[30] US (62/170,038) 2015-06-02

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[11] **2,973,832**  
[13] C

[51] **Int.Cl. H01M 4/133 (2010.01) H01M 4/1393 (2010.01) H01M 10/0525 (2010.01)**

[25] EN

[54] **METHOD FOR THE PREPARATION OF ANODES FOR LITHIUM BATTERIES**

[54] **PROCEDE DE PREPARATION D'ANODES POUR BATTERIES AU LITHIUM**

[72] HASSAN, FATHY MOHAMED, CA

[72] CHEN, ZHONGWEI, CA

[72] YU, AIPING, CA

[73] HASSAN, FATHY MOHAMED, CA

[73] CHEN, ZHONGWEI, CA

[73] YU, AIPING, CA

[85] 2017-07-10

[86] 2016-02-05 (PCT/CA2016/050108)

[87] (WO2016/123718)

[30] US (62/176,004) 2015-02-06

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[11] **2,974,580**  
[13] C

[51] **Int.Cl. E04F 11/18 (2006.01) E04B 1/38 (2006.01) E04H 17/14 (2006.01) F16B 5/12 (2006.01) F21V 21/08 (2006.01)**

[25] EN

[54] **CORNER BRACKET**

[54] **SUPPORT D'ANGLE**

[72] LAWSON, CRAIG R., CA

[73] PEAK INNOVATIONS INC., CA

[85] 2017-07-21

[86] 2015-01-27 (PCT/CA2015/050054)

[87] (WO2016/119038)

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[11] **2,975,139**  
[13] C

[51] **Int.Cl. G08G 5/04 (2006.01) G06T 7/10 (2017.01) H04N 13/106 (2018.01) H04N 13/246 (2018.01) G06T 7/00 (2017.01)**

[25] EN

[54] **STEREO CAMERA SYSTEM FOR COLLISION AVOIDANCE DURING AIRCRAFT SURFACE OPERATIONS**

[54] **SYSTEME DE CAMERA STEREO SERVANT A EVITER LA COLLISION PENDANT LES OPERATIONS DE SURFACE D'AERONEF**

[72] RAY, GARY ALAN, US

[72] GILBERT, BRIAN DAVID, US

[73] THE BOEING COMPANY, US

[86] (2975139)

[87] (2975139)

[22] 2017-08-02

[30] US (15/281189) 2016-09-30

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[11] **2,976,144**  
[13] C

[51] **Int.Cl. H04J 13/14 (2011.01) H04L 27/18 (2006.01) H04L 27/26 (2006.01) H04H 20/33 (2009.01)**

[25] EN

[54] **SYSTEM DISCOVERY AND SIGNALING**

[54] **DECOUVERTE ET SIGNALISATION DE SYSTEMES**

[72] SIMON, MICHAEL J., US

[72] SHELBY, KEVIN A., US

[72] EARNSHAW, MARK, US

[72] KANNAPPA, SANDEEP MAVUDURU, US

[73] ONE MEDIA, LLC, US

[85] 2017-08-08

[86] 2016-03-09 (PCT/US2016/021547)

[87] (WO2016/145070)

[30] US (62/130,365) 2015-03-09

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[11] **2,978,104**  
[13] C

[51] **Int.Cl. B32B 5/26 (2006.01) B32B 5/28 (2006.01) B32B 25/02 (2006.01) B32B 27/04 (2006.01) F41H 1/02 (2006.01) F41H 5/04 (2006.01)**

[25] EN

[54] **BALLISTIC AND STAB RESISTANT COMPOSITE**

[54] **COMPOSITE PARE-BALLES ET RESISTANT AUX COUPS DE POIGNARD**

[72] ROZANT, OLIVIER, FR

[72] BADER, YVES, FR

[72] BOOGH, LOUIS, CH

[72] PONT, NICOLAS, FR

[73] DUPONT SAFETY & CONSTRUCTION, INC., US

[85] 2017-08-28

[86] 2016-05-02 (PCT/US2016/030457)

[87] (WO2016/182781)

[30] US (62/158,612) 2015-05-08

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[11] **2,978,358**  
[13] C

[51] **Int.Cl. H01M 50/30 (2021.01) H01M 50/204 (2021.01) H01M 10/0525 (2010.01)**

[25] EN

[54] **BATTERY MODULE WITH THERMAL RUNAWAY AND GAS EXHAUST MANAGEMENT SYSTEM**

[54] **MODULE DE BATTERIE AYANT UN EMBALLEMENT THERMIQUE ET SYSTEME DE GESTION DES GAZ D'ECHAPPEMENT**

[72] KRUGER, JOHANNES CHRISTIAN, CA

[73] SHIFT CLEAN SOLUTIONS LTD., CA

[85] 2017-08-31

[86] 2016-03-04 (PCT/CA2016/050236)

[87] (WO2016/141467)

[30] US (62/129,116) 2015-03-06

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[11] **2,983,157**  
[13] C

[51] **Int.Cl. B65G 1/16 (2006.01) B65G 41/00 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR STORING OR RETRIEVING ITEMS**  
[54] **PROCEDE ET APPAREIL PERMETTANT DE STOCKER OU DE RECUPERER DES ARTICLES**  
[72] DEWITT, ROBERT R., US  
[73] OPEX CORPORATION, US  
[85] 2017-10-17  
[86] 2016-04-20 (PCT/US2016/028500)  
[87] (WO2016/172253)  
[30] US (62/150,786) 2015-04-21

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[11] **2,985,042**  
[13] C

[51] **Int.Cl. A61K 9/19 (2006.01) B65D 30/22 (2006.01)**  
[25] EN  
[54] **MULTI CHAMBER FLEXIBLE BAG AND METHODS OF USING SAME**  
[54] **SAC FLEXIBLE MULTI COMPARTIMENT ET METHODES D'UTILISATION ASSOCIEES**  
[72] DI NARO, ANTONIO FRANCESCO, CH  
[73] ADIENNE PHARMA & BIOTECH SA, CH  
[86] (2985042)  
[87] (2985042)  
[22] 2017-11-09  
[30] US (15/609,870) 2017-05-31

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[11] **2,986,590**  
[13] C

[51] **Int.Cl. A61B 5/103 (2006.01) A61B 34/00 (2016.01) A61B 5/00 (2006.01) A61B 5/107 (2006.01) A61B 8/00 (2006.01) G06T 7/60 (2017.01) G06T 17/00 (2006.01)**  
[25] EN  
[54] **SURFACE MODELING OF A SEGMENTED ECHOGENIC STRUCTURE FOR DETECTION AND MEASUREMENT OF ANATOMICAL ANOMALIES**  
[54] **MODELISATION DE SURFACE D'UNE STRUCTURE ECHOGENE SEGMENTEE POUR LA DETECTION ET LA MESURE D'ANOMALIES ANATOMIQUES**  
[72] BOULANGER, PIERRE, CA  
[72] HAREENDRANATHAN, ABHILASH, CA  
[72] JAREMKO, JACOB LESTER, CA  
[72] MABEE, MYLES, CA  
[72] PUNITHAKUMAR, KUMARDEVAN, CA  
[72] THOMPSON, RICHARD, CA  
[73] THE GOVERNORS OF THE UNIVERSITY OF ALBERTA, CA  
[85] 2017-11-21  
[86] 2016-05-31 (PCT/CA2016/050614)  
[87] (WO2016/191870)  
[30] US (62/169,530) 2015-06-01

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[11] **2,988,219**  
[13] C

[51] **Int.Cl. C12N 15/54 (2006.01) C12N 15/113 (2010.01) C12N 1/21 (2006.01) C12N 9/02 (2006.01) C12N 9/10 (2006.01) C12N 15/53 (2006.01) C12N 15/63 (2006.01) C12P 7/06 (2006.01)**  
[25] EN  
[54] **CLONING AND EXPRESSION OF THE GENES ENCODING KEY CLOSTRIDIAL CATALYZING MECHANISMS FOR SYNGAS TO ETHANOL PRODUCTION AND FUNCTIONAL CHARACTERIZATION THEREOF**  
[54] **CLONAGE ET EXPRESSION DES GENES CODANT DES MECANISMES DE CATALYSE CLOSTRIDIALE CLES POUR LA PRODUCTION D'ETHANOL A PARTIR DE GAZ DE SYNTHESE ET LEUR CARACTERISATION FONCTIONNELLE**  
[72] REEVES, ANDREW, US  
[72] DATTA, RATHIN, US  
[73] COSKATA, INC., US  
[86] (2988219)  
[87] (2988219)  
[22] 2010-07-30  
[62] 2,802,015  
[30] US (12/802,560) 2010-06-09

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[11] **2,989,156**  
[13] C

[51] **Int.Cl. B08B 3/08 (2006.01) E21B 37/00 (2006.01) E21B 41/00 (2006.01)**  
[25] EN  
[54] **CRYOGENIC CLEANING METHODS FOR RECLAIMING AND REPROCESSING OILFIELD TOOLS**  
[54] **PROCEDES DE NETTOYAGE CRYOGENIQUE POUR LA REPRISE ET LE RETRAITEMENT D'OUTILS DE CHAMP PETROLIFERE**  
[72] WHITE, LONNIE DALE, US  
[73] TRC SERVICES, INC., US  
[86] (2989156)  
[87] (2989156)  
[22] 2013-11-07  
[62] 2,832,982  
[30] US (61/723,488) 2012-11-07

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[11] **2,990,691**  
[13] C

[51] **Int.Cl. G01F 1/05 (2006.01) G01F 1/76 (2006.01) G01F 3/00 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR DETECTING GAS FLOW**

[54] **PROCEDE ET SYSTEME DE DETECTION D'ECOULEMENT GAZEUX**

[72] DOULL, KERRY, CA

[72] DOULL, RYAN, CA

[72] FRIESZ, RICHARD, CA

[72] HULL, JOHN, CA

[73] VENTMETER TECHNOLOGIES INC., CA

[85] 2017-12-22

[86] 2015-07-17 (PCT/CA2015/050671)

[87] (WO2016/205917)

[30] US (62/184,724) 2015-06-25

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[11] **2,991,385**  
[13] C

[51] **Int.Cl. B64C 25/10 (2006.01) B64C 25/12 (2006.01) B64C 25/60 (2006.01)**

[25] EN

[54] **AIRCRAFT LANDING GEAR ASSEMBLY AND METHOD OF ASSEMBLING THE SAME**

[54] **ASSEMBLAGE DE TRAIN D'ATTERRISSAGE D'AERONEF ET METHODE D'ASSEMBLAGE DUDIT ASSEMBLAGE**

[72] COTTET, JUSTIN, US

[72] SONNENBURG, GEORGE, US

[72] CUSWORTH, JAMES, US

[73] THE BOEING COMPANY, US

[86] (2991385)

[87] (2991385)

[22] 2018-01-08

[30] US (15/490,440) 2017-04-18

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[11] **2,992,231**  
[13] C

[51] **Int.Cl. C07D 239/91 (2006.01) A61K 31/517 (2006.01) A61K 31/519 (2006.01) A61K 31/55 (2006.01) A61K 31/551 (2006.01) C07D 401/04 (2006.01) C07D 401/10 (2006.01) C07D 401/14 (2006.01) C07D 403/04 (2006.01) C07D 403/10 (2006.01) C07D 403/12 (2006.01) C07D 403/14 (2006.01) C07D 409/12 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **PHENYL-QUINAZOLIN-4(3H)-ONE AND PHENYL-PYRIDO[2,3-D]PYRIMIDIN-4(3H)-ONE DERIVATIVES AND COMPOSITIONS THEREOF USEFUL AS ANTI-INFLAMMATORY AGENTS**

[54] **DERIVES DE LA PHENYL-QUINAZOLIN-4(3H)-ONE ET DE LA PHENYL-PYRIDO[2,3-D]PYRIMIDIN-4(3H)-ONE ET LEURS COMPOSITIONS UTILES COMME AGENTS ANTI-INFLAMMATOIRES**

[72] HANSEN, C. HENRIK, CA

[73] RESVERLOGIX CORP., CA

[86] (2992231)

[87] (2992231)

[22] 2010-03-16

[62] 2,754,509

[30] US (61/161,089) 2009-03-18

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[11] **2,994,541**  
[13] C

[51] **Int.Cl. H01R 4/12 (2006.01) H01R 4/22 (2006.01) H01R 13/514 (2006.01) H01R 43/00 (2006.01)**

[25] EN

[54] **PRE-FILLED SPLICE CONNECTOR**

[54] **CONNECTEUR D'EPISSURE PRE-REMPLE**

[72] ZANTOUT, ALAN EMAD, US

[72] SWEDBERG, BENJAMIN DAVID, US

[73] IDEAL INDUSTRIES, INC., US

[85] 2018-02-01

[86] 2016-08-02 (PCT/US2016/045186)

[87] (WO2017/023946)

[30] US (14/817,330) 2015-08-04

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[11] **2,997,522**  
[13] C

[51] **Int.Cl. G06T 7/73 (2017.01) H04N 13/305 (2018.01) H04N 13/327 (2018.01)**

[25] EN

[54] **MEASURING ROTATIONAL POSITION OF LENTICULAR LENS SHEET**

[54] **MESURAGE DE POSITION ANGULAIRE DE FEUILLE DE VERRE LENTICULAIRE**

[72] MARSMAN, HERMAN GEERT, NL

[72] ZUIDEMA, HANS, NL

[72] RIEMENS, ABRAHAM KAREL, NL

[72] CREMERS, MICHAEL, NL

[72] WOUTERS, JOHANNES HUBERTINA PETRUS, NL

[73] ULTRA-D COOPERATIEF U.A., NL

[85] 2018-03-02

[86] 2015-09-03 (PCT/EP2015/070138)

[87] (WO2017/036531)

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[11] **2,998,352**  
[13] C

[51] **Int.Cl. C07C 211/13 (2006.01) A61L 2/18 (2006.01) C07C 55/02 (2006.01) C07C 55/21 (2006.01)**

[25] EN

[54] **TRIAMINE SOLIDIFICATION USING DIACIDS**

[54] **SOLIDIFICATION DE TRIAMINE A L'AIDE DE DIACIDES**

[72] OLSON, ERIK C., US

[72] SILVERNAIL, CARTER M., US

[72] GRIESE, GREGORY G., US

[73] ECOLAB USA INC., US

[85] 2018-03-09

[86] 2016-09-16 (PCT/US2016/052121)

[87] (WO2017/049076)

[30] US (62/219,781) 2015-09-17

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[11] **3,000,522**  
[13] C

[51] **Int.Cl. A61M 16/10 (2006.01) A61B 5/087 (2006.01) A61B 5/1455 (2006.01) A61M 16/12 (2006.01)**

[25] EN

[54] **METHOD FOR DELIVERY OF BREATHING GAS TO A PATIENT AND SYSTEM FOR PERFORMING SAME**

[54] **PROCEDE DE DISTRIBUTION DE GAZ RESPIRATOIRE A UN PATIENT, ET SYSTEME POUR LE METTRE EN □UVRE**

[72] LELLOUCHE, FRANCOIS, CA  
[72] L'HER, ERWAN, FR  
[72] GOSSELIN, BENOIT, CA  
[72] NGUYEN, QUANG-THANG, VN  
[73] UNIVERSITE LAVAL, CA  
[73] UNIVERSITE DE BRETAGNE OCCIDENTALE, FR  
[73] OXY'NOV INC., CA  
[85] 2018-03-29  
[86] 2016-10-04 (PCT/CA2016/051153)  
[87] (WO2017/059530)  
[30] US (62/237,252) 2015-10-05

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[11] **3,002,415**  
[13] C

[51] **Int.Cl. A23G 1/00 (2006.01) A23G 1/10 (2006.01) A23G 3/02 (2006.01) A23G 3/34 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR AERATION OF A FOOD PRODUCT**

[54] **APPAREIL ET PROCEDE DE FOISSONNEMENT DE PRODUIT ALIMENTAIRE**

[72] CLAVIER, LUIS, FR  
[72] CHEVALIER, JEAN-FRANCOIS, FR  
[72] MARCILLA, RAFAEL, FR  
[73] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2018-04-18  
[86] 2016-10-19 (PCT/EP2016/075050)  
[87] (WO2017/067965)  
[30] EP (15190428.1) 2015-10-19

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[11] **3,002,605**  
[13] C

[51] **Int.Cl. G06F 21/56 (2013.01) H04L 9/40 (2022.01)**

[25] EN

[54] **SYSTEM AND METHODS FOR DETECTING DOMAIN GENERATION ALGORITHM (DGA) MALWARE**

[54] **SYSTEME ET PROCEDES DE DETECTION D'UN MALICIEL D'ALGORITHME DE GENERATION DE DOMAINE (DGA)**

[72] MINEA, OCTAVIAN MIHAI, RO  
[72] VATAMANU, CRISTINA, RO  
[72] BENCHEA, MIHAI-RAZVAN, RO  
[72] GAVRILUT, DRAGOS-TEODOR, RO  
[73] BITDEFENDER IPR MANAGEMENT LTD, CY  
[85] 2018-04-19  
[86] 2016-11-02 (PCT/EP2016/076343)  
[87] (WO2017/076859)  
[30] US (14/932,765) 2015-11-04

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[11] **3,002,897**  
[13] C

[51] **Int.Cl. C07D 257/02 (2006.01) A61K 49/10 (2006.01)**

[25] EN

[54] **DIMERIC CONTRAST AGENTS**

[54] **AGENTS DE CONTRASTE DIMERIQUES**

[72] BOI, VALERIA, IT  
[72] NAPOLITANO, ROBERTA, IT  
[72] LATTUADA, LUCIANO, IT  
[73] BRACCO IMAGING SPA, IT  
[85] 2018-04-23  
[86] 2016-12-12 (PCT/EP2016/080621)  
[87] (WO2017/098044)  
[30] EP (15199220.3) 2015-12-10

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[11] **3,003,387**  
[13] C

[51] **Int.Cl. C12M 1/34 (2006.01) C12M 1/26 (2006.01) C12Q 1/04 (2006.01) G01N 33/48 (2006.01) G01N 35/10 (2006.01)**

[25] EN

[54] **AUTOMATED SELECTION OF MICROORGANISMS AND IDENTIFICATION USING MALDI**

[54] **SELECTION AUTOMATIQUE DE MICROORGANISMES ET IDENTIFICATION A L'AIDE D'UNE DILAM**

[72] BOTMA, JETZE, NL  
[72] KLEEFSTRA, MARTIJN, NL  
[72] VAN DER ZEE, TINO WALTER, NL  
[73] BD KIESTRA B.V., NL  
[86] (3003387)  
[87] (3003387)  
[22] 2013-04-02  
[62] 2,868,555  
[30] US (61/618,003) 2012-03-30

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[11] **3,004,130**  
[13] C

[51] **Int.Cl. B01L 3/00 (2006.01) F04B 9/12 (2006.01) F04B 9/14 (2006.01) F04B 13/00 (2006.01) F04B 53/10 (2006.01) G01N 1/00 (2006.01) G01N 30/20 (2006.01)**

[25] EN

[54] **SAMPLE PREPARATION DEVICE**

[54] **DISPOSITIF DE PREPARATION D'ECHANTILLONS**

[72] HAWORTH, DANIEL NICHOLAS, GB  
[72] PALMER-FELGATE, JOHN PAUL, GB  
[73] ABBOTT DIAGNOSTICS SCARBOROUGH, INC., CA  
[85] 2018-05-03  
[86] 2016-10-31 (PCT/EP2016/076263)  
[87] (WO2017/076817)  
[30] GB (1519565.4) 2015-11-05

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29 mars 2022**

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[11] **3,004,814**  
[13] C

[51] **Int.Cl. A61J 1/03 (2006.01) A61J 7/00 (2006.01)**

[25] EN

[54] **MEDICATION SYSTEM WITH A MEDICATION TRAY AND METHOD FOR PRODUCING A READY-TO-DELIVER MEDICATION SYSTEM**

[54] **SYSTEME DE MEDICATION COMPRENANT UN PLATEAU DE MEDICAMENTS ET PROCEDE DE PRODUCTION D'UN SYSTEME DE MEDICATION PRET A L'EXPEDITION**

[72] HAFNER, JENS, AT

[72] NEUSSL, STEFAN, AT

[73] MEDINOXX GMBH, AT

[85] 2018-05-09

[86] 2016-11-08 (PCT/EP2016/076934)

[87] (WO2017/080981)

[30] AT (A50954/2015) 2015-11-10

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[11] **3,005,189**  
[13] C

[51] **Int.Cl. A61B 10/02 (2006.01) A61B 10/00 (2006.01) A61B 17/34 (2006.01)**

[25] EN

[54] **SUCTION DEVICES AND METHODS FOR FINE NEEDLE ASPIRATION**

[54] **DISPOSITIFS D'ASPIRATION ET PROCEDES D'ASPIRATION A AIGUILLE FINE**

[72] KATKAR, AMOL SURYAKANT, US

[73] FNAPEN LLC, US

[85] 2018-05-11

[86] 2016-10-31 (PCT/US2016/059648)

[87] (WO2017/087143)

[30] US (62/257,843) 2015-11-20

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[11] **3,005,701**  
[13] C

[51] **Int.Cl. A61M 5/00 (2006.01) A61M 5/44 (2006.01) A61M 5/14 (2006.01) A61M 5/172 (2006.01)**

[25] EN

[54] **THERMAL CONDITIONING DEVICE FOR AN INJECTION SYSTEM**

[54] **DISPOSITIF DE CONDITIONNEMENT THERMIQUE POUR UN SYSTEME D'INJECTION**

[72] CHASSOT, PIERRE YVES, CH

[72] PAWELCZYK, NICOLAS, CH

[73] BRACCO INJENEERING SA, CH

[85] 2018-05-17

[86] 2016-12-21 (PCT/EP2016/082141)

[87] (WO2017/114718)

[30] EP (15203123.3) 2015-12-30

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[11] **3,005,804**  
[13] C

[51] **Int.Cl. C07K 16/28 (2006.01) C07K 16/30 (2006.01) G01N 33/50 (2006.01) G01N 33/569 (2006.01) G01N 33/574 (2006.01)**

[25] EN

[54] **METHODS OF IDENTIFYING IMMUNE CELLS IN PD-L1 POSITIVE TUMOR TISSUE**

[54] **METHODES D'IDENTIFICATION DE CELLULES IMMUNITAIRES DANS UN TISSU TUMORAL POSITIF PD-L1**

[72] BIRCH, CHANDLER MORGAN, US

[73] VENTANA MEDICAL SYSTEMS, INC., US

[85] 2018-05-18

[86] 2016-11-21 (PCT/EP2016/078237)

[87] (WO2017/085307)

[30] US (62/258,493) 2015-11-22

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[11] **3,006,812**  
[13] C

[51] **Int.Cl. B23K 26/03 (2006.01) B23K 26/21 (2014.01) B23K 26/70 (2014.01) B23K 26/22 (2014.01)**

[25] EN

[54] **METHOD OF WELDING LAMINATED METAL FOILS**

[54] **METHODE DE SOUDAGE DE PELLICULES METALLIQUES LAMELLEES**

[72] KOBAYASHI, HIROOMI, JP

[72] TATEYAMA, NOZOMI, JP

[72] UCHIDA, KEISUKE, JP

[72] OHASHI, FUMINORI, JP

[72] SHIBATA, YOSHINORI, JP

[72] KOIKE, MASAKI, JP

[73] TOYOTA JIDOSHA KABUSHIKI KAISHA, JP

[86] (3006812)

[87] (3006812)

[22] 2018-05-31

[30] JP (2017-120723) 2017-06-20

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[11] **3,007,081**  
[13] C

[51] **Int.Cl. A61K 31/275 (2006.01) A61K 31/277 (2006.01) A61K 31/4453 (2006.01) A61K 31/5375 (2006.01) A61K 31/7024 (2006.01)**

[25] EN

[54] **METHODS FOR INHIBITING CONVERSION OF CHOLINE TO TRIMETHYLAMINE (TMA)**

[54] **PROCEDES POUR INHIBER LA CONVERSION DE LA CHOLINE EN TRIMETHYLAMINE (TMA)**

[72] HAZEN, STANLEY LEON, US

[72] GARCIA-GARCIA, JOSE CARLOS, US

[72] GERBERICK, GEORGE FRANKLIN, US

[72] WOS, JOHN AUGUST, US

[72] STANTON, DAVID THOMAS, US

[72] INGLIN, THOMAS ALFRED, US

[72] REILLY, MICHAEL, US

[72] DEUTSCH, ANGELA JANE, US

[72] REED, JODIE MICHELLE, US

[72] CODY, DAVID BLAIR, US

[73] THE PROCTER & GAMBLE COMPANY, US

[73] THE CLEVELAND CLINIC FOUNDATION, US

[85] 2018-05-31

[86] 2016-12-01 (PCT/US2016/064339)

[87] (WO2017/095993)

[30] US (62/261,645) 2015-12-01

[30] US (62/261,662) 2015-12-01

[30] US (62/356,422) 2016-06-29

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[11] **3,008,095**  
[13] C

[51] **Int.Cl. A61K 47/02 (2006.01) A61K 47/10 (2017.01) A61K 47/30 (2006.01) A61K 47/42 (2017.01) A61P 35/00 (2006.01)**

[25] EN

[54] **A PHARMACEUTICAL COMPOSITION COMPRISING APATITE-BASED MATRIX AND SURFACE MODIFYING AGENT**

[54] **COMPOSITION PHARMACEUTIQUE COMPRENANT UNE MATRICE A BASE D'APATITE ET UN AGENT DE MODIFICATION DE SURFACE**

[72] CHOWDHURY, EZHARUL HOQUE, MY

[73] MONASH UNIVERSITY MALAYSIA, MY

[86] (3008095)

[87] (3008095)

[22] 2018-06-13

[30] MY (PI 2017702177) 2017-06-14

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[11] **3,009,077**  
[13] C

[51] **Int.Cl. B29C 48/885 (2019.01) B29C 48/08 (2019.01) B29C 48/10 (2019.01) B29C 55/28 (2006.01)**

[25] EN

[54] **CONTROLLED PRESSURE ENCLOSURE FOR BLOWN FILM COOLING**

[54] **ENCEINTE A PRESSION REGULEE POUR LE REFROIDISSEMENT DE FILM SOUFFLE**

[72] CREE, ROBERT E., US

[72] RANDOLPH, WILLIAM J., US

[73] ADDEX, INC., US

[85] 2018-06-18

[86] 2017-01-13 (PCT/US2017/013546)

[87] (WO2017/124026)

[30] US (14/997,127) 2016-01-15

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[11] **3,009,242**  
[13] C

[51] **Int.Cl. C08J 3/24 (2006.01) B29C 35/04 (2006.01) C08G 75/14 (2006.01) C08K 5/40 (2006.01) C08L 81/04 (2006.01) C09K 3/10 (2006.01)**

[25] EN

[54] **METHODS AND COMPOSITIONS FOR CURING A SURFACE OF AN UNCURED POLYSULFIDE RUBBER**

[54] **METHODES ET COMPOSITIONS DE DURCISSAGE D'UNE SURFACE D'UN CAOUTCHOUC POLYSULFURE NON DURCI**

[72] FLACK, MATTHEW ALEXANDER, US

[72] ZWEIG, ANDREW M., US

[73] THE BOEING COMPANY, US

[86] (3009242)

[87] (3009242)

[22] 2018-06-21

[30] US (62/534970) 2017-07-20

[30] US (15/804,395) 2017-11-06

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[11] **3,009,482**  
[13] C

[51] **Int.Cl. A47C 1/024 (2006.01) A47C 3/026 (2006.01)**

[25] EN

[54] **CHAIR AND SEAT SUPPORT MECHANISM**

[54] **MECANISME DE SUPPORT DE SIEGE ET CHAISE**

[72] YAJIMA, TOSHIKI, JP

[72] SUGANO, TAKAO, JP

[72] SHIBAMOTO, YASUHIRO, JP

[72] XU, FEI, JP

[73] KOKUYO CO., LTD., JP

[85] 2018-06-21

[86] 2016-02-23 (PCT/JP2016/055313)

[87] (WO2017/145271)

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[11] **3,009,570**  
[13] C

[51] **Int.Cl. H03M 13/13 (2006.01)**

[25] EN

[54] **GENERATION OF POLAR CODES WITH A VARIABLE BLOCK LENGTH UTILIZING PUNCTURING**

[54] **GENERATION DE CODES POLAIRES A LONGUEUR DE BLOC VARIABLE PAR PERFORATION**

[72] XU, CHANGLONG, US

[72] LI, JIAN, US

[72] HOU, JILEI, US

[72] WANG, NENG, US

[73] QUALCOMM INCORPORATED, US

[85] 2018-06-22

[86] 2016-08-17 (PCT/CN2016/095661)

[87] (WO2017/128700)

[30] CN (PCT/CN2016/071959) 2016-01-25

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[11] **3,009,808**  
[13] C

[51] **Int.Cl. C10G 67/04 (2006.01) C10L 1/08 (2006.01)**

[25] EN

[54] **DISTILLATE AND BOTTOMS COMPOSITIONS**

[54] **COMPOSITIONS DE DISTILLAT ET DE RESIDUUMS**

[72] RUBIN-PITEL, SHERYL B., US

[72] KAR, KENNETH, US

[72] FRUCHEY, KENDALL S., US

[73] EXXONMOBIL RESEARCH AND ENGINEERING COMPANY, US

[85] 2018-06-26

[86] 2016-12-28 (PCT/US2016/068781)

[87] (WO2017/117161)

[30] US (62/271,543) 2015-12-28

[30] US (62/327,624) 2016-04-26

[30] US (15/390,780) 2016-12-27

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[11] **3,012,869**  
[13] C

[51] **Int.Cl. H04N 19/91 (2014.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR VECTOR-BASED ENTROPY CODING FOR DISPLAY STREAM COMPRESSION**

[54] **APPAREIL ET PROCÉDE DE CODAGE ENTROPIQUE EN FONCTION D'UN VECTEUR POUR UNE COMPRESSION DE FLUX D'AFFICHAGE**

[72] THIRUMALAI, VIJAYARAGHAVAN, US  
[72] JACOBSON, NATAN HAIM, US  
[72] JOSHI, RAJAN LAXMAN, US  
[73] QUALCOMM INCORPORATED, US  
[85] 2018-07-26  
[86] 2017-03-06 (PCT/US2017/020897)  
[87] (WO2017/155864)  
[30] US (62/305,380) 2016-03-08  
[30] US (62/415,999) 2016-11-01  
[30] US (15/449,755) 2017-03-03

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[11] **3,013,230**  
[13] C

[51] **Int.Cl. H02G 3/04 (2006.01) H01R 13/52 (2006.01) H01R 13/639 (2006.01) H02G 15/18 (2006.01)**

[25] EN  
[54] **ELECTRICAL CORD CONNECTION COVERING TECHNIQUES**

[54] **TECHNIQUES DE COUVERTURE DE CONNEXION DE CORDONS ELECTRIQUES**

[72] NOONER, BRYAN, US  
[72] ZAJESKI, ROBERT B., US  
[72] ZAJESKI, BENJAMIN LYNCH, US  
[73] MIDWEST INNOVATIVE PRODUCTS, LLC, US  
[85] 2018-07-30  
[86] 2017-05-03 (PCT/US2017/030807)  
[87] (WO2017/192698)  
[30] US (62/331,133) 2016-05-03  
[30] US (15/585,379) 2017-05-03

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[11] **3,016,256**  
[13] C

[51] **Int.Cl. A61B 17/64 (2006.01) A61B 17/56 (2006.01) A61B 17/68 (2006.01) A61B 17/88 (2006.01) A61F 5/01 (2006.01)**

[25] EN  
[54] **EXTERNAL BONE FIXATION SYSTEMS**

[54] **SYSTEMES DE FIXATION OSSEUSE EXTERNES**

[72] MULLANEY, MICHAEL, US  
[73] AMDT HOLDINGS, INC., US  
[85] 2018-08-29  
[86] 2017-03-01 (PCT/US2017/020285)  
[87] (WO2017/151822)  
[30] US (62/301,768) 2016-03-01

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[11] **3,016,938**  
[13] C

[51] **Int.Cl. F23D 14/58 (2006.01) F23C 5/00 (2006.01) F23D 11/38 (2006.01) F23D 14/22 (2006.01) F27B 1/16 (2006.01) F27B 3/22 (2006.01) F27D 7/02 (2006.01)**

[25] EN  
[54] **FURNACE BURNER**

[54] **BRULEUR DE FOUR**

[72] BOYLE, DENNIS, US  
[72] MATTICH, MICHAEL, US  
[73] BERRY METAL COMPANY, US  
[86] (3016938)  
[87] (3016938)  
[22] 2018-09-07  
[30] US (15/803,455) 2017-11-03

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[11] **3,018,626**  
[13] C

[51] **Int.Cl. H04L 5/00 (2006.01)**

[25] EN  
[54] **SEARCH SPACE DESIGN FOR CONTROL CHANNEL IN WIRELESS COMMUNICATION**

[54] **CONCEPTION D'ESPACE DE RECHERCHE POUR CANAL DE COMMANDE DANS UNE COMMUNICATION SANS FIL**

[72] YANG, YANG, US  
[72] LUO, TAO, US  
[72] ANG, PETER PUI LOK, US  
[72] JIANG, JING, US  
[73] QUALCOMM INCORPORATED, US  
[85] 2018-09-20  
[86] 2017-04-28 (PCT/US2017/030233)  
[87] (WO2017/192399)  
[30] US (62/330,349) 2016-05-02  
[30] US (15/291,666) 2016-10-12

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[11] **3,021,364**  
[13] C

[51] **Int.Cl. G01N 33/487 (2006.01)**

[25] EN  
[54] **MEDICAL ANALYTE TESTING SYSTEM AND OPERATING METHOD THEREFOR**

[54] **SYSTEME DE TEST DE SUBSTANCE A ANALYSER MEDICAL ET SON PROCÉDE DE FONCTIONNEMENT**

[72] BERG, MAX, DE  
[72] KINTZIG, HANS, DE  
[72] KOSCHORRECK, BEATE, DE  
[73] F. HOFFMANN-LA ROCHE AG, CH  
[85] 2018-10-18  
[86] 2017-05-11 (PCT/EP2017/061390)  
[87] (WO2017/194703)  
[30] EP (16169232.2) 2016-05-11

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[11] **3,021,845**  
[13] C

[51] **Int.Cl. A61M 5/24 (2006.01) A61M 5/20 (2006.01) A61M 5/32 (2006.01) A61M 5/50 (2006.01)**

[25] EN  
[54] **AUTOINJECTOR APPARATUS**

[54] **APPAREIL AUTO-INJECTEUR**

[72] DENZER, MICHAEL, US  
[72] SWIFT, ROBERT W., US  
[72] JOHNSTON, NEAL, US  
[72] GANZITTI, GABRIELE, US  
[72] EWING, KENNETH R., US  
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[73] AMGEN INC., US  
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[54] **STRUCTURE DE MONTAGE DE RESEAU PHOTOVOLTAIQUE**

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[72] GRUM, KENNETH, US  
[73] OMCO SOLAR, LLC, US  
[85] 2018-10-23  
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[54] **RECEPTEURS ACOUSTIQUES A CRISTAUX CYLINDRIQUES**  
[72] NGUYEN, MINH DANG, SG  
[72] CHANG, CHUNG, US  
[72] BATES, CLINTON KEITH, US  
[73] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2018-10-25  
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[54] **RADIAL-PATH FILTER ELEMENTS, SYSTEMS AND METHODS OF USING SAME**  
[54] **ELEMENTS FILTRANTS A TRAJET RADIAL, SYSTEMES ET PROCEDES D'UTILISATION DE CES DERNIERS**  
[72] STEEN, JONATHAN, US  
[73] EMD MILLIPORE CORPORATION, US  
[85] 2018-11-06  
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[54] **RADIO FRAME SENDING AND RECEIVING METHODS AND APPARATUS**  
[54] **PROCEDE ET APPAREIL POUR ENVOYER ET RECEVOIR UNE TRAME SANS FIL**  
[72] GUO, YUCHEN, CN  
[72] YU, JIAN, CN  
[72] YANG, XUN, CN  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN  
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[25] EN  
[54] **CELL SURFACE MARKER-DEPLETION IN A SAMPLE PROCESSING DEVICE**  
[54] **DEPLETION DE MARQUEUR DE SURFACE CELLULAIRE DANS UN DISPOSITIF DE TRAITEMENT D'ECHANTILLONS**  
[72] LU, JINSHUANG, US  
[72] MA, BEIYANG, US  
[72] SCHOENBRUNNER, NANCY, US  
[72] WANG, FANGNIAN, US  
[73] F. HOFFMANN-LA ROCHE AG, CH  
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[25] EN  
[54] **CLAMPING ASSEMBLY FOR ATTACHING A GROUNDING CONDUCTOR TO A PIPE HAVING A PROTECTIVE COATING**  
[54] **ENSEMBLE DE SERRAGE POUR FIXER UN CONDUCTEUR DE MISE A LA TERRE A UN TUYAU MUNI D'UN REVETEMENT PROTECTEUR**  
[72] TROMBLEY, LOGAN M, US  
[73] HUBBELL INCORPORATED, US  
[85] 2018-12-07  
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[25] EN  
[54] **HOISTING ARRANGEMENT OF ROPE HOIST**  
[54] **ARRANGEMENT DE LEVAGE D'UN ENGIN DE LEVAGE A CABLE**  
[72] LINDBERG, TEPPU, FI  
[73] KONECRANES GLOBAL CORPORATION, FI  
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[54] **ALLIAGES D'ALUMINIUM DE QUALITE ANODISEE, AINSI QUE PRODUITS ET PROCEDES ASSOCIES**  
[72] KANG, DAEHOON, US  
[72] WEN, WEI, US  
[72] MATHUR, DEVESH, US  
[73] NOVELIS INC., US  
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[54] **TRACKED ALL-TERRAIN VEHICLE**  
[54] **VEHICULE TOUT TERRAIN A CHENILLES**  
[72] BORUD, ERIC J., US  
[72] SAFRANSKI, BRIAN M., US  
[72] BRACHT, BRADLEY A., US  
[73] POLARIS INDUSTRIES INC., US  
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[54] **PROJECTION IMAGE CONSTRUCTION METHOD AND DEVICE**  
[54] **PROCEDE ET DISPOSITIF DE CONSTRUCTION D'IMAGE DE PROJECTION**  
[72] ZHU, JIADAN, CN  
[72] WANG, TAO, CN  
[72] LIU, HONGBIN, CN  
[73] BEIJING QIYI CENTURY SCIENCE & TECHNOLOGY CO., LTD., CN  
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[25] EN  
[54] **MATERIAL FOR BLOOD PURIFICATION**  
[54] **MATERIAU DE PURIFICATION DU SANG**  
[72] KANDA, SHUNGO, JP  
[72] TAKAHASHI, HIROSHI, JP  
[72] TOMITA, NAOTOSHI, JP  
[73] TORAY INDUSTRIES, INC., JP  
[85] 2019-01-30  
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[54] **METHOD AND APPARATUS FOR REDUNDANT DATA PROCESSING**  
[54] **PROCEDE ET DISPOSITIF DE TRAITEMENT DE DONNEES REDONDANT**  
[72] ECKELMANN-WENDT, UWE, DE  
[72] GERKEN, STEFAN, DE  
[73] SIEMENS MOBILITY GMBH, DE  
[85] 2019-02-14  
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[25] EN  
[54] **PROCESS AND APPARATUS FOR WETLAYING NONWOVENS**  
[54] **PROCEDE ET APPAREIL DE POSE DE NON-TISSES PAR VOIE HUMIDE**  
[72] AHONIEMI, HANNU, SE  
[72] STRANDQVIST, MIKAEL, SE  
[72] WIJBENGA, GAATZE, NL  
[72] VENEMA, ARIE, NL  
[73] ESSITY HYGIENE AND HEALTH AKTIEBOLAG, SE  
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[25] EN  
[54] **PLANT CONTROL SYSTEM, PLANT CONTROL METHOD, AND COMPUTER-READABLE MEDIUM**  
[54] **SYSTEME DE CONTROLE D'UNE INSTALLATION, METHODE DE CONTROLE D'UNE INSTALLATION ET SUPPORT INFORMATIQUE**  
[72] OKUYOSHI, MASAHIRO, JP  
[72] BONO, TETSUYA, JP  
[72] EGAWA, TOSHIHIRO, JP  
[73] TOYOTA JIDOSHA KABUSHIKI KAISHA, JP  
[86] (3035012)  
[87] (3035012)  
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[30] JP (2018-034129) 2018-02-28

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[25] EN  
[54] **SYSTEMS AND METHODS FOR NON-CONTACT TENSIONING OF A METAL STRIP**  
[54] **SYSTEMES ET PROCEDES DE MISE SOUS TENSION SANS CONTACT D'UNE BANDE METALLIQUE**  
[72] PRALONG, ANTOINE JEAN WILLY, CH  
[72] GAENSBAUER, DAVID ANTHONY, US  
[72] BROWN, RODGER, US  
[72] BECK, WILLIAM, US  
[72] HOBBS, ANDREW JAMES, US  
[73] NOVELIS INC., US  
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[86] 2017-09-27 (PCT/US2017/053810)  
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[25] EN  
[54] **PHARMACEUTICAL COMPOSITIONS AND METHODS OF TREATING CARDIOVASCULAR DISEASES**  
[54] **COMPOSITIONS PHARMACEUTIQUES ET METHODES DE TRAITEMENT DE MALADIES CARDIOVASCULAIRES**  
[72] WANG, JIN JEAN, US  
[72] YAKATAN, GERALD J., US  
[72] LIN, TING N., CN  
[72] GAO, JING H., CN  
[73] CARDIX THERAPEUTICS LLC, US  
[85] 2019-03-22  
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[54] **PROCESS FOR PRODUCING A NANO-CBD MICROEMULSION SYSTEM**  
[54] **PROCEDE DE PRODUCTION D'UN SYSTEME DE MICROEMULSION NANO-CBD**  
[72] LAI, NAM HAI, VN  
[73] LAI, NAM HAI, VN  
[86] (3038346)  
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[25] EN  
[54] **INTELLIGENT, REAL-TIME RESPONSE TO CHANGES IN OILFIELD EQUILIBRIUM**  
[54] **REPOSE INTELLIGENTE EN TEMPS REEL A DES CHANGEMENTS D'EQUILIBRE DE CHAMP PETROLIFERE**  
[72] WINSTON, JOSEPH BLAKE, US  
[72] HOUCHEMS, BRENT CHARLES, US  
[72] ZHANG, FEIFEI, US  
[72] WESLEY, AVINASH, US  
[72] ELSEY, ANDREW SHANE, US  
[72] NGUYEN, JONATHAN, US  
[72] RANGARAJAN, KESHAHA, US  
[72] GERMAIN, OLIVIER, US  
[73] LANDMARK GRAPHICS CORPORATION, US  
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[54] **BOWSTRING RELEASE**  
[54] **LIBERATION DE CORDE D'ARC**  
[72] HAAS, MATTHEW PETER, US  
[73] FERADYNE OUTDOORS, LLC, US  
[85] 2019-04-18  
[86] 2017-10-18 (PCT/US2017/057105)  
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[54] **CHAISE**  
[72] SUGANO, TAKAO, JP  
[72] HAYASHI, KATSUAKI, JP  
[73] KOKUYO CO., LTD., JP  
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[25] EN  
[54] **PROFILING APPARATUS FOR STYLING FACIAL HAIR**  
[54] **APPAREIL DE PROFILAGE DE MISE EN STYLE DE POILS FACIAUX**  
[72] YUSUF, SHAFEEK ALLEEM, CA  
[73] ALEEM & COMPANY INC., CA  
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[25] EN  
[54] **NOZZLE AND GAS DIFFUSER ASSEMBLIES FOR WELDING TORCHES**  
[54] **ENSEMBLES BUSE ET DIFFUSEUR DE GAZ POUR TORCHES DE SOUDAGE**  
[72] WHIPPLE, BRADLEY EUGENE, US  
[72] WELLS, JEFFREY G., US  
[73] ILLINOIS TOOL WORKS INC., US  
[85] 2019-06-11  
[86] 2017-12-28 (PCT/US2017/068695)  
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[30] US (62/439,831) 2016-12-28  
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[25] EN  
[54] **SECONDARY CONTAINMENT FUEL TANK ASSEMBLY AND METHOD**  
[54] **ASSEMBLAGE D'UN RESERVOIR D'ESSENCE SECONDAIRE ET METHODE**  
[72] BEAULIEU, MARC, CA  
[73] ATELIER GERARD BEAULIEU INC., CA  
[86] (3047472)  
[87] (3047472)  
[22] 2019-06-20  
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[25] EN  
[54] **INSOLUBLE COMPLEX OR SOLVATE THEREOF, PHARMACEUTICAL COMPOSITION AND USE THEREOF**  
[54] **COMPLEXE INSOLUBLE OU SOLVATE DERIVE, COMPOSITION PHARMACEUTIQUE ET SON UTILISATION**  
[72] ZHANG, SHANCHUN, CN  
[72] WANG, YIHUA, CN  
[72] PENG, JIASHI, CN  
[72] CHENG, KAISHENG, CN  
[72] WANG, XIAO, CN  
[72] GAO, SHU, CN  
[72] SUN, HONGZHANG, CN  
[72] LU, XIAORONG, CN  
[73] FRUITHY HOLDINGS LIMITED, CN  
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[87] (WO2018/177232)  
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[25] EN  
[54] **PROJECTILE, IN PARTICULAR IN THE MEDIUM CALIBER RANGE**  
[54] **PROJECTILE, EN PARTICULIER DANS LA PLAGE DE CALIBRES MOYENS**  
[72] STENZEL, UDO, DE  
[72] LITTE, TOBIAS, DE  
[72] STOPPER, DANIEL, DE  
[73] RHEINMETALL WAFFE MUNITION GMBH, DE  
[85] 2019-07-05  
[86] 2018-03-08 (PCT/EP2018/055752)  
[87] (WO2018/177713)  
[30] DE (10 2017 106 526.1) 2017-03-27

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[25] EN  
[54] **CRUSHING APPARATUS FOR CRUSHED**  
[54] **DISPOSITIF DE BROYAGE SERVANT A BROYER UN PRODUIT A BROYER**  
[72] DOPPSTADT, FERDINAND, DE  
[73] DOPPSTADT FAMILIENHOLDING GMBH, DE  
[85] 2019-08-13  
[86] 2018-01-19 (PCT/EP2018/000025)  
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[30] DE (10 2017 001 813.8) 2017-02-27

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[54] **POWER SUPPLY SYSTEM**  
[54] **SYSTEME D'ALIMENTATION ELECTRIQUE**  
[72] MOEN, STIAN SKORSTAD, NO  
[72] SNILSBERG, GUNNAR, NO  
[72] SKJETNE, ARVE, NO  
[73] SIEMENS ENERGY AS, NO  
[85] 2019-08-19  
[86] 2018-03-29 (PCT/EP2018/058140)  
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[30] GB (1705503.9) 2017-04-05

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[25] EN  
[54] **TAG LAYOUT FOR INDUSTRIAL VEHICLE OPERATION**  
[54] **DISPOSITION D'ETIQUETTES POUR EXPLOITATION DE VEHICULES INDUSTRIELS**  
[72] WALTON, DANIEL D., US  
[72] SHERMAN, NICHOLAS J., US  
[73] CROWN EQUIPMENT CORPORATION, US  
[86] (3050407)  
[87] (3050407)  
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[25] EN  
[54] **DMRS INDICATING AND RECEIVING METHODS, TRANSMIT END, AND RECEIVE END**  
[54] **PROCEDES D'INDICATION ET DE RECEPTION DE DMRS, EXTREMITE D'EMISSION ET EXTREMITE DE RECEPTION**  
[72] REN, XIANG, CN  
[72] LIU, YONG, CN  
[72] RONG, LU, CN  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2019-08-16  
[86] 2018-07-19 (PCT/CN2018/096201)  
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[30] CN (201710686645.9) 2017-08-11  
[30] CN (201711147995.4) 2017-11-17

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[25] EN  
[54] **TECHNIQUES FOR MULTIPLE HARQ TRANSMISSIONS**  
[54] **TECHNIQUES DE TRANSMISSIONS D'HARQ MULTIPLES**  
[72] BAGHEL, SUDHIR KUMAR, US  
[72] GULATI, KAPIL, US  
[72] PATIL, SHAILESH, US  
[72] NGUYEN, TIEN VIET, US  
[73] QUALCOMM INCORPORATED, US  
[85] 2019-08-19  
[86] 2018-03-23 (PCT/US2018/023947)  
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[25] EN  
[54] **REPORTING POWER HEADROOM FOR AGGREGATED CARRIERS**  
[54] **COMPTE RENDU DE MARGE DE PUISSANCE POUR PORTEUSES AGGLOMEREES**  
[72] HEO, YOUNG HYOUNG, CA  
[72] CAL, ZHIJUN, US  
[72] EARNSHAW, ANDREW MARK, CA  
[72] MCBEATH, SEAN, US  
[72] FONG, MO-HAN, CA  
[73] BLACKBERRY LIMITED, CA  
[86] (3054129)  
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[22] 2010-05-21  
[62] 2,972,529  
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[30] US (61/303,920) 2010-02-12  
[30] US (61/320,211) 2010-04-01

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[54] **REFERENCE SIGNAL RESOURCE LOCATION TECHNIQUES IN WIRELESS COMMUNICATIONS**  
[54] **TECHNIQUES DE LOCALISATION DE RESSOURCES DE SIGNAL DE REFERENCE DANS DES COMMUNICATIONS SANS FIL**  
[72] SUBRAMANIAN, SUNDAR, US  
[72] GOROKHOV, ALEXEI YURIEVITCH, US  
[72] LI, JUNYI, US  
[72] CEZANNE, JUERGEN, US  
[72] SAMPATH, ASHWIN, US  
[73] QUALCOMM INCORPORATED, US  
[85] 2019-09-04  
[86] 2018-04-03 (PCT/US2018/025924)  
[87] (WO2018/187351)  
[30] US (62/481,669) 2017-04-04  
[30] US (15/943,518) 2018-04-02

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[13] C

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[54] **NEW METHOD FOR VISUAL QUANTITATIVE DETECTION OF DUAL HEAVY METAL IONS**  
[54] **NOUVEAU PROCEDE DE DETECTION QUANTITATIVE VISUELLE D'IONS DE METAUX LOURDS DOUBLES**  
[72] LUO, YUNBO, CN  
[72] XU, WENTAO, CN  
[72] HUANG, KUNLUN, CN  
[72] DU, ZAIHUI, CN  
[72] TIAN, JINGJING, CN  
[73] CHINA AGRICULTURAL UNIVERSITY, CN  
[85] 2019-10-07  
[86] 2018-08-08 (PCT/CN2018/099405)  
[87] (WO2019/153677)  
[30] CN (201810129689.6) 2018-02-08

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[13] C

[51] **Int.Cl. C22B 3/24 (2006.01)**  
[25] EN  
[54] **CYCLONE UNDERFLOW SCAVENGERING PROCESS USING ENHANCED MINERAL SEPARATION CIRCUITS (EMSC)**  
[54] **PROCEDE DE PIEGEAGE DE SOUSVERSE DE SEPARATEUR A CYCLONE A L'AIDE DE CIRCUITS DE SEPARATION DE MINERAUX AMELIORES (EMSC)**  
[72] ROTHMAN, PAUL J., US  
[72] JORDENS, ADAM MICHAEL, US  
[72] AMELUNXEN, PETER A., AN  
[73] CIDRA CORPORATE SERVICES LLC, US  
[85] 2019-08-30  
[86] 2018-03-01 (PCT/US2018/020405)  
[87] (WO2018/160806)  
[30] US (62/465,250) 2017-03-01

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[13] C

[51] **Int.Cl. G01R 31/52 (2020.01) H02H 3/16 (2006.01) H02H 3/33 (2006.01) H02H 3/38 (2006.01)**  
[25] EN  
[54] **METHOD FOR IDENTIFYING AN OUTGOING CIRCUIT HAVING AN EARTH FAULT IN A THREE-PHASE POWER SUPPLY SYSTEM**  
[54] **PROCEDE D'IDENTIFICATION D'UNE DERIVATION SUJETTE A UN DEFAUT DE FUITE A LA TERRE D'UN RESEAU ELECTRIQUE TRIPHASE**  
[72] AIGNER, MARKUS, AT  
[72] SCHINERL, THOMAS, AT  
[72] OSTERKORN, HARALD, AT  
[73] SIEMENS AKTIENGESELLSCHAFT, DE  
[85] 2019-09-17  
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[13] C

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[25] EN  
[54] **RECIRCULATION VALVE AND HOT WATER RECIRCULATION SYSTEM USING THE SAME**  
[54] **VANNE DE RECIRCULATION ET SYSTEME DE RECIRCULATION D'EAU CHAUDE UTILISANT LE MEME PROCEDE**  
[72] SON, SEUNG KIL, KR  
[72] HU, CHANG HEOI, KR  
[72] KIM, SOON KI, KR  
[73] KYUNG DONG NAVIEN CO., LTD., KR  
[86] (3059694)  
[87] (3059694)  
[22] 2019-10-23  
[30] KR (10-2018-0127934) 2018-10-25  
[30] KR (10-2018-0127935) 2018-10-25

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[13] C

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[25] EN  
[54] **TAMPER RESISTANT ELECTRICAL RECEPTACLE**  
[54] **PRISE ELECTRIQUE SECURISEE**  
[72] BHOSALE, VIKRAMSINH, US  
[73] LEVITON MANUFACTURING CO., INC., US  
[86] (3060123)  
[87] (3060123)  
[22] 2019-10-25  
[30] US (16/291,291) 2019-03-04

[11] **3,060,275**  
[13] C

- [51] **Int.Cl. A01G 3/00 (2006.01)**  
[25] EN  
[54] **PLANT PROCESSING SYSTEM**  
[54] **SYSTEME DE TRAITEMENT DE PLANTE**  
[72] OLSON, ROY, US  
[72] TRACY, JOSHUA, US  
[72] PEARSON, ALEX, US  
[73] PEARSON INC., US  
[86] (3060275)  
[87] (3060275)  
[22] 2019-10-28  
[30] US (16/279,445) 2019-02-19

[11] **3,061,450**  
[13] C

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[25] EN  
[54] **THREADED CONNECTION FOR STEEL PIPES**  
[54] **ACCOUPLLEMENT FILETE POUR CANALISATION EN ACIER**  
[72] MARUTA, SATOSHI, JP  
[72] OKU, YOUSUKE, JP  
[72] NAKAMURA, TADASHI, JP  
[73] NIPPON STEEL CORPORATION, JP  
[73] VALLOUREC OIL AND GAS FRANCE, FR  
[85] 2019-10-24  
[86] 2018-04-11 (PCT/JP2018/015263)  
[87] (WO2018/211873)  
[30] JP (2017-096651) 2017-05-15

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[13] C

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[25] EN  
[54] **GLASS CONTAINERS WITH DELAMINATION RESISTANCE AND IMPROVED DAMAGE TOLERANCE**  
[54] **RECIPIENTS EN VERRE AYANT UNE RESISTANCE AU DELAMINAGE ET UNE TOLERANCE A L'ENDOMMAGEMENT AMELIOREE**  
[72] CHANG, THERESA, US  
[72] DANIELSON, PAUL STEPHEN, US  
[72] DEMARTINO, STEVEN EDWARD, US  
[72] FADEEV, ANDREI GENNADYEVICH, US  
[72] MORENA, ROBERT MICHAEL, US  
[72] PAL, SANTONA, US  
[72] PEANASKY, JOHN STEPHEN, US  
[72] SCHAUT, ROBERT ANTHONY, US  
[72] TIMMONS, CHRISTOPHER LEE, US  
[72] VENKATARAMAN, NATESAN, US  
[72] VERKLEEREN, RONALD LUCE, US  
[72] BOOKBINDER, DANA CRAIG, US  
[73] CORNING INCORPORATED, US  
[86] (3061515)  
[87] (3061515)  
[22] 2013-11-22  
[62] 2,891,784  
[30] US (61/731,767) 2012-11-30  
[30] US (13/780,754) 2013-02-28  
[30] US (13/912,457) 2013-06-07  
[30] US (14/075,620) 2013-11-08

[11] **3,061,633**  
[13] C

- [51] **Int.Cl. H04W 64/00 (2009.01) H04B 7/06 (2006.01)**  
[25] EN  
[54] **BEAM CONFIGURATION METHOD AND APPARATUS**  
[54] **PROCEDE ET DISPOSITIF DE CONFIGURATION DE FAISCEAU**  
[72] GUAN, PENG, CN  
[72] QIN, YI, CN  
[72] LIU, JIANQIN, CN  
[72] JIANG, PENG, CN  
[72] ZHANG, DI, CN  
[73] HUawei TECHNOLOGIES CO., LTD., CN  
[85] 2019-10-28  
[86] 2018-11-13 (PCT/CN2018/115244)  
[87] (WO2019/096129)  
[30] CN (201711164925.X) 2017-11-17  
[30] CN (201811302964.6) 2018-11-02

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

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[25] EN  
[54] **CANOLA INBRED CL233163**  
[54] **CANOLA AUTOGAME CL233163**  
[72] ALAHAKOON, USHAN, US  
[72] TAHIR, MUHAMMAD, CA  
[73] AGRIGENETICS, INC., US  
[86] (3062008)  
[87] (3062008)  
[22] 2019-11-19  
[30] US (16/663,081) 2019-10-24

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[13] C

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[25] EN  
[54] **CANOLA INBRED CL4787698R**  
[54] **CANOLA AUTOGAME CL4787698R**  
[72] SHAW, ERIC, US  
[72] ZHAO, JIANWEI, CA  
[73] AGRIGENETICS, INC., US  
[86] (3062012)  
[87] (3062012)  
[22] 2019-11-19  
[30] US (16/663,088) 2019-10-24

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[11] **3,062,020**  
[13] C

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[25] EN  
[54] **CANOLA INBRED G00182**  
[54] **CANOLA AUTOGAME G00182**  
[72] MCCLINCHEY, SCOTT, US  
[72] PATEL, JAYANTILAL DEVABHAI, US  
[73] PIONEER HI-BRED INTERNATIONAL, INC., US  
[86] (3062020)  
[87] (3062020)  
[22] 2019-11-19  
[30] US (16/662,880) 2019-10-24

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[11] **3,062,024**  
[13] C

[51] **Int.Cl. C12N 5/04 (2006.01) A23K 10/30 (2016.01) A23L 25/00 (2016.01) A01H 6/20 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) A23D 9/00 (2006.01) A23J 1/14 (2006.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN  
[54] **CANOLA INBRED G00566**  
[54] **CANOLA AUTOGAME G00566**  
[72] MCCLINCHEY, SCOTT, US  
[72] PATEL, JAYANTILAL DEVABHAI, US  
[73] PIONEER HI-BRED INTERNATIONAL, INC., US  
[86] (3062024)  
[87] (3062024)  
[22] 2019-11-19  
[30] US (16/662,866) 2019-10-24

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[13] C

[51] **Int.Cl. C12N 15/82 (2006.01) C12N 15/113 (2010.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01)**

[25] EN  
[54] **PLANT REGULATORY ELEMENTS AND USES THEREOF**  
[54] **ELEMENTS REGULATEURS POUR VEGETAUX ET LEURS UTILISATIONS**  
[72] FLASINSKI, STANISLAW, US  
[73] MONSANTO TECHNOLOGY LLC, US  
[86] (3062365)  
[87] (3062365)  
[22] 2013-12-17  
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[30] US (61/739,720) 2012-12-19

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[13] C

[51] **Int.Cl. A61K 9/16 (2006.01) A61K 31/337 (2006.01) C07C 233/58 (2006.01)**

[25] EN  
[54] **QUINIC ACID-MODIFIED NANOPARTICLES AND USES THEREOF**  
[54] **NANOPARTICULES MODIFIEES PAR ACIDE QUINIQUE ET UTILISATIONS ASSOCIEES**  
[72] YEO, YOON, US  
[72] XU, JUN, US  
[73] PURDUE RESEARCH FOUNDATION, US  
[85] 2019-11-06  
[86] 2018-05-08 (PCT/US2018/031464)  
[87] (WO2018/208700)  
[30] US (62/502,847) 2017-05-08

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[11] **3,062,885**  
[13] C

[51] **Int.Cl. A61K 9/06 (2006.01) A61K 38/17 (2006.01) A61K 38/38 (2006.01) A61K 47/14 (2017.01)**

[25] EN  
[54] **SELF-ASSEMBLED GELS FOR CONTROLLED DELIVERY OF BIOLOGICS AND LABILE AGENTS**  
[54] **GEL AUTO-ASSEMBLE DESTINE A L'ADMINISTRATION CONTROLEE D'AGENTS BIOLOGIQUES ET LABILES**  
[72] KARP, JEFFREY, US  
[72] JOSHI, NITIN, US  
[72] HE, XUEYIN, CA  
[72] AMIRALTY, JULIAN, US  
[72] LARAMEE, BRITTANY, US  
[72] SLAUGHTER, KAI, CA  
[73] THE BRIGHAM AND WOMEN'S HOSPITAL, INC., US  
[85] 2019-10-29  
[86] 2017-05-08 (PCT/US2017/031614)  
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[13] C

[51] **Int.Cl. A61B 5/1455 (2006.01) A61B 5/1491 (2006.01)**  
[25] EN  
[54] **METHOD AND PULSE OXIMETER APPARATUS USING CHEMICAL HEATING**  
[54] **PROCEDE ET APPAREIL OXYMETRE DE PORES UTILISANT UN CHAUFFAGE CHIMIQUE**  
[72] ABEE, CATHERINE P., US  
[73] U.S. DEPARTMENT OF VETERANS AFFAIRS, US  
[86] (3063153)  
[87] (3063153)  
[22] 2012-11-26  
[62] 2,857,419  
[30] US (61/629,825) 2011-11-29

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[13] C

[51] **Int.Cl. A42B 3/06 (2006.01)**  
[25] EN  
[54] **HELMET**  
[54] **CASQUE**  
[72] HALLDIN, PETER, SE  
[72] LINDBLOM, KIM, SE  
[73] MIPS AB, SE  
[85] 2019-11-12  
[86] 2018-05-18 (PCT/EP2018/063193)  
[87] (WO2018/211106)  
[30] GB (1708094.6) 2017-05-19

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[13] C

[51] **Int.Cl. G10L 19/018 (2013.01) G10L 25/45 (2013.01) G10L 25/54 (2013.01) H04N 19/467 (2014.01) H04N 19/60 (2014.01) G10L 19/02 (2013.01) H04H 60/29 (2009.01) H04N 21/258 (2011.01)**  
[25] EN  
[54] **RESEARCH DATA GATHERING**  
[54] **REGROUPEMENT DE DONNEES DE RECHERCHE**  
[72] NEUHAUSER, ALAN R., US  
[72] CRYSTAL, JACK C., US  
[73] ARBITRON INC., US  
[86] (3063376)  
[87] (3063376)  
[22] 2008-01-25  
[62] 2,676,516  
[30] US (60/886,615) 2007-01-25  
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[13] C

[51] **Int.Cl. F16C 33/04 (2006.01) E21B 10/22 (2006.01) E21B 10/46 (2006.01) E21B 10/56 (2006.01) E21B 10/567 (2006.01) F16C 17/12 (2006.01) C30B 33/00 (2006.01)**  
[25] EN  
[54] **BEARING ASSEMBLIES, RELATED BEARING APPARATUSES, AND RELATED METHODS**  
[54] **ENSEMBLES PALIERS, APPAREILS DE PALIERS ASSOCIES ET PROCEDES ASSOCIES**  
[72] KOLSTE, TYLER, US  
[72] PETERSON, S. BARRETT, US  
[72] GONZALEZ, JAIR J., US  
[72] PETERSON, TROND, US  
[73] US SYNTHETIC CORPORATION, US  
[85] 2019-11-20  
[86] 2018-05-17 (PCT/US2018/033190)  
[87] (WO2018/226380)  
[30] US (62/516,226) 2017-06-07

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[13] C

[51] **Int.Cl. H04N 21/234 (2011.01) H04N 21/44 (2011.01)**  
[25] EN  
[54] **TEMPORAL PLACEMENT OF A REBUFFERING EVENT**  
[54] **PLACEMENT TEMPOREL D'UN EVENEMENT DE REMISE EN TAMPON**  
[72] KATSAVOUNIDIS, IOANNIS, US  
[72] WATSON, MARK, US  
[72] HIPPLE, AARON, US  
[72] WOLCOTT, WILL, US  
[73] NETFLIX, INC., US  
[85] 2019-11-21  
[86] 2018-05-21 (PCT/US2018/033729)  
[87] (WO2018/222435)  
[30] US (15/610,053) 2017-05-31

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[11] **3,064,729**  
[13] C

[51] **Int.Cl. B29C 48/09 (2019.01) A61L 31/16 (2006.01) A61M 25/10 (2013.01) B29C 55/24 (2006.01)**  
[25] EN  
[54] **CONTINUOUS FORMATION OF TUBES OF POLY-4-HYDROXYBUTYRATE AND COPOLYMERS THEREOF**  
[54] **FORMATION CONTINUE DE TUBES EN POLY-4-HYDROXYBUTYRATE ET SES COPOLYMERES**  
[72] GANATRA, AMIT, US  
[72] RIZK, SAID, US  
[73] TEPHA, INC., US  
[85] 2019-11-22  
[86] 2018-05-18 (PCT/US2018/033420)  
[87] (WO2018/217574)  
[30] US (62/511,069) 2017-05-25

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[13] C

[51] **Int.Cl. E21B 41/00 (2006.01) E21B 43/12 (2006.01) G06N 3/04 (2006.01) G06N 3/08 (2006.01)**  
[25] EN  
[54] **INTEGRATED SURVEILLANCE AND CONTROL**  
[54] **SURVEILLANCE ET COMMANDE INTEGRES**  
[72] RANGARAJAN, KESHAVA, US  
[72] WINSTON, JOSEPH BLAKE, US  
[72] JAIN, ANUJ, US  
[72] WANG, XI, US  
[73] LANDMARK GRAPHICS CORPORATION, US  
[85] 2019-11-26  
[86] 2018-04-05 (PCT/US2018/026332)  
[87] (WO2019/040125)  
[30] US (62/548,272) 2017-08-21

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[13] C

[51] **Int.Cl. A61L 31/12 (2006.01) D04H 3/16 (2006.01) A61F 2/02 (2006.01)**  
[25] EN  
[54] **MULTILAYERED BIOMEDICAL STRUCTURES CONFIGURED TO SEPARATE AFTER A PREDETERMINED TIME OR UPON EXPOSURE TO AN ENVIRONMENTAL CONDITION**  
[54] **STRUCTURES BIOMEDICALES MULTICOUCHES CONFIGUREES POUR SE SEPARER APRES UNE PERIODE PREDETERMINEE OU SUIVANT L'EXPOSITION A UNE CONDITION ENVIRONNEMENTALE**  
[72] MACEWAN, MATTHEW R., US  
[73] WASHINGTON UNIVERSITY, US  
[86] (3066269)  
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[22] 2012-09-21  
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[11] **3,066,513**  
[13] C

[51] **Int.Cl. A61B 5/15 (2006.01) A61B 5/153 (2006.01)**  
[25] EN  
[54] **AUTO-RETRACTABLE SAFETY BLOOD COLLECTION NEEDLE**  
[54] **AIGUILLE DE SECURITE POUR PRELEVEMENT SANGUIN AUTORETRACTABLE**  
[72] WANG, ZUYANG, CN  
[73] WANG, ZUYANG, CN  
[85] 2019-12-06  
[86] 2018-06-08 (PCT/CN2018/090525)  
[87] (WO2018/224046)  
[30] CN (201710433613.8) 2017-06-09

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[13] C

[51] **Int.Cl. A47L 5/24 (2006.01) A47L 7/02 (2006.01) A47L 11/38 (2006.01)**  
[25] EN  
[54] **SURFACE CLEANING DEVICE WITH COMPACT STORAGE CONFIGURATION**  
[54] **DISPOSITIF DE NETTOYAGE DE SURFACE A CONFIGURATION DE STOCKAGE COMPACTE**  
[72] BROWN, ANDRE D., US  
[72] INNES, DANIEL J., US  
[73] SHARKNINJA OPERATING LLC, US  
[85] 2019-12-12  
[86] 2018-06-12 (PCT/US2018/037106)  
[87] (WO2018/231831)  
[30] US (62/518,287) 2017-06-12

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[13] C

[51] **Int.Cl. F01N 3/20 (2006.01) F01N 3/08 (2006.01)**  
[25] EN  
[54] **TEMPERATURE-BASED CONTROL OF REAGENT DISTRIBUTION**  
[54] **COMMANDE BASEE SUR LA TEMPERATURE DE DISTRIBUTION DE REACTIF**  
[72] EVERLY, MARK DENIS, US  
[72] FREE, PAUL DOUGLAS, US  
[72] DIESTELMEIER, JEFFREY, US  
[72] SELVY, ANDREW D., US  
[73] WATLOW ELECTRIC MANUFACTURING COMPANY, US  
[85] 2019-12-12  
[86] 2018-06-15 (PCT/US2018/037835)  
[87] (WO2018/232293)  
[30] US (62/520,959) 2017-06-16

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[13] C

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[25] EN  
[54] **RECLAIMING APPARATUS AND METHOD FOR RECLAIMING**  
[54] **DISPOSITIF DE RECUPERATION ET PROCEDE DE RECUPERATION**  
[72] TANAKA, HIROSHI, JP  
[72] HIRATA, TAKUYA, JP  
[72] KAMIJO, TAKASHI, JP  
[72] TSUJIUCHI, TATSUYA, JP  
[73] MITSUBISHI HEAVY INDUSTRIES ENGINEERING, LTD., JP  
[85] 2020-01-31  
[86] 2018-10-15 (PCT/JP2018/038359)  
[87] (WO2019/078168)  
[30] JP (2017-203726) 2017-10-20

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[13] C

[51] **Int.Cl. E21B 47/003 (2012.01) E21B 47/07 (2012.01) E21B 43/24 (2006.01) E21B 43/30 (2006.01) E21B 47/06 (2012.01)**  
[25] EN  
[54] **INFILL WELL METHODS FOR HYDROCARBON RECOVERY**  
[54] **METHODES DE Puits INTERCALAIRE POUR LA RECUPERATION D'HYDROCARBURES**  
[72] CHAN, RICHARD, CA  
[72] GHANNADI, SAHAR, CA  
[73] SUNCOR ENERGY INC., CA  
[86] (3071806)  
[87] (3071806)  
[22] 2017-09-25  
[62] 2,980,009

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[11] **3,072,971**  
[13] C

[51] **Int.Cl. G01N 1/20 (2006.01) A01J 5/007 (2006.01)**  
[25] EN  
[54] **SAMPLING APPARATUS FOR TAKING A REPRESENTATIVE MILK SAMPLE AND METHOD FOR TAKING REPRESENTATIVE MILK SAMPLES**  
[54] **DISPOSITIF DE PRELEVEMENT D'ECHANTILLON POUR LE PRELEVEMENT D'UN ECHANTILLON REPRESENTATIF DE LAIT ET PROCEDE POUR LE PRELEVEMENT D'ECHANTILLONS REPRESENTATIFS DE LAIT**  
[72] HOEFELMAYR, TILMAN, CH  
[73] LACTOCORDER AG, CH  
[85] 2020-02-13  
[86] 2018-08-02 (PCT/EP2018/071007)  
[87] (WO2019/034443)  
[30] DE (10 2017 214 337.1) 2017-08-17

[11] **3,075,536**  
[13] C

[51] **Int.Cl. B65D 83/20 (2006.01) B05B 11/00 (2006.01) B65D 50/04 (2006.01) B65D 83/22 (2006.01) B65D 83/24 (2006.01) B65D 83/30 (2006.01)**  
[25] EN  
[54] **CHILD RESISTANT AEROSOL ACTUATOR**  
[54] **ACTIONNEUR D'AEROSOL A SECURITE ENFANT**  
[72] STARZMAN, MICHAEL J., US  
[72] FREUDENBERG, JOHN W., US  
[72] BATES, KEVIN VICTOR, GB  
[72] KRUPP, BENJAMIN THOMAS, US  
[72] STATES, ROBERT GERALD, US  
[72] PARROT, DAVID A., US  
[72] GOOD, ROBERT J., US  
[72] DODD, JOSEPH K., US  
[72] FALCON, SARA DAWSON, US  
[73] WD-40 MANUFACTURING COMPANY, US  
[85] 2020-03-10  
[86] 2018-09-11 (PCT/US2018/050424)  
[87] (WO2019/055395)  
[30] US (15/701,558) 2017-09-12

[11] **3,076,465**  
[13] C

[51] **Int.Cl. F28F 17/00 (2006.01) B01D 53/26 (2006.01) F28D 7/00 (2006.01) F28D 9/00 (2006.01)**  
[25] EN  
[54] **PERFECTED HEAT EXCHANGER AND AIR DRYING SYSTEM USING THE AFORESAID HEAT EXCHANGER**  
[54] **ECHANGEUR DE CHALEUR PERFECTIONNE ET SYSTEME DE SECHAGE A L'AIR UTILISANT LEDIT ECHANGEUR DE CHALEUR**  
[72] NARDINI, MAURIZIO, IT  
[72] FALCONE, ALESSANDRO, IT  
[72] BELLOSI, MASSIMO, IT  
[73] CECCATO ARIA COMPRESSA S.R.L., IT  
[85] 2020-03-19  
[86] 2018-10-23 (PCT/IB2018/058252)  
[87] (WO2019/082078)  
[30] IT (102017000119692) 2017-10-23

[11] **3,076,702**  
[13] C

[51] **Int.Cl. C07K 7/08 (2006.01) C07K 7/06 (2006.01) C07K 14/00 (2006.01) G01N 33/564 (2006.01)**  
[25] EN  
[54] **METHOD OF DETECTING AUTOANTIBODIES FROM PATIENTS SUFFERING FROM RHEUMATOID ARTHRITIS, A PEPTIDE AND AN ASSAYKIT**  
[54] **PROCEDE POUR DETECTER DES AUTO-ANTICORPS CHEZ DES PATIENTS SOUFFRANT DE POLYARTHRITE RHUMATOIDE, PEPTIDE ET TROUSSE DE DOSAGE**  
[72] VAN VENROOIJ, WALTHERUS JACOBUS WILHELMUS, NL  
[72] DRIJFHOUT, JAN WOUTER, NL  
[72] VAN BOEKEL, MARTINUS ADRIANUS MARIA, NL  
[72] PRUIJN, GERARDUS JOZEF MARIA, NL  
[73] STICHTING VOOR DE TECHNISCHE WETENSCHAPPEN, NL  
[86] (3076702)  
[87] (3076702)  
[22] 2002-12-11  
[62] 2,969,577  
[30] NL (1019540) 2001-12-11

[11] **3,076,963**  
[13] C

[51] **Int.Cl. A61K 47/24 (2006.01) A23L 29/10 (2016.01) A23L 33/10 (2016.01) A23L 33/105 (2016.01) A23L 2/38 (2021.01) A23L 2/52 (2006.01) A61K 9/107 (2006.01) A61K 31/05 (2006.01) A61K 31/352 (2006.01) A61K 36/185 (2006.01) A61K 47/06 (2006.01) A61K 47/14 (2017.01) C07C 39/23 (2006.01) C07D 311/80 (2006.01)**  
[25] EN  
[54] **LIQUID DOSAGE FORMS COMPRISING CANNABIS, METHODS OF MAKING AND USE**  
[54] **FORMES PHARMACEUTIQUES LIQUIDES COMPRENANT DU CANNABIS, LEURS PROCEDES DE FABRICATION ET D'UTILISATION**  
[72] GEILING, BEN, CA  
[72] SHIPLEY, TOM, CA  
[73] CANOPY GROWTH CORPORATION, CA  
[85] 2020-03-23  
[86] 2018-11-30 (PCT/CA2018/051533)  
[87] (WO2019/104442)  
[30] US (62/592,993) 2017-11-30  
[30] US (62/611,851) 2017-12-29  
[30] US (62/618,790) 2018-01-18  
[30] US (62/632,272) 2018-02-19  
[30] US (62/632,279) 2018-02-19  
[30] US (62/632,286) 2018-02-19  
[30] US (62/632,289) 2018-02-19  
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[30] US (62/632,299) 2018-02-19  
[30] US (62/632,309) 2018-02-19

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[13] C

[51] **Int.Cl. B62D 21/11 (2006.01) B29C 43/00 (2006.01) B29C 43/34 (2006.01) B29C 70/18 (2006.01) B62D 29/04 (2006.01)**

[25] EN

[54] **METHOD OF REDUCING KNIT LINES IN COMPOSITES COMPRESSION MOLDING OF A SUB FRAME**

[54] **METHODE POUR REDUIRE LES LIGNES DE SOUDURE DANS LE MOULAGE PAR COMPRESSION DE COMPOSITES D'UN FAUX CADRE**

[72] KRULL, BRIAN A., US  
[72] LAUX, JOSEPH J., CH  
[72] PACHHA, RANJIT, CA  
[72] WANG, ZONGXUN, CA  
[73] MAGNA EXTERIORS INC., CA  
[85] 2020-04-03  
[86] 2018-10-19 (PCT/US2018/056640)  
[87] (WO2019/079676)  
[30] US (62/574,435) 2017-10-19

[11] **3,080,924**  
[13] C

[51] **Int.Cl. C09K 8/03 (2006.01) C09K 8/66 (2006.01) C09K 8/72 (2006.01) C09K 8/80 (2006.01) C09K 8/84 (2006.01)**

[25] EN

[54] **USING BRINE RESISTANT SILICON DIOXIDE NANOPARTICLE DISPERSIONS TO IMPROVE OIL RECOVERY**

[54] **UTILISATION DE DISPERSIONS DE NANOPARTICULES DE DIOXYDE DE SILICIUM RESISTANTES A LA SAUMURE EN VUE D'AMELIORER LA RECUPERATION DE PETROLE**

[72] HOLCOMB, DAVID, US  
[72] AHMAD, YUSRA KHAN, US  
[72] SOUTHWELL, JOHN EDMOND, US  
[73] NISSAN CHEMICAL AMERICA CORPORATION, US  
[85] 2020-04-29  
[86] 2018-11-02 (PCT/US2018/058954)  
[87] (WO2019/090073)  
[30] US (62/581,331) 2017-11-03

[11] **3,083,699**  
[13] C

[51] **Int.Cl. H04L 12/16 (2006.01) G06F 16/27 (2019.01) H04L 9/06 (2006.01)**

[25] EN

[54] **USING BLOCKCHAIN TO TRACK INFORMATION FOR DEVICES ON A NETWORK**

[54] **UTILISATION DE CHAINE DE BLOC POUR SUIVRE L'INFORMATION DES DISPOSITIFS D'UN RESEAU**

[72] MOELLER, BERND, DE  
[73] MYOMEGA SYSTEMS GMBH, DE  
[86] (3083699)  
[87] (3083699)  
[22] 2018-06-04  
[62] 3,007,206  
[30] US (62/524807) 2017-06-26  
[30] US (15/907500) 2018-02-18

[11] **3,084,427**  
[13] C

[51] **Int.Cl. A61N 2/06 (2006.01) A61N 2/12 (2006.01)**

[25] FR

[54] **PORTABLE APPARATUS FOR GENERATING AN INDUCED LOW-FREQUENCY SINUSOIDAL ELECTRIC CURRENT**

[54] **APPAREIL PORTATIF POUR GENERER UN COURANT ELECTRIQUE INDUIT SINUSOIDAL A BASSE FREQUENCE**

[72] CREPIN, GERARD, FR  
[72] MENEROUD, PATRICK, FR  
[72] RUDENT, PASCAL, FR  
[73] G.C. TECHNOLOGY, FR  
[85] 2020-05-05  
[86] 2018-11-06 (PCT/FR2018/052728)  
[87] (WO2019/092349)  
[30] FR (1760443) 2017-11-07

[11] **3,086,852**  
[13] C

[51] **Int.Cl. C12N 5/04 (2006.01) A23K 10/30 (2016.01) A23L 11/00 (2021.01) A01H 6/54 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) A23D 9/00 (2006.01) A23J 1/14 (2006.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **SOYBEAN VARIETY 5PKHR80**

[54] **VARIETE DE SOYA 5PKHR80**

[72] ORTIZ-PEREZ, EVELYN, US  
[72] WILEY, HUNT B., US  
[73] AGRIGENETICS, INC., US  
[86] (3086852)  
[87] (3086852)  
[22] 2020-07-15  
[30] US (16/917,953) 2020-07-01

[11] **3,087,795**  
[13] C

[51] **Int.Cl. F16H 25/20 (2006.01) F16H 19/02 (2006.01) H02K 7/06 (2006.01) H02K 7/116 (2006.01)**

[25] EN

[54] **ELECTRIC PUSH ROD**

[54] **TIGE DE POUSSEE ELECTRIQUE**

[72] LI, SUJIAO, CN  
[73] LI, SUJIAO, CN  
[86] (3087795)  
[87] (3087795)  
[22] 2020-07-02  
[30] CN (202020898332.7) 2020-05-25

[11] **3,092,489**  
[13] C

[51] **Int.Cl. G06K 19/077 (2006.01)**

[25] EN

[54] **A SYSTEM AND METHOD FOR TRANSFERRING AN EMV CHIP FROM A FIRST CARD TO A SECOND CARD**

[54] **SYSTEME ET METHODE POUR TRANSFERER UNE PUCE EMV D'UNE PREMIERE CARTE A UNE DEUXIEME CARTE**

[72] SANTOS, ANDRE, CA  
[73] SANTOS, ANDRE, CA  
[73] SMILYNOV, CHRISTIAN, CA  
[86] (3092489)  
[87] (3092489)  
[22] 2020-09-09  
[30] US (17/007,833) 2020-08-31

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[11] **3,098,003**  
[13] C

- [51] **Int.Cl. G01N 27/416 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR QUALITY ASSURANCE OF A BIOSENSOR TEST STRIP**  
[54] **SYSTEME ET PROCEDE D'ASSURANCE DE QUALITE D'UNE BANDE TEST DE BIO-DETECTEUR**  
[72] CELENTANO, MICHAEL J., US  
[72] GROLL, HENNING, US  
[72] PAULEY, JAMES L., US  
[72] MOORE, STEVEN K., US  
[73] F. HOFFMANN-LA ROCHE AG, CH  
[86] (3098003)  
[87] (3098003)  
[22] 2005-06-20  
[62] 3,023,000  
[30] US (60/581,002) 2004-06-18

[11] **3,100,681**  
[13] C

- [51] **Int.Cl. A61K 31/495 (2006.01) A61P 29/00 (2006.01) A61P 43/00 (2006.01)**  
[25] EN  
[54] **USE OF N-BENZOYL-L-PHENYLALANINE DERIVATIVES IN THE TREATMENT OF CYTOKINE RELEASE SYNDROME AND OTHER SYNDROMES OR DISEASES**  
[54] **UTILISATION DE DERIVES DE N-BENZOYLE-L-PHENYLALANINE DANS LE TRAITEMENT DU SYNDROME DE LIBERATION DE CYTOKINE ET D'AUTRES SYNDROMES OU MALADIES**  
[72] WATANABE, YOSHIHIRO, JP  
[72] TAHARA, YOSHIO, JP  
[72] SUZUKI, KEISUKE, JP  
[72] MIMURA, TAKAYUKI, JP  
[72] OHMAE, SAORI, JP  
[73] TORII PHARMACEUTICAL CO., LTD., JP  
[85] 2020-11-17  
[86] 2019-11-29 (PCT/JP2019/046689)  
[87] (WO2020/111212)  
[30] JP (2018-223377) 2018-11-29  
[30] JP (2019-165013) 2019-09-11

[11] **3,106,036**  
[13] C

- [51] **Int.Cl. H01J 49/14 (2006.01) H01J 49/20 (2006.01) H01J 49/22 (2006.01)**  
[25] EN  
[54] **DYNAMIC ELECTRON IMPACT ION SOURCE**  
[54] **SOURCE D'IONS A IMPACT ELECTRONIQUE DYNAMIQUE**  
[72] WELKIE, DAVID G., US  
[72] CHENG, TONG, US  
[73] PERKINELMER HEALTH SCIENCES, INC., US  
[85] 2021-01-07  
[86] 2019-07-12 (PCT/US2019/041540)  
[87] (WO2020/014571)  
[30] US (16/033,927) 2018-07-12

[11] **3,106,168**  
[13] C

- [51] **Int.Cl. B29C 43/34 (2006.01) B29D 99/00 (2010.01) B29B 11/16 (2006.01) B29C 70/08 (2006.01) B29C 70/20 (2006.01) B29C 70/46 (2006.01) B29C 70/54 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR COMPRESSION MOLDING**  
[54] **PROCEDES ET COMPOSITIONS POUR LE MOULAGE PAR COMPRESSION**  
[72] DAVIDSON, ERICK, US  
[72] ESCOWITZ, ETHAN, US  
[73] ARRIS COMPOSITES INC., US  
[85] 2021-01-08  
[86] 2019-07-12 (PCT/US2019/041565)  
[87] (WO2020/014589)  
[30] US (62/697,070) 2018-07-12  
[30] US (16/509,801) 2019-07-12

[11] **3,109,937**  
[13] C

- [51] **Int.Cl. F01D 5/14 (2006.01) F01D 25/24 (2006.01) F02C 6/12 (2006.01)**  
[25] EN  
[54] **A HUB-LESS AND NUT-LESS TURBINE WHEEL AND COMPRESSOR WHEEL DESIGN FOR TURBOCHARGERS**  
[54] **ROUE DE TURBINE SANS MOYEU ET SANS ECROU ET CONCEPTION DE ROUE DE COMPRESSEUR POUR TURBOCOMPRESSEURS**  
[72] SALENBIEN, RYAN HAROLD, US  
[73] APEXTURBO LLC, US  
[85] 2021-02-17  
[86] 2019-08-14 (PCT/US2019/046553)  
[87] (WO2020/041072)  
[30] US (62/720,212) 2018-08-21  
[30] US (16/413,952) 2019-05-16

[11] **3,114,035**  
[13] C

- [51] **Int.Cl. A61G 10/02 (2006.01) A61M 16/00 (2006.01) A61B 5/00 (2006.01)**  
[25] EN  
[54] **MODULES FOR SUBMERGED HYPERBARIC OXYGEN THERAPY AND RELATED METHODS AND SYSTEMS**  
[54] **MODULES POUR LA THERAPIE D'OXYGENE HYPERBARE SUBMERGEE ET METHODES ET SYSTEMES CONNEXES**  
[72] GARRITY, MARC, CA  
[73] 2388634 ALBERTA LTD., CA  
[86] (3114035)  
[87] (3114035)  
[22] 2021-04-01

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[11] **3,118,318**  
[13] C

[51] **Int.Cl. C09K 8/80 (2006.01) C09K 8/84 (2006.01)**  
[25] EN  
[54] **ENHANCED OIL RECOVERY USING TREATMENT FLUIDS COMPRISING COLLOIDAL SILICA WITH A PROPPANT**  
[54] **RECUPERATION AMELIOREE D'HUILE A L'AIDE DE FLUIDES DE TRAITEMENT COMPRENANT DE LA SILICE COLLOIDALE AVEC UN AGENT DE SOUTÈNEMENT**  
[72] SOUTHWELL, JOHN EDMOND, US  
[72] AHMAD, YUSRA KHAN, US  
[72] HOLCOMB, DAVID, US  
[73] NISSAN CHEMICAL AMERICA CORPORATION, US  
[85] 2021-04-29  
[86] 2019-11-01 (PCT/US2019/059417)  
[87] (WO2020/092920)  
[30] US (62/755,357) 2018-11-02

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[13] C

[51] **Int.Cl. B65D 83/32 (2006.01) B05B 11/00 (2006.01) B65D 83/14 (2006.01)**  
[25] EN  
[54] **ADAPTER AND DISPENSER WITH ADAPTER**  
[54] **ADAPTATEUR ET DISTRIBUTEUR AVEC ADAPTATEUR**  
[72] LAIDLER, KEITH, GB  
[72] RODD, TIMOTHY, GB  
[73] PLASTIPAK BAWT S.A.R.L., LU  
[85] 2021-05-04  
[86] 2019-11-06 (PCT/IB2019/059554)  
[87] (WO2020/095235)  
[30] US (62/756,159) 2018-11-06

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[13] C

[51] **Int.Cl. B01J 19/32 (2006.01) C02F 3/10 (2006.01) F28D 9/02 (2006.01) F28F 25/08 (2006.01)**  
[25] EN  
[54] **FILL SHEETS AND RELATED FILL PACK ASSEMBLIES**  
[54] **FEUILLES DE REMPLISSAGE ET ENSEMBLES DE SUPPORTS DE REMPLISSAGE ASSOCIES**  
[72] EDWARDS, BRIAN, US  
[72] BHAT, ADITYA, US  
[72] KULICK, FRANK M., III, US  
[72] LINGLE, LUKE, US  
[73] BRENTWOOD INDUSTRIES, INC., US  
[85] 2021-05-05  
[86] 2019-11-27 (PCT/US2019/063692)  
[87] (WO2020/113064)  
[30] US (62/771,858) 2018-11-27

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[11] **3,121,458**  
[13] C

[51] **Int.Cl. G21F 3/025 (2006.01) A41D 13/02 (2006.01) A44B 19/00 (2006.01)**  
[25] FR  
[54] **DISPOSABLE INDIVIDUAL OVERALL FOR PROTECTION AGAINST RADIOACTIVE PARTICLES**  
[54] **COMBINAISON INDIVIDUELLE A USAGE UNIQUE DE PROTECTION CONTRE DES PARTICULES RADIOACTIVES**  
[72] MONIER, CATHERINE, FR  
[72] ROUGON, GILLES, FR  
[72] SPAZZOLA, VICTOR, FR  
[73] ELECTRICITE DE FRANCE, FR  
[85] 2021-05-28  
[86] 2019-11-29 (PCT/FR2019/052847)  
[87] (WO2020/109742)  
[30] FR (1872160) 2018-11-30

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[11] **3,124,782**  
[13] C

[51] **Int.Cl. G01N 21/954 (2006.01) G06T 7/00 (2017.01)**  
[25] EN  
[54] **BORESCOPE INSPECTION METHOD AND DEVICE**  
[54] **PROCEDE ET DISPOSITIF D'INSPECTION AU BOROSCOPE**  
[72] PETERS, JAN OKE, DE  
[72] THIES, MICHAEL, DE  
[72] RASCHE, SVEN, DE  
[72] DOMASCHKE, TOMAS, DE  
[72] SCHUPPSTUHL, THORSTEN, DE  
[72] NEDDERMEYER, WERNER, LU  
[72] BAHR, SONKE, DE  
[73] LUFTHANSA TECHNIK AG, DE  
[85] 2021-06-23  
[86] 2020-01-14 (PCT/EP2020/000009)  
[87] (WO2020/148085)  
[30] DE (10 2019 100 822.0) 2019-01-14

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[11] **3,126,927**  
[13] C

[51] **Int.Cl. G06F 3/01 (2006.01) G06Q 30/02 (2012.01) G06F 15/16 (2006.01) G06Q 50/00 (2012.01)**  
[25] EN  
[54] **SELECTIVELY PROMPTING MATCHED INDIVIDUALS TO INITIATE AN IN-PERSON MEETING**  
[54] **INVITE SELECTIVE A DES INDIVIDUS MIS EN CORRESPONDANCE POUR INITIER UNE RENCONTRE EN PERSONNE**  
[72] ANGAPOVA, NATALIA, GB  
[72] KNEELAND, JOHN, GB  
[72] STOTT, CLAIRE, GB  
[73] AMI HOLDINGS LIMITED, BM  
[85] 2021-07-15  
[86] 2020-01-14 (PCT/US2020/013435)  
[87] (WO2020/150186)  
[30] US (62/792,606) 2019-01-15

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[11] **3,127,129**

[13] C

- [51] **Int.Cl. B27B 5/29 (2006.01) B27B 7/04 (2006.01)**  
[25] EN  
[54] **NON-CONTACT TEMPERATURE SENSOR FOR SAW GUIDES**  
[54] **CAPTEUR DE TEMPERATURE SANS CONTACT POUR GUIDES DE SCIE**  
[72] VOGT, NALYND, CA  
[72] BERGEN, CARRICK, CA  
[73] PRECISION GUIDE MACHINERY AND REPAIR LIMITED, CA  
[85] 2021-07-19  
[86] 2020-02-03 (PCT/CA2020/050123)  
[87] (WO2020/160645)  
[30] US (62/801,084) 2019-02-04

[11] **3,127,570**

[13] C

- [51] **Int.Cl. B60L 58/24 (2019.01) B60L 50/60 (2019.01)**  
[25] EN  
[54] **DESIRED DEPARTURE TEMPERATURE FOR A BATTERY IN A VEHICLE**  
[54] **TEMPERATURE DE DEPART SOUHAITEE POUR UNE BATTERIE DANS UN VEHICULE**  
[72] MUNIZ, THOMAS, US  
[72] ZHANG, KE, US  
[72] MELACK, JOHN, US  
[73] WISK AERO LLC, US  
[85] 2021-07-22  
[86] 2019-02-21 (PCT/US2019/018896)  
[87] (WO2020/167324)  
[30] US (16/277,812) 2019-02-15

[11] **3,127,381**

[13] C

- [51] **Int.Cl. G06Q 20/40 (2012.01) H04W 4/12 (2009.01) G06Q 20/32 (2012.01) G06Q 20/36 (2012.01) H04W 4/30 (2018.01)**  
[25] EN  
[54] **TERMINAL TYPE IDENTIFICATION IN INTERACTION PROCESSING**  
[54] **IDENTIFICATION DE TYPE DE TERMINAL DANS UN TRAITEMENT D'INTERACTION**  
[72] SHENKER, GAVIN, US  
[72] SULLIVAN, BRIAN, GB  
[72] AABYE, CHRISTIAN, US  
[72] NGO, HAO, US  
[73] VISA INTERNATIONAL SERVICE ASSOCIATION, US  
[85] 2021-07-20  
[86] 2020-01-27 (PCT/US2020/015272)  
[87] (WO2020/159896)  
[30] US (16/262,699) 2019-01-30

[11] **3,140,179**

[13] C

- [51] **Int.Cl. B32B 15/09 (2006.01) B65D 25/36 (2006.01) C08J 5/18 (2006.01)**  
[25] EN  
[54] **POLYESTER FILM AND METHOD FOR PRODUCING SAME**  
[54] **FILM DE POLYESTER ET SON PROCEDE DE PRODUCTION**  
[72] ASHIHARA, HIROSHI, JP  
[72] OKUZU, TAKAYOSHI, JP  
[72] AKAMATSU, KEN, JP  
[72] KUROSAWA, AKIKO, JP  
[72] ARAKI, GORO, JP  
[72] KAJITA, AKITO, JP  
[73] UNITIKA LTD., JP  
[85] 2021-11-30  
[86] 2021-03-08 (PCT/JP2021/009015)  
[87] (WO2021/182402)  
[30] JP (2020-040388) 2020-03-10

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[21] **3,090,167**  
[13] A1  
[51] **Int.Cl. G06F 17/00 (2019.01) G06F 16/00 (2019.01)**  
[25] EN  
[54] **FREQUENT RULES DATA ANALYSIS**  
[54] **ANALYSE DE DONNEES DE REGLES FREQUENTES**  
[72] KHOSHGOO, NADIA NK, CA  
[71] KHOSHGOO, NADIA NK, CA  
[22] 2020-09-15  
[41] 2022-03-15

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[21] **3,092,962**  
[13] A1  
[51] **Int.Cl. A45C 11/00 (2006.01)**  
[25] EN  
[54] **MASK CASE**  
[54] **BOITIER A MASQUE**  
[72] LALONDE, HELENE A., CA  
[71] LALONDE, HELENE A., CA  
[22] 2020-09-14  
[41] 2022-03-14

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[21] **3,093,096**  
[13] A1  
[51] **Int.Cl. H01J 61/52 (2006.01) H01J 61/067 (2006.01) H01J 65/04 (2006.01)**  
[25] EN  
[54] **EXCIMER LAMP**  
[54] **LAMPE A EXCIMERE**  
[72] SHAN, XINXIN, CA  
[71] LED SMART INC., CA  
[22] 2020-09-15  
[41] 2022-03-15

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[21] **3,093,107**  
[13] A1  
[51] **Int.Cl. G01N 15/00 (2006.01)**  
[25] EN  
[54] **RAPID SARS-COV-2 DETECTION SYSTEM BASED ON FLASHED RATCHET POTENTIAL ANDELECTRIC CURRENT SPECTRUM**  
[54] **SYSTEME DE DETECTION RAPIDE DU SARS-COV-2 FONDE SUR LE SPECTRE DU COURANT POTENTIEL ET ELECTRIQUE A CLIQUET OSCILLANT**  
[72] ALBQOOR, MOHAMMAD, JO  
[71] ALBQOOR, MOHAMMAD, JO  
[22] 2020-09-16  
[41] 2022-03-15

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[21] **3,093,108**  
[13] A1  
[51] **Int.Cl. B62H 3/08 (2006.01) B62H 3/04 (2006.01)**  
[25] EN  
[54] **BICYCLE PARKING RACK**  
[54] **RATELIER DE STATIONNEMENT A VELOS**  
[72] GU, HAIDONG, US  
[71] CYCLINGDEAL USA, INC., US  
[22] 2020-09-15  
[41] 2022-03-15

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[21] **3,093,116**  
[13] A1  
[51] **Int.Cl. B60D 1/44 (2006.01)**  
[25] EN  
[54] **ARTICULATING TRAILER HITCH**  
[54] **ATTACHE DE REMORQUE ARTICULEE**  
[72] MAH, WALTER, CA  
[71] MAH, WALTER, CA  
[22] 2020-09-15  
[41] 2022-03-15

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[21] **3,093,131**  
[13] A1  
[51] **Int.Cl. G06F 17/00 (2019.01) G06Q 40/08 (2012.01) G06F 21/30 (2013.01)**  
[25] EN  
[54] **INITIATING PROVISIONING OF AN EXISTING ACCOUNT BASED ON AN UNAUTHENTICATED REQUEST**  
[54] **FOURNITURE DE DONNEES D'APPROVISIONNEMENT D'UN COMPTE EXISTANT EN FONCTION D'UNE DEMANDE NON AUTHENTIFIEE**  
[72] LO, KELVIN CHUN-YI, CA  
[72] ROBERGE, GUILLAUME, CA  
[72] CARLE, FRANCIS, CA  
[72] BIGRAS, ROBERT, CA  
[72] HOUDE, BRIGITTE, CA  
[71] THE TORONTO-DOMINION BANK, CA  
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[41] 2022-03-15

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[21] **3,093,133**  
[13] A1  
[51] **Int.Cl. G08G 1/017 (2006.01) G06Q 50/26 (2012.01) G08G 1/054 (2006.01)**  
[25] EN  
[54] **VIOLATION DETECTION DEVICE**  
[54] **DISPOSITIF DE DETECTION DES INFRACTIONS**  
[72] HANRATTY, ALAN, CA  
[71] HANRATTY, ALAN, CA  
[22] 2020-09-15  
[41] 2022-03-14  
[30] US (17/020,706) 2020-09-14

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[21] **3,093,139**  
 [13] A1

[51] **Int.Cl. B60W 40/09 (2012.01) B60K 28/02 (2006.01)**  
 [25] EN  
 [54] **THE DETECTION SYSTEM OF "RISK ACTIVITIES WHILE DRIVING" BASED ON THE CONTROL OF THE POSITION OF BOTH HANDS GRIPPING THE STEERING WHEEL**  
 [54] **SYSTEME DE DETECTION DES « ACTIVITES RISQUEES EN CONDUISANT » EN FONCTION DU CONTROLE DE LA POSITION DES DEUX MAINS SUR LE VOLANT**  
 [72] OCHOA NIEVA, IGNACIO JAVIER, ES  
 [71] OCHOA NIEVA, IGNACIO JAVIER, ES  
 [22] 2020-09-15  
 [41] 2022-03-15

[21] **3,093,143**  
 [13] A1

[51] **Int.Cl. A61G 7/05 (2006.01) A61G 7/002 (2006.01) A61G 7/057 (2006.01) A61G 7/10 (2006.01)**  
 [25] EN  
 [54] **LIT THERAPEUTIQUE A GEOMETRIE VARIABLE TOURNANT ET CENTRALISANT UN PATIENT IMMOBILE POUR PREVENIR LA PLAIE DE LIT AINSI QUE METHODE ASSOCIEE**  
 [54] **LIT THERAPEUTIQUE A GEOMETRIE VARIABLE TOURNANT ET CENTRALISANT UN PATIENT IMMOBILE POUR PREVENIR LA PLAIE DE LIT AINSI QUE METHODE ASSOCIEE**  
 [72] LE, HOANG VAN, CA  
 [71] DOMORES INC., CA  
 [22] 2020-09-15  
 [41] 2022-03-15

[21] **3,093,150**  
 [13] A1

[51] **Int.Cl. F03G 7/10 (2006.01)**  
 [25] EN  
 [54] **NICKOLAS ALEXANDER POCE'S GASLESS GENERATOR INVENTION**  
 [54] **INVENTION DE GENERATRICE SANS GAZ DE NICKOLAS ALEXANDER POCE**  
 [72] POCE, NICKOLAS A., CA  
 [71] POCE, NICKOLAS A., CA  
 [22] 2020-09-16  
 [41] 2022-03-16

[21] **3,093,241**  
 [13] A1

[51] **Int.Cl. A01C 7/08 (2006.01) A01C 7/20 (2006.01)**  
 [25] EN  
 [54] **A BULK TRANSFER DELIVERY SYSTEM FOR MULTIPLE GRANULAR AGRICULTURAL PRODUCTS**  
 [54] **SYSTEME DE DISTRIBUTION DE TRANSFERT EN VRAC POUR DE MULTIPLES PRODUITS GRANULAIRES AGRICOLES**  
 [72] MOLDER, DANIEL KIRK STANLEY, CA  
 [72] RUFF, ROBERT SYDNEY, CA  
 [72] WILSON, GORDON BLAIR, CA  
 [72] SCHEMBRI, CHARLES JOSEPH, CA  
 [72] QUON, EDWARD, CA  
 [72] RUSH, COLIN MICHAEL, CA  
 [72] SCHULTZ, JASON WILLIAM, CA  
 [71] CLEAN SEED AGRICULTURAL TECHNOLOGIES LTD., CA  
 [22] 2020-09-16  
 [41] 2022-03-16

[21] **3,093,244**  
 [13] A1

[51] **Int.Cl. E02F 3/96 (2006.01)**  
 [25] EN  
 [54] **APPARATUS AND METHOD FOR BLADE INSTALLATION**  
 [54] **APPAREIL ET METHODE D'INSTALLATION DE LAME**  
 [72] HEGGESTAD, DILLON, CA  
 [71] EXCEL LIFT SOLUTIONS LTD., CA  
 [22] 2020-09-16  
 [41] 2022-03-16

[21] **3,093,285**  
 [13] A1

[51] **Int.Cl. A45F 5/00 (2006.01) A45F 5/02 (2006.01)**  
 [25] EN  
 [54] **REMOVABLE EXPANDABLE SEMIRIGID CUMMERBUND**  
 [54] **CEINTURE DRAPEE SEMI-RIGIDE, EXPANSIBLE ET NON REUTILISABLE**  
 [72] BOLAND, RILEY, CA  
 [72] THIBEAULT, TYRELL, CA  
 [71] FERRO CONCEPTS INC., CA  
 [22] 2020-09-16  
 [41] 2022-03-16

[21] **3,093,288**  
 [13] A1

[51] **Int.Cl. A61F 2/16 (2006.01) A61F 9/007 (2006.01)**  
 [25] EN  
 [54] **IMPLANTABLE ACCOMODATING INTRAOCULAR LENSES AND RELATED METHODS**  
 [54] **LENTILLES INTRAOCULAIRES ADAPTEES IMPLANTABLES ET METHODES CONNEXES**  
 [72] KADAMBI, DESIKAN R., CA  
 [71] KADAMBI, DESIKAN R., CA  
 [22] 2020-09-16  
 [41] 2022-03-16

[21] **3,093,345**  
 [13] A1

[51] **Int.Cl. G01J 3/12 (2006.01) G01J 3/02 (2006.01) G01J 3/28 (2006.01) G01J 9/00 (2006.01)**  
 [25] EN  
 [54] **SYSTEMS AND METHODS FOR DUAL COMB SPECTROSCOPY**  
 [54] **SYSTEMES ET METHODES POUR UNE SPECTROSCOPIE A DEUX PEIGNES**  
 [72] RIEKER, GREGORY B., US  
 [72] ALDEN, CAROLINE B., US  
 [72] WRIGHT, ROBERT J., US  
 [72] COBURN, SEAN C., US  
 [71] THE REGENTS OF THE UNIVERSITY OF COLORADO, A BODY CORPORATE, US  
 [22] 2020-09-16  
 [41] 2022-03-16  
 [30] US (62/900,829) 2020-09-16

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[21] **3,093,357**  
[13] A1

[51] **Int.Cl. E21B 43/24 (2006.01) E21B 41/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR USING SUPERHEATED STEAM IN A HYDROCARBON RECOVERY PROCESS**  
[54] **SYSTEME ET METHODE D'UTILISATION DE VAPEUR SUPERCHAUFFEE DANS UN PROCEDE DE RECUPERATION D'HYDROCARBURES**  
[72] DONALD, ANDREW, CA  
[72] RASMUSSEN, JAN, CA  
[71] SUNCOR ENERGY INC., CA  
[22] 2020-09-16  
[41] 2022-03-16

[21] **3,093,403**  
[13] A1

[51] **Int.Cl. C02F 1/00 (2006.01) A47G 19/12 (2006.01) A47G 19/30 (2006.01) C02F 1/28 (2006.01) C02F 1/44 (2006.01)**  
[25] EN  
[54] **COUNTERTOP FLOWER FILTER VASE**  
[54] **VASE A FLEUR FILTRANT DE COMPTOIR**  
[72] BARROW, LISA, CA  
[72] HARMAN, KIMBERLY, CA  
[71] BARROW, LISA, CA  
[71] HARMAN, KIMBERLY, CA  
[22] 2020-09-17  
[41] 2022-03-17

[21] **3,093,439**  
[13] A1

[51] **Int.Cl. C30B 30/02 (2006.01) B82Y 40/00 (2011.01) C23C 14/34 (2006.01) C23C 16/44 (2006.01) C23C 18/16 (2006.01) C23C 18/54 (2006.01) C30B 29/16 (2006.01) C30B 29/62 (2006.01)**  
[25] EN  
[54] **THE FABRICATION METHOD OF 3D NANOWIRE ARRAY ELECTRODES FOR AIR IONIZATION AND THE APPARATUS USING SUCH ELECTRODES**  
[54] **METHODE DE FABRICATION D'ELECTRODES A RESEAU NANOFILAIRE TRIDIMENSIONNEL POUR L'IONISATION DE L'AIR ET APPAREIL UTILISANT CES ELECTRODES**  
[72] YANG, QIONG, CA  
[71] YANG, QIONG, CA  
[22] 2020-09-17  
[41] 2022-03-17

[21] **3,093,447**  
[13] A1

[51] **Int.Cl. E05F 15/77 (2015.01) H04W 4/30 (2018.01) G07C 9/20 (2020.01) H05B 47/10 (2020.01) G08B 13/196 (2006.01) G09F 7/00 (2006.01) H03K 17/945 (2006.01)**  
[25] EN  
[54] **SECURITY DOOR**  
[54] **PORTE DE SECURITE**  
[72] LEITE, TRAVIS L., CA  
[71] LEITE, TRAVIS L., CA  
[22] 2020-09-17  
[41] 2022-03-15  
[30] US (17/021,390) 2020-09-15

[21] **3,093,461**  
[13] A1

[51] **Int.Cl. G06F 3/033 (2013.01) G06F 3/038 (2013.01) G06F 3/041 (2006.01)**  
[25] EN  
[54] **MULTI-DIMENSIONAL CONTROLLER APPARATUS**  
[54] **APPAREIL DE CONTROLEUR MULTIDIMENSIONNEL**  
[72] CHU, CALVIN, CA  
[72] WANG, SIRUI, CA  
[72] QI, ZHAN YONG, CA  
[72] HAYES, ANDREW JOSEPH JOHN, CA  
[72] CURTICAPEAN, IOAN ROMULUS, CA  
[71] GRANT & UNION INC., CA  
[22] 2020-09-16  
[41] 2022-03-16

[21] **3,093,610**  
[13] A1

[51] **Int.Cl. A61N 5/06 (2006.01) F21K 99/00 (2016.01) G02B 5/10 (2006.01) G02B 5/22 (2006.01)**  
[25] EN  
[54] **A SOLAR LIGHT THERAPY DEVICE FOR THE TREATMENT OF SEASONAL AFFECTIVE DISORDER**  
[54] **THERAPIE A LUMIERE SOLAIRE POUR LE TRAITEMENT DU TROUBLE AFFECTIF SAISONNIER**  
[72] HUDSON, CRAIG J., CA  
[71] HUDSON, CRAIG J., CA  
[22] 2020-09-18  
[41] 2022-03-18

[21] **3,093,620**  
[13] A1

[51] **Int.Cl. E06B 9/78 (2006.01)**  
[25] EN  
[54] **A WINDER DEVICE**  
[54] **REMONTOIR**  
[72] ZHOU, FAN, CA  
[71] LES ENTREPRISES SMARTLUX INC., CA  
[22] 2020-09-18  
[41] 2022-03-18

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[21] **3,093,635**  
[13] A1

[51] **Int.Cl. B60R 7/05 (2006.01) A47G 29/08 (2006.01) F16M 13/02 (2006.01)**

[25] EN  
[54] **MASK CADDY**  
[54] **SUPPORT A MASQUES**  
[72] CHOQUETTE, JESSE, CA  
[72] TWEEDY, JEINETTE, CA  
[71] CHOQUETTE, JESSE, CA  
[71] TWEEDY, JEINETTE, CA  
[22] 2020-09-18  
[41] 2022-03-18  
[30] US (17/025,216) 2020-09-18

[21] **3,093,657**  
[13] A1

[51] **Int.Cl. H01M 50/174 (2021.01) H01M 50/244 (2021.01) H01M 50/543 (2021.01) H01M 14/00 (2006.01)**

[25] EN  
[54] **SOLID STATE RECHARGING BATTERY**  
[54] **BATTERIE RECHARGEABLE A SEMICONDUCTEURS**  
[72] BRISTAL, MELVERN, CA  
[71] BRISTAL, MELVERN, CA  
[22] 2020-09-18  
[41] 2022-03-18

[21] **3,093,686**  
[13] A1

[51] **Int.Cl. A23K 50/40 (2016.01) A23K 40/00 (2016.01) A21D 13/40 (2017.01)**

[25] EN  
[54] **WOOFLE DOG/PET TREAT**  
[54] **GATERIE GAUFREE POUR ANIMAL DE COMPAGNIE/WOOFLE DOG**  
[72] PERSON, BASIL J., CA  
[71] PERSON, BASIL J., CA  
[22] 2020-09-19  
[41] 2022-03-19

[21] **3,093,771**  
[13] A1

[51] **Int.Cl. A61B 17/225 (2006.01) A61B 17/22 (2006.01) A61M 3/02 (2006.01)**

[25] EN  
[54] **METHOD AND APPARATUS FOR REMOVAL OF COAGULATED BLOOD FROM THE HUMAN BLADDER BY ULTRASOUND ENERGY**  
[54] **METHODE ET APPAREIL POUR LE RETRAIT DE SANG COAGULE DE LA VESSIE HUMAINE A L'AIDE L'ENERGIE ULTRASONIQUE**  
[72] GOTZ, LASAR, CA  
[71] GOTZ, LASAR, CA  
[22] 2020-09-19  
[41] 2022-03-19

[21] **3,093,933**  
[13] A1

[51] **Int.Cl. F16L 57/00 (2006.01)**

[25] EN  
[54] **GAS MONITOR TUBE LINE ADJUSTABLE PROTECTIVE SHIELDING DEVICE**  
[54] **DISPOSITIF DE PROTECTION AJUSTABLE POUR TUBE DE DETECTEUR DE GAZ**  
[72] EDMUNDS, LYLE W., CA  
[72] CALLAHAN, THOMAS M., CA  
[71] EDMUNDS, LYLE W., CA  
[71] CALLAHAN, THOMAS M., CA  
[22] 2020-09-17  
[41] 2022-03-17

[21] **3,098,385**  
[13] A1

[51] **Int.Cl. H01J 7/24 (2006.01) H01J 5/16 (2006.01) H01J 65/04 (2006.01)**

[25] EN  
[54] **EXCIMER LAMP**  
[54] **LAMPE A EXCIMERE**  
[72] SHAN, XINXIN, CA  
[71] LED SMART INC., CA  
[22] 2020-11-06  
[41] 2022-03-15  
[30] CA (3093096) 2020-09-15

[21] **3,098,746**  
[13] A1

[51] **Int.Cl. H01M 50/204 (2021.01) H01M 10/6551 (2014.01) H01M 50/519 (2021.01)**

[25] EN  
[54] **BATTERY PACK WITH A PLURALITY OF BATTERY CELLS**  
[54] **BLOC-BATTERIE A PLUSIEURS ELEMENTS D'ACCUMULATEUR**  
[72] ZHANG, ZHIXIAN, CN  
[72] SO, CHIT FUNG WYLIE, HK  
[71] LITHIUM POWER INC., US  
[22] 2020-11-10  
[41] 2022-03-15  
[30] US (17/022,041) 2020-09-15

[21] **3,104,096**  
[13] A1

[51] **Int.Cl. A45D 20/10 (2006.01)**

[25] EN  
[54] **HAIR DRYER**  
[54] **SECHOIR A CHEVEUX**  
[72] LIU, TUANFANG, CN  
[71] LIU, TUANFANG, CN  
[22] 2020-12-24  
[41] 2022-03-17  
[30] CN (202010981594.4) 2020-09-17  
[30] CN (202022048710.5) 2020-09-17

[21] **3,105,110**  
[13] A1

[51] **Int.Cl. G06F 30/13 (2020.01) E04F 11/18 (2006.01) G06Q 30/00 (2012.01) H04L 12/16 (2006.01) H04W 4/14 (2009.01)**

[25] EN  
[54] **RAILING CONFIGURATION SYSTEM**  
[54] **SYSTEME DE CONFIGURATION DE GARDE-FOU**  
[72] WALKER, SIMON, CA  
[72] RIAHI, SIAMAK, CA  
[72] MANTEI, ADAM, CA  
[72] LAWSON, CRAIG, CA  
[72] FAGHANI, PEDRAM, CA  
[72] STUART, MICHAEL, CA  
[72] LABBEE, PASCAL, CA  
[71] PEAK INNOVATIONS INC., CA  
[22] 2021-01-07  
[41] 2022-03-18  
[30] US (17/025,195) 2020-09-18

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[21] **3,107,285**

[13] A1

- [51] **Int.Cl. D06F 35/00 (2006.01) A47L 25/00 (2006.01)**  
[25] EN  
[54] **MASK HYGIENE WASH DEVICE**  
[54] **DISPOSITIF DE LAVAGE POUR HYGIENE DE MASQUE**  
[72] CHAN, CONNIE, US  
[72] CHAN, EUNICE, US  
[72] CHAN, DANIEL, US  
[72] TSANG, CLARA, CA  
[72] TSANG, WINNIE, CA  
[71] CHAN, CONNIE, US  
[71] CHAN, EUNICE, US  
[71] CHAN, DANIEL, US  
[71] TSANG, CLARA, CA  
[71] TSANG, WINNIE, CA  
[22] 2021-01-27  
[41] 2022-03-18  
[30] US (63080625) 2020-09-18

[21] **3,112,741**

[13] A1

- [51] **Int.Cl. G02C 11/00 (2006.01) H04W 4/80 (2018.01) G02C 5/14 (2006.01) H05K 5/00 (2006.01)**  
[25] EN  
[54] **MAGNETIC BLUETOOTH EYEGLASSES**  
[54] **LUNETTES BLUETOOTH MAGNETIQUES**  
[72] HUANG, SHUE-YU, TW  
[72] CHENG, HSI-CHOU, TW  
[71] HUANG, SHUE-YU, TW  
[71] CHENG, HSI-CHOU, TW  
[22] 2021-03-22  
[41] 2022-03-17  
[30] TW (109212223) 2020-09-17

[21] **3,113,179**

[13] A1

- [51] **Int.Cl. A61L 9/22 (2006.01)**  
[25] EN  
[54] **ROOM DISINFECTING IONIZATION SYSTEM**  
[54] **SYSTEME D'IONISATION POUR LA DESINFECTION D'UNE PIECE**  
[72] HALDEMAN, ROBERT, US  
[71] HALDEMAN, ROBERT, US  
[22] 2021-03-24  
[41] 2022-03-16  
[30] US (17/022,752) 2020-09-16

[21] **3,115,147**

[13] A1

- [51] **Int.Cl. C12P 19/14 (2006.01) C07H 1/06 (2006.01) C12M 1/02 (2006.01) C12M 1/40 (2006.01) C12P 19/02 (2006.01) C13K 1/02 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR PRODUCING A CARBOHYDRATE STREAM FROM A CELLULOSIC FEEDSTOCK**  
[54] **SYSTEME ET METHODE DE PRODUCTION D'UN FLUX DE GLUCIDES D'UNE CHARGE D'ALIMENTATION CELLULOSIQUE**  
[72] ROBERT, JEFFREY P., US  
[72] JAKEL, NEAL, US  
[72] CANNON, DONALD M., US  
[71] FLUID QUIP TECHNOLOGIES, LLC, US  
[22] 2021-04-14  
[41] 2022-03-14  
[30] US (17/019,696) 2020-09-14

[21] **3,116,391**

[13] A1

- [51] **Int.Cl. C12N 7/01 (2006.01) A61K 48/00 (2006.01) A61P 27/00 (2006.01) C07K 14/015 (2006.01) C07K 14/47 (2006.01) C07K 14/705 (2006.01) C12N 5/10 (2006.01) C12N 15/12 (2006.01) C12N 15/35 (2006.01) C12N 15/864 (2006.01)**  
[25] EN  
[54] **RECOMBINANT ADENO ASSOCIATED VIRUS ENCODING CLARIN-1 AND USES THEREOF**  
[54] **VIRUS ASSOCIE AUX ADENOVIRUS RECOMBINANT CODANT CLARIN-1 ET UTILISATIONS CONNEXES**  
[72] COREY, DAVID P., US  
[72] MAGUIRE, CASEY A., US  
[72] HANLON, KILLIAN S., US  
[72] IVANCHENKO, MARYNA V., US  
[71] PRESIDENT AND FELLOWS OF HARVARD COLLEGE, US  
[71] THE GENERAL HOSPITAL CORPORATION, US  
[22] 2021-04-27  
[41] 2022-03-14  
[30] US (63/078319) 2020-09-14

[21] **3,119,122**

[13] A1

- [51] **Int.Cl. F28D 21/00 (2006.01) F02C 7/06 (2006.01) F02C 7/14 (2006.01) F02C 7/28 (2006.01) F16C 33/72 (2006.01) F28D 11/02 (2006.01) F28F 5/00 (2006.01)**  
[25] EN  
[54] **ROTATING HEAT EXCHANGER**  
[54] **ECHANGEUR DE CHALEUR ROTATIF**  
[72] DIOSADY, LASLO, CA  
[72] ALECU, DANIEL, CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2021-05-18  
[41] 2022-03-15  
[30] US (17/021,547) 2020-09-15

[21] **3,119,378**

[13] A1

- [51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/10 (2020.01) A24F 40/42 (2020.01)**  
[25] EN  
[54] **GLASS ATOMIZER**  
[54] **PULVERISATEUR EN VERRE**  
[72] LIU, TUANFANG, CN  
[71] SHENZHEN EIGATE TECHNOLOGY CO., LTD., CN  
[22] 2021-05-21  
[41] 2022-03-17  
[30] CN (202022043745.X) 2020-09-17

[21] **3,119,381**

[13] A1

- [51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/10 (2020.01)**  
[25] EN  
[54] **GLASS ATOMIZER**  
[54] **PULVERISATEUR EN VERRE**  
[72] LIU, TUANFANG, CN  
[71] SHENZHEN EIGATE TECHNOLOGY CO., LTD., CN  
[22] 2021-05-21  
[41] 2022-03-17  
[30] CN (202022043762.3) 2020-09-17

**Demandes canadiennes mises à la disponibilité du public  
13 mars 2022 au 19 mars 2022**

[21] **3,119,510**  
[13] A1

[51] **Int.Cl. A63B 60/06 (2015.01) A63B 60/46 (2015.01) A63B 53/02 (2015.01) A63B 53/14 (2015.01)**

[25] EN

[54] **CONFIGURABLE GOLFING APPARATUS**

[54] **APPAREIL DE GOLF CONFIGURABLE**

[72] WRIGHT, TIMOTHY N., US

[71] WRIGHT, TIMOTHY N., US

[22] 2021-05-21

[41] 2022-03-14

[30] US (63/077810) 2020-09-14

[30] US (17/199762) 2021-03-12

[21] **3,121,996**  
[13] A1

[51] **Int.Cl. G06F 9/06 (2006.01) G06F 17/00 (2019.01) G06Q 30/00 (2012.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DYNAMIC SCHEDULING OF DATA PROCESSING**

[54] **SYSTEMES ET METHODES DE PLANIFICATION DYNAMIQUE DE TRAITEMENT DE DONNEES**

[72] QURESHI, MOHAMMAD ZEESHAN, CA

[71] SHOPIFY INC., CA

[22] 2021-06-11

[41] 2022-03-14

[30] US (17/020,082) 2020-09-14

[30] EP (21169632.3) 2021-04-21

[21] **3,123,272**  
[13] A1

[51] **Int.Cl. G06F 9/455 (2018.01) G06F 9/448 (2018.01)**

[25] EN

[54] **VIRTUAL MACHINE FOR VIRTUALIZING GRAPHICS FUNCTIONS**

[54] **MACHINE VIRTUELLE POUR VIRTUALISER DES FONCTIONS GRAPHIQUES**

[72] DALE, TIMOTHY JAMES, US

[72] HOTRA, JONATHAN NICHOLAS, US

[72] PATTERSON, GLENN ALAN, US

[72] SOWADSKI, CRAIG, US

[71] THE BOEING COMPANY, US

[22] 2021-06-25

[41] 2022-03-15

[30] US (62/706,878) 2020-09-15

[21] **3,123,375**  
[13] A1

[51] **Int.Cl. B62J 7/04 (2006.01) B62K 27/12 (2006.01)**

[25] EN

[54] **BIKE TRAILER**

[54] **REMORQUE A VELOS**

[72] BRITTON, DANIEL, SE

[72] FAVERO, GARETT, SE

[72] ANDERSSON, STEFAN, SE

[72] MENDES, KARL, SE

[72] ARVIDSSON, ANDREAS, SE

[71] THULE SWEDEN AB, SE

[22] 2021-06-28

[41] 2022-03-18

[30] EP (20196800.5) 2020-09-18

[21] **3,124,866**  
[13] A1

[51] **Int.Cl. C05F 17/90 (2020.01) C02F 11/13 (2019.01) C05F 1/02 (2006.01) F26B 11/22 (2006.01) F26B 17/20 (2006.01) F26B 21/00 (2006.01)**

[25] EN

[54] **DEHYDRATOR FOR BIOLOGICAL MATERIAL**

[54] **DESHYDRATEUR POUR MATIERE BIOLOGIQUE**

[72] BROWN, CALVIN, CA

[72] WIEBE, LYALL, CA

[71] TRIPLE GREEN PRODUCTS INC., CA

[22] 2021-07-19

[41] 2022-03-17

[30] US (63/079,626) 2020-09-17

[21] **3,125,662**  
[13] A1

[51] **Int.Cl. H02J 9/00 (2006.01) H02H 11/00 (2006.01)**

[25] EN

[54] **INTELLIGENT CONTROL SYSTEM, EMERGENCY STARTING POWER SUPPLY, AND INTELLIGENT BATTERY CLIP**

[54] **SYSTEME DE CONTROLE INTELLIGENT, BLOC D'ALIMENTATION DE DEMARRAGE DE SECOURS ET GRIFFE D'ACCUMULATEUR INTELLIGENTE**

[72] LEI, YUN, CN

[72] ZHANG, ZHIFENG, CN

[72] CHENG, MING, CN

[71] SHENZHEN CAR KU TECHNOLOGY CO., LIMITED, CN

[22] 2021-07-22

[41] 2022-03-14

[30] CN (202010963095.2) 2020-09-14

[21] **3,125,803**  
[13] A1

[51] **Int.Cl. F21V 21/14 (2006.01) F21V 21/02 (2006.01) F21V 21/30 (2006.01) F21V 23/06 (2006.01) H02G 3/18 (2006.01)**

[25] EN

[54] **ROTATABLE LIGHT FIXTURE SECURED TO A JUNCTION BOX VIA A BASE**

[54] **APPAREIL D'ECLAIRAGE ROTATIF FIXE A UNE BOITE DE JONCTION AU MOYEN D'UNE BASE**

[72] DIXIT, KUSHAGRA, US

[72] MCDONALD, MILES WILLIAM, US

[72] LUU, LIONEL V., US

[72] TYLICKI, SCOTT BLAISE, US

[72] DEATON, JOHN COLVIN, US

[72] PAREDES, APOLLO PAUL, US

[72] STEVENS, LEEMAN ELLIOT, US

[72] SALHOVIC, AMER, US

[72] THOMPSON, STEPHEN BRETT, US

[71] HEATHCO LLC, US

[22] 2021-07-22

[41] 2022-03-14

[30] US (63/077,848) 2020-09-14

[30] US (17/035,100) 2020-09-28

[21] **3,126,327**  
[13] A1

[51] **Int.Cl. H05B 47/105 (2020.01) H05B 47/115 (2020.01) F21S 9/02 (2006.01) F21V 21/14 (2006.01) H02J 9/00 (2006.01)**

[25] EN

[54] **VARIABLE POWER SUPPLY SECURITY LIGHT WITH CONNECTION PRIORITY**

[54] **LAMPE DE SECURITE A ALIMENTATION VARIABLE AVEC PRIORITE DE CONNEXION**

[72] THOMPSON, STEPHEN BRETT, US

[72] PAREDES, APOLLO PAUL, US

[72] LUU, LIONEL V., US

[72] DEATON, JOHN COLVIN, US

[72] TYLICKI, SCOTT BLAISE, US

[71] HEATHCO LLC, US

[22] 2021-07-29

[41] 2022-03-14

[30] US (63/077,848) 2020-09-14

[30] US (17/211,008) 2021-03-24

**Canadian Applications Open to Public Inspection  
March 13, 2022 to March 19, 2022**

[21] **3,126,332**

[13] A1

- [51] **Int.Cl. H05B 47/10 (2020.01) H05B 45/10 (2020.01) H05B 47/105 (2020.01) F21S 8/04 (2006.01) F21S 9/02 (2006.01) F21S 9/04 (2006.01) F21V 21/14 (2006.01) F21V 23/04 (2006.01) H02J 7/35 (2006.01) H03K 17/687 (2006.01)**
- [25] EN
- [54] **VARIABLE POWER SUPPLY SECURITY LIGHT**
- [54] **LAMPE DE SECURITE A ALIMENTATION VARIABLE**
- [72] THOMPSON, STEPHEN BRETT, US
- [72] PAREDES, APOLLO PAUL, US
- [72] LUU, LIONEL V., US
- [72] DEATON, JOHN COLVIN, US
- [72] TYLICKI, SCOTT BLAISE, US
- [71] HEATHCO LLC, US
- [22] 2021-07-29
- [41] 2022-03-14
- [30] US (63/077,848) 2020-09-14
- [30] US (17/211,005) 2021-03-24

[21] **3,126,479**

[13] A1

- [51] **Int.Cl. G06N 10/00 (2022.01) G06V 10/764 (2022.01) G06V 10/82 (2022.01) G06N 3/02 (2006.01) G06N 3/08 (2006.01)**
- [25] EN
- [54] **MACHINE LEARNING NETWORK FOR SCREENING QUANTUM DEVICES**
- [54] **RESEAU D'APPRENTISSAGE AUTOMATIQUE POUR LA VERIFICATION DE DISPOSITIFS QUANTIQUES**
- [72] MEI, ANTONIO RODOLPH BIGHETTI, US
- [71] THE BOEING COMPANY, US
- [22] 2021-07-29
- [41] 2022-03-18
- [30] US (63/080,560) 2020-09-18

[21] **3,126,777**

[13] A1

- [51] **Int.Cl. H04N 21/6547 (2011.01) H04N 21/40 (2011.01) H04N 21/6334 (2011.01) H04N 21/643 (2011.01) H04N 21/658 (2011.01)**
- [25] EN
- [54] **SYSTEM AND METHOD TO CONTROL A MEDIA CLIENT USING A MESSAGE SERVICE**
- [54] **SYSTEME ET METHODE POUR CONTROLER UN CLIENT DE CONTENU AU MOYEN D'UN SERVICE DE MESSAGERIE**
- [72] MALONEY, CHRIS ADAM, US
- [72] ANDERSON, JOHN CARL, US
- [72] BOURKE, CONNOR FOX, US
- [72] OU, YU CHANG, US
- [72] VENKATANAGA, KEERTHI SAMHITA VEMPATTI, US
- [71] ACCENTURE GLOBAL SOLUTIONS LIMITED, GB
- [22] 2021-08-04
- [41] 2022-03-17
- [30] US (63/079,776) 2020-09-17
- [30] US (17/247,178) 2020-12-02

[21] **3,127,073**

[13] A1

- [51] **Int.Cl. F21V 21/14 (2006.01) F21V 21/02 (2006.01) F21V 21/30 (2006.01) F21V 23/06 (2006.01)**
- [25] EN
- [54] **ROTATIONALLY ADJUSTABLE OUTDOOR SECURITY LIGHT**
- [54] **LAMPE DE SECURITE EXTERIEURE AJUSTABLE SUR LE PLAN ROTATIF**
- [72] PAREDES, APOLLO PAUL, US
- [72] TYLICKI, SCOTT BLAISE, US
- [72] MCDONALD, MILES WILLIAM, US
- [72] DIXIT, KUSHAGRA, US
- [72] LUU, LIONEL V., US
- [72] DEATON, JOHN COLVIN, US
- [71] HEATHCO LLC, US
- [22] 2021-08-05
- [41] 2022-03-14
- [30] US (63/077,848) 2020-09-14
- [30] US (17/211,004) 2021-03-24
- [30] US (17/334,914) 2021-05-31

[21] **3,127,085**

[13] A1

- [51] **Int.Cl. F21V 21/14 (2006.01) H05B 47/115 (2020.01) F21V 21/02 (2006.01) F21V 21/30 (2006.01) F21V 23/06 (2006.01)**
- [25] EN
- [54] **ROTATIONALLY ADJUSTABLE OUTDOOR SECURITY LIGHT**
- [54] **LAMPE DE SECURITE EXTERIEURE AJUSTABLE SUR LE PLAN ROTATIF**
- [72] MCDONALD, MILES WILLIAM, US
- [72] PAREDES, APOLLO PAUL, US
- [72] DIXIT, KUSHAGRA, US
- [72] LUU, LIONEL V., US
- [72] TYLICKI, SCOTT BLAISE, US
- [72] DEATON, JOHN COLVIN, US
- [71] HEATHCO LLC, US
- [22] 2021-08-05
- [41] 2022-03-14
- [30] US (63/077,848) 2020-09-14
- [30] US (17/211,004) 2021-03-24

[21] **3,127,780**

[13] A1

- [51] **Int.Cl. H04W 12/069 (2021.01) H04B 10/114 (2013.01) H04W 4/021 (2018.01) H04W 4/38 (2018.01) G05B 99/00 (2006.01) G08C 17/02 (2006.01) F21S 2/00 (2016.01)**
- [25] EN
- [54] **PHYSICAL VERIFICATION AND AUTHORIZATION FOR WIRELESS CONTROL OF A NETWORK**
- [54] **VERIFICATION PHYSIQUE ET AUTORISATION POUR UN CONTROLE SANS FIL D'UN RESEAU**
- [72] LU, YENPAO ALBERT, US
- [72] SAES, MARC, US
- [72] ABOU-RIZK, MITRI J., US
- [71] ABL IP HOLDING LLC, US
- [22] 2021-08-11
- [41] 2022-03-16
- [30] US (17/022,743) 2020-09-16

**Demandes canadiennes mises à la disponibilité du public**  
**13 mars 2022 au 19 mars 2022**

[21] **3,127,810**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2012.01) G06Q 30/00 (2012.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR CONTROLLING PRODUCT INVENTORY**  
[54] **SYSTEMES ET METHODES POUR CONTROLER UN STOCK DE PRODUITS**  
[72] DEFRANCESCO, NICOLAS, CA  
[72] SLEHTA, STEFAN, CA  
[71] SHOPIFY INC., CA  
[22] 2021-08-11  
[41] 2022-03-18  
[30] US (17/024,939) 2020-09-18

[21] **3,127,822**  
[13] A1

[51] **Int.Cl. G01S 15/89 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR ULTRASONIC CHARACTERIZATION OF A MEDIUM**  
[54] **METHODE ET SYSTEME DE CARACTERISATION ULTRASONIQUE D'UN SUPPORT**  
[72] LAMBERT, WILLIAM, FR  
[72] AUBRY, ALEXANDRE, FR  
[72] FINK, MATHIAS, FR  
[72] FRAPPART, THOMAS, FR  
[71] SUPERSONIC IMAGINE, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE - CNRS -, FR  
[71] ECOLE SUPERIEURE DE PHYSIQUE ET DE CHIMIE INDUSTRIELLES DE LA VILLE DE PARIS, FR  
[22] 2021-08-11  
[41] 2022-03-15  
[30] FR (20/09314) 2020-09-15

[21] **3,127,873**  
[13] A1

[51] **Int.Cl. G01S 15/88 (2006.01) G01S 15/89 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR ULTRASONIC CHARACTERIZATION OF A MEDIUM**  
[54] **METHODE ET SYSTEME DE CARACTERISATION ULTRASONIQUE D'UN SUPPORT**  
[72] LAMBERT, WILLIAM, FR  
[72] AUBRY, ALEXANDRE, US  
[72] FINK, MATHIAS, FR  
[72] FRAPPART, THOMAS, FR  
[71] SUPERSONIC IMAGINE, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[71] ECOLE SUPERIEURE DE PHYSIQUE ET DE CHIMIE INDUSTRIELLES DE LA VILLE DE PARIS (EPC), FR  
[22] 2021-08-11  
[41] 2022-03-15  
[30] FR (20/09311) 2020-09-15

[21] **3,127,900**  
[13] A1

[51] **Int.Cl. G01H 5/00 (2006.01) A61B 8/00 (2006.01) A61B 8/13 (2006.01) A61B 8/14 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR ULTRASONIC CHARACTERIZATION OF A MEDIUM**  
[54] **METHODE ET SYSTEME DE CARACTERISATION ULTRASONIQUE D'UN SUPPORT**  
[72] LAMBERT, WILLIAM, FR  
[72] AUBRY, ALEXANDRE, FR  
[72] FINK, MATHIAS, FR  
[72] FRAPPART, THOMAS, FR  
[71] SUPERSONIC IMAGINE, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE - CNRS -, FR  
[71] ECOLE SUPERIEURE DE PHYSIQUE ET DE CHIMIE INDUSTRIELLES DE LA VILLE DE PARIS, FR  
[22] 2021-08-11  
[41] 2022-03-15  
[30] FR (20/09312) 2020-09-15

[21] **3,127,924**  
[13] A1

[51] **Int.Cl. G01S 15/89 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR ULTRASONIC CHARACTERIZATION OF A MEDIUM**  
[54] **METHODE ET SYSTEME DE CARACTERISATION ULTRASONIQUE D'UN SUPPORT**  
[72] LAMBERT, WILLIAM, FR  
[72] AUBRY, ALEXANDRE, FR  
[72] FINK, MATHIAS, FR  
[72] FRAPPART, THOMAS, FR  
[72] BUREAU, FLAVIEN, FR  
[71] SUPERSONIC IMAGINE, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE - CNRS -, FR  
[71] ECOLE SUPERIEURE DE PHYSIQUE ET DE CHIMIE INDUSTRIELLES DE LA VILLE DE PARIS, FR  
[22] 2021-08-11  
[41] 2022-03-15  
[30] FR (20/09313) 2020-09-15

[21] **3,127,946**  
[13] A1

[51] **Int.Cl. G01B 21/02 (2006.01) G01S 17/04 (2020.01) A01B 76/00 (2006.01)**  
[25] FR  
[54] **PROCEDURE FOR RELIABLE DETECTION, FROM THE UPPER EDGE OF THE HEADING FACE, OF A VARIETY OF ANIMAL FEEDING PRODUCTS FROM A SAMPLING VEHICLE, SUCH A VEHICLE ALLOWING THE IMPLEMENTATION OF SAID PROCEDURE**  
[54] **PROCEDE PERMETTANT UNE DETECTION FIABLE DU BORD SUPERIEUR DU FRONT D'ATTAQUE D'UN TAS DE PRODUIT(S) POUR L'ALIMENTATION ANIMALE, A PARTIR D'UN VEHICULE DE PRELEVEMENT ET UN TEL VEHICULE PERMETTANT LA MISE EN OEUVRE DUDIT PROCEDE**  
[72] LEGRAND, ADRIEN, FR  
[72] GUIDAULT, LEANDRE, FR  
[71] KUHN-AUDUREAU SAS, FR  
[22] 2021-08-12  
[41] 2022-03-14  
[30] FR (2009281) 2020-09-14

**Canadian Applications Open to Public Inspection  
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[21] **3,128,175**  
[13] A1

[51] **Int.Cl. A61M 29/00 (2006.01) A61M 25/092 (2006.01)**  
[25] EN  
[54] **ELONGATED MEDICAL DILATOR INCLUDING A STIFFNESS-CONTROL DEVICE**  
[54] **DILATATEUR MEDICAL ALLONGE COMPRENANT UN DISPOSITIF DE CONTROLE DE LA RIGIDITE**  
[72] MORIYAMA, EDUARDO, CA  
[72] LAU, KAYLIE, CA  
[72] QUACH, CARLINE, CA  
[71] BAYLIS MEDICAL COMPANY INC., CA  
[22] 2021-08-13  
[41] 2022-03-15  
[30] US (63/078,388) 2020-09-15

[21] **3,128,529**  
[13] A1

[51] **Int.Cl. C08K 3/015 (2018.01) B32B 27/18 (2006.01) C08K 3/04 (2006.01) C08K 3/22 (2006.01) C08L 27/06 (2006.01) C08L 101/12 (2006.01)**  
[25] EN  
[54] **GRAPHENE-BASED ANTIVIRAL POLYMER**  
[54] **POLYMERE ANTIVIRAL A BASE DE GRAPHENE**  
[72] REDDY, MURALI MOHAN, CA  
[72] FARRAR, GREGORY JAMES, CA  
[71] CPK INTERIOR PRODUCTS INC., CA  
[22] 2021-08-16  
[41] 2022-03-18  
[30] US (63/080,417) 2020-09-18

[21] **3,128,544**  
[13] A1

[51] **Int.Cl. A63F 3/00 (2006.01)**  
[25] EN  
[54] **GAME APPARATUS AND USE**  
[54] **APPAREIL DE JEU ET UTILISATION**  
[72] SULLIVAN, COLLEEN, US  
[71] SULLIVAN, COLLEEN, US  
[22] 2021-08-17  
[41] 2022-03-14  
[30] US (63/077,915) 2020-09-14

[21] **3,128,841**  
[13] A1

[51] **Int.Cl. A61M 25/01 (2006.01) A61M 25/092 (2006.01) A61M 25/10 (2013.01)**  
[25] EN  
[54] **MEDICAL CATHETER ASSEMBLY HAS CURVE-ADJUSTING DEVICE**  
[54] **ASSEMBLAGE DE CATHETER MEDICAL COMPRENANT UN DISPOSITIF D'AJUSTEMENT DE COURBE**  
[72] MORIYAMA, EDUARDO, CA  
[72] QUACH, CARLINE, CA  
[71] BAYLIS MEDICAL COMPANY INC., CA  
[22] 2021-08-25  
[41] 2022-03-15  
[30] US (63/078,524) 2020-09-15

[21] **3,129,074**  
[13] A1

[51] **Int.Cl. H05K 5/02 (2006.01) H05B 47/115 (2020.01) F21V 15/01 (2006.01) F21V 21/30 (2006.01)**  
[25] EN  
[54] **ADJUSTABLE SPHERICAL MOTION SENSOR HOUSING FOR OUTDOOR SECURITY LIGHT**  
[54] **LOGEMENT DE CAPTEUR DE MOUVEMENT SPHERIQUE AJUSTABLE POUR LAMPE DE SECURITE EXTERIEURE**  
[72] MCDONALD, MILES WILLIAM, US  
[72] DIXIT, KUSHAGRA, US  
[72] TYLICKI, SCOTT BLAISE, US  
[72] PAREDES, APOLLO PAUL, US  
[72] LUU, LIONEL V., US  
[72] DEATON, JOHN COLVIN, US  
[71] HEATHCO LLC, US  
[22] 2021-08-26  
[41] 2022-03-14  
[30] US (63/077,848) 2020-09-14  
[30] US (17/334,918) 2021-05-31

[21] **3,129,083**  
[13] A1

[51] **Int.Cl. G01P 13/00 (2006.01) F21V 21/30 (2006.01) F21S 8/04 (2006.01)**  
[25] EN  
[54] **SPERICAL MOTION SENSOR HOUSING FOR OUTDOOR SECURITY LIGHT**  
[54] **LOGEMENT DE CAPTEUR DE MOUVEMENT SPHERIQUE POUR LAMPE DE SECURITE EXTERIEURE**  
[72] MCDONALD, MILES WILLIAM, US  
[72] DIXIT, KUSHAGRA, US  
[72] TYLICKI, SCOTT BLAISE, US  
[72] PAREDES, APOLLO PAUL, US  
[72] LUU, LIONEL V., US  
[72] DEATON, JOHN COLVIN, US  
[71] HEATHCO LLC, US  
[22] 2021-08-26  
[41] 2022-03-14  
[30] US (63/077,848) 2020-09-14  
[30] US (17/334,917) 2021-05-31

[21] **3,129,144**  
[13] A1

[51] **Int.Cl. G01B 11/02 (2006.01) B64F 5/60 (2017.01) B64C 1/12 (2006.01) F16B 29/00 (2006.01) F16B 39/28 (2006.01) G01B 11/08 (2006.01)**  
[25] EN  
[54] **EDDIE-BOLT INSPECTION TOOL**  
[54] **OUTIL D'INSPECTION D'EDDIE-BOLT**  
[72] TERRY, ALYSSA MARIE, US  
[72] MILETTO, STEVEN WADE, US  
[72] GUEVARA, ALONDRA RENEE, US  
[72] GOLSON, JACK P., US  
[72] LODEN, DUSTIN, US  
[71] LOCKHEED MARTIN CORPORATION, US  
[22] 2021-08-27  
[41] 2022-03-18  
[30] US (17/025,579) 2020-09-18

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**13 mars 2022 au 19 mars 2022**

[21] **3,129,457**  
 [13] A1

[51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/10 (2020.01)**  
 [25] EN  
 [54] **ATOMIZER AND E-CIGARETTE COMPRISING THE SAME**  
 [54] **VAPORISATEUR ET CIGARETTE ELECTRONIQUE LE COMPRENANT**  
 [72] LIU, TUANFANG, CN  
 [71] SHENZHEN EIGATE TECHNOLOGY CO., LTD., CN  
 [22] 2021-08-31  
 [41] 2022-03-17  
 [30] CN (202010981307.X) 2020-09-17  
 [30] CN (202010981599.7) 2020-09-17  
 [30] CN (202022048684.6) 2020-09-17  
 [30] CN (202110361302.1) 2021-04-02  
 [30] CN (202120678278.X) 2021-04-02

[21] **3,129,560**  
 [13] A1

[51] **Int.Cl. C09K 8/36 (2006.01) E21B 21/00 (2006.01)**  
 [25] EN  
 [54] **IMPROVED INVERT EMULSIFIER FOR USE IN INVERT EMULSION DRILLING FLUIDS**  
 [54] **EMULSIFIANT INVERSE AMELIORE A UTILISER DANS LES FLUIDES DE FORAGE A EMULSION INVERSE**  
 [72] PATEL, ARVIND, US  
 [72] SINGH, ANIL KUMAR, IN  
 [72] INDULKAR, SAKSHI, IN  
 [72] GUPTA, VIVEK, IN  
 [72] BIDWAI, NIKHIL, IN  
 [72] DEWALKAR, KARTIKI, IN  
 [72] KSHIRSAGAR, VIJAY, IN  
 [71] GUMPRO DRILLING FLUIDS PVT. LTD., IN  
 [22] 2021-08-31  
 [41] 2022-03-18  
 [30] IN (202021040521) 2020-09-18

[21] **3,129,566**  
 [13] A1

[51] **Int.Cl. B65H 19/10 (2006.01)**  
 [25] EN  
 [54] **DEVICE AND METHOD FOR SPLICING AND CONTINUOUSLY PROVIDING A FILM WEB**  
 [54] **DISPOSITIF ET METHODE POUR COLLER ET FOURNIR DE FACON CONTINUE UNE TOILE DE FILM**  
 [72] THIENST, ANDREAS, DE  
 [72] WALKER, TIM, DE  
 [71] HARRO HOFFLIGER VERPACKUNGSMASCHINEN GMBH, DE  
 [22] 2021-08-31  
 [41] 2022-03-14  
 [30] EP (20 196 066.3) 2020-09-14

[21] **3,129,786**  
 [13] A1

[51] **Int.Cl. C07C 309/15 (2006.01) B01D 15/08 (2006.01) C02F 1/54 (2006.01) C02F 5/00 (2006.01)**  
 [25] EN  
 [54] **METHOD FOR THE PURIFICATION OF ACRYLAMIDO-2-METHYL-2-PROPANESULPHONIC ACID**  
 [54] **METHODE D'EPURATION D'ACIDE ACRYLAMIDO-2-METHYL-2-PROPANESULPHONIQUE**  
 [72] FAVERO, CEDRICK, FR  
 [72] KIEFFER, JOHANN, FR  
 [72] LEGRAS, BENOIT, FR  
 [72] DOUDIN, RAPHAEL, FR  
 [71] SPCM SA, FR  
 [22] 2021-09-02  
 [41] 2022-03-18  
 [30] FR (2009493) 2020-09-18

[21] **3,129,809**  
 [13] A1

[51] **Int.Cl. F21V 23/06 (2006.01) F21V 15/01 (2006.01) F21V 17/00 (2006.01) H01R 13/42 (2006.01) F21V 21/30 (2006.01)**  
 [25] EN  
 [54] **MECHANICAL AND ELECTRICAL INTERFACE FOR SECURITY LIGHT MOUNTING**  
 [54] **INTERFACE MECANIQUE ET ELECTRIQUE POUR SUPPORT DE LAMPE DE SECURITE**  
 [72] MCDONALD, MILES WILLIAM, US  
 [72] DIXIT, KUSHAGRA, US  
 [72] TYLICKI, SCOTT BLAISE, US  
 [72] PAREDES, APOLLO PAUL, US  
 [72] LUU, LIONEL V., US  
 [72] DEATON, JOHN COLVIN, US  
 [71] HEATHCO LLC, US  
 [22] 2021-09-02  
 [41] 2022-03-14  
 [30] US (63/077,848) 2020-09-14  
 [30] US (17/211,004) 2021-03-24  
 [30] US (17/334,931) 2021-05-31

[21] **3,129,810**  
 [13] A1

[25] EN  
 [54] **METHOD AND SYSTEM FOR TIME-DOMAIN INTEGRATION OF BROADBAND TERAHERTZ PULSES**  
 [54] **METHODE ET SYSTEME POUR INTEGRATION TEMPS-DOMAIN DES IMPULSIONS DE TERAHERTZ DE LARGE BANDE**  
 [72] TOMASINO, ALESSANDRO, CA  
 [72] BALISTRERI, GIACOMO, CA  
 [72] DONG, JUNLIANG, CA  
 [72] JESTIN, YOANN, CA  
 [72] YURTSEVER, AYCAN, CA  
 [72] AZANA, JOSE, CA  
 [72] MORANDOTTI, ROBERTO, CA  
 [71] INSTITUT NATIONAL DE LA RECHERCHE SCIENTIFIQUE, CA  
 [22] 2021-09-02  
 [41] 2022-03-14  
 [30] US (63/078,095) 2020-09-14

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[21] **3,129,971**  
[13] A1

[51] **Int.Cl. F16L 41/04 (2006.01) F16L 41/06 (2006.01)**  
[25] EN  
[54] **A METHOD AND SYSTEM FOR PRESSURE PIPE DRILLING CEMENT-MORTAR LINED AND COATED STEEL CYLINDERS**  
[54] **METHODE ET SYSTEME POUR LE FORAGE A CONDUITE SOUS PRESSION DE CYLINDRES EN ACIER CHEMISES ET REVETUS D'UNE MATIERE DE CIMENT-MORTIER**  
[72] GAGNON, GILLES, CA  
[72] DAVISON, MICHAEL, CA  
[72] BUREAU, MARTIN, CA  
[71] SANEXEN ENVIRONMENTAL SERVICES INC., CA  
[22] 2021-09-03  
[41] 2022-03-18  
[30] US (63/080,022) 2020-09-18

[21] **3,129,993**  
[13] A1

[51] **Int.Cl. F16D 3/60 (2006.01) F02C 7/32 (2006.01) F02C 7/36 (2006.01)**  
[25] EN  
[54] **COUPLING AND ASSOCIATED METHOD OF TRANSFERRING TORQUE**  
[54] **COUPLAGE ET METHODE CONNEXE DE TRANSFERT DE COUPLE**  
[72] ALECU, DANIEL, CA  
[72] CONCIATORI, MICHAEL, CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2021-09-03  
[41] 2022-03-16  
[30] US (17/022,203) 2020-09-16

[21] **3,130,323**  
[13] A1

[51] **Int.Cl. E04F 13/076 (2006.01) E04C 2/40 (2006.01)**  
[25] EN  
[54] **INTERLOCKING SIDING PANEL**  
[54] **PANNEAU DE REVETEMENT IMBRIQUE**  
[72] MAISONNEUVE, JOCELYN, CA  
[71] OTTAWA ALUMINUM MANUFACTURERS, CA  
[22] 2021-09-10  
[41] 2022-03-17  
[30] US (63/079,641) 2020-09-17

[21] **3,130,427**  
[13] A1

[51] **Int.Cl. C22B 3/08 (2006.01) C22B 1/14 (2006.01) C22B 3/44 (2006.01) C22B 15/00 (2006.01)**  
[25] EN  
[54] **EXTRACTING BASE METALS USING A WETTING AGENT AND A THIOCARBONYL FUNCTIONAL GROUP REAGENT**  
[54] **EXTRACTION DE METAUX DE BASE AU MOYEN D'UN MOUILLANT ET D'UN REACTIF DU GROUPE FONCTIONNEL THIOCARBONYL**  
[72] REN, ZIHE, CA  
[72] MORA HUERTAS, NELSON, US  
[72] DIXON, DAVID G., CA  
[72] ASSELIN, EDOUARD, CA  
[71] THE UNIVERSITY OF BRITISH COLUMBIA, CA  
[22] 2021-09-10  
[41] 2022-03-18  
[30] US (63/080,578) 2020-09-18  
[30] US (63/212,518) 2021-06-18

[21] **3,130,430**  
[13] A1

[51] **Int.Cl. C22B 3/08 (2006.01) C22B 1/14 (2006.01) C22B 3/44 (2006.01) C22B 15/00 (2006.01)**  
[25] EN  
[54] **EXTRACTION OF BASE METALS USING CARBONACEOUS MATTER AND A THIOCARBONYL FUNCTIONAL GROUP REAGENT**  
[54] **EXTRACTION DE METAUX DE BASE AU MOYEN D'UNE MATIERE CARBONEE ET D'UN REACTIF DU GROUPE FONCTIONNEL THIOCARBONYL**  
[72] REN, ZIHE, CA  
[72] MORA HUERTAS, NELSON, US  
[72] DIXON, DAVID G., CA  
[72] ASSELIN, EDOUARD, CA  
[71] THE UNIVERSITY OF BRITISH COLUMBIA, CA  
[22] 2021-09-10  
[41] 2022-03-18  
[30] US (63/080,549) 2020-09-18

[21] **3,130,440**  
[13] A1

[51] **Int.Cl. F16K 3/02 (2006.01) F16K 3/30 (2006.01)**  
[25] EN  
[54] **KNIFE VALVE**  
[54] **ROBINET-VANNE A GUILLOTINE**  
[72] MIRABAL WEHRLI, REUBEN EUGENE, US  
[72] SCHERBIK, JAY, US  
[72] SALVICCIO, VINCENT JAMES, US  
[72] DIDIER, JACOB, US  
[71] WEIR PUMP AND VALVE SOLUTIONS INC., US  
[22] 2021-09-10  
[41] 2022-03-14  
[30] US (63/077,891) 2020-09-14  
[30] AU (2020903841) 2020-10-23

[21] **3,130,496**  
[13] A1

[51] **Int.Cl. F16B 12/10 (2006.01) A47B 47/00 (2006.01) A47B 96/06 (2006.01)**  
[25] EN  
[54] **CONNECTING ELEMENT FOR A PIECE OF FURNITURE, PLUG-IN SYSTEM COMPRISING SUCH A CONNECTING ELEMENT AND A METHOD OF ASSEMBLING A PIECE OF FURNITURE**  
[54] **ELEMENT DE CONNEXION POUR UNE PIECE DE MOBILIER, SYSTEME BRANCHEMENT COMPRENANT UN TEL ELEMENT DE CONNEXION ET METHODE D'ASSEMBLAGE D'UNE PIECE DE MOBILIER**  
[72] DIEZ, STEFAN, DE  
[71] TOPSTAR GMBH, DE  
[22] 2021-09-10  
[41] 2022-03-14  
[30] DE (DE 10 2020 123 839.8) 2020-09-14

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[21] **3,130,497**  
[13] A1

[51] **Int.Cl. F04D 27/02 (2006.01) F01D 17/16 (2006.01) F02C 9/22 (2006.01) F04D 27/00 (2006.01) F04D 29/46 (2006.01) G05B 11/42 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEM FOR CONTROL OF COMPRESSORS WITH BOTH VARIABLE SPEED AND GUIDE VANES POSITION**

[54] **METHODES ET SYSTEME POUR CONTROLER DES COMPRESSEURS A VITESSE VARIABLE ET A POSITION VARIABLE DES AUBES DIRECTRICES**

[72] BELLONI, STEFANO, US

[71] COMPRESSOR CONTROLS CORPORATION, US

[22] 2021-09-13

[41] 2022-03-17

[30] US (63/079,607) 2020-09-17

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[21] **3,130,523**  
[13] A1

[51] **Int.Cl. F23D 14/70 (2006.01) F23D 11/24 (2006.01) F23D 11/40 (2006.01) F23D 14/02 (2006.01) F23D 14/62 (2006.01)**

[25] EN

[54] **COMBUSTION HEAD FOR A BURNER**

[54] **TETE DE COMBUSTION POUR UN BRULEUR**

[72] COMENCINI, FLAVIO, IT

[72] DALLA BENETTA, ANDREA, IT

[72] MARCONCINI, FILIPPO, IT

[72] MARCHETTI, ROBERTO, IT

[71] RIELLO S.P.A., IT

[22] 2021-09-13

[41] 2022-03-14

[30] IT (10202000021688) 2020-09-14

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[21] **3,130,540**  
[13] A1

[51] **Int.Cl. A47B 97/00 (2006.01) A47B 53/02 (2006.01) F16P 3/14 (2006.01)**

[25] EN

[54] **STORAGE SYSTEM**

[54] **SYSTEME DE STOCKAGE**

[72] VAN DER VELDEN, SILVESTER HELENA GERARDUS ROLAND, NL

[71] BRUYNZEEL STORAGE SYSTEMS, NL

[22] 2021-09-13

[41] 2022-03-16

[30] NL (2026479) 2020-09-16

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[21] **3,130,586**  
[13] A1

[51] **Int.Cl. E04D 13/076 (2006.01)**

[25] EN

[54] **GUTTER COVER WITH FOLDS AND GUTTER ASSEMBLY INCLUDING THE SAME**

[54] **COUVERCLE DE GOUTTIERE AVEC PLIS ET ASSEMBLAGE DE GOUTTIERE LE COMPRENANT**

[72] BROCHU, STEPHANE, CA

[71] BROCHU, STEPHANE, CA

[22] 2021-09-13

[41] 2022-03-15

[30] US (63/078,424) 2020-09-15

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[21] **3,130,595**  
[13] A1

[51] **Int.Cl. A61B 17/00 (2006.01) A61B 17/068 (2006.01) A61B 17/072 (2006.01)**

[25] EN

[54] **ARTICULATION MECHANISM FOR SURGICAL STAPLING DEVICE**

[54] **MECANISME D'ARTICULATION POUR UNE AGRAFEUSE CHIRURGICALE**

[72] WILLIAMS, JUSTIN, US

[71] COVIDIEN LP, US

[22] 2021-09-13

[41] 2022-03-16

[30] US (17/022,251) 2020-09-16

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[21] **3,130,600**  
[13] A1

[51] **Int.Cl. F16C 7/00 (2006.01) B64C 25/02 (2006.01) F16C 3/02 (2006.01) F16S 3/00 (2006.01)**

[25] EN

[54] **IMPACT SHIELD FOR SHAFT ASSEMBLY**

[54] **PROTECTEUR CONTRE LES IMPACTS POUR UN ENSEMBLE ARBRE**

[72] BAIRD, BRADLEY WILLIAM, CA

[72] BERNARD, JAMES WILLIAM, GB

[71] GOODRICH CORPORATION, US

[22] 2021-09-13

[41] 2022-03-14

[30] GB (2014395.4) 2020-09-14

[30] US (16/950,048) 2020-11-17

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[21] **3,130,610**  
[13] A1

[51] **Int.Cl. B24B 41/00 (2006.01)**

[25] EN

[54] **BILATERAL ABRASIVE DISC PAD**

[54] **DISQUE ABRASIF BILATERAL**

[72] GUCTEKIN, AKIN, TR

[71] UCER ZIMPARA TASI SAN.VE TIC.LTD.STI., TR

[22] 2021-09-13

[41] 2022-03-16

[30] US (63/079,198) 2020-09-16

[30] US (17/173,472) 2021-02-11

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[21] **3,130,621**  
[13] A1

[51] **Int.Cl. H01M 10/633 (2014.01)**

[25] FR

[54] **PROCESS AND DEVICE FOR THE THERMAL MANAGEMENT OF A BATTERY**

[54] **PROCEDE ET DISPOSITIF DE GESTION DU COMPORTEMENT THERMIQUE D'UNE BATTERIE**

[72] GUILLET, NICOLAS, FR

[71] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, FR

[22] 2021-09-14

[41] 2022-03-15

[30] FR (2009305) 2020-09-15

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[21] **3,130,643**  
[13] A1

[51] **Int.Cl. D21F 1/66 (2006.01)**

[25] EN

[54] **DEWATERING BOX COVER**

[54] **COUVERCLE DE BOITIER DE DESHYDRATATION**

[72] KENNEDY, THEODORE D., US

[72] ZIMMERMANN, DONALD KENNETH, US

[71] FIRST QUALITY TISSUE, LLC, US

[22] 2021-09-14

[41] 2022-03-15

[30] US (63/078,412) 2020-09-15

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[21] **3,130,654**  
[13] A1

[51] **Int.Cl. G01N 1/02 (2006.01) G01N 1/04 (2006.01) G01N 1/10 (2006.01)**

[25] EN

[54] **SAMPLE COLLECTION APPARATUS AND USES THEREOF**

[54] **APPAREIL DE COLLECTE D'ECHANTILLONS ET UTILISATIONS CONNEXES**

[72] HAJ-AHMAD, YOUSEF, CA

[71] NORGEN BIOTEK CORP., CA

[22] 2021-09-13

[41] 2022-03-15

[30] US (63/078,605) 2020-09-15

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[21] **3,130,683**  
[13] A1

[51] **Int.Cl. A61K 8/365 (2006.01) A61L 2/18 (2006.01) A61P 31/02 (2006.01) A61Q 15/00 (2006.01)**

[25] EN

[54] **PREPARATION FOR TREATING BODY ODOR**

[54] **PREPARATION POUR LE TRAITEMENT DES ODEURS CORPORELLES**

[72] FARRELL, RAE ROBERT, CA

[71] ASSURED HYGIENE PRODUCTS LTD., CA

[22] 2021-09-13

[41] 2022-03-14

[30] US (63/077,900) 2020-09-14

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[21] **3,130,720**  
[13] A1

[51] **Int.Cl. E05B 73/00 (2006.01) E05B 65/00 (2006.01) F16M 11/04 (2006.01) F16M 13/02 (2006.01)**

[25] EN

[54] **LOCKABLE COUPLING DEVICE**

[54] **DISPOSITIF DE RACCORD VERROUILLABLE**

[72] BOUCHARD, CARL, CA

[71] TECHNOLOGIES CGC INC., CA

[22] 2021-09-14

[41] 2022-03-14

[30] US (63/078,021) 2020-09-14

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[21] **3,130,722**  
[13] A1

[51] **Int.Cl. G06N 3/02 (2006.01) G06N 3/04 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR SIMULATING DYNAMICAL SYSTEMS VIA SYNAPTIC DESCENT IN ARTIFICIAL NEURAL NETWORKS**

[54] **METHODES ET SYSTEMES DE SIMULATION DE SYSTEMES DYNAMIQUES AU MOYEN D'UNE DESCENTE SYNAPTIQUE DANS LES RESEAUX NEURONAUX ARTIFICIELS**

[72] VOELKER, AARON, CA

[72] ELIASMITH, CHRISTOPHER DAVID, CA

[71] APPLIED BRAIN RESEARCH INC., CA

[22] 2021-09-14

[41] 2022-03-14

[30] US (63/078,200) 2020-09-14

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[21] **3,130,762**  
[13] A1

[51] **Int.Cl. B60K 6/52 (2007.10) B60K 6/543 (2007.10)**

[25] EN

[54] **HYBRID POWER SYSTEM AND ALL-TERRAIN VEHICLE**

[54] **SYSTEME D'ALIMENTATION HYBRIDE ET VEHICULE TOUT-TERRAIN**

[72] DONG, ZHEN, CN

[72] YAN, SHUTING, CN

[71] SEGWAY TECHNOLOGY CO., LTD., CN

[22] 2021-09-14

[41] 2022-03-14

[30] CN (202010961679.6) 2020-09-14

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[21] **3,130,779**  
[13] A1

[51] **Int.Cl. B60B 35/12 (2006.01) B60B 35/02 (2006.01) B60K 17/02 (2006.01) B60K 23/08 (2006.01)**

[25] EN

[54] **AXLE AND VEHICLE**

[54] **ESSIEU ET VEHICULE**

[72] CHEN, SHANGJIAN, CN

[72] DENG, ZHENGCHANG, CN

[71] SEGWAY TECHNOLOGY CO., LTD., CN

[22] 2021-09-14

[41] 2022-03-17

[30] CN (202022053046.3) 2020-09-17

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[21] **3,130,783**  
[13] A1

[51] **Int.Cl. B60G 3/20 (2006.01) B60G 7/00 (2006.01)**

[25] EN

[54] **VEHICLE**

[54] **VEHICULE**

[72] DONG, ZHEN, CN

[72] YAN, SHUTING, CN

[71] SEGWAY TECHNOLOGY CO., LTD., CN

[22] 2021-09-14

[41] 2022-03-15

[30] CN (202022025509.5) 2020-09-15

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[21] **3,130,818**  
[13] A1

[51] **Int.Cl. F01D 25/30 (2006.01) F01D 9/02 (2006.01) F01D 25/24 (2006.01) F02K 1/46 (2006.01) F02K 1/78 (2006.01)**

[25] EN

[54] **EXHAUST DUCT OF GAS TURBINE ENGINE**

[54] **CONDUIT D'EVACUATION D'UNE TURBINE A GAZ**

[72] KASSAB, RABIH, CA

[71] PRATT & WHITNEY CANADA CORP., CA

[22] 2021-09-14

[41] 2022-03-17

[30] US (17/023,945) 2020-09-17

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[21] **3,130,861**  
[13] A1

[51] **Int.Cl. E21B 23/00 (2006.01) E21B 23/06 (2006.01)**

[25] EN

[54] **UNIFIED SETTING TOOL AND WIRELINE ADAPTER KIT**

[54] **OUTIL DE POSE ET TROUSSE D'ADAPTATEUR FILAIRE**

[72] PENDSE, BHUSHAN, US

[72] ALTEIRAC, LAURENT, US

[72] GRAHAM, ROBERT M., US

[71] SCHLUMBERGER CANADA LIMITED, CA

[22] 2021-09-14

[41] 2022-03-14

[30] US (63/077767) 2020-09-14

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[21] **3,130,912**  
 [13] A1

[51] **Int.Cl. A61B 5/22 (2006.01) A61B 5/11 (2006.01)**  
 [25] EN  
 [54] **PORTABLE NECK STRENGTH TESTING DEVICE**  
 [54] **DISPOSITIF D'ESSAI PORTATIF DE LA FORCE DU COU**  
 [72] FURTADO, MARTIN DANIEL, CA  
 [72] FURTADO, ANTONIO DUARTE, CA  
 [71] FURTADO, MARTIN DANIEL, CA  
 [71] FURTADO, ANTONIO DUARTE, CA  
 [22] 2021-09-15  
 [41] 2022-03-15  
 [30] US (63/078,843) 2020-09-15

[21] **3,130,915**  
 [13] A1

[51] **Int.Cl. C25B 15/08 (2006.01) C01B 32/60 (2017.01) C01F 5/24 (2006.01) C25B 1/04 (2021.01)**  
 [25] EN  
 [54] **METHOD AND SYSTEM FOR CO2 EMISSION REDUCTION IN THE PRODUCTION OF CHEMICAL COMPOUNDS**  
 [54] **METHODE ET SYSTEME DE REDUCTION DES EMISSIONS DE CO2 DANS LA PRODUCTION DE COMPOSES CHIMIQUES**  
 [72] RAU, GREGORY HUDSON, US  
 [71] PLANETARY HYDROGEN INC., CA  
 [22] 2021-09-15  
 [41] 2022-03-15  
 [30] US (17/243,499) 2021-04-28  
 [30] US (63/078,679) 2020-09-15

[21] **3,130,936**  
 [13] A1

[51] **Int.Cl. H02G 3/04 (2006.01) B05B 7/30 (2006.01) B05D 1/02 (2006.01) B05D 1/06 (2006.01) F16L 9/00 (2006.01) F16L 9/02 (2006.01) F16L 9/12 (2006.01)**  
 [25] EN  
 [54] **EASY PULL ELECTRICAL CONDUIT**  
 [54] **CONDUITE ELECTRIQUE FACILE A RETIRER**  
 [72] NIES, JERRY W., US  
 [72] POTTER, BARTON C., US  
 [72] DAGGULA, MANIKANTHA R., US  
 [72] BOLDING, KENNETH R., US  
 [71] PENN ALUMINUM INTERNATIONAL LLC, US  
 [22] 2021-09-15  
 [41] 2022-03-16  
 [30] US (63/079,289) 2020-09-16  
 [30] US (17/474,439) 2021-09-14

[21] **3,130,942**  
 [13] A1

[51] **Int.Cl. G07C 9/29 (2020.01) G01S 11/00 (2006.01) G01S 11/06 (2006.01)**  
 [25] EN  
 [54] **ACCESS CONTROL WITH READER TO READER COMMUNICATION**  
 [54] **CONTROLE D'ACCES AVEC COMMUNICATION LECTEUR A LECTEUR**  
 [72] SHAIKH, NADEEM, IN  
 [72] LINGALA, RAMESH, IN  
 [72] NANDA, AVINEET, IN  
 [72] THAKUR, ANIL KUMAR, IN  
 [72] NOVOZHENETS, YURI, US  
 [71] CARRIER CORPORATION, US  
 [22] 2021-09-15  
 [41] 2022-03-18  
 [30] US (62/706,925) 2020-09-18

[21] **3,130,946**  
 [13] A1

[51] **Int.Cl. F23L 13/00 (2006.01) F16K 51/00 (2006.01) F23J 13/00 (2006.01)**  
 [25] EN  
 [54] **FLUE DAMPER WITH A DRAINAGE PORT**  
 [54] **REGISTRE DE TIRAGE CLAPET AVEC ORIFICE DE DRAINAGE**  
 [72] LUNDBERG, MARK R., US  
 [72] WEISS, CORY A., US  
 [72] GLOVER, KYLE R., US  
 [71] FIELD CONTROLS, L.L.C., US  
 [22] 2021-09-15  
 [41] 2022-03-16  
 [30] US (17/023,030) 2020-09-16

[21] **3,130,948**  
 [13] A1

[51] **Int.Cl. A61C 13/00 (2006.01) A61C 9/00 (2006.01)**  
 [25] EN  
 [54] **METHOD FOR GENERATING A CAM DATASET**  
 [54] **METHODE DE PRODUCTION D'UN ENSEMBLE DE DONNEES CAM**  
 [72] GEIER, MARKUS, IT  
 [72] MITTERHOFER, MARTIN, IT  
 [71] IVOCLAR VIVADENT AG, LI  
 [22] 2021-09-15  
 [41] 2022-03-16  
 [30] EP (20 196 430.1) 2020-09-16

[21] **3,130,949**  
 [13] A1

[51] **Int.Cl. A01K 1/03 (2006.01)**  
 [25] EN  
 [54] **CAGE FOR HOUSING LABORATORY ANIMALS**  
 [54] **CAGE POUR LOGER DES ANIMAUX DE LABORATOIRE**  
 [72] TAMBORINI, DIEGO, IT  
 [72] CICERI, FABIO, IT  
 [72] BERNARDINI, PIETRO, IT  
 [71] TECNIPLAST S.P.A., IT  
 [22] 2021-09-15  
 [41] 2022-03-18  
 [30] IT (10202000022057) 2020-09-18

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[21] **3,130,960**  
[13] A1

[51] **Int.Cl. G01N 1/28 (2006.01) B01J 25/00 (2006.01)**  
[25] EN  
[54] **MICROTOME BLADE GUARD WITH INTEGRATED BLADE ALIGNMENT DEVICE**  
[54] **CARTER DE LAME DE MICROTOME AVEC DISPOSITIF D'ALIGNEMENT DE LAME INTEGRE**  
[72] DIRKS, LAWRENCE H., US  
[71] SAKURA FINETEK U.S.A., INC., US  
[22] 2021-09-15  
[41] 2022-03-18  
[30] US (17/025937) 2020-09-18

[21] **3,130,961**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR FACILITATING LOCATION-BASED INTERACTIONS BY REDUCING INTERCHANGE FEES**  
[54] **SYSTEMES ET METHODES POUR FACILITER LES INTERACTIONS AXEES SUR L'EMPLACEMENT EN REDUISANT LES FRAIS D'INTERCHANGE**  
[72] MOSSOBA, MICHAEL, US  
[72] BENKREIRA, ABDELKADER, US  
[72] EDWARDS, JOSHUA, US  
[71] CAPITAL ONE SERVICES, LLC, US  
[22] 2021-09-15  
[41] 2022-03-16  
[30] US (17/022830) 2020-09-16

[21] **3,130,970**  
[13] A1

[51] **Int.Cl. F16L 3/227 (2006.01) F16L 3/10 (2006.01)**  
[25] EN  
[54] **HOLDER FOR CABLE CONDUITS**  
[54] **SUPPORT POUR CONDUITS DE CABLES**  
[72] HUPPI-ZIEGLER, ROGER, CH  
[72] GUELLER, MARTIN, CH  
[71] ABB SCHWEIZ AG, CH  
[22] 2021-09-16  
[41] 2022-03-18  
[30] EP (20 196 993.8) 2020-09-18  
[30] EP (20 209 708.5) 2020-11-25

[21] **3,130,971**  
[13] A1

[51] **Int.Cl. B07B 1/46 (2006.01)**  
[25] EN  
[54] **SYSTEMS, DEVICES, AND METHODS FOR SCREENING PANEL ATTACHMENT**  
[54] **SYSTEMES, DISPOSITIFS ET METHODES POUR SELECTIONNER DES ATTACHES A PANNEAU**  
[72] TAKEV, DIETER, CA  
[71] W.S. TYLER CANADA LTD., CA  
[22] 2021-09-16  
[41] 2022-03-18  
[30] US (63/080,379) 2020-09-18

[21] **3,130,974**  
[13] A1

[51] **Int.Cl. C08L 53/00 (2006.01) B29C 41/20 (2006.01) C08J 3/18 (2006.01) C08L 53/02 (2006.01)**  
[25] EN  
[54] **THERMOPLASTIC ELASTOMER OVERMOLD COMPOSITION**  
[54] **COMPOSITE DE SURMOULAGE ELASTOMERE THERMOPLASTIQUE**  
[72] SANJEEVAIAH, PRAKASH, US  
[72] VENKATASWAMY, KRISHNA, US  
[72] JIAN, PEI-ZHEN, US  
[71] STAR THERMOPLASTIC ALLOYS & RUBBERS, INC., US  
[22] 2021-09-16  
[41] 2022-03-18  
[30] US (63/080,512) 2020-09-18

[21] **3,130,976**  
[13] A1

[25] EN  
[54] **LOAD-PULL TUNER**  
[54] **ACCORDEUR D'IMPEDANCE VARIABLE**  
[72] PALIZBAN, ARDESHIR, CA  
[72] GIGOYAN, SUREN, CA  
[72] RASTI BOROUJENI, SOROUSH, CA  
[72] SAFAVI-NAEINI, SAFIEDDIN, CA  
[71] C-COM SATELLITE SYSTEMS INC., CA  
[22] 2021-09-16  
[41] 2022-03-16  
[30] US (63/079,140) 2020-09-16

[21] **3,130,981**  
[13] A1

[51] **Int.Cl. G07F 17/32 (2006.01) A63F 13/35 (2014.01) A63F 13/45 (2014.01) A63F 13/52 (2014.01)**  
[25] EN  
[54] **A METHOD FOR A GAMING SYSTEM**  
[54] **METHODE DE SYSTEME DE JEU**  
[72] MILIZIANO, CHARLOTTE, MT  
[72] DOMBI, PETER, MT  
[71] PLAY'N GO MARKS LTD, MT  
[22] 2021-09-16  
[41] 2022-03-17  
[30] SE (2051085-5) 2020-09-17

[21] **3,130,983**  
[13] A1

[51] **Int.Cl. E04H 15/20 (2006.01) B63B 69/00 (2013.01) B66F 19/00 (2006.01)**  
[25] EN  
[54] **JACK DEVICE AND SYSTEM FOR PULLING BOAT COVERS TAUT AND PROTECTING AGAINST WATER POOLING**  
[54] **VERIN ET SYSTEME POUR TIRER DES COUVERTURES DE BATEAU RAIDES ET LES PROTEGER CONTRE L'ACCUMULATION D'EAU**  
[72] MANNINGHAM, JOE, CA  
[72] NIELSEN, ALLISON, CA  
[71] MANNINGHAM, JOE, CA  
[71] NIELSEN, ALLISON, CA  
[22] 2021-09-16  
[41] 2022-03-16  
[30] US (63079180) 2020-09-16

[21] **3,130,984**  
[13] A1

[51] **Int.Cl. B63B 17/04 (2006.01)**  
[25] EN  
[54] **ENCLOSURE SYSTEM FOR A PONTOON BOAT**  
[54] **SYSTEME D'ENCEINTE POUR BATEAU PONTON**  
[72] RENAUD, BENOIT J., US  
[72] RUPP, BRIAN M., US  
[72] ROSS, WALTER B., US  
[71] POLARIS INDUSTRIES INC., US  
[22] 2021-09-16  
[41] 2022-03-17  
[30] US (63/079756) 2020-09-17

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[21] **3,130,988**  
[13] A1

[51] **Int.Cl. G06F 16/24 (2019.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR IDENTIFYING REPETITIVE ASSOCIATION CALCULATION AND COMPUTER SYSTEM**  
[54] **METHODE ET DISPOSITIF POUR DETERMINER UN CALCUL D'ASSOCIATION REPETITIVE ET SYSTEME INFORMATIQUE**  
[72] DING, QINGYAN, CN  
[72] XU, WEI, CN  
[71] 10353744 CANADA LTD., CA  
[22] 2021-09-16  
[41] 2022-03-16  
[30] CN (202010973509.X) 2020-09-16

[21] **3,130,990**  
[13] A1

[51] **Int.Cl. E06B 1/34 (2006.01)**  
[25] EN  
[54] **DOOR FRAME COVER**  
[54] **COUVERTURE POUR CADRE DE PORTE**  
[72] JASKIEWICZ, TOMASZ, US  
[72] SIMON, STEPHEN, US  
[72] KENDALL, ADAM, US  
[71] ENDURA PRODUCTS, LLC, US  
[22] 2021-09-16  
[41] 2022-03-17  
[30] US (63/079,576) 2020-09-17  
[30] US (17/475,650) 2021-09-15

[21] **3,130,992**  
[13] A1

[51] **Int.Cl. A63B 71/12 (2006.01) A63B 71/08 (2006.01)**  
[25] EN  
[54] **FOAM-PLASTIC PROTECTOR**  
[54] **PROTECTEUR EN MOUSSE-PLASTIQUE**  
[72] BELAND, JEAN-FRANCOIS, CA  
[72] STEENBRINK, BRIAN, CA  
[71] SPORT MASKA INC., CA  
[22] 2021-09-15  
[41] 2022-03-15  
[30] US (63/078,594) 2020-09-15

[21] **3,131,020**  
[13] A1

[51] **Int.Cl. E04B 1/19 (2006.01) E04D 3/02 (2006.01)**  
[25] EN  
[54] **ROOF STRUCTURE INCLUDING PANELS AND SUBSTRUCTURE FOR SUPPORTING PANELS AND METHODS FOR ASSEMBLY THEREOF**  
[54] **STRUCTURE DE TOIT COMPRENANT DES PANNEAUX ET SOUS-STRUCTURE POUR SOUTENIR LES PANNEAUX ET METHODES D'ASSEMBLAGE**  
[72] MEETHER, STUART L., US  
[72] WHYMAN, DANIEL R., US  
[72] GOODWIN, TIMOTHY A., US  
[72] BANKE, CRAIG M., US  
[72] MONOHON, DAVID E., US  
[72] HARDY, PATRICK R., US  
[71] LEISURE TIME PRODUCTS, LLC, US  
[22] 2021-09-16  
[41] 2022-03-17  
[30] US (63/079,542) 2020-09-17

[21] **3,131,024**  
[13] A1

[51] **Int.Cl. C12N 5/04 (2006.01) A23K 10/30 (2016.01) A23L 19/00 (2016.01) A01H 6/82 (2018.01) A01H 1/00 (2006.01) A01H 5/00 (2018.01) A01H 5/08 (2018.01) A01H 5/10 (2018.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**  
[25] EN  
[54] **TOMATO VARIETY NUN 06091 TOF**  
[54] **TOMATE DE VARIETE NUN 06091 TOF**  
[72] OVED, MATAN, IL  
[71] NEWBREED LTD., IL  
[22] 2021-09-16  
[41] 2022-03-17  
[30] US (63/079788) 2020-09-17

[21] **3,131,038**  
[13] A1

[25] EN  
[54] **AUTO-ACQUISITION CELLULAR REPEATER**  
[54] **REPETEUR CELLULAIRE A ACQUISITION AUTOMATIQUE**  
[72] FACCA, DARIO, CA  
[72] KENNEDY, PAUL, CA  
[72] COCKWELL, BRYAN, CA  
[72] RYAN, KEVIN, CA  
[72] KORCHYNSKI, CURTIS, CA  
[72] CAMERON, RYAN, CA  
[72] SAYSON, EDWIN, CA  
[71] DATADRILL COMMUNICATIONS INC., CA  
[22] 2021-09-16  
[41] 2022-03-16  
[30] US (63/079,138) 2020-09-16

[21] **3,131,047**  
[13] A1

[51] **Int.Cl. F16G 11/14 (2006.01) A47G 25/90 (2006.01) B65H 69/04 (2006.01)**  
[25] EN  
[54] **QUICK STRING-TYING DEVICE AND METHOD**  
[54] **DISPOSITIF ET METHODE D'ATTACHE DE LACET RAPIDE**  
[72] MAK, YOK KEY, CN  
[72] MAK, CHI YIN, CN  
[71] MAK, YOK KEY, CN  
[22] 2021-09-16  
[41] 2022-03-16  
[30] US (63/078,919) 2020-09-16

[21] **3,131,057**  
[13] A1

[51] **Int.Cl. H05K 7/20 (2006.01) H01L 23/46 (2006.01)**  
[25] EN  
[54] **COOLING APPARATUS**  
[54] **APPAREIL DE REFROIDISSEMENT**  
[72] WHITMORE, RICH S., US  
[72] SHEDD, TIMOTHY A., US  
[71] MOTIVAIR CORPORATION, US  
[22] 2021-09-16  
[41] 2022-03-16  
[30] US (17/023028) 2020-09-16

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[21] **3,131,066**  
[13] A1

[51] **Int.Cl. B62D 55/08 (2006.01)**  
[25] EN  
[54] **SUPPORT STRUCTURE FOR CONNECTING AT LEAST ONE SUPPORT WHEEL ASSEMBLY TO A FRAME OF A TRACK SYSTEM AND TRACK SYSTEM HAVING THE SAME**

[54] **STRUCTURE DE SUPPORT POUR RACCORDER AU MOINS UN ASSEMBLAGE DE ROUE DE SUPPORT A UN CHASSIS D'UN SYSTEME DE PISTE ET SYSTEME DE PISTE COMPRENANT LA STRUCTURE**

[72] AUBIN-MARCHAND, JEREMIE, CA  
[72] ROGER, YAN, CA  
[71] SOUCY INTERNATIONAL INC., CA  
[22] 2021-09-17  
[41] 2022-03-18  
[30] US (63/080,135) 2020-09-18

[21] **3,131,079**  
[13] A1

[51] **Int.Cl. G06F 11/36 (2006.01)**  
[25] EN  
[54] **TEST CASE GENERATION METHOD AND DEVICE, COMPUTER EQUIPMENT AND STORAGE MEDIUM**

[54] **METHODE ET DISPOSITIF DE GENERATION DE CAS D'ESSAI, MATERIEL INFORMATIQUE ET SUPPORT DE STOCKAGE**

[72] HU, XIAOQIANG, CN  
[72] CHEN, QIANG, CN  
[72] SUN, QIAN, CN  
[71] 10353744 CANADA LTD., CA  
[22] 2021-09-17  
[41] 2022-03-17  
[30] CN (202010985123.0) 2020-09-17

[21] **3,131,090**  
[13] A1

[51] **Int.Cl. B29C 45/40 (2006.01) B29C 45/17 (2006.01) B65D 41/04 (2006.01) B65D 41/34 (2006.01)**  
[25] EN  
[54] **INJECTION MOLDED ARTICLES AND MOLD APPARATUS FOR FORMING SAME**

[54] **ARTICLES MOULES PAR INJECTION ET MOULES POUR LEUR FABRICATION**

[72] YU, DAVID, CA  
[71] CAP-THIN MOLDS INC., CA  
[22] 2021-09-16  
[41] 2022-03-17  
[30] US (63/079,724) 2020-09-17

[21] **3,131,098**  
[13] A1

[25] EN  
[54] **HIGH-AVAILABILITY LOAD BALANCING METHOD AND SYSTEM AND COMPUTER READABLE STORAGE MEDIUM**

[54] **METHODE ET SYSTEME D'EQUILIBRAGE DES CHARGES A GRANDE DISPONIBILITE ET SUPPORT DE STOCKABLE LISIBLE PAR ORDINATEUR**

[72] DONG, SHUJING, CN  
[72] XIE, YINGHAO, CN  
[72] CHEN, ZHIHUI, CN  
[71] 10353744 CANADA LTD., CA  
[22] 2021-09-17  
[41] 2022-03-17  
[30] CN (202010980799.0) 2020-09-17

[21] **3,131,106**  
[13] A1

[51] **Int.Cl. G06F 7/36 (2006.01)**  
[25] EN  
[54] **METHOD, DEVICE AND SYSTEM FOR PROCESSING SERVICE DATA BY MERGING SORTING ALGORITHM**

[54] **METHODE, DISPOSITIF ET SYSTEME POUR TRAITER DES DONNEES DE SERVICE A L'AIDE D'UN ALGORITHME DE FUSION-TRI**

[72] ZHANG, QIANG, CN  
[72] WANG, JINZHONG, CN  
[72] SUN, QIAN, CN  
[71] 10353744 CANADA LTD., CA  
[22] 2021-09-17  
[41] 2022-03-17  
[30] CN (202010979773.4) 2020-09-17

[21] **3,131,118**  
[13] A1

[51] **Int.Cl. A01B 59/043 (2006.01)**  
[25] EN  
[54] **ATTACHMENT ASSEMBLY FOR POWERED IMPLEMENTS**

[54] **ENSEMBLE DE FIXATION POUR APPAREILS ELECTRIQUES**

[72] ELLER, JARED, US  
[72] TAYLOR, LANCE, US  
[71] GREAT PLAINS MANUFACTURING, INCORPORATED, US  
[22] 2021-09-17  
[41] 2022-03-18  
[30] US (63/080,097) 2020-09-18

[21] **3,131,204**  
[13] A1

[51] **Int.Cl. B60P 3/41 (2006.01) A01G 23/00 (2006.01)**  
[25] EN  
[54] **LOG HAULER DEVICES, SYSTEMS, AND METHODS**

[54] **DISPOSITIFS, SYSTEMES ET METHODES DE REMORQUE A BILLOTS**

[72] BUSIAHN, JACOB, US  
[71] BUSIAHN, JACOB, US  
[22] 2021-09-17  
[41] 2022-03-17  
[30] US (63/079,843) 2020-09-17

[21] **3,131,205**  
[13] A1

[51] **Int.Cl. B61D 17/18 (2006.01) B61D 17/04 (2006.01)**  
[25] EN  
[54] **INSULATING PANELS FOR RAILCARS**

[54] **PANNEAUX ISOLANTS POUR WAGONS**

[72] GACHHADAR, SUMAN, US  
[72] CARDENAS MIRANDA, FERNANDO, MX  
[71] TRINITY NORTH AMERICAN FREIGHT CAR, INC., US  
[22] 2021-09-17  
[41] 2022-03-18  
[30] US (63/080,421) 2020-09-18

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[21] **3,131,209**  
 [13] A1

[51] **Int.Cl. B62D 55/08 (2006.01)**  
 [25] EN  
 [54] **SUPPORT STRUCTURE FOR CONNECTING AT LEAST ONE SUPPORT WHEEL ASSEMBLY TO A FRAME MEMBER OF A TRACK SYSTEM AND TRACK SYSTEM HAVING THE SAME**  
 [54] **STRUCTURE DE SUPPORT POUR RACCORDER AU MOINS UN ASSEMBLAGE DE ROUE DE SUPPORT A UN ELEMENT DE CHASSIS D'UN SYSTEME DE PISTE ET SYSTEME DE PISTE COMPRENANT LA STRUCTURE**  
 [72] AUBIN-MARCHAND, JEREMIE, CA  
 [72] ROGER, YAN, CA  
 [72] GENOIS PELLETIER, STEPHANE, CA  
 [71] SOUCY INTERNATIONAL INC., CA  
 [22] 2021-09-17  
 [41] 2022-03-18  
 [30] US (63/080,139) 2020-09-18

[21] **3,131,262**  
 [13] A1

[51] **Int.Cl. G01D 21/00 (2006.01) A01B 76/00 (2006.01) A01C 1/00 (2006.01) G07C 3/00 (2006.01)**  
 [25] EN  
 [54] **GEOSPATIAL AGGREGATING AND LAYERING OF FIELD DATA**  
 [54] **AGREGATION ET MISE EN COUCHE GEOSPATIALE DES DONNEES SUR LE TERRAIN**  
 [72] TATGE, JASON G., US  
 [72] CARENZA, JONATHAN S., US  
 [72] TYNES, SARAH MICHELLE, US  
 [72] GROVES, TYRONE AVERY, US  
 [71] FARMOBILE LLC, US  
 [22] 2021-09-17  
 [41] 2022-03-17  
 [30] US (17/024,308) 2020-09-17

[21] **3,131,327**  
 [13] A1

[51] **Int.Cl. G06F 17/00 (2019.01)**  
 [25] EN  
 [54] **METHOD FOR DOCKING RESOURCE TRANSFER PARTY WITH RESOURCE TRANSFER PLATFORM BASED ON BUILDER MODE**  
 [54] **METHODE DE DOCKING POUR AUTEUR DU TRANSFERT DE RESSOURCES AVEC PLATEFORME DE TRANSFERT DE RESSOURCES FONDEE SUR UN MODE CREATION**  
 [72] YE, MINGTIAN, CN  
 [72] SI, XIAOBO, CN  
 [72] DUAN, TAO, CN  
 [72] LI, HUANAN, CN  
 [71] 10353744 CANADA LTD., CA  
 [22] 2021-09-20  
 [41] 2022-03-18  
 [30] CN (202010987495.7) 2020-09-18

[21] **3,131,330**  
 [13] A1

[51] **Int.Cl. G06F 16/24 (2019.01)**  
 [25] EN  
 [54] **DATABASE AGGREGATION QUERY METHOD, DEVICE AND SYSTEM**  
 [54] **METHODE, DISPOSITIF ET SYSTEME DE RECHERCHE EN BASE DE DONNEES PAR AGREGATION**  
 [72] ZHANG, QIANG, CN  
 [72] WANG, JINZHONG, CN  
 [72] SUN, QIAN, CN  
 [71] 10353744 CANADA LTD., CA  
 [22] 2021-09-20  
 [41] 2022-03-18  
 [30] CN (202010988662.X) 2020-09-18

[21] **3,131,360**  
 [13] A1

[51] **Int.Cl. E03C 1/18 (2006.01)**  
 [25] EN  
 [54] **SINK**  
 [54] **EVIER**  
 [72] JUST, PAUL JOSEPH, US  
 [72] HISER, MICHAEL EARL, JR, US  
 [72] GJERTSON, MATTHEW D., US  
 [72] WOJCIK, JOHN JOSEPH, US  
 [72] TRICKLE, GLEN WILLIAM, US  
 [71] ZURN INDUSTRIES, LLC, US  
 [22] 2021-09-20  
 [41] 2022-03-18  
 [30] US (63/080,602) 2020-09-18  
 [30] US (63/083,629) 2020-09-25  
 [30] US (63/085,953) 2020-09-30  
 [30] US (17/073,127) 2020-10-16  
 [30] US (17/091,966) 2020-11-06

[21] **3,131,586**  
 [13] A1

[51] **Int.Cl. E04D 1/30 (2006.01) B32B 3/10 (2006.01) B32B 38/04 (2006.01)**  
 [25] EN  
 [54] **METHOD AND APPARATUS FOR CREATING A SCORED HINGE IN A HIP OR RIDGE CAP SHINGLE**  
 [54] **METHODE ET APPAREIL POUR CREER UNE CHARNIERE ENTAILLEE DANS UN BARDEAU DE FAITE OU DE CROUPE**  
 [72] LEITCH, OLAN T., US  
 [71] BMIC LLC, US  
 [22] 2021-09-17  
 [41] 2022-03-17  
 [30] US (63/079,657) 2020-09-17  
 [30] US (63/195,775) 2021-06-02  
 [30] US (17/477,645) 2021-09-17

[21] **3,136,445**  
 [13] A1

[51] **Int.Cl. B60N 2/90 (2018.01) B60N 2/58 (2006.01) B60R 11/02 (2006.01)**  
 [25] EN  
 [54] **HEADREST COVER HOLDER SYSTEM**  
 [54] **SYSTEME DE SUPPORT DE COUVERTURE D'APPUIE-TETE**  
 [72] COTTERELL, LASCELLES, CA  
 [71] COTTERELL, LASCELLES, CA  
 [22] 2021-10-28  
 [41] 2022-03-17  
 [30] US (17/024,171) 2020-09-17  
 [30] US (17/024,244) 2020-09-17

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March 13, 2022 to March 19, 2022**

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[21] **3,138,961**

[13] A1

[51] **Int.Cl. G06F 16/21 (2019.01) G06F  
16/24 (2019.01)**

[25] EN

[54] **HIVE TABLE STATE CHANGING  
METHOD AND DEVICE**

[54] **METHODE ET DISPOSITIF DE  
CHANGEMENT D'ETAT DE  
TABLEAU HIVE**

[72] LU, PING, CN

[72] SUN, QIAN, CN

[72] ZHAO, YUN, CN

[72] LU, WEI, CN

[71] 10353744 CANADA LTD., CA

[22] 2021-09-16

[41] 2022-03-16

[30] CN (202010975656.0) 2020-09-16

# PCT Applications Entering the National Phase

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[21] <b>3,123,040</b> [13] A1	[21] <b>3,133,491</b> [13] A1	[21] <b>3,138,165</b> [13] A1
[51] <b>Int.Cl. B01D 36/02 (2006.01) B01D 21/01 (2006.01) B01D 35/02 (2006.01) C02F 1/00 (2006.01) C02F 1/44 (2006.01) C02F 1/52 (2006.01) C02F 9/00 (2006.01)</b> [25] EN [54] <b>MOBILE WATER FILTRATION SYSTEM</b> [54] <b>SYSTEME DE FILTRATION D'EAU MOBILE</b> [72] WINTER, GARY, US [72] PERI, SHRINIVAS, US [71] COKEBUSTERS USA INC., US [85] 2021-06-16 [86] 2020-09-17 (PCT/US2020/051152) [87] (3123040)	[51] <b>Int.Cl. C12Q 1/58 (2006.01) C12M 1/34 (2006.01) C12Q 1/00 (2006.01) G01N 33/62 (2006.01)</b> [25] EN [54] <b>TEST STRIPS FOR DETERMINATION OF UREA LEVELS IN SALIVA AND FOR DETECTION OF AZOTEMIA OR KIDNEY DISEASE IN FELINE AND CANINE SUBJECTS</b> [54] <b>BANDETTES REACTIVES POUR DETERMINER LES NIVEAUX D'UREE DANS LA SALIVE ET POUR DETERMINER L'AZOTEMIE OU UNE MALADIE RENALE CHEZ LES SUJETS FELINS ET CANINS</b> [72] NICKEL, MATTHEW, CA [72] SWEET, HILLARY, CA [71] SN BIOMEDICAL INC., CA [85] 2021-10-06 [86] 2021-09-14 (PCT/CA2021/051280) [87] (3133491) [30] US (63/079,184) 2020-09-16	[51] <b>Int.Cl. G02B 1/00 (2006.01) B82Y 30/00 (2011.01) B82Y 40/00 (2011.01) C01B 32/152 (2017.01) G02B 5/20 (2006.01)</b> [25] EN [54] <b>OPTICAL FILTER BASED ON LIGHT-MATTER COUPLING IN QUANTUM-CONFINED CAVITY SPACES</b> [54] <b>FILTRE OPTIQUE BASEE SUR UN COUPLAGE DE MATIERE LEGERE DANS DES ESPACES CAVITAIRES CONFINES QUANTIQUES</b> [72] KORUGA, DJURO, RS [71] FIELDPOINT (CYPRUS) LIMITED, CY [85] 2021-11-15 [86] 2019-06-12 (PCT/EP2019/065365) [87] (WO2020/249207)
[21] <b>3,129,452</b> [13] A1	[21] <b>3,134,393</b> [13] A1	[21] <b>3,144,311</b> [13] A1
[51] <b>Int.Cl. G01N 27/30 (2006.01) G01N 33/487 (2006.01)</b> [25] EN [54] <b>METHOD AND SYSTEM FOR DETECTION AND/OR QUANTIFICATION OF DELTA-9-TETRAHYDROCANNABINOL IN SALIVA</b> [54] <b>METHODE ET SYSTEME DE DETECTION ET/OU DE QUANTIFICATION DE DELTA-9-TETRAHYDROCANNABINOL DANS LA SALIVE</b> [72] DWEIK, BADAWI M., US [72] ARGUN, AVNI A., US [72] KARIMI, ANAHITA, US [72] SCHWENK, MELISSA N., US [71] GINER, INC., US [85] 2021-08-06 [86] 2020-02-07 (PCT/US2020/017317) [87] (WO2020/163780) [30] US (62/802,416) 2019-02-07	[51] <b>Int.Cl. C09K 8/584 (2006.01) B01J 13/10 (2006.01) C09K 8/594 (2006.01) E21B 21/14 (2006.01)</b> [25] EN [54] <b>NANOPARTICLE-SURFACTANT STABILIZED FOAMS</b> [54] <b>MOUSSES STABILISEES PAR DES NANOPARTICULES-TENSIOACTIFS</b> [72] DONG, MINGZHE, CA [72] BRYANT, STEVEN L., CA [72] TELMADARREIE, ALI, CA [71] CNERGREEN CORP., CA [85] 2021-09-21 [86] 2020-03-25 (PCT/CA2020/050390) [87] (WO2020/191491) [30] US (62/824,910) 2019-03-27	[51] <b>Int.Cl. C02F 9/12 (2006.01) C02F 1/28 (2006.01) C02F 1/32 (2006.01) C02F 1/78 (2006.01) C02F 9/00 (2006.01)</b> [25] EN [54] <b>TREATMENT SYSTEM AND METHOD FOR DRINKING WATER</b> [54] <b>SYSTEME DE TRAITEMENT ET METHODE POUR L'EAU POTABLE</b> [72] SUN, WENJUN, CA [72] SHI, JINGDONG, CN [71] TSINGHUA UNIVERSITY, CN [85] 2021-12-23 [86] 2021-04-13 (PCT/IB2021/053053) [87] (3144311) [30] CN (202110182570.7) 2021-02-10

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[13] A1

[51] **Int.Cl. A61K 35/12 (2015.01) A61K 35/17 (2015.01) A61K 35/26 (2015.01)**  
[25] EN  
[54] **AUTOLOGOUS THYMIC TISSUE TRANSPLANTATION**  
[54] **GREFFE DE TISSU THYMIQUE AUTOLOGUE**  
[72] LAGASSE, ERIC, US  
[71] UNIVERSITY OF PITTSBURGH - OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION, US  
[85] 2022-02-01  
[86] 2020-08-05 (PCT/US2020/044940)  
[87] (WO2021/026195)  
[30] US (62/882,887) 2019-08-05

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[21] **3,147,083**  
[13] A1

[51] **Int.Cl. C08L 67/02 (2006.01)**  
[25] EN  
[54] **OPAQUE, NON-PEARLESCENT POLYESTER ARTICLES**  
[54] **ARTICLES EN POLYESTER OPAQUE ET NON PERLE**  
[72] WIELOCH, KELAN, US  
[72] WALSH, JAMES, US  
[72] MILES, WILLIAM, US  
[72] FARRELL, THOMAS, US  
[72] CUDDIGAN, JULIE, US  
[72] RUBILAR, JAVIERA, US  
[72] MYERS, KENNETH, US  
[72] SANDT, ANDREW, US  
[72] ADAMS, MARK, US  
[72] BALL, VINCENT J., IV, US  
[72] LARIANE, YUCEF, US  
[71] PENN COLOR, INC., US  
[85] 2022-02-04  
[86] 2020-08-21 (PCT/US2020/047348)  
[87] (WO2021/035124)  
[30] US (62/890,266) 2019-08-22  
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[51] **Int.Cl. A61K 36/61 (2006.01) A61K 9/00 (2006.01) A61K 9/06 (2006.01) A61K 31/22 (2006.01) A61K 36/71 (2006.01) A61K 47/44 (2017.01) A61P 17/00 (2006.01) A61P 31/00 (2006.01)**  
[25] EN  
[54] **ANTIMICROBIAL TOPICAL COMPOSITIONS CONTAINING MANUKA OIL**  
[54] **COMPOSITIONS TOPIQUES ANTIMICROBIENNES CONTENANT DE L'HUILE DE MANUKA**  
[72] GILMOUR, ROBERT F., AU  
[72] HAMES, CHRISTINE J., NZ  
[72] CAIRNS, STUART H., NZ  
[71] MANUKA THERAPEUTICS LTD., NZ  
[85] 2022-02-04  
[86] 2020-08-05 (PCT/IB2020/057420)  
[87] (WO2021/024211)  
[30] US (62/882,672) 2019-08-05

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[21] **3,147,087**  
[13] A1

[51] **Int.Cl. G01F 1/20 (2006.01)**  
[25] EN  
[54] **TIME-ACCURATE CFD ENHANCED INTERPRETATION OF STRAIN-BASED FLOW MEASUREMENT**  
[54] **INTERPRETATION AMELIOREE PAR CFD A PRECISION TEMPORELLE D'UNE MESURE DE DEBIT FONDEE SUR UNE CONTRAINTE**  
[72] GYSLING, DANIEL L., US  
[71] EXPRO METERS, INC., US  
[85] 2022-02-04  
[86] 2020-08-12 (PCT/US2020/045894)  
[87] (WO2021/030417)  
[30] US (62/885,782) 2019-08-12  
[30] US (62/886,138) 2019-08-13

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[21] **3,147,088**  
[13] A1

[51] **Int.Cl. B03D 1/008 (2006.01) B03D 1/01 (2006.01)**  
[25] EN  
[54] **A COLLECTOR COMPOSITION FOR THE LITHIUM ORE OR MAGNESIUM ORE FLOTATION**  
[54] **COMPOSITION DE COLLECTEUR POUR LA FLOTTATION DE MINERAI DE LITHIUM OU DE MINERAI DE MAGNESIUM**  
[72] MICHAILOVSKI, ALEXEJ DR., DE  
[72] CHIPFUNHU, DANIEL, AU  
[72] DICKIE, SCOTT ALEXANDER, NZ  
[71] BASF SE, DE  
[85] 2022-02-04  
[86] 2020-08-28 (PCT/EP2020/074040)  
[87] (WO2021/038017)  
[30] EP (19194277.0) 2019-08-29

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[13] A1

[51] **Int.Cl. A01C 1/06 (2006.01) A01C 7/06 (2006.01) A01C 23/00 (2006.01)**  
[25] EN  
[54] **SOWING DEVICE AND METHOD FOR TREATING SEEDS DURING PLANTING**  
[54] **DISPOSITIF D'ENSEMENCEMENT ET PROCEDE DE TRAITEMENT DE SEMENCES PENDANT LA PLANTATION**  
[72] RICKARD, JAMIE, CH  
[72] LUPFER, CHRISTOPHE, CH  
[72] GRIMM, CHRISTOPH, CH  
[71] SYNGENTA PARTICIPATIONS AG, CH  
[85] 2022-02-04  
[86] 2020-08-14 (PCT/EP2020/072886)  
[87] (WO2021/032630)  
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[13] A1  
[51] **Int.Cl. A61K 41/00 (2020.01) B01J 8/26 (2006.01) B01J 8/42 (2006.01) C01B 13/02 (2006.01)**  
[25] EN  
[54] **A SYSTEM AND METHOD USING PHOTOCHEMICAL OXYGEN STORAGE AND RELEASE**  
[54] **SYSTEME ET PROCEDE FAISANT APPEL AU STOCKAGE ET A LA LIBERATION PHOTOCHEMIQUE D'OXYGENE**  
[72] MCCORMICK, THERESA, US  
[72] LUTKUS, LUKE, US  
[71] PORTLAND STATE UNIVERSITY, US  
[85] 2022-02-04  
[86] 2020-08-25 (PCT/US2020/047829)  
[87] (WO2021/041430)  
[30] US (62/892,758) 2019-08-28

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[21] **3,147,091**  
[13] A1  
[51] **Int.Cl. B65B 11/04 (2006.01) B65B 57/04 (2006.01) B65B 65/02 (2006.01)**  
[25] EN  
[54] **ULTRASONIC PACKAGING MATERIAL FLAW DETECTION WITH TIME-LIMITED RESPONSE DETECTION**  
[54] **DETECTION ULTRASONORE DE DEFAUTS DE MATERIAU D'EMBALLAGE AVEC DETECTION DE REPONSE LIMITEE DANS LE TEMPS**  
[72] MITCHELL, MICHAEL P., US  
[71] LANTECH.COM, LLC, US  
[85] 2022-02-04  
[86] 2020-07-27 (PCT/US2020/043777)  
[87] (WO2021/055104)  
[30] US (62/902,646) 2019-09-19

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[13] A1  
[51] **Int.Cl. C07K 1/22 (2006.01)**  
[25] EN  
[54] **METHODS FOR IMPROVED EXTRACTION OF SPIDER SILK PROTEINS**  
[54] **PROCEDES D'EXTRACTION AMELIOREE DE POLYMERES DE PROTEINES DE SOIE D'ARAIGNEE**  
[72] MUI, PHILLIP, US  
[72] LI, SIMON, US  
[72] MUTALIK, RITU BANSAL, US  
[72] PETERSON, COLE RICH, US  
[71] BOLT THREADS, INC., US  
[85] 2022-02-04  
[86] 2020-08-21 (PCT/US2020/047514)  
[87] (WO2021/035184)  
[30] US (62/890,473) 2019-08-22

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[13] A1  
[51] **Int.Cl. B65B 11/02 (2006.01)**  
[25] EN  
[54] **PACKAGING MATERIAL GRADING AND/OR FACTORY PROFILES**  
[54] **CLASSEMENT DE MATERIAUX D'EMBALLAGE ET/OU PROFILS D'USINE**  
[72] LANCASTER, III PATRICK R., US  
[71] LANTECH.COM, LLC, US  
[85] 2022-02-04  
[86] 2020-09-09 (PCT/US2020/049845)  
[87] (WO2021/055193)  
[30] US (62/902,736) 2019-09-19

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[21] **3,147,094**  
[13] A1  
[51] **Int.Cl. B65B 11/02 (2006.01)**  
[25] EN  
[54] **STRETCH WRAPPING MACHINE WITH DISPENSE RATE CONTROL BASED ON SENSED RATE OF DISPENSED PACKAGING MATERIAL AND PREDICTED LOAD GEOMETRY**  
[54] **EMBALLEUSE SOUS FILM RETRACTABLE A CONTROLE DE LA VITESSE DE DISTRIBUTION BASE SUR LA VITESSE DETECTEE DU MATERIAU D'EMBALLAGE DISTRIBUE ET LA GEOMETRIE PREDITE DE LA CHARGE**  
[72] MITCHELL, MICHAEL P., US  
[71] LANTECH.COM, LLC, US  
[85] 2022-02-04  
[86] 2020-09-08 (PCT/US2020/049693)  
[87] (WO2021/050420)  
[30] US (62/897,505) 2019-09-09

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[13] A1  
[51] **Int.Cl. A61C 7/00 (2006.01) G16H 30/20 (2018.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR ORTHODONTIC TREATMENT INTERVENTION**  
[54] **SYSTEMES ET PROCEDES POUR UNE INTERVENTION DE TRAITEMENT ORTHODONTIQUE**  
[72] PHAN, LOC, US  
[72] MENON, RENJITH, US  
[72] CHAN, HENRY HANH, US  
[71] SMYLIO INC., US  
[85] 2022-02-04  
[86] 2020-08-10 (PCT/US2020/045650)  
[87] (WO2021/030284)  
[30] US (62/885,633) 2019-08-12  
[30] US (63/046,839) 2020-07-01

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[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 37/02 (2006.01)**

[25] EN  
[54] **ANTI BDCA-2 ANTIBODIES**  
[54] **ANTICORPS ANTI BDCA-2**  
[72] HOLMES, STEVE, GB  
[71] CAPELLA BIOSCIENCE LTD, GB  
[85] 2022-02-05  
[86] 2020-08-05 (PCT/EP2020/072051)  
[87] (WO2021/023793)  
[30] GB (1911188.9) 2019-08-05  
[30] GB (2000814.0) 2020-01-20

[21] **3,147,130**  
[13] A1

[51] **Int.Cl. G06Q 20/32 (2012.01) G06Q 20/38 (2012.01)**

[25] EN  
[54] **SYSTEM FOR ENCODING RESOURCE ACCESS CREDENTIAL IN BARCODE**  
[54] **SYSTEME DE CODAGE DE JUSTIFICATIF D'ACCES A DES RESSOURCES EN UN CODE A BARRES**  
[72] GOLLAN, MELISSA LINDA, NZ  
[71] THE WORK SHOP LIMITED, NZ  
[85] 2022-02-07  
[86] 2020-08-10 (PCT/NZ2020/050086)  
[87] (WO2021/025564)  
[30] NZ (756161) 2019-08-08

[21] **3,147,136**  
[13] A1

[51] **Int.Cl. H01M 4/86 (2006.01) H01M 8/0234 (2016.01) H01M 8/0239 (2016.01) H01M 8/0243 (2016.01) H01M 8/0245 (2016.01)**

[25] EN  
[54] **MEMBRANE ELECTRODE ASSEMBLY**  
[54] **ASSEMBLAGE MEMBRANE-ELECTRODES**  
[72] BONAKDARPOUR, ARMAN, CA  
[72] DANIEL, LIUS, CA  
[72] WILKINSON, DAVID, CA  
[71] JOHNSON MATTHEY FUEL CELLS LIMITED, GB  
[85] 2022-02-07  
[86] 2020-10-02 (PCT/GB2020/052417)  
[87] (WO2021/064410)  
[30] GB (1914335.3) 2019-10-04

[21] **3,147,138**  
[13] A1

[51] **Int.Cl. A01C 1/06 (2006.01) A01C 7/06 (2006.01) A01C 11/02 (2006.01) A01G 9/08 (2006.01) A01C 7/10 (2006.01)**

[25] EN  
[54] **HIGH PRECISION GREENHOUSE SEED AND SEEDLING TREATMENT**  
[54] **TRAITEMENT DE HAUTE PRECISION DE SEMIS ET DE GRAINES EN SERRE**  
[72] RICKARD, JAMIE, CH  
[72] LUPFER, CHRISTOPHE, CH  
[72] GRIMM, CHRISTOPH, CH  
[71] SYNGENTA PARTICIPATIONS AG, CH  
[85] 2022-02-07  
[86] 2020-08-14 (PCT/EP2020/072889)  
[87] (WO2021/032633)  
[30] EP (19192906.6) 2019-08-21

[21] **3,147,139**  
[13] A1

[51] **Int.Cl. F23L 17/04 (2006.01) F23J 13/08 (2006.01) F23L 17/02 (2006.01) F23L 17/08 (2006.01)**

[25] EN  
[54] **AN INTAKE DEVICE FOR A CHIMNEY TERMINATION**  
[54] **DISPOSITIF D'ADMISSION POUR UNE EXTREMITÉ DE CHEMINÉE**  
[72] HUTA, ROBERT M., US  
[71] RLH INDUSTRIES, INC., US  
[85] 2022-02-07  
[86] 2020-08-10 (PCT/US2020/045646)  
[87] (WO2021/030281)  
[30] US (62/884,859) 2019-08-09

[21] **3,147,142**  
[13] A1

[51] **Int.Cl. B29C 49/02 (2006.01)**

[25] EN  
[54] **CONTAINER PREFORM WITH STEPPED INTERIOR FINISH**  
[54] **PREFORME DE RECIPIENT A FINITION INTERIEURE ETAGEE**  
[72] HANAN, JAY CLARKE, US  
[71] NIAGARA BOTTLING, LLC, US  
[85] 2022-02-07  
[86] 2020-08-07 (PCT/US2020/045349)  
[87] (WO2021/026424)  
[30] US (62/884,566) 2019-08-08  
[30] US (16/986,825) 2020-08-06

[21] **3,147,147**  
[13] A1

[51] **Int.Cl. D01F 8/14 (2006.01) D01D 5/08 (2006.01) D01D 5/34 (2006.01) D01F 1/10 (2006.01)**

[25] EN  
[54] **ECO-FRIENDLY POLYESTER FIBERS AND MICROFIBER SHED-RESISTANCE POLYESTER TEXTILES**  
[54] **FIBRES DE POLYESTER ECOLOGIQUES ET TEXTILES EN POLYESTER A RESISTANCE AU PELUCHAGE DES MICROFIBRES**  
[72] AMMEN, RICHARD MARCUS, US  
[72] FAIRGRIEVE, STUART P., GB  
[72] MCSHEEHY, JR. BRENDAN F., US  
[72] BESCH, RYAN MATTHEW, US  
[71] UNIVERSAL FIBERS, INC., US  
[85] 2022-02-07  
[86] 2020-08-12 (PCT/US2020/045958)  
[87] (WO2021/030456)

[21] **3,147,149**  
[13] A1

[51] **Int.Cl. A01C 1/06 (2006.01) A01C 7/06 (2006.01) A01C 7/10 (2006.01)**

[25] EN  
[54] **PRECISION TREATMENT AND SOWING OR PLANTING METHOD AND DEVICE**  
[54] **PROCEDE ET DISPOSITIF DE TRAITEMENT DE PRECISION ET DE SEMIS OU DE PLANTATION**  
[72] RICKARD, JAMIE, CH  
[72] LUPFER, CHRISTOPHE, CH  
[72] GRIMM, CHRISTOPH, CH  
[71] SYNGENTA PARTICIPATIONS AG, CH  
[85] 2022-02-07  
[86] 2020-08-14 (PCT/EP2020/072887)  
[87] (WO2021/032631)  
[30] EP (19192912.4) 2019-08-21

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[21] **3,147,156**  
[13] A1

[51] **Int.Cl. A61F 2/16 (2006.01)**  
[25] EN  
[54] **PACKAGING-INTEGRATED MANUALLY ACTUATED INTRAOCULAR LENS CARTRIDGE AND LENS DELIVERY DEVICE**

[54] **CARTOUCHE DE LENTILLE INTRAOCULAIRE A ACTIONNEMENT MANUEL INTEGREE DANS UN EMBALLAGE ET DISPOSITIF DE DISTRIBUTION DE LENTILLE**

[72] WU, YINGHUI, US  
[72] TABER, TODD, US  
[72] WENSRICH, DOUGLAS BRENT, US  
[72] SINGH, SUDARSHAN B., US  
[72] HANEY, TREVOR, US  
[72] CHECK, ANDREW, US  
[72] BENACQUISTO, JUSTIN, US  
[72] MARIETTA, JOE, US  
[72] PENROD, JONATHAN, US  
[72] LAROY, TIM, US  
[72] PORTER, BRYCE, US  
[71] ALCON INC., CH  
[85] 2022-02-07  
[86] 2020-08-21 (PCT/IB2020/057874)  
[87] (WO2021/038412)  
[30] US (62/890,859) 2019-08-23  
[30] US (63/035,148) 2020-06-05

[21] **3,147,160**  
[13] A1

[51] **Int.Cl. A01C 1/06 (2006.01) A01C 7/06 (2006.01) A01C 7/10 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR CONVERTING EXISTING SOWING EQUIPMENT**

[54] **APPAREIL ET PROCEDE POUR CONVERTIR UN EQUIPEMENT DE SEMIS EXISTANT**

[72] RICKARD, JAMIE, CH  
[72] LUPFER, CHRISTOPHE, CH  
[72] GRIMM, CHRISTOPH, CH  
[71] SYNGENTA PARTICIPATIONS AG, CH  
[85] 2022-02-07  
[86] 2020-08-14 (PCT/EP2020/072888)  
[87] (WO2021/032632)  
[30] EP (19192907.4) 2019-08-21

[21] **3,147,163**  
[13] A1

[51] **Int.Cl. A61F 2/16 (2006.01)**  
[25] EN  
[54] **RETRACTABLE CAP ACTUATION FOR AN INTRAOCULAR LENS CARTRIDGE**

[54] **ACTIONNEMENT DE CAPUCHON RETRACTABLE POUR CARTOUCHE DE LENTILLE INTRAOCULAIRE**

[72] SINGH, SUDARSHAN B., US  
[72] TABER, TODD, US  
[72] WU, YINGHUI, US  
[72] WENSRICH, DOUGLAS BRENT, US  
[72] JANG, SAM, US  
[72] PINKHAM, CHRIS, US  
[71] ALCON INC., CH  
[85] 2022-02-07  
[86] 2020-08-21 (PCT/IB2020/057872)  
[87] (WO2021/038410)  
[30] US (62/890,859) 2019-08-23

[21] **3,147,167**  
[13] A1

[51] **Int.Cl. E04B 9/00 (2006.01) E04B 9/36 (2006.01) F21V 7/00 (2006.01)**  
[25] EN  
[54] **LIGHT BAR FOR SUSPENDED CEILING**

[54] **BARRE LEGERE POUR PLAFOND SUSPENDU**

[72] AHMADI, RANA, US  
[72] MEDINA, RICHARD R., US  
[71] USG INTERIORS, LLC, US  
[85] 2022-02-07  
[86] 2020-08-14 (PCT/US2020/046387)  
[87] (WO2021/034673)  
[30] US (16/547,612) 2019-08-22

[21] **3,147,170**  
[13] A1

[51] **Int.Cl. H04B 7/185 (2006.01) H04W 84/06 (2009.01) H04B 7/0413 (2017.01)**  
[25] EN  
[54] **SATELLITE MIMO SYSTEM**

[54] **SYSTEME MIMO DE SATELLITE**

[72] YAO, HUIWEN, US  
[72] AVELLAN, ABEL, US  
[72] JAYASIMHA, SRIRAM, US  
[72] YU, ZHI ZHONG, GB  
[71] AST & SCIENCE, LLC, US  
[85] 2022-02-07  
[86] 2020-07-28 (PCT/US2020/043896)  
[87] (WO2021/030046)  
[30] US (62/884,951) 2019-08-09  
[30] US (62/936,955) 2019-11-18

[21] **3,147,171**  
[13] A1

[51] **Int.Cl. A61K 9/08 (2006.01) A61K 31/166 (2006.01) A61K 31/4155 (2006.01) A61K 31/4985 (2006.01) A61K 31/5377 (2006.01) A61K 47/10 (2017.01) A61P 33/02 (2006.01) A61P 33/14 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS COMPRISING TIGOLANER FOR CONTROLLING PARASITES**

[54] **COMPOSITIONS COMPRENANT DU TIGOLANER POUR LUTTER CONTRE DES PARASITES**

[72] KANIKANTI, VENKATA-RANGARAO, IN  
[72] HEEP, IRIS, DE  
[72] FELDHUES, ELISABETH, DE  
[72] SIEGEL, DAVID, DE  
[72] PETRY, GABRIELE, DE  
[71] VETOQUINOL SA, FR  
[85] 2022-02-07  
[86] 2020-08-12 (PCT/EP2020/072640)  
[87] (WO2021/028479)  
[30] EP (19191727.7) 2019-08-14

[21] **3,147,173**  
[13] A1

[51] **Int.Cl. C12N 7/00 (2006.01) C12N 7/04 (2006.01) C12N 15/74 (2006.01) C12Q 1/66 (2006.01) C12Q 1/70 (2006.01)**  
[25] EN  
[54] **DEVICES AND METHODS FOR DETECTING MICROORGANISMS USING RECOMBINANT REPRODUCTION-DEFICIENT INDICATOR BACTERIOPHAGE**

[54] **DISPOSITIFS ET PROCEDES DE DETECTION DE MICRO-ORGANISMES A L'AIDE D'UN BACTERIOPHAGE INDICATEUR DEFICIENT EN REPRODUCTION RECOMBINANT**

[72] ERICKSON, STEPHEN, US  
[72] GIL, JOSE S., US  
[72] NGUYEN, MINH MINDY BAO, US  
[72] HAHN, WENDY S., US  
[71] LABORATORY CORPORATION OF AMERICA HOLDINGS, US  
[85] 2022-02-07  
[86] 2020-08-26 (PCT/US2020/047972)  
[87] (WO2021/041524)

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[21] **3,147,174**  
[13] A1

[51] **Int.Cl. H01L 33/48 (2010.01) H01L 33/58 (2010.01)**

[25] EN

[54] **LUMINAIRES AND COMPONENTS THEREOF**

[54] **LUMINAIRES ET COMPOSANTS ASSOCIES**

[72] LIM, JIN HONG, US

[72] LACKEY, MARK, US

[72] SANCHEZ, ROB, US

[72] DRAPER, CHARLES, US

[72] EPPS, DANIEL VAN, US

[72] THOMAS, BRAD, US

[71] IDEAL INDUSTRIES LIGHTING LLC, US

[85] 2022-02-07

[86] 2020-09-02 (PCT/US2020/049036)

[87] (WO2021/046108)

[30] US (16/558,964) 2019-09-03

[30] US (16/786,619) 2020-02-10

[21] **3,147,175**  
[13] A1

[51] **Int.Cl. C02F 1/24 (2006.01) B03D 1/02 (2006.01) B03D 1/08 (2006.01)**

[25] EN

[54] **LOW-ENERGY WATER TREATMENT**

[54] **TRAITEMENT DES EAUX A BASSE ENERGIE**

[72] DUCKWORTH, CLIFF ALEXANDER, AU

[72] HUNTER, JAMES PATRICK, AU

[71] THE WATER & CARBON GROUP, AU

[85] 2022-02-07

[86] 2020-09-05 (PCT/AU2020/050938)

[87] (WO2021/042175)

[30] AU (2019903302) 2019-09-06

[21] **3,147,176**  
[13] A1

[51] **Int.Cl. E03D 1/14 (2006.01) E03D 1/34 (2006.01) E03D 1/35 (2006.01)**

[25] EN

[54] **ADJUSTABLE FLUSH VALVE POPPET ASSEMBLY**

[54] **ENSEMBLE CLAPET DE ROBINET DE CHASSE D'EAU REGLABLE**

[72] NGUYEN, KEN, US

[72] JENSEN, ROBERT, US

[72] JOHNSON, JAMES, US

[71] FLUIDMASTER, INC., US

[71] AS AMERICA, INC., US

[85] 2022-02-07

[86] 2020-08-28 (PCT/US2020/048311)

[87] (WO2021/041754)

[30] US (62/893,683) 2019-08-29

[21] **3,147,178**  
[13] A1

[51] **Int.Cl. C08F 10/02 (2006.01) C08J 5/18 (2006.01) C08L 23/12 (2006.01)**

[25] EN

[54] **BIMODAL POLYETHYLENE-BASED COMPOSITION**

[54] **COMPOSITION BIMODALE A BASE DE POLYETHYLENE**

[72] WILLIAMSON, ALEXANDER, US

[72] HEITSCH, ANDREW T., US

[72] WHITED, STEPHANIE M., US

[72] KAPUR, MRIDULA BABLI, US

[71] DOW GLOBAL TECHNOLOGIES LLC, US

[85] 2022-02-07

[86] 2020-08-19 (PCT/US2020/046898)

[87] (WO2021/041095)

[30] US (62/891,649) 2019-08-26

[21] **3,147,179**  
[13] A1

[51] **Int.Cl. C07K 16/40 (2006.01)**

[25] EN

[54] **DOSING FOR ANTI-TRYPTASE ANTIBODIES**

[54] **DOSAGE D'ANTICORPS ANTI-TRYPTASE**

[72] LIN, JOSEPH HAW-LING, US

[72] OWEN, RYAN PATRICK, US

[72] RYMUT, SHARON MARIE, US

[72] SUKUMARAN, SIDDHARTH, US

[71] GENENTECH, INC., US

[85] 2022-02-07

[86] 2020-09-18 (PCT/US2020/051416)

[87] (WO2021/055694)

[30] US (62/903,409) 2019-09-20

[21] **3,147,182**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61K 38/10 (2006.01) A61K 45/00 (2006.01) A61P 19/08 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) A61P 35/04 (2006.01) A61P 37/06 (2006.01) A61P 37/08 (2006.01) A61P 43/00 (2006.01) C07K 14/78 (2006.01) C07K 16/00 (2006.01) C07K 16/28 (2006.01) C07K 16/30 (2006.01) C07K 19/00 (2006.01) C12M 1/34 (2006.01) C12N 15/12 (2006.01) C12Q 1/04 (2006.01) G01N 33/53 (2006.01)**

[25] EN

[54] **IMMUNE CHECKPOINT INHIBITOR, THERAPEUTIC AGENT FOR IMMUNE CHECKPOINT-RELATED DISEASE, IMMUNOSUPPRESSANT, ANTI-FIBRONECTIN ANTIBODY OR DERIVATIVE THEREOF, FIBRONECTIN ANALOG, KIT FOR DETECTING FIBRONECTIN OR PARTIAL PROTEIN THEREOF, AND METHOD FOR DETECTING FIBRONECTIN OR PARTIAL PROTEIN THEREOF**

[54] **INHIBITEUR DE POINT DE CONTROLE IMMUNITAIRE, AGENT THERAPEUTIQUE POUR MALADIE LIEE AU POINT DE CONTROLE IMMUNITAIRE, IMMUNOSUPPRESSEUR, ANTICORPS ANTI-FIBRONECTINE OU DERIVE DE CELUI-CI, ANALOGUE DE LA FIBRONECTINE, KIT POUR DETECTER LA FIBRONECTINE OU PROTEINE PARTIELLE DE CELLE-CI, ET PROCEDE POUR DETECTER LA FIBRONECTINE OU UNE PROTEINE PARTIELLE DE CE...**

[72] TAKAI, TOSHIYUKI, JP

[72] INUI, MASANORI, JP

[72] SU, MEI TZU, JP

[72] ENDO, SHOTA, JP

[71] TOHOKU UNIVERSITY, JP

[85] 2022-02-07

[86] 2020-08-06 (PCT/JP2020/030175)

[87] (WO2021/029318)

[30] JP (2019-148423) 2019-08-13

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[21] **3,147,183**  
[13] A1

[51] **Int.Cl. A23L 29/25 (2016.01) A01N 25/04 (2006.01) A61K 47/36 (2006.01)**  
[25] EN  
[54] **GUM ARABIC**  
[54] **GOMME ARABIQUE**  
[72] HOLTHAUS, DEREK, US  
[72] PATEL, SARFARAZ, US  
[72] MAGNESS, SCOTT, US  
[72] MAKARIOUS, AFAF, US  
[71] CORN PRODUCTS DEVELOPMENT, INC., US  
[85] 2022-02-07  
[86] 2020-08-07 (PCT/US2020/045447)  
[87] (WO2021/041005)  
[30] US (62/891,858) 2019-08-26  
[30] US (63/060,316) 2020-08-03

[21] **3,147,184**  
[13] A1

[51] **Int.Cl. A23L 5/41 (2016.01) A23L 27/30 (2016.01) A23L 2/58 (2006.01) C07H 1/08 (2006.01)**  
[25] EN  
[54] **FOOD INGREDIENTS FROM STEVIA REBAUDIANA**  
[54] **INGREDIENTS ALIMENTAIRES ISSUS DE STEVIA REBAUDIANA**  
[72] MARKOSYN, AVETIK, AM  
[72] WONG, YEEN YEE, MY  
[72] KOH, PEI CHEN, MY  
[72] MARTIN, JOHN, US  
[72] PETIT, MARCIA, US  
[72] SAYEED, MARYAM, US  
[71] PURECIRCLE USA INC., US  
[85] 2022-02-07  
[86] 2020-08-27 (PCT/US2020/048274)  
[87] (WO2021/041728)  
[30] US (62/892,320) 2019-08-27  
[30] US (62/990,437) 2020-03-16  
[30] US (62/892,286) 2019-08-27

[21] **3,147,190**  
[13] A1

[51] **Int.Cl. H04N 21/236 (2011.01) G11B 27/02 (2006.01) H04N 21/2343 (2011.01) H04N 21/242 (2011.01) H04N 21/44 (2011.01) H04N 21/84 (2011.01) H04N 21/845 (2011.01) G10L 19/16 (2013.01) G10L 21/0316 (2013.01) G10L 21/0356 (2013.01) G10L 21/055 (2013.01)**  
[25] EN  
[54] **AUDIO METADATA SMOOTHING**  
[54] **LISSAGE DE METADONNEES AUDIO**  
[72] ZHENG, WEIGUO, US  
[72] CHING, REX, US  
[72] NI, WEIBO, US  
[72] MIYAGI, KENSUKE, US  
[72] MUNDAY, SEAN, US  
[72] TAO, TERESA, US  
[71] NETFLIX, INC., US  
[85] 2022-02-07  
[86] 2020-09-22 (PCT/US2020/052017)  
[87] (WO2021/061656)  
[30] US (62/904,542) 2019-09-23  
[30] US (15/931,442) 2020-05-13

[21] **3,147,193**  
[13] A1

[51] **Int.Cl. B29C 53/74 (2006.01) B29C 53/58 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR PRODUCING TUBES**  
[54] **APPAREIL ET PROCEDE DE PRODUCTION DE TUBES**  
[72] KURZYCH, KRZYSZTOF, PL  
[71] AMIBLU TECHNOLOGY AS, NO  
[85] 2022-02-07  
[86] 2020-08-12 (PCT/EP2020/072681)  
[87] (WO2021/069133)  
[30] EP (19202232.5) 2019-10-09

[21] **3,147,194**  
[13] A1

[51] **Int.Cl. F28D 9/00 (2006.01) B23K 1/00 (2006.01) B23K 1/20 (2006.01) B23K 31/02 (2006.01) F01N 5/02 (2006.01) F02G 5/02 (2006.01)**  
[25] EN  
[54] **HIGH EFFICIENCY TANKLESS WATER HEATER**  
[54] **CHAUFFE-EAU SANS RESERVOIR A HAUTE EFFICACITE**  
[72] YIN, JIANMIN, US  
[72] MEMORY, STEPHEN, US  
[72] EDINGTON, CHAD, US  
[72] ROLPH, NEIL, US  
[72] ISKE, BRIAN, US  
[72] WIGGINS, DUSTIN, US  
[72] YANG, MENG, CN  
[72] LI, TINGYU, CN  
[71] A. O. SMITH CORPORATION, US  
[85] 2022-02-07  
[86] 2020-08-06 (PCT/US2020/045291)  
[87] (WO2021/026397)  
[30] US (62/883,869) 2019-08-07

[21] **3,147,195**  
[13] A1

[51] **Int.Cl. B60C 23/00 (2006.01) F16K 15/20 (2006.01)**  
[25] EN  
[54] **AUTOMATIC PRESSURE VALVE FOR INFLATION / DEFLATION OF A PNEUMATIC ARRANGEMENT**  
[54] **SOUPAPE DE PRESSION AUTOMATIQUE DESTINEE AU GONFLAGE/DEGONFLAGE D'UN AGENCEMENT PNEUMATIQUE**  
[72] VENICA, NATALIO DOMINGO, AR  
[72] COLUSSI, PRIMO ANTONIO, ES  
[71] COL-VEN S.A., AR  
[85] 2022-02-07  
[86] 2020-08-06 (PCT/EP2020/072164)  
[87] (WO2021/023828)  
[30] AR (P 20190102248) 2019-08-07

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[21] **3,147,197**  
[13] A1

[51] **Int.Cl. B64C 27/08 (2006.01) B64C 11/46 (2006.01) B64C 27/02 (2006.01) B64C 27/10 (2006.01) B64C 27/14 (2006.01) B64C 27/22 (2006.01) B64C 27/26 (2006.01) B64C 27/28 (2006.01) B64C 27/52 (2006.01) B64C 27/54 (2006.01) B64C 27/82 (2006.01)**

[25] EN  
[54] **AERIAL VEHICLE**  
[54] **VEHICULE AERIEN**  
[72] SHAANAN, GAD, US  
[71] UNMANNED AEROSPACE LLC, US  
[85] 2022-02-07  
[86] 2020-08-13 (PCT/US2020/046240)  
[87] (WO2021/030630)  
[30] US (62/886,578) 2019-08-14  
[30] US (62/896,257) 2019-09-05  
[30] US (63/018,848) 2020-05-01

[21] **3,147,199**  
[13] A1

[51] **Int.Cl. B29C 49/06 (2006.01) B29C 49/22 (2006.01) B65D 1/02 (2006.01)**

[25] EN  
[54] **PREFORM, SYNTHETIC RESIN CONTAINER, AND METHOD FOR MANUFACTURING SYNTHETIC RESIN CONTAINER**  
[54] **PREFORME, RECIPIENT EN RESINE SYNTHETIQUE ET PROCEDE POUR LA FABRICATION DE RECIPIENT EN RESINE SYNTHETIQUE**  
[72] SUZUKI, TAKANORI, JP  
[71] YOSHINO KOGYOSHO CO., LTD., JP  
[85] 2022-02-07  
[86] 2020-07-14 (PCT/JP2020/027412)  
[87] (WO2021/029175)  
[30] JP (2019-148052) 2019-08-09

[21] **3,147,200**  
[13] A1

[51] **Int.Cl. B32B 5/02 (2006.01) B32B 5/18 (2006.01) B32B 15/08 (2006.01) B32B 15/18 (2006.01) B32B 27/12 (2006.01) B32B 27/20 (2006.01) B32B 27/32 (2006.01) F41H 5/04 (2006.01)**

[25] EN  
[54] **COMPOSITE DOOR SYSTEMS**  
[54] **SYSTEMES DE PORTE COMPOSITE**  
[72] GLOVER, DANIEL BRIAN, US  
[71] AADG, INC., US  
[85] 2022-02-07  
[86] 2020-08-21 (PCT/US2020/047452)  
[87] (WO2021/076231)  
[30] US (62/890,978) 2019-08-23  
[30] US (16/999,738) 2020-08-21

[21] **3,147,202**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 8/00 (2006.01) A61K 9/10 (2006.01) A61K 9/14 (2006.01) A61K 31/00 (2006.01)**

[25] EN  
[54] **METHOD OF ENHANCING THE EFFICACY AND STABILITY OF INGREDIENTS IN SUSPENSIONS**  
[54] **PROCEDE D'AMELIORATION DE L'EFFICACITE ET DE LA STABILITE D'INGREDIENTS DANS DES SUSPENSIONS**  
[72] SARKAS, HARRY W., US  
[71] NANOPHASE TECHNOLOGIES CORPORATION, US  
[85] 2022-02-07  
[86] 2020-08-07 (PCT/US2020/045479)  
[87] (WO2021/030212)  
[30] US (16/537,337) 2019-08-09

[21] **3,147,204**  
[13] A1

[51] **Int.Cl. E06B 3/76 (2006.01) E06B 3/70 (2006.01) E06B 3/74 (2006.01) E06B 3/78 (2006.01)**

[25] EN  
[54] **COMPOSITE DOOR SYSTEMS**  
[54] **SYSTEMES DE PORTE COMPOSITE**  
[72] GLOVER, DANIEL BRIAN, US  
[71] AADG, INC., US  
[85] 2022-02-07  
[86] 2020-08-21 (PCT/US2020/047404)  
[87] (WO2021/041215)  
[30] US (62/890,980) 2019-08-23  
[30] US (16/999,472) 2020-08-21

[21] **3,147,206**  
[13] A1

[51] **Int.Cl. A61K 31/19 (2006.01)**

[25] EN  
[54] **NANOEMULSION OF 18.BETA.-GLYCYRRHETINIC ACID**  
[54] **FORMES PHARMACEUTIQUES DE L'ACIDE18B-GLYCYRRHETINIQUE**  
[72] ZENDEJAS HERNANDEZ, ULISES, MX  
[71] ATSO CORPORATE AFFAIRS, S.A. DE C.V., MX  
[85] 2022-02-07  
[86] 2020-08-07 (PCT/MX2020/050025)  
[87] (WO2021/025550)  
[30] MX (MX/A/2019/009482) 2019-08-08

[21] **3,147,210**  
[13] A1

[51] **Int.Cl. C09D 7/40 (2018.01)**

[25] EN  
[54] **COATING COMPOSITIONS, LAYERS, AND SYSTEMS FOR RADAR TRANSMISSION AND METHODS FOR MAKING AND USING THE SAME**  
[54] **COMPOSITIONS, COUCHES ET SYSTEMES DE REVETEMENT POUR TRANSMISSION RADAR ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION**  
[72] DECKER, ELDON L., US  
[72] LEWIS, JASON R., US  
[72] BROWN, ZACHARY J., US  
[72] HORDIJK, DAVID M., US  
[72] MUNRO, CALUM H., US  
[71] PPG INDUSTRIES OHIO, INC., US  
[85] 2022-02-07  
[86] 2020-08-07 (PCT/US2020/045430)  
[87] (WO2021/030197)  
[30] US (16/536,655) 2019-08-09

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[21] **3,147,211**  
[13] A1

[51] **Int.Cl. C12M 1/34 (2006.01) A61B 5/15 (2006.01) C12M 1/00 (2006.01) C12M 3/04 (2006.01)**

[25] EN

[54] **HIGH DENSITY BOTTLE DRUM FOR STORAGE, AGITATION AND READING OF BLOOD CULTURE BOTTLES AND METHODS OF STORING**

[54] **TAMBOUR POUR BOUTEILLES HAUTE DENSITE POUR LE STOCKAGE, L'AGITATION ET LA LECTURE DE BOUTEILLES D'HEMOCULTE ET PROCEDES DE STOCKAGE**

[72] ARMSTRONG, ROBERT EDWARD, US

[72] POHL, BRENT RONALD, US

[72] LENTZ, AMMON DAVID, US

[72] ZERWECK, JASON, US

[72] MURRAY, CHRISTOPHER, US

[72] LOHAN, DANIEL JUSTIN, US

[72] WENGER, KEVIN, US

[71] BECTON, DICKINSON AND COMPANY, US

[85] 2022-02-07

[86] 2020-08-05 (PCT/US2020/045065)

[87] (WO2021/026272)

[30] US (62/883,796) 2019-08-07

[21] **3,147,212**  
[13] A1

[51] **Int.Cl. H04B 7/155 (2006.01) H04B 1/38 (2015.01)**

[25] EN

[54] **RADIO FREQUENCY SIGNAL REPEATER SYSTEM**

[54] **SYSTEME DE REPETEUR DE SIGNAUX RADIOFREQUENCE**

[72] HARNEY, GORDON, CA

[71] FONEX DATA SYSTEMS INC., CA

[85] 2022-02-07

[86] 2019-08-29 (PCT/CA2019/051201)

[87] (WO2021/035330)

[21] **3,147,213**  
[13] A1

[51] **Int.Cl. F25D 31/00 (2006.01) F28F 1/04 (2006.01) F28F 3/12 (2006.01)**

[25] EN

[54] **FREEZING PLATE**

[54] **PLAQUE DE CONGELATION**

[72] MOLLER, THOMAS BUUS, DK

[71] DSI DANTECH A/S, DK

[85] 2022-02-07

[86] 2020-08-10 (PCT/EP2020/072362)

[87] (WO2021/028379)

[30] DK (PA201970502) 2019-08-09

[21] **3,147,215**  
[13] A1

[51] **Int.Cl. B29C 64/30 (2017.01) B29C 64/106 (2017.01)**

[25] EN

[54] **3D PRINTING HEAD FOR BIOPRINTERS**

[54] **TETE D'IMPRESSION 3D POUR BIO-IMPRIANTES**

[72] AHMADI, ALI, CA

[72] MACCALLUM, BEN GREGORY, CA

[72] MACNEVIN, WYATT NORMAN, CA

[72] NASERI, EMAD, CA

[71] UNIVERSITY OF PRINCE EDWARD ISLAND, CA

[85] 2022-02-07

[86] 2020-08-07 (PCT/CA2020/051087)

[87] (WO2021/022381)

[30] US (62/884,217) 2019-08-08

[21] **3,147,216**  
[13] A1

[51] **Int.Cl. E04H 15/02 (2006.01) E04B 1/00 (2006.01)**

[25] EN

[54] **A BUILDING ASSEMBLY AND A METHOD OF ENABLING CAMPING**

[54] **ENSEMBLE DE CONSTRUCTION ET PROCEDE POUR PERMETTRE LE CAMPING**

[72] BLACKWELL, LIAM, US

[71] BLACKWELL, LIAM, US

[85] 2022-02-07

[86] 2020-08-06 (PCT/EP2020/072209)

[87] (WO2021/023846)

[30] GB (1911255.6) 2019-08-06

[21] **3,147,217**  
[13] A1

[51] **Int.Cl. G06F 8/41 (2018.01) G06F 15/78 (2006.01)**

[25] EN

[54] **COMPILER FLOW LOGIC FOR RECONFIGURABLE ARCHITECTURES**

[54] **LOGIQUE DE FLUX DE COMPILATEUR POUR ARCHITECTURES RECONFIGURABLES**

[72] KOEPLINGER, DAVID ALAN, US

[72] PRABHAKAR, RAGHU, US

[72] JAIRATH, SUMTI, US

[71] SAMBANOVA SYSTEMS, INC., US

[85] 2022-02-07

[86] 2020-08-07 (PCT/US2020/045478)

[87] (WO2021/026489)

[30] US (16/536,192) 2019-08-08

[21] **3,147,218**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 31/00 (2006.01) A61K 47/02 (2006.01) A61K 47/18 (2017.01)**

[25] EN

[54] **INFUSION DOSAGE FORM OF NOREPINEPHRINE**

[54] **FORME POSOLOGIQUE D'INFUSION DE NOREPINEPHRINE**

[72] KUMAR, SAMARTH, IN

[72] SONI, MAHESHKUMAR PARASMAL, IN

[72] SRIVASTAVA, PRAVEEN KUMAR, IN

[72] KANE, PRASHANT, IN

[72] BHOWMICK, SUBHAS BALARAM, IN

[71] SUN PHARMACEUTICAL INDUSTRIES LIMITED, IN

[85] 2022-02-07

[86] 2020-08-10 (PCT/IB2020/057517)

[87] (WO2021/024237)

[30] IN (201921032096) 2019-08-08

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[21] **3,147,219**  
[13] A1

[51] **Int.Cl. A61M 37/00 (2006.01)**  
[25] EN  
[54] **DEVICE FOR RECIPROCALLY PUNCTURING SKIN**  
[54] **DISPOSITIF DE PERFORATION RECIPROQUE DE LA PEAU**  
[72] DE JONG, ERIK JAN, NL  
[71] MEDICAL PRECISION B.V., NL  
[85] 2022-02-07  
[86] 2020-08-10 (PCT/NL2020/050504)  
[87] (WO2021/029767)  
[30] NL (2023627) 2019-08-09  
[30] NL (2024668) 2020-01-14

[21] **3,147,252**  
[13] A1

[51] **Int.Cl. A61M 16/10 (2006.01)**  
[25] EN  
[54] **MODULAR, INTEGRATED POWERED AIR PURIFYING RESPIRATOR SYSTEM**  
[54] **SYSTEME D'APPAREIL RESPIRATOIRE A EPURATION D'AIR MOTORISE INTEGRE MODULAIRE**  
[72] TILLEY, GREG A., US  
[72] CURLEE, BRIAN, US  
[71] D. WHEATLEY ENTERPRISES, INC., US  
[85] 2022-02-08  
[86] 2020-08-20 (PCT/US2020/047165)  
[87] (WO2021/035035)  
[30] US (62/889,263) 2019-08-20  
[30] US (16/998,413) 2020-08-20

[21] **3,147,254**  
[13] A1

[51] **Int.Cl. A61K 35/30 (2015.01) A61F 2/14 (2006.01) A61L 27/00 (2006.01) A61L 27/36 (2006.01) A61P 27/02 (2006.01)**  
[25] FR  
[54] **HOLLOW THREE-DIMENSIONAL UNIT MADE FROM RETINAL TISSUE AND USE THEREOF IN THE TREATMENT OF RETINOPATHIES**  
[54] **UNITE TRIDIMENSIONNELLE CREUSE DE TISSU RETINIEN ET UTILISATION DANS LE TRAITEMENT DES RETINOPATHIES**  
[72] FEYEUX, MAXIME, FR  
[72] ALESSANDRI, KEVIN, FR  
[71] TREEFROG THERAPEUTICS, FR  
[85] 2022-02-08  
[86] 2020-08-12 (PCT/EP2020/072567)  
[87] (WO2021/028456)  
[30] FR (FR1909155) 2019-08-12

[21] **3,147,275**  
[13] A1

[51] **Int.Cl. C02F 1/467 (2006.01) C02F 1/32 (2006.01) C02F 1/66 (2006.01) C02F 9/00 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR TREATMENT OF WASTEWATER CONTAINING AZIDE IONS**  
[54] **PROCEDE ET APPAREIL POUR LE TRAITEMENT DES EAUX USEES CONTENANT DES IONS AZOTURES**  
[72] UNDERWOOD, LEE, GB  
[72] WALKER, JOHN, GB  
[72] KEARY, JAMES, GB  
[71] VWS (UK) LIMITED, GB  
[85] 2022-02-08  
[86] 2020-08-27 (PCT/GB2020/052046)  
[87] (WO2021/048524)  
[30] GB (1913242.2) 2019-09-13

[21] **3,147,279**  
[13] A1

[51] **Int.Cl. E21D 21/00 (2006.01) E01B 25/24 (2006.01) E21F 17/02 (2006.01)**  
[25] EN  
[54] **A CONNECTION DEVICE AND SYSTEM FOR SUSPENDING A MONORAIL BEAM FROM A ROOF BOLT**  
[54] **DISPOSITIF DE RACCORDEMENT ET SYSTEME DE SUSPENSION D'UN LONGERON DE MONORAIL A PARTIR D'UN BOULON D'ANCRAGE**  
[72] RIEGER, HUBERT, AT  
[71] SANDVIK MINING AND CONSTRUCTION G.M.B.H., AT  
[85] 2022-02-08  
[86] 2019-09-09 (PCT/EP2019/073927)  
[87] (WO2021/047748)

[21] **3,147,288**  
[13] A1

[51] **Int.Cl. E04F 15/02 (2006.01)**  
[25] EN  
[54] **FLOOR PANEL FOR FORMING A FLOOR COVERING**  
[54] **PANNEAU DE PLANCHER DESTINE A LA FORMATION D'UN REVETEMENT DE SOL**  
[72] DE RICK, JAN, BE  
[71] FLOORING INDUSTRIES LIMITED, SARL, LU  
[85] 2022-02-08  
[86] 2020-10-02 (PCT/IB2020/059238)  
[87] (WO2021/070022)  
[30] BE (2019/5659) 2019-10-08

[21] **3,147,293**  
[13] A1

[51] **Int.Cl. E04F 15/02 (2006.01)**  
[25] EN  
[54] **FLOOR OR WALL COVERING REVETEMENT DE SOL OU DE MUR**  
[54] **REJETEMENT DE SOL OU DE MUR**  
[72] DE RICK, JAN, BE  
[72] ROLLIER, BRYAN, BE  
[71] FLOORING INDUSTRIES LIMITED, SARL, LU  
[85] 2022-02-08  
[86] 2020-09-08 (PCT/IB2020/058328)  
[87] (WO2021/059062)  
[30] US (62/904,193) 2019-09-23  
[30] US (62/942,335) 2019-12-02  
[30] US (62/958,082) 2020-01-07  
[30] US (62/971,401) 2020-02-07  
[30] US (63/024,794) 2020-05-14  
[30] US (63/042,789) 2020-06-23

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[21] **3,147,298**  
[13] A1

[51] **Int.Cl. F24F 11/74 (2018.01) F24F 11/80 (2018.01) F24F 1/02 (2019.01) F24F 3/14 (2006.01)**

[25] EN

[54] **IMPROVED METHOD AND SYSTEM FOR CONFIGURING HVAC SYSTEMS**

[54] **PROCEDE ET SYSTEME AMELIORES POUR CONFIGURER DES SYSTEMES DE CVC**

[72] DICKINSON, ERIC, US

[71] DICKINSON, ERIC, US

[85] 2022-02-08

[86] 2020-08-12 (PCT/US2020/045964)

[87] (WO2021/030462)

[30] US (62/886,266) 2019-08-13

[30] US (16/914,381) 2020-06-28

[21] **3,147,300**  
[13] A1

[51] **Int.Cl. C03C 17/32 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL PACKAGES WITH COATINGS COMPRISING POLYCYANURATES**

[54] **EMBALLAGES PHARMACEUTIQUES A REVETEMENTS COMPRENANT DES POLYCYANURATES**

[72] LI, LINGKE, CN

[72] LI, YANG, CN

[72] WEIKEL, ARLIN LEE, US

[71] CORNING INCORPORATED, US

[85] 2022-02-08

[86] 2020-08-03 (PCT/US2020/044690)

[87] (WO2021/030082)

[30] US (62/884,731) 2019-08-09

[21] **3,147,303**  
[13] A1

[51] **Int.Cl. B01D 53/62 (2006.01) B01D 53/22 (2006.01)**

[25] EN

[54] **IMPROVED GAS EXCHANGE SYSTEM AND METHOD**

[54] **SYSTEME ET METHODE D'ECHANGE DE GAZ AMELIORES**

[72] CHAN, ZHE PHAK, MY

[72] KHALIT, SITI HAJAR, MY

[72] CAO, YIMING, CN

[72] KANG, GUODONG, CN

[71] PETROLIAM NASIONAL BERHAD (PETRONAS), MY

[71] DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES, CN

[85] 2022-02-08

[86] 2019-08-08 (PCT/CN2019/099721)

[87] (WO2021/022535)

[21] **3,147,305**  
[13] A1

[51] **Int.Cl. A01M 23/38 (2006.01)**

[25] EN

[54] **ELECTRONIC RODENT TRAP WITH REMOTE MONITORING CAPABILITY**

[54] **PIEGE A RONGEURS ELECTRONIQUE A CAPACITE DE SURVEILLANCE A DISTANCE**

[72] KLETZLI, PAUL, US

[72] EBNER, MARK, US

[72] BLAIR, CORY, US

[72] KOZIAR, PETER, US

[72] DALY, THOMAS J. JR., US

[71] WOODSTREAM CORPORATION, US

[85] 2022-02-08

[86] 2020-08-14 (PCT/US2020/046279)

[87] (WO2021/030650)

[30] US (16/540,455) 2019-08-14

[21] **3,147,306**  
[13] A1

[51] **Int.Cl. D04B 1/26 (2006.01) D02G 3/32 (2006.01) D04B 1/24 (2006.01)**

[25] EN

[54] **COMPRESSION HOSIERY**

[54] **BAS DE CONTENTION**

[72] NURY, CHRISTOPHE, FR

[72] MASSOTTE, LAURENT, FR

[72] MATHIEU, FLORENCE, FR

[72] MORET, FLORENT, FR

[72] FORESTIER, PASCAL, FR

[71] HANES FRANCE SAS, FR

[85] 2022-02-08

[86] 2020-05-29 (PCT/EP2020/064981)

[87] (WO2021/028090)

[30] EP (19315093.5) 2019-08-14

[21] **3,147,310**  
[13] A1

[25] EN

[54] **INTERIOR GATEWAY PROTOCOL FLOODING OPTIMIZATION METHOD AND DEVICE, AND STORAGE MEDIUM**

[54] **PROCEDE ET DISPOSITIF D'OPTIMISATION D'ACHEMINEMENT PAR INONDATION DE PROTOCOLE DE PASSERELLE INTERIEURE, ET SUPPORT D'INFORMATIONS**

[72] PENG, SHAOFU, CN

[72] WANG, HUILAI, CN

[72] SUN, JINSONG, CN

[72] CHEN, HUANAN, CN

[72] ZHU, YONGQING, CN

[71] NANJING ZHONGXING SOFTWARE CO, LTD., CN

[85] 2022-02-08

[86] 2020-06-29 (PCT/CN2020/099018)

[87] (WO2021/022945)

[30] CN (201910730287.6) 2019-08-08

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[21] **3,147,311**  
[13] A1

[51] **Int.Cl. C07K 7/06 (2006.01) A61K 8/27 (2006.01)**  
[25] EN  
[54] **ZINC ACTIVATED THYMULIN AND METHODS OF PREPARATION AND ADMINISTRATION**  
[54] **THYMULINE ACTIVEE PAR DU ZINC ET PROCEDES DE PREPARATION ET D'ADMINISTRATION**  
[72] PRASAD, ANANDA, US  
[72] VARGHESE, ROY, US  
[72] BIRD, PHILIP, US  
[72] CLAYTON, CHARLES, US  
[71] CYTOLYF THERAPEUTICS LLC, US  
[85] 2022-02-08  
[86] 2020-08-14 (PCT/US2020/046380)  
[87] (WO2021/030689)  
[30] US (62/886,995) 2019-08-15

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[21] **3,147,314**  
[13] A1

[51] **Int.Cl. C07K 14/22 (2006.01) A61P 31/04 (2006.01)**  
[25] EN  
[54] **METHODS OF MAKING AND USING LIPOOLIGOSACCHARIDE COMPOSITIONS AND VACCINES**  
[54] **PROCEDES DE PRODUCTION ET D'UTILISATION DE COMPOSITIONS DE LIPOOLIGOSACCHARIDES ET VACCINS**  
[72] GRIFFISS, J. MCLEOD, US  
[71] CRAPAUD BIO, INC., US  
[85] 2022-02-08  
[86] 2020-07-08 (PCT/US2020/041272)  
[87] (WO2021/007365)  
[30] US (62/871,472) 2019-07-08  
[30] US (62/872,973) 2019-07-11

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[21] **3,147,315**  
[13] A1

[51] **Int.Cl. F04F 1/16 (2006.01) F04B 19/24 (2006.01) F04F 1/06 (2006.01) F04F 1/14 (2006.01)**  
[25] EN  
[54] **OXYHYDROGEN PULSE AND ROTARY DETONATION COMBUSTION PUMP**  
[54] **IMPULSION OXYHRIQUE ET POMPE A COMBUSTION A DETONATION ROTATIVE**  
[72] TURNER, VANCE, US  
[71] TURNER, VANCE, US  
[85] 2022-02-08  
[86] 2020-08-10 (PCT/US2020/045681)  
[87] (WO2021/026543)  
[30] US (62/884,589) 2019-08-08

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[21] **3,147,324**  
[13] A1

[51] **Int.Cl. F16B 7/10 (2006.01) A47C 3/28 (2006.01) B25G 1/04 (2006.01) F16M 11/26 (2006.01)**  
[25] EN  
[54] **TELESCOPIC POLE LOCKING AND DAMPING MECHANISM**  
[54] **MECANISME DE VERROUILLAGE ET D'AMORTISSEMENT DE BARRE TELESCOPIQUE**  
[72] BEN-AVI, EHUD, IL  
[72] AMIRAN, HADAR, IL  
[71] KETER HOME AND GARDEN PRODUCTS LTD, IL  
[85] 2022-02-08  
[86] 2020-08-05 (PCT/IL2020/050855)  
[87] (WO2021/038554)  
[30] IL (268972) 2019-08-28

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[21] **3,147,326**  
[13] A1

[51] **Int.Cl. C12Q 1/6869 (2018.01) C40B 40/06 (2006.01)**  
[25] EN  
[54] **METHODS OF PREPARING DUAL INDEXED METHYL-SEQ LIBRARIES**  
[54] **PROCEDES DE PREPARATION DE BIBLIOTHEQUES DE METHYL-SEQ INDEXEES DOUBLES**  
[72] DAS CHAKRAVARTY, USHATI, US  
[72] HUANG, HSIAO-YUN, US  
[72] ZHENG, YU, US  
[72] LAI, KEVIN, US  
[71] INTEGRATED DNA TECHNOLOGIES, INC., US  
[85] 2022-02-08  
[86] 2020-09-29 (PCT/US2020/053284)  
[87] (WO2021/067275)  
[30] US (62/907,778) 2019-09-30

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[21] **3,147,328**  
[13] A1

[51] **Int.Cl. C07K 16/24 (2006.01) A61K 39/395 (2006.01) A61P 17/06 (2006.01)**  
[25] EN  
[54] **ANTI-IL-23P19 ANTIBODY FORMULATIONS**  
[54] **FORMULATIONS D'ANTICORPS ANTI-IL-23 P19**  
[72] GARIDEL, PATRICK, DE  
[72] SCHULTZ-FADEMRECHT, TORSTEN, DE  
[71] BOEHRINGER INGELHEIM INTERNATIONAL GMBH, DE  
[85] 2022-02-08  
[86] 2020-09-09 (PCT/IB2020/058347)  
[87] (WO2021/048743)  
[30] US (62/897,930) 2019-09-09

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[13] A1

[51] **Int.Cl. C11D 3/48 (2006.01) C08L 39/06 (2006.01) C11D 3/20 (2006.01) C11D 3/30 (2006.01) C11D 3/32 (2006.01) C11D 3/37 (2006.01) C11D 7/26 (2006.01) C11D 7/28 (2006.01) C11D 7/32 (2006.01) C11D 17/04 (2006.01)**

[25] EN

[54] **ANTIMICROBIAL COMPOSITION COMPRISING ALKYLATED POLYVINYLPIRROLIDONE POLYMER**

[54] **COMPOSITION ANTIMICROBIENNE COMPRENANT UN POLYMERE DE POLYVINYLPIRROLIDONE ALKYLEE**

[72] SHERRY, ALAN EDWARD, US  
[72] POLICICCHIO, NICOLA JOHN, US  
[72] WANG, YUEXI, US  
[72] FORD, FRANCIS CORNELIO, US  
[71] THE PROCTER & GAMBLE COMPANY, US

[85] 2022-02-08  
[86] 2020-08-18 (PCT/US2020/070423)  
[87] (WO2021/035250)  
[30] EP (19192578.3) 2019-08-20

[21] **3,147,332**  
[13] A1

[51] **Int.Cl. B05C 5/00 (2006.01) B05C 5/02 (2006.01)**

[25] EN

[54] **ADHESIVE SPLITTER SYSTEMS AND METHODS OF USING THE SAME**

[54] **SYSTEMES DIVISEURS D'ADHESIF ET LEURS PROCEDES D'UTILISATION**

[72] GIANNAZZO, FELIPE, US  
[71] DAL-TILE CORPORATION, US

[85] 2022-02-08  
[86] 2020-09-15 (PCT/US2020/050802)  
[87] (WO2021/055310)  
[30] US (16/577,237) 2019-09-20

[21] **3,147,333**  
[13] A1

[51] **Int.Cl. C12Q 1/6886 (2018.01)**

[25] EN

[54] **METHOD FOR CLASSIFYING A PATIENT'S RESPONSIVENESS TO IMMUNE CHECKPOINT INHIBITOR THERAPY**

[54] **PROCEDE DE CLASSIFICATION DE LA REPONSE D'UN PATIENT A UNE THERAPIE PAR INHIBITEUR DU POINT DE CONTROLE IMMUNITAIRE**

[72] ROECKEN, MARTIN, DE  
[72] RIESS, OLAF, DE  
[72] HILKE, FRANZ JOACHIM, DE  
[72] BRENNER, ELLEN, DE  
[71] EBERHARD KARLS UNIVERSITAT TUBINGEN MEDIZINISCHE FAKULTAT, DE

[85] 2022-02-08  
[86] 2020-08-06 (PCT/EP2020/072203)  
[87] (WO2021/028326)  
[30] EP (19191783.0) 2019-08-14

[21] **3,147,335**  
[13] A1

[51] **Int.Cl. A61K 9/107 (2006.01) A61K 9/50 (2006.01) A61K 47/14 (2017.01) A61K 47/26 (2006.01)**

[25] EN

[54] **METHODS FOR INCREASING THE BIOAVAILABILITY OF OTC AND PHARMACEUTICAL DRUGS**

[54] **PROCEDES POUR AUGMENTER LA BIODISPONIBILITE DE MEDICAMENTS PHARMACEUTIQUES ET SANS ORDONNANCE ("OTC")**

[72] FARMER, SEAN, US  
[72] ALIBEK, KEN, US  
[71] LOCUS IP COMPANY, LLC, US

[85] 2022-02-08  
[86] 2020-08-10 (PCT/US2020/045587)  
[87] (WO2021/030250)  
[30] US (62/885,233) 2019-08-10

[21] **3,147,336**  
[13] A1

[51] **Int.Cl. A23L 3/3436 (2006.01) C08K 3/30 (2006.01) C08K 3/34 (2006.01) C08L 23/04 (2006.01) C08L 53/02 (2006.01) C09J 153/02 (2006.01)**

[25] EN

[54] **TPE BASED LINERS FOR PRESSURIZED CONTAINERS**

[54] **JOINTS A BASE DE TPE POUR CONTENANTS SOUS PRESSION**

[72] PEIRSMAN, DANIEL, BE  
[72] VAN HOVE, SARAH, BE  
[72] DIMCIC, BILJANA, BE  
[71] ANHEUSER-BUSCH INBEV S.A., BE

[85] 2022-02-08  
[86] 2020-08-10 (PCT/EP2020/072421)  
[87] (WO2021/028398)  
[30] BE (2019/5521) 2019-08-09

[21] **3,147,338**  
[13] A1

[51] **Int.Cl. G01N 21/3577 (2014.01) G01N 33/50 (2006.01)**

[25] EN

[54] **A METHOD FOR ANALYZING A PERITONEAL DIALYSIS SAMPLE**

[54] **METHODE D'ANALYSE D'UN ECHANTILLON DE DIALYSE PERITONEALE**

[72] GRUNERT, TOM, AT  
[72] KRATOCHWILL, KLAUS, AT  
[71] VETERINARMEDIZINISCHE UNIVERSITAT WIEN, AT  
[71] MEDIZINISCHE UNIVERSITAT WIEN, AT

[85] 2022-02-08  
[86] 2020-08-25 (PCT/EP2020/073771)  
[87] (WO2021/037866)  
[30] EP (19193619.4) 2019-08-26

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[21] **3,147,340**  
[13] A1

[51] **Int.Cl. C04B 33/00 (2006.01) C04B 18/00 (2006.01) C04B 18/08 (2006.01) C04B 20/00 (2006.01) C04B 20/02 (2006.01) C04B 33/135 (2006.01)**

[25] EN  
[54] **PROCESS FOR PREPARING A GRANULAR CERAMIC MIXTURE**  
[54] **PROCEDE DE PREPARATION D'UN MELANGE CERAMIQUE GRANULAIRE**

[72] SEVERIN, ERIK J., HK  
[72] FERNANDEZ, ERWIN N., HK  
[72] MISA, JOHN VINCENT A., HK  
[71] VECOR IP HOLDINGS LIMITED, CN  
[85] 2022-02-08  
[86] 2020-08-14 (PCT/EP2020/072869)  
[87] (WO2021/028572)  
[30] EP (19191857.2) 2019-08-14

[21] **3,147,343**  
[13] A1

[51] **Int.Cl. C08J 11/24 (2006.01) C08L 67/02 (2006.01)**

[25] EN  
[54] **POLYMER RECYCLING**  
[54] **RECYCLAGE DE POLYMERE**

[72] ATKINS, MARTIN, GB  
[72] CURRY, NICHOLAS, GB  
[71] POSEIDON PLASTICS LIMITED, GB  
[85] 2022-02-08  
[86] 2020-08-13 (PCT/GB2020/051942)  
[87] (WO2021/028695)  
[30] GB (1911587.2) 2019-08-13

[21] **3,147,345**  
[13] A1

[51] **Int.Cl. F16C 17/10 (2006.01) E21B 10/567 (2006.01) E21B 10/573 (2006.01) F16C 33/36 (2006.01) F16C 43/02 (2006.01)**

[25] EN  
[54] **DOWNHOLE DRILLING TOOL WITH A POLYCRYSTALLINE DIAMOND BEARING**  
[54] **OUTIL DE FORAGE DE FOND DE TROU AVEC UN PALIER EN DIAMANT POLYCRISTALLIN**

[72] PREVOST, GREGORY, US  
[72] WILLIAM, MICHAEL V., US  
[72] SPATZ, EDWARD C., US  
[72] REESE, MICHAEL R., US  
[72] KING, WILLIAM W., US  
[72] MIESS, DAVID P., US  
[71] XR DOWNHOLE, LLC, US  
[85] 2022-02-08  
[86] 2020-09-04 (PCT/US2020/049382)  
[87] (WO2021/046335)  
[30] US (16/561,335) 2019-09-05

[21] **3,147,346**  
[13] A1

[51] **Int.Cl. B05D 7/00 (2006.01) C09D 7/61 (2018.01) C09D 7/63 (2018.01) B05D 3/10 (2006.01) C09D 5/02 (2006.01) C08K 3/36 (2006.01) C08K 5/103 (2006.01)**

[25] EN  
[54] **PIGMENTED AQUEOUS COATING COMPOSITION WITH IMPROVED STABILITY TOWARDS PINHOLES**  
[54] **COMPOSITION DE REVETEMENT AQUEUSE PIGMENTEE PRESENTANT UNE STABILITE AMELIOREE VIS-A-VIS DES PIQUES**

[72] LOEW, NORBERT, DE  
[72] BLUM, BASTIAN, DE  
[72] KAEMMERER, MICHAEL, DE  
[72] STEINMETZ, BERNHARD, DE  
[72] SCHAEFFER, FLORIAN, DE  
[71] BASF COATINGS GMBH, DE  
[85] 2022-02-08  
[86] 2020-10-23 (PCT/EP2020/079852)  
[87] (WO2021/078923)  
[30] EP (19204851.0) 2019-10-23

[21] **3,147,347**  
[13] A1

[51] **Int.Cl. A23K 10/30 (2016.01) A23K 20/10 (2016.01) A23K 20/163 (2016.01) A23K 20/179 (2016.01) A23K 20/189 (2016.01) A23K 20/28 (2016.01) A23K 30/15 (2016.01) A23K 30/18 (2016.01) C12N 1/00 (2006.01)**

[25] EN  
[54] **NOVEL SILAGE ADDITIVE COMPOSITIONS**  
[54] **NOUVELLES COMPOSITIONS D'ADDITIFS D'ENSILAGE**

[72] FARMER, SEAN, US  
[71] LOCUS IP COMPANY, LLC, US  
[85] 2022-02-08  
[86] 2021-07-23 (PCT/US2021/042921)  
[87] (WO2022/026309)  
[30] US (63/056,663) 2020-07-26

[21] **3,147,348**  
[13] A1

[51] **Int.Cl. C01B 17/22 (2006.01) H01M 10/052 (2010.01) H01M 10/0525 (2010.01) H01M 10/0562 (2010.01) C01B 25/14 (2006.01) C01D 15/00 (2006.01) H01B 1/10 (2006.01)**

[25] EN  
[54] **NEW METHOD FOR THE PREPARATION OF A LI-P-S PRODUCT AND CORRESPONDING PRODUCTS**  
[54] **NOUVEAU PROCEDE DE PREPARATION D'UN PRODUIT LI-P-S ET PRODUITS CORRESPONDANTS**

[72] MASQUELIER, CHRISTIAN, FR  
[72] LE MERCIER, THIERRY, FR  
[72] BRAIDA, MARC-DAVID, FR  
[72] KUDU, OMER ULAS, FR  
[72] FLEUTOT, BENOIT, CA  
[71] RHODIA OPERATIONS, FR  
[71] LE CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[71] UNIVERSITE DE PICARDIE JULES VERNE, FR  
[85] 2022-02-08  
[86] 2020-09-04 (PCT/EP2020/074881)  
[87] (WO2021/044042)  
[30] EP (19306075.3) 2019-09-06

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[21] **3,147,349**  
[13] A1

[51] **Int.Cl. A61K 31/70 (2006.01) A61K 35/742 (2015.01) A23L 33/125 (2016.01) A23L 2/52 (2006.01) A61K 9/00 (2006.01) A61K 31/685 (2006.01) A61K 33/00 (2006.01) A61P 1/08 (2006.01) A61P 1/12 (2006.01)**

[25] EN  
[54] **DRINKABLE SUPPLEMENT COMPOSITION FOR IMPROVED HEALTH AND HYDRATION**  
[54] **COMPOSITION DE COMPLEMENT A BOIRE POUR AMELIORER LA SANTE ET L'HYDRATATION**

[72] FARMER, SEAN, US  
[72] ALIBEK, KEN, US  
[71] LOCUS IP COMPANY, LLC, US  
[85] 2022-02-08  
[86] 2020-08-14 (PCT/US2020/046409)  
[87] (WO2021/030702)

[21] **3,147,350**  
[13] A1

[51] **Int.Cl. C09D 5/24 (2006.01) C09D 7/40 (2018.01) C09D 7/61 (2018.01) C09D 5/00 (2006.01) C09D 5/33 (2006.01) C08K 3/08 (2006.01) C08K 3/22 (2006.01)**

[25] EN  
[54] **NIR LIGHT SCATTERING COATINGS AND COMPOSITIONS FOR PREPARING THEM**  
[54] **REVEITEMENTS DE DIFFUSION DE LUMIERE DANS LE PROCHE IR (NIR) ET COMPOSITIONS POUR LES PREPARER**

[72] CHASE, THOMAS, US  
[72] CHILDERS, MATTHEW IAN, US  
[72] KURTOGLU, YUNUS EMRE, US  
[72] MUNDUS, MARKUS, DE  
[71] BASF COATINGS GMBH, DE  
[85] 2022-02-08  
[86] 2020-10-16 (PCT/EP2020/079154)  
[87] (WO2021/074360)  
[30] EP (19203762.0) 2019-10-17

[21] **3,147,352**  
[13] A1

[51] **Int.Cl. C04B 2/06 (2006.01) C04B 7/06 (2006.01) C04B 7/36 (2006.01) C04B 7/42 (2006.01) C04B 7/43 (2006.01)**

[25] EN  
[54] **PROCESS TO MAKE CALCIUM OXIDE OR ORDINARY PORTLAND CEMENT FROM CALCIUM BEARING ROCKS AND MINERALS**  
[54] **PROCEDE DE FABRICATION D'OXYDE DE CALCIUM OU DE CIMENT PORTLAND ORDINAIRE A PARTIR DE ROCHES ET DE MINERAUX CONTENANT DU CALCIUM**

[72] FINKE, CODY E., US  
[72] LEANDRI, HUGO F., US  
[71] CALIFORNIA INSTITUTE OF TECHNOLOGY, US  
[71] BRIMSTONE ENERGY INC., US  
[85] 2022-02-08  
[86] 2020-08-13 (PCT/US2020/046063)  
[87] (WO2021/030529)  
[30] US (62/886,137) 2019-08-13  
[30] US (62/913,620) 2019-10-10  
[30] US (62/932,200) 2019-11-07  
[30] US (63/019,916) 2020-05-04

[21] **3,147,353**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 31/05 (2006.01) A61K 31/164 (2006.01) A61K 31/167 (2006.01) A61K 31/192 (2006.01) A61K 31/198 (2006.01) A61K 31/352 (2006.01) A61K 31/353 (2006.01) A61P 17/00 (2006.01) A61P 29/00 (2006.01)**

[25] EN  
[54] **CBD FORMULATIONS AND USES THEREOF**  
[54] **FORMULATIONS DE CBD ET LEURS UTILISATIONS**

[72] WILSON, GLYNN, US  
[72] HUGLI, TONY, US  
[71] JUPITER WELLNESS, INC., US  
[71] HEALTHAIDE INC., US  
[85] 2022-02-08  
[86] 2020-08-07 (PCT/US2020/045408)  
[87] (WO2021/030190)  
[30] US (62/884,955) 2019-08-09  
[30] US (62/985,235) 2020-03-04

[21] **3,147,354**  
[13] A1

[51] **Int.Cl. C07D 513/04 (2006.01) A61K 31/545 (2006.01) A61P 31/00 (2006.01)**

[25] EN  
[54] **SIDEROPHORE CEPHALOSPORIN CONJUGATES AND USES THEREOF**  
[54] **CONJUGUES CEPHALOSPORINE SIDEROPHORE ET LEURS UTILISATIONS**

[72] RIEDL, ROSEMARIE, AT  
[72] PAUKNER, SUSANNE, AT  
[72] WICHA, WOLFGANG, AT  
[72] WIESER, JOSEF, AT  
[72] THIRRING, KLAUS (DECEASED), AT  
[72] KOLLMANN, HERMANN, AT  
[71] NABRIVA THERAPEUTICS GMBH, AT  
[85] 2022-02-08  
[86] 2020-09-04 (PCT/EP2020/074754)  
[87] (WO2021/043973)  
[30] EP (19195809.9) 2019-09-06

[21] **3,147,355**  
[13] A1

[51] **Int.Cl. D21C 11/00 (2006.01) D21C 11/06 (2006.01) D21C 11/10 (2006.01) D21C 11/12 (2006.01)**

[25] EN  
[54] **A METHOD AND A SYSTEM FOR ADJUSTING PH OF GREEN LIQUOR DREGS**  
[54] **PROCEDE ET SYSTEME D'AJUSTEMENT DU PH DE LIE DE LIQUEUR VERTE**

[72] VETTENRANTA, AINO, FI  
[71] VALMET TECHNOLOGIES OY, FI  
[85] 2022-02-08  
[86] 2020-08-18 (PCT/FI2020/050536)  
[87] (WO2021/032913)  
[30] FI (20195692) 2019-08-22

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[21] **3,147,356**  
[13] A1

[51] **Int.Cl. B29B 7/24 (2006.01) B29B 7/60 (2006.01) G05D 11/13 (2006.01)**

[25] EN

[54] **DEVICE AND METHOD FOR REFILLING AND TRANSFERRING SOLID RAW MATERIALS FROM A CONTAINER INTO A MIXER**

[54] **DISPOSITIF ET PROCEDE DE TRANSVIDAGE ET DE TRANSFERT DE MATIERES PREMIERES SOLIDES D'UN CONTENANT DANS UN MELANGEUR**

[72] BERG, RALF, DE

[72] JOEGE, FRANK, DE

[72] FOUILLET, JEREMY, DE

[72] HUESER, BERNHARD, DE

[71] BASF COATINGS GMBH, DE

[85] 2022-02-08

[86] 2020-10-16 (PCT/EP2020/079151)

[87] (WO2021/083688)

[30] EP (19205853.5) 2019-10-29

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[21] **3,147,357**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/14 (2006.01) A61K 9/70 (2006.01) A61K 36/00 (2006.01) A61K 47/10 (2017.01) A61K 47/34 (2017.01) A61K 47/46 (2006.01)**

[25] EN

[54] **MEDICAL APPARATUS WITH CANNABIS SATIVA L.**

[54] **APPAREIL MEDICAL AVEC CANNABIS SATIVA L.**

[72] GOLDNER, STEPHEN, US

[72] KIMLESS, DEBRA, US

[72] KIRAKOSYAN, ARA, US

[71] PURE GREEN PHARMACEUTICALS, INC., US

[85] 2022-02-08

[86] 2020-08-21 (PCT/US2020/047354)

[87] (WO2021/035126)

[30] US (62/889,648) 2019-08-21

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[21] **3,147,360**  
[13] A1

[51] **Int.Cl. G01V 1/28 (2006.01) G01V 1/36 (2006.01)**

[25] EN

[54] **SURFACE WAVE ESTIMATION AND REMOVAL FROM SEISMIC DATA**

[54] **ESTIMATION ET ELIMINATION D'ONDES DE SURFACE DE DONNEES SISMIQUES**

[72] ZHENG, YINGCAI, US

[72] HU, HAO, US

[71] UNIVERSITY OF HOUSTON SYSTEM, US

[85] 2022-02-08

[86] 2019-08-07 (PCT/US2019/045391)

[87] (WO2020/033465)

[30] US (62/717,456) 2018-08-10

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[21] **3,147,361**  
[13] A1

[51] **Int.Cl. G06K 9/00 (2022.01)**

[25] EN

[54] **METHODS FOR PROVIDING INFORMATION ABOUT A PERSON BASED ON FACIAL RECOGNITION**

[54] **PROCEDES DE FOURNITURE D'INFORMATIONS CONCERNANT UNE PERSONNE SE BASANT SUR LA RECONNAISSANCE FACIALE**

[72] TON-THAT, CAM-HOAN, US

[71] CLEARVIEW AI, INC., US

[85] 2022-02-08

[86] 2020-08-07 (PCT/US2020/045361)

[87] (WO2021/030178)

[30] US (62/884,766) 2019-08-09

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[21] **3,147,365**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 31/341 (2006.01) A61K 31/7125 (2006.01) A61P 29/00 (2006.01) C07C 13/553 (2006.01) C07D 307/64 (2006.01)**

[25] EN

[54] **EXTRACELLULAR VESICLE-NLRP3 ANTAGONIST**

[54] **ANTAGONISTE DE LA VESICULE EXTRACELLULAIRE-NLRP3**

[72] LIM, JOANNE, US

[72] KIRWIN, KATHERINE, US

[72] BROOM, WENDY, US

[72] SATHYANARAYANAN, SRIRAM, US

[72] VERMA, AJAY, US

[71] CODIAK BIOSCIENCES, INC., US

[85] 2022-02-08

[86] 2020-08-14 (PCT/US2020/046556)

[87] (WO2021/030773)

[30] US (62/886,876) 2019-08-14

[30] US (62/989,541) 2020-03-13

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[21] **3,147,366**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 9/127 (2006.01) A61K 31/7125 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **EXTRACELLULAR VESICLES WITH STAT3-ANTISENSE OLIGONUCLEOTIDES**

[54] **VESICULES EXTRACELLULAIRES AVEC DES OLIGONUCLEOTIDES ANTISENS STAT3**

[72] BOUTIN, ADAM T., US

[72] BROOM, WENDY, US

[72] SATHYANARAYANAN, SRIRAM, US

[72] YU, STEPHANIE, US

[72] HUANG, NAI-JIA, US

[72] KAUCHE, MONIQUE, US

[71] CODIAK BIOSCIENCES, INC., US

[85] 2022-02-08

[86] 2020-08-14 (PCT/US2020/046549)

[87] (WO2021/030768)

[30] US (62/886,904) 2019-08-14

[30] US (62/886,901) 2019-08-14

[30] US (62/900,376) 2019-09-13

[30] US (62/900,371) 2019-09-13

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[21] **3,147,367**  
[13] A1

[51] **Int.Cl. C12Q 1/6844 (2018.01) C12Q 1/6869 (2018.01)**

[25] EN

[54] **METHOD, SYSTEM AND APPARATUS FOR MULTI-OMIC SIMULTANEOUS DETECTION OF PROTEIN EXPRESSION, SINGLE NUCLEOTIDE VARIATIONS, AND COPY NUMBER VARIATIONS IN THE SAME SINGLE CELLS**

[54] **PROCEDE, SYSTEME ET APPAREIL POUR LA DETECTION SIMULTANEE MULTI-OMIQUE D'EXPRESSION PROTEIQUE, DE VARIATIONS NUCLEOTIDIQUES SIMPLES ET DE VARIATIONS DE NOMBRE DE COPIES DANS LES MEMES CELLULES INDIVIDUELLE**

[72] DHINGRA, DALIA, US  
[72] OOI, AIK, US  
[72] MENDEZ, PEDRO, US  
[72] RUFF, DAVID, US  
[72] SCIAMBI, ADAM, US  
[71] MISSION BIO, INC., US  
[85] 2022-02-08  
[86] 2020-08-12 (PCT/US2020/045949)  
[87] (WO2021/030447)  
[30] US (62/885,490) 2019-08-12

[21] **3,147,368**  
[13] A1

[51] **Int.Cl. E02F 9/22 (2006.01) E21C 45/00 (2006.01)**

[25] EN

[54] **REPLACEMENT HYDRAULIC HOSE KIT FOR A WORK MACHINE AND METHOD OF REPLACING A HYDRAULIC HARNESS OF A WORK MACHINE**

[54] **KIT DE TUYAU HYDRAULIQUE DE REMPLACEMENT POUR UN ENGIN DE CHANTIER ET PROCEDE DE REMPLACEMENT D'UN HARNAIS HYDRAULIQUE D'UN ENGIN DE CHANTIER**

[72] ENLUND, PENTTI, FI  
[72] JANTTI, JARKKO, FI  
[72] BLUMENKRON, GUILLERMO, FI  
[72] LYLTY-YRJANAINEN, JOUNI, FI  
[72] NIKITIN, ARTUR, FI  
[71] SANDVIK MINING AND CONSTRUCTION OY, FI  
[85] 2022-02-08  
[86] 2019-10-03 (PCT/EP2019/076798)  
[87] (WO2021/063510)

[21] **3,147,369**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 9/127 (2006.01) A61K 31/7125 (2006.01) A61P 29/00 (2006.01)**

[25] EN

[54] **EXTRACELLULAR VESICLE-ASO CONSTRUCTS TARGETING CEBP/BETA**

[54] **CONSTRUCTIONS VESICULE EXTRACELLULAIRE-OLIGONUCLEOTIDE ANTISENS (ASO) CIBLANT CEBP/BETA**

[72] BURZYN, DALIA, US  
[72] KAMERKAR, SUSHRUT, US  
[72] BOUTIN, ADAM T., US  
[72] BROOM, WENDY, US  
[72] SATHYANARAYANAN, SRIRAM, US  
[72] VERMA, AJAY, US  
[71] CODIAK BIOSCIENCES, INC., US  
[85] 2022-02-08  
[86] 2020-08-14 (PCT/US2020/046563)  
[87] (WO2021/030780)  
[30] US (62/886,930) 2019-08-14  
[30] US (62/900,136) 2019-09-13  
[30] US (62/936,220) 2019-11-15  
[30] US (62/944,204) 2019-12-05  
[30] US (62/989,540) 2020-03-13  
[30] US (63/023,065) 2020-05-11  
[30] US (63/035,357) 2020-06-05

[21] **3,147,370**  
[13] A1

[51] **Int.Cl. A61L 27/36 (2006.01) D01B 7/00 (2006.01)**

[25] EN

[54] **METHODS FOR ISOLATING SPIDER SILK PROTEINS VIA HIGH SHEAR SOLUBILIZATION**

[54] **PROCEDES POUR ISOLER DES PROTEINES DE SOIE D'ARAIGNEE PAR L'INTERMEDIAIRE D'UNE SOLUBILISATION A CISAILLEMENT ELEVE**

[72] WHEATLEY, ROBERT WILLIAM, US  
[71] BOLT THREADS, INC., US  
[85] 2022-02-08  
[86] 2020-09-16 (PCT/US2020/051024)  
[87] (WO2021/055440)  
[30] US (62/901,053) 2019-09-16

[21] **3,147,371**  
[13] A1

[51] **Int.Cl. A61M 25/00 (2006.01) A61M 25/02 (2006.01) A61M 25/06 (2006.01)**

[25] EN

[54] **CATHETER SYSTEM FOR PEDIATRIC TREATMENT**

[54] **SYSTEME DE CATHETER POUR TRAITEMENT PEDIATRIQUE**

[72] NATESAN, MOHANKUMAR, SG  
[72] JOHN, ONG XUE GUANG, SG  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2022-02-08  
[86] 2020-08-13 (PCT/US2020/046218)  
[87] (WO2021/041047)  
[30] US (62/892,738) 2019-08-28  
[30] US (16/989,243) 2020-08-10

[21] **3,147,374**  
[13] A1

[51] **Int.Cl. A61M 25/00 (2006.01) A61M 25/01 (2006.01) A61M 25/06 (2006.01) A61M 5/158 (2006.01)**

[25] EN

[54] **CATHETER SYSTEM WITH EXTENDABLE EXTENSION TUBE**

[54] **SYSTEME DE CATHETER AVEC TUBE DE RALLONGE EXTENSIBLE**

[72] KUMAR, JITHENDRA, SG  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2022-02-08  
[86] 2020-08-13 (PCT/US2020/046225)  
[87] (WO2021/041048)  
[30] US (62/892,725) 2019-08-28  
[30] US (16/989,293) 2020-08-10

[21] **3,147,438**  
[13] A1

[51] **Int.Cl. A43B 5/14 (2006.01) A43B 7/14 (2022.01) A43B 13/14 (2006.01)**

[25] FR

[54] **MONOLITHIC CYCLING SHOE SOLE**

[54] **SEMELLE MONOLITHIQUE DE CHAUSSURE DE CYCLISME**

[72] NOBILE, PASCAL, FR  
[71] PEDALISSIME 2020, FR  
[85] 2022-02-09  
[86] 2020-08-14 (PCT/EP2020/072926)  
[87] (WO2021/028586)  
[30] FR (1909215) 2019-08-14

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[21] **3,147,439**  
[13] A1

[51] **Int.Cl. C23C 10/28 (2006.01)**  
[25] EN  
[54] **METHOD FOR APPLYING AN INTERMETALLIC ANTICORROSION COATING BY THERMAL DIFFUSION GALVANIZATION**

[54] **PROCEDE D'APPLICATION D'UN REVETEMENT INTERMETALLIQUE ANTI-CORROSION SELON UN PROCEDE DE ZINGAGE PAR THERMODIFFUSION**

[72] SONK, ALEKSEY NIKOLAEVICH, RU  
[72] PETROV, IGOR' VLADIMIROVICH, RU  
[72] YAREMA, IGOR' PETROVICH, RU  
[71] MAJORPACK INCORPORATED, US  
[85] 2022-02-09  
[86] 2020-10-16 (PCT/RU2020/000544)  
[87] (WO2021/034223)

[21] **3,147,441**  
[13] A1

[51] **Int.Cl. C12N 5/0783 (2010.01)**  
[25] EN  
[54] **METHODS OF PREPARING T CELLS FOR T CELL THERAPY**

[54] **PROCEDES DE PREPARATION DE LYMPHOCYTES T POUR UNE THERAPIE PAR LYMPHOCYTES T**

[72] NI, YAJIN, US  
[72] ZHANG, CHUPEI, US  
[72] LEONARD, MARK W., US  
[72] PERTEL, THOMAS CHARLES, US  
[71] ALLOGENE THERAPEUTICS, INC., US  
[85] 2022-02-09  
[86] 2020-09-02 (PCT/US2020/049074)  
[87] (WO2021/046134)  
[30] US (62/895,381) 2019-09-03

[21] **3,147,442**  
[13] A1

[51] **Int.Cl. C08G 59/18 (2006.01) C08G 59/50 (2006.01) C09D 163/00 (2006.01) C09J 163/00 (2006.01)**

[25] EN  
[54] **COATING COMPOSITIONS**

[54] **COMPOSITIONS DE REVETEMENT**

[72] KRILEY, JOSEPH P., US  
[72] POLLUM, JR. MARVIN M., US  
[72] FORTMAN, DAVID J., US  
[72] REARICK, BRIAN K., US  
[72] NAKAJIMA, MASAYUKI, US  
[72] FRENCH, MARIA S., US  
[71] PPG INDUSTRIES OHIO, INC., US  
[85] 2022-02-09  
[86] 2020-06-23 (PCT/US2020/039130)  
[87] (WO2021/040867)  
[30] US (62/890,675) 2019-08-23

[21] **3,147,454**  
[13] A1

[51] **Int.Cl. C07D 405/04 (2006.01) A61K 31/4192 (2006.01) A61P 29/00 (2006.01) C07D 405/14 (2006.01) C07D 413/14 (2006.01) C07D 417/14 (2006.01)**

[25] EN  
[54] **2-HYDROXYCYCLOALKANE-1-CARBAMOYL DERIVATIVES**

[54] **DERIVES DE 2-HYDROXYCYCLOALKANE-1-CARBAMOYLE**

[72] BOLLI, MARTIN, CH  
[72] GATFIELD, JOHN, CH  
[72] GRISOSTOMI, CORINNA, CH  
[72] REMEN, LUBOS, CH  
[72] SAGER, CHRISTOPH, CH  
[72] ZUMBRUNN, CORNELIA, CH  
[71] IDORSIA PHARMACEUTICALS LTD, CH  
[85] 2022-02-09  
[86] 2020-08-14 (PCT/EP2020/072865)  
[87] (WO2021/028570)  
[30] EP (PCT/EP2019/071921) 2019-08-15

[21] **3,147,455**  
[13] A1

[51] **Int.Cl. A01N 1/02 (2006.01)**  
[25] FR  
[54] **USE OF ANnelid HAEMOGLOBIN IN VITRO**

[54] **UTILISATION D'HEMOGLOBINE D'ANnelIDES IN VITRO**

[72] ZAL, FRANCK, FR  
[71] HEMARINA, FR  
[85] 2022-02-09  
[86] 2020-08-19 (PCT/EP2020/073154)  
[87] (WO2021/032763)  
[30] FR (FR1909299) 2019-08-20

[21] **3,147,464**  
[13] A1

[51] **Int.Cl. C12N 9/22 (2006.01) C12N 15/85 (2006.01) C12N 15/86 (2006.01) C12Q 1/68 (2018.01)**

[25] EN  
[54] **METHODS OF OPTIMISING EXPRESSION AND DELIVERY OF MITOCHONDRIAL PROTEINS**

[54] **PROCEDES D'OPTIMISATION DE L'EXPRESSION ET DE L'ADMINISTRATION DE PROTEINES MITOCHONDRIALES**

[72] MINCZUK, MICHAL, GB  
[72] GAMMAGE, PAYAM A., GB  
[71] CAMBRIDGE ENTERPRISE LIMITED, GB  
[85] 2022-02-09  
[86] 2019-03-21 (PCT/GB2019/050808)  
[87] (WO2020/188228)

[21] **3,147,470**  
[13] A1

[51] **Int.Cl. A61K 31/4709 (2006.01) A61K 45/06 (2006.01) C12Q 1/68 (2018.01) G01N 33/574 (2006.01)**

[25] EN  
[54] **NOVEL USES OF CRENOLANIB**

[54] **NOUVELLES UTILISATIONS DU CRENOLANIB**

[72] JAIN, VINAY K., US  
[71] AROG PHARMACEUTICALS, INC., US  
[85] 2022-02-09  
[86] 2020-01-10 (PCT/US2020/013066)  
[87] (WO2021/034345)  
[30] US (62/888,717) 2019-08-19  
[30] US (16/738,108) 2020-01-09

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[21] **3,147,475**  
[13] A1

[51] **Int.Cl. F41C 33/00 (2006.01) F41C 33/02 (2006.01)**  
[25] EN  
[54] **FIREARM HOLSTER**  
[54] **ETUI D'ARME A FEU**  
[72] EVANS, SCOTT V., US  
[72] TOMCZAK, NICHOLAS R., US  
[71] EDGE-WORKS MANUFACTURING COMPANY, US  
[85] 2022-02-09  
[86] 2020-08-16 (PCT/US2020/046585)  
[87] (WO2021/034732)  
[30] US (62/888,155) 2019-08-16

[21] **3,147,483**  
[13] A1

[51] **Int.Cl. C07C 255/46 (2006.01) C01B 15/023 (2006.01)**  
[25] EN  
[54] **PROCESS FOR MANUFACTURING AN AQUEOUS HYDROGEN PEROXIDE SOLUTION**  
[54] **PROCEDE DE FABRICATION D'UNE SOLUTION AQUEUSE DE PEROXYDE D'HYDROGENE**  
[72] LORENT, KAROL, BE  
[71] SOLVAY SA, BE  
[85] 2022-02-09  
[86] 2020-09-11 (PCT/EP2020/075489)  
[87] (WO2021/048368)  
[30] EP (19196602.7) 2019-09-11

[21] **3,147,486**  
[13] A1

[51] **Int.Cl. B60L 5/36 (2006.01) B60L 53/16 (2019.01) B60L 53/30 (2019.01) B60L 53/31 (2019.01) B60L 53/36 (2019.01) B60L 5/42 (2006.01)**  
[25] EN  
[54] **POSITIONING UNIT AND CONTACTING METHOD**  
[54] **UNITE DE POSITIONNEMENT ET PROCEDE DE MISE EN CONTACT**  
[72] FELDINGER, MARTIN, AT  
[72] HEIEIS, NILS, DE  
[72] STAUBACH, TIMO, DE  
[71] SCHUNK TRANSIT SYSTEMS GMBH, DE  
[71] SCHUNK TRANSIT SYSTEMS GMBH, AT  
[85] 2022-02-09  
[86] 2019-08-28 (PCT/EP2019/072936)  
[87] (WO2021/037351)

[21] **3,147,490**  
[13] A1

[51] **Int.Cl. C12Q 1/6806 (2018.01)**  
[25] EN  
[54] **METHODS FOR GENERATING A POPULATION OF POLYNUCLEOTIDE MOLECULES**  
[54] **PROCEDES DE GENERATION D'UNE POPULATION DE MOLECULES DE POLYNUCLEOTIDES**  
[72] FICZ, GABRIELLA, GB  
[72] SAUNDERSON, EMILY, GB  
[71] QUEEN MARY UNIVERSITY OF LONDON, GB  
[85] 2022-02-09  
[86] 2020-08-12 (PCT/GB2020/051917)  
[87] (WO2021/028682)  
[30] GB (1911515.3) 2019-08-12

[21] **3,147,492**  
[13] A1

[51] **Int.Cl. B65G 1/10 (2006.01)**  
[25] EN  
[54] **MATERIAL HANDLING SYSTEM**  
[54] **SYSTEME DE MANIPULATION DE MATERIAU**  
[72] STEVENS, ALEXANDER, US  
[72] VALINSKY, JOSEPH, US  
[71] OPEX CORPORATION, US  
[85] 2022-02-09  
[86] 2020-08-14 (PCT/US2020/046263)  
[87] (WO2021/030647)  
[30] US (62/886,602) 2019-08-14

[21] **3,147,493**  
[13] A1

[51] **Int.Cl. A61K 31/519 (2006.01) A61P 35/00 (2006.01) C07D 417/04 (2006.01) C07D 417/14 (2006.01)**  
[25] EN  
[54] **4-SUBSTITUTED INDOLE AND INDAZOLE SULFONAMIDO DERIVATIVES AS PARG INHIBITORS**  
[54] **DERIVES DE SULFONAMIDO D'INDOLE ET D'INDAZOLE SUBSTITUES EN POSITION 4 EN TANT QU'INHIBITEURS DE PARG**  
[72] SUTTON, JR. JAMES CLIFFORD, US  
[72] DILLON, MICHAEL PATRICK, US  
[71] IDEAYA BIOSCIENCES, INC., US  
[85] 2022-02-09  
[86] 2020-09-18 (PCT/US2020/051486)  
[87] (WO2021/055744)  
[30] US (62/903,438) 2019-09-20

[21] **3,147,494**  
[13] A1

[51] **Int.Cl. C12M 1/36 (2006.01)**  
[25] EN  
[54] **CONTROL SYSTEMS AND METHODS FOR AUTOMATED CLARIFICATION OF CELL CULTURE WITH HIGH SOLIDS CONTENT**  
[54] **SYSTEMES DE COMMANDE ET PROCEDES DE CLARIFICATION AUTOMATISEE DE CULTURE CELLULAIRE A TENEUR ELEVEE EN SOLIDES**  
[72] CARROLL, DEREK, US  
[72] BRANSBY, MICHAEL, US  
[72] YUEN, PHILIP, US  
[71] REPLIGEN CORPORATION, US  
[85] 2022-02-09  
[86] 2020-08-13 (PCT/US2020/046151)  
[87] (WO2021/030573)  
[30] US (62/886,144) 2019-08-13

[21] **3,147,495**  
[13] A1

[51] **Int.Cl. H05B 47/185 (2020.01) H05B 45/20 (2020.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR PROVIDING HIGH POWER FACTOR WIRED LAMP CONTROL**  
[54] **SYSTEME ET PROCEDE POUR FOURNIR UNE COMMANDE DE LAMPE CABLEE A FACTEUR D'ALIMENTATION ELEVE**  
[72] TAKACS, LASZLO A., US  
[72] TOMASOVICS, ATTILA, US  
[72] FLIES, GREG, US  
[72] NICOLAY, DAVID, US  
[72] DAVENPORT, JOHN, US  
[72] LIANG, ZHANG, CN  
[72] SEIFERT, JAY, US  
[71] ENERGY FOCUS, INC., US  
[85] 2022-02-09  
[86] 2020-05-27 (PCT/US2020/034675)  
[87] (WO2021/029933)  
[30] US (62/887,406) 2019-08-15  
[30] US (63/006,814) 2020-04-08

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[13] A1

[51] **Int.Cl. E21B 21/00 (2006.01) E21B 21/10 (2006.01) F16K 17/06 (2006.01)**  
[25] EN  
[54] **HYDRAULIC PROTECTION SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE DE PROTECTION HYDRAULIQUE**  
[72] SZPUNAR, DARIUSZ KRZYSZTOF, GB  
[72] MANETT, KRIS, GB  
[72] DUPLESSIS, ANDRE NICOLAAS, GB  
[71] EXPRO NORTH SEA LIMITED, GB  
[85] 2022-02-09  
[86] 2020-09-01 (PCT/GB2020/052091)  
[87] (WO2021/044133)  
[30] GB (1912684.6) 2019-09-04

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[13] A1

[51] **Int.Cl. B65G 1/137 (2006.01) B65G 1/00 (2006.01) B65G 1/02 (2006.01) B65G 1/04 (2006.01) B65G 57/00 (2006.01) B65G 61/00 (2006.01)**  
[25] EN  
[54] **AUTOMATED VEHICLE FOR USE IN INVENTORY MANAGEMENT SYSTEM**  
[54] **VEHICULE AUTOMATISE DESTINE A ETRE UTILISE DANS UN SYSTEME DE GESTION D'INVENTAIRE**  
[72] STEVENS, ALEXANDER, US  
[72] VALINSKY, JOSEPH, US  
[71] OPEX CORPORATION, US  
[85] 2022-02-09  
[86] 2020-08-14 (PCT/US2020/046418)  
[87] (WO2021/030705)  
[30] US (62/886,602) 2019-08-14

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[13] A1

[51] **Int.Cl. G06F 1/3293 (2019.01) G06F 1/12 (2006.01) G06F 3/16 (2006.01) G06F 13/12 (2006.01) G06F 15/16 (2006.01) H04R 3/00 (2006.01)**  
[25] EN  
[54] **POWER MANAGEMENT AND DISTRIBUTED AUDIO PROCESSING TECHNIQUES FOR PLAYBACK DEVICES**  
[54] **GESTION D'ENERGIE ET TECHNIQUES DE TRAITEMENT AUDIO REPARTI POUR DES DISPOSITIFS DE LECTURE**  
[72] RAMASUBRAMANIAN, RAJASEKARAN, US  
[72] DOLAN, JAMES M., US  
[72] ANTONY, ALLEN, US  
[72] TOBER, BENJAMIN, US  
[72] VISCUSI, MARK, US  
[72] ROSENMAN, JASON VICTOR, US  
[72] MURLI, MADHUR, US  
[72] MOORE, MATTHEW DAVID, US  
[71] RAMASUBRAMANIAN, RAJASEKARAN, US  
[71] DOLAN, JAMES M., US  
[71] ANTONY, ALLEN, US  
[71] TOBER, BENJAMIN, US  
[71] VISCUSI, MARK, US  
[71] ROSENMAN, JASON VICTOR, US  
[71] MURLI, MADHUR, US  
[71] MOORE, MATTHEW DAVID, US  
[85] 2022-02-09  
[86] 2020-08-07 (PCT/US2020/045465)  
[87] (WO2021/030208)  
[30] US (62/884,966) 2019-08-09

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[13] A1

[51] **Int.Cl. E04B 2/96 (2006.01)**  
[25] EN  
[54] **CURTAIN WALL**  
[54] **MUR-RIDEAU**  
[72] CLAEYS, ERIC, BE  
[71] CLAEYS, STEPHANIE CATHARINA R., BE  
[71] CLAEYS, LAURENS LEONARD J., BE  
[71] CLAEYS, NAUSIKAA ELS P., BE  
[85] 2022-02-09  
[86] 2020-08-20 (PCT/EP2020/073405)  
[87] (WO2021/032854)  
[30] US (62/889,141) 2019-08-20

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[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01)**  
[25] EN  
[54] **PROTEIN PANELS FOR THE EARLY DIAGNOSIS/PROGNOSIS AND TREATMENT OF AGGRESSIVE PROSTATE CANCER**  
[54] **ENSEMBLES DE PROTEINES POUR LE DIAGNOSTIC/PRONOSTIC PRECOCE ET LE TRAITEMENT D'UN CANCER AGRESSIF DE LA PROSTATE**  
[72] RODLAND, KARIN, US  
[72] LIU, TAO, US  
[72] CULLEN, JENNIFER, US  
[72] PETROVICS, GYORGY, US  
[72] SRIVASTAVA, SUDHIR, US  
[72] KAGAN, JACOB, US  
[71] BATTELLE MEMORIAL INSTITUTE, US  
[71] THE HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE, INC., US  
[71] THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES, US  
[85] 2022-02-09  
[86] 2020-08-19 (PCT/US2020/047069)  
[87] (WO2021/034975)  
[30] US (62/888,890) 2019-08-19

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[13] A1

[51] **Int.Cl. A61F 2/44 (2006.01)**  
[25] EN  
[54] **INTERSPINOUS-INTERLAMINAR STABILIZATION SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES DE STABILISATION INTEREPINEUSE-INTERLAMELLAIRE**  
[72] SOO, CHENG-LUN, US  
[72] HARRIS, PETER M., US  
[72] BOMBACH, ROBERT, US  
[72] SPITLER, JAMES Q., US  
[72] ESCOBAR III, LUIS A., US  
[71] FLOSPINE, LLC, US  
[85] 2022-02-09  
[86] 2020-08-21 (PCT/US2020/047457)  
[87] (WO2021/035160)  
[30] US (62/889,719) 2019-08-21

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[21] **3,147,518**  
[13] A1

[51] **Int.Cl. C01G 53/00 (2006.01) H01M 4/525 (2010.01)**  
[25] EN  
[54] **ELECTRODE ACTIVE MATERIAL AND PROCESS FOR MANUFACTURING SAID ELECTRODE ACTIVE MATERIAL**  
[54] **MATERIAU ACTIF D'ELECTRODE ET PROCEDE DE FABRICATION DUDIT MATERIAU ACTIF D'ELECTRODE**  
[72] KIM, YOUNG JIN, US  
[72] SIOSS, JAMES A, US  
[72] HAAG, JACOB, US  
[72] VASSILARAS, PLOUSIA, US  
[72] LAMPERT, JORDAN K, US  
[72] LONG, BRANDON RAY, US  
[71] BASF SE, DE  
[85] 2022-02-09  
[86] 2020-10-15 (PCT/EP2020/079071)  
[87] (WO2021/078627)  
[30] EP (19204615.9) 2019-10-22

[21] **3,147,519**  
[13] A1

[51] **Int.Cl. B65G 1/04 (2006.01) B65G 1/00 (2006.01) B65G 1/02 (2006.01) B65G 1/06 (2006.01) B65G 1/12 (2006.01) B65G 1/137 (2006.01)**  
[25] EN  
[54] **MATERIAL HANDLING SYSTEM**  
[54] **SYSTEME DE MANIPULATION DE MATERIAU**  
[72] VALINSKY, JOSEPH, US  
[72] STEVENS, ALEXANDER, US  
[71] OPEX CORPORATION, US  
[85] 2022-02-09  
[86] 2020-08-14 (PCT/US2020/046562)  
[87] (WO2021/030779)  
[30] US (62/886,602) 2019-08-14

[21] **3,147,521**  
[13] A1

[51] **Int.Cl. F22B 1/18 (2006.01) E21B 43/24 (2006.01)**  
[25] EN  
[54] **STEAM GENERATOR TOOL**  
[54] **OUTIL GENERATEUR DE VAPEUR**  
[72] THOMPSON, DANIEL, CA  
[72] KAY, BRIAN, CA  
[72] SOPKO, WESLEY, CA  
[72] WIEBE, KEVIN, CA  
[72] DESMARAIS, ADRIEN, CA  
[72] DARY, BRADLEY, CA  
[71] GENERAL ENERGY RECOVERY INC., CA  
[85] 2022-02-09  
[86] 2020-09-22 (PCT/CA2020/051071)  
[87] (3147521)  
[30] US (62/885,078) 2019-08-09

[21] **3,147,522**  
[13] A1

[51] **Int.Cl. B22D 1/00 (2006.01) B22D 11/117 (2006.01) F27D 3/16 (2006.01)**  
[25] EN  
[54] **DIFFUSION ARTICLE**  
[54] **ARTICLE DE DIFFUSION**  
[72] SMITH, MARK, US  
[71] HARBISONWALKER INTERNATIONAL, INC., US  
[85] 2022-02-09  
[86] 2020-08-12 (PCT/US2020/045874)  
[87] (WO2021/034559)  
[30] US (16/544,020) 2019-08-19

[21] **3,147,526**  
[13] A1

[51] **Int.Cl. A63B 69/40 (2006.01) A01K 15/00 (2006.01) A63B 29/00 (2006.01)**  
[25] EN  
[54] **A TURNING DEVICE FOR A BALL LAUNCHER**  
[54] **DISPOSITIF DE ROTATION POUR LANCEUR DE BALLES**  
[72] KALFA, YONAH, IL  
[71] SLINGER BAG LTD, IL  
[85] 2022-02-09  
[86] 2020-08-12 (PCT/IL2020/050881)  
[87] (WO2021/028914)  
[30] IL (268727) 2019-08-15

[21] **3,147,527**  
[13] A1

[51] **Int.Cl. G06T 19/00 (2011.01) G06T 15/06 (2011.01) G06T 15/40 (2011.01)**  
[25] EN  
[54] **MODELLING OF UNDERGROUND WORKSITE**  
[54] **MODELISATION D'UN CHANTIER SOUTERRAIN**  
[72] MARTIKAINEN, PEKKA, FI  
[71] SANDVIK MINING AND CONSTRUCTION OY, FI  
[85] 2022-02-09  
[86] 2020-09-17 (PCT/EP2020/076041)  
[87] (WO2021/053112)  
[30] EP (19198780.9) 2019-09-20

[21] **3,147,529**  
[13] A1

[51] **Int.Cl. C01G 53/00 (2006.01) H01M 4/131 (2010.01) H01M 4/525 (2010.01) H01M 4/04 (2006.01) H01M 4/36 (2006.01)**  
[25] EN  
[54] **ELECTRODE ACTIVE MATERIAL AND PROCESS FOR MANUFACTURING SAID ELECTRODE ACTIVE MATERIAL**  
[54] **MATERIAU ACTIF D'ELECTRODE ET PROCEDE DE FABRICATION DUDIT MATERIAU ACTIF D'ELECTRODE**  
[72] KIM, YOUNG JIN, US  
[72] SIOSS, JAMES A, US  
[72] HAAG, JACOB, US  
[72] VASSILARAS, PLOUSIA, US  
[72] LAMPERT, JORDAN, US  
[72] LONG, BRANDON RAY, US  
[71] BASF SE, DE  
[85] 2022-02-09  
[86] 2020-10-15 (PCT/EP2020/079059)  
[87] (WO2021/078626)  
[30] EP (19204614.2) 2019-10-22

[21] **3,147,530**  
[13] A1

[51] **Int.Cl. A47J 29/02 (2006.01)**  
[25] EN  
[54] **AUTOMATIC EGG COOKER**  
[54] **CUISEUR AUTOMATIQUE D'?UFS**  
[72] LOCICCHIO, LOUIS, US  
[71] CIPO, CA  
[71] LOU VAN ENTERPRISE INC., US  
[85] 2022-02-09  
[86] 2020-09-08 (PCT/US2020/049676)  
[87] (WO2021/050415)  
[30] US (62/899,815) 2019-09-13

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[13] A1

[51] **Int.Cl. B08B 1/00 (2006.01)**  
[25] EN  
[54] **METHODS OF REDUCING BIOFILM AND/OR PLANKTONIC CONTAMINATION**  
[54] **PROCEDES DE REDUCTION DE CONTAMINATION PAR BIOFILM ET/OU PLANCTONIQUE**  
[72] FITZGERALD, JAMESINA ANNE, US  
[72] SHERRY, ALAN EDWARD, US  
[72] PORTER, JULIE MARIE, US  
[72] POLICICCHIO, NICOLA JOHN, US  
[72] IBERI, VIGHTER, US  
[72] PALACIOMANCHENO, PAOLO EFRAIN, US  
[72] DUFRESNE, TOM EDWARD, US  
[72] BAO, HAILING, US  
[72] DE BEER, ANTONIUS LAMBERTUS, US  
[71] CIPO, CA  
[71] THE PROCTER & GAMBLE COMPANY, US  
[85] 2022-02-09  
[86] 2020-08-18 (PCT/US2020/070422)  
[87] (WO2021/035249)  
[30] EP (19192574.2) 2019-08-20

[21] **3,147,533**  
[13] A1

[51] **Int.Cl. A23L 2/395 (2006.01) A23K 10/38 (2016.01) A23L 33/17 (2016.01) A23L 33/185 (2016.01) A23J 1/00 (2006.01) A23J 1/12 (2006.01) A23J 3/14 (2006.01) A23J 3/34 (2006.01) A23L 2/66 (2006.01) A23L 2/74 (2006.01) A23L 2/84 (2006.01) C12C 1/16 (2006.01) C12F 3/06 (2006.01)**  
[25] EN  
[54] **PROTEIN POWDER**  
[54] **POUDRE DE PROTEINE**  
[72] FREDERIX, SOFIE, BE  
[72] GREDEN, KARL, BE  
[71] ANHEUSER-BUSCH INBEV S.A., BE  
[85] 2022-02-09  
[86] 2020-08-12 (PCT/EP2020/072682)  
[87] (WO2021/028509)  
[30] BE (BE2019/5525) 2019-08-12

[21] **3,147,535**  
[13] A1

[51] **Int.Cl. F16B 11/00 (2006.01) F16B 2/22 (2006.01) F16B 7/04 (2006.01) F16L 3/133 (2006.01)**  
[25] EN  
[54] **ATTACHMENT DEVICE FOR A NON-STRUCTURAL COMPONENT OF A BUILDING**  
[54] **DISPOSITIF DE FIXATION POUR UN ELEMENT NON STRUCTUREL D'UN BATIMENT**  
[72] WITHERBEE, MARTIN LEE, US  
[72] THORAT, HEMRAJ K., IN  
[72] KHALKAR, AMOL, IN  
[71] EATON INTELLIGENT POWER LIMITED, IE  
[85] 2022-02-09  
[86] 2020-08-13 (PCT/EP2020/025373)  
[87] (WO2021/028079)  
[30] US (62/886016) 2019-08-13

[21] **3,147,536**  
[13] A1

[51] **Int.Cl. E21F 13/00 (2006.01) G05D 1/02 (2020.01)**  
[25] EN  
[54] **POSITIONING OF MOBILE DEVICE IN UNDERGROUND WORKSITE**  
[54] **POSITIONNEMENT DE DISPOSITIF MOBILE DANS UN CHANTIER SOUTERRAIN**  
[72] MARTIKAINEN, PEKKA, FI  
[71] SANDVIK MINING AND CONSTRUCTION OY, FI  
[85] 2022-02-09  
[86] 2020-09-17 (PCT/EP2020/076040)  
[87] (WO2021/053111)  
[30] EP (19198779.1) 2019-09-20

[21] **3,147,537**  
[13] A1

[51] **Int.Cl. H04W 74/08 (2009.01) H04W 74/00 (2009.01)**  
[25] EN  
[54] **ENHANCED IMPLEMENTATION OF A RANDOM ACCESS CHANNEL**  
[54] **MISE EN OEUVRE AMELIOREE D'UN CANAL D'ACCES ALEATOIRE**  
[72] HEDAYAT, AHMAD REZA, US  
[72] MUKHERJEE, AMITAV, US  
[72] VAIDYA, MAULIK V., US  
[71] CHARTER COMMUNICATIONS OPERATING, LLC, US  
[85] 2022-02-09  
[86] 2020-08-11 (PCT/US2020/045738)  
[87] (WO2021/030331)  
[30] US (16/541,855) 2019-08-15

[21] **3,147,547**  
[13] A1

[51] **Int.Cl. H04R 25/00 (2006.01)**  
[25] EN  
[54] **SOUND ANCHOR FOR TRANSMITTING SOUND AND VIBRATION TO HUMAN TISSUES IN EAR CANAL AND SEMI-IMPLANTABLE HEARING AID HAVING THE SAME**  
[54] **ANCORAGE SONORE PERMETTANT DE TRANSMETTRE UN SON A DES TISSUS HUMAINS A L'INTERIEUR D'UN CONDUIT AUDITIF EXTERNE ET PROTHESE AUDITIVE SEMI-IMPLANTABLE LE COMPRENANT**  
[72] HAN, CHANG YONG, KR  
[71] SAFAUD INC., KR  
[85] 2022-02-09  
[86] 2019-10-14 (PCT/KR2019/013422)  
[87] (WO2021/029482)  
[30] KR (10-2019-0098741) 2019-08-13

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[13] A1

[51] **Int.Cl. C07K 14/47 (2006.01)**  
[25] EN  
[54] **METHODS TO DETECT MTBR TAU ISOFORMS AND USE THEREOF**  
[54] **PROCEDES DE DETECTION D'ISOFORMES TAU DE MTBR ET LEUR UTILISATION**  
[72] BATEMAN, RANDALL, US  
[72] BARTHELEMY, NICOLAS, US  
[72] HORIE, KANTA, US  
[72] SATO, CHIHIRO, US  
[71] WASHINGTON UNIVERSITY, US  
[85] 2022-02-09  
[86] 2020-08-13 (PCT/US2020/046224)  
[87] (WO2021/030615)  
[30] US (62/886,165) 2019-08-13  
[30] US (62/970,950) 2020-02-06  
[30] US (63/044,836) 2020-06-26

[21] **3,147,568**  
[13] A1

[51] **Int.Cl. H02K 3/02 (2006.01) H02K 3/04 (2006.01) H02K 3/18 (2006.01) H02K 3/24 (2006.01) H02K 15/04 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR PRODUCING AN ELECTRIC MACHINE, ELECTRIC MACHINE AND GROUP OF ELECTRIC MACHINES**  
[54] **PROCEDE ET DISPOSITIF POUR PRODUIRE UNE MACHINE ELECTRIQUE, MACHINE ELECTRIQUE ET GROUPE DE MACHINES ELECTRIQUES**  
[72] WOSTMANN, FRANZ-JOSEF, DE  
[72] BUSSE, MATTHIAS, DE  
[71] FRAUNHOFER-GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2022-02-09  
[86] 2020-09-01 (PCT/EP2020/074346)  
[87] (WO2021/043765)  
[30] DE (10 2019 213 232.4) 2019-09-02

[21] **3,147,580**  
[13] A1

[51] **Int.Cl. A61H 33/06 (2006.01) G06Q 30/02 (2012.01)**  
[25] EN  
[54] **SAUNA SYSTEM WITH COMMUNICATION, NETWORKING, AND GLOBAL INFRASTRUCTURE**  
[54] **SYSTEME DE SAUNA AVEC COMMUNICATION, RESEAUTIQUE ET INFRASTRUCTURE GLOBALE**  
[72] ZACK, AARON MICHAEL, US  
[72] THARA, MOHSIN, US  
[72] ROCK, WILLIAM, US  
[71] SUNLIGHTEN, INC., US  
[85] 2022-02-09  
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[87] (WO2020/046744)  
[30] US (62/723,741) 2018-08-28

[21] **3,147,581**  
[13] A1

[51] **Int.Cl. G06T 5/00 (2006.01) G01C 11/02 (2006.01) G01S 13/90 (2006.01) G06N 3/04 (2006.01)**  
[25] EN  
[54] **PREDICTING VISIBLE/INFRARED BAND IMAGES USING RADAR REFLECTANCE/BACKSCATTER IMAGES OF A TERRESTRIAL REGION**  
[54] **PREDICTION D'IMAGES DANS LA BANDE VISIBLE/INFRAROUGE A L'AIDE D'IMAGES DE REFLECTANCE/RETRODIFFUSION RADAR D'UNE REGION TERRESTRE**  
[72] GEACH, JAMES EDWARD, GB  
[72] SMITH, MICHAEL JAMES, GB  
[71] UNIVERSITY OF HERTFORDSHIRE HIGHER EDUCATION CORPORATION, GB  
[85] 2022-02-09  
[86] 2020-07-24 (PCT/GB2020/051787)  
[87] (WO2021/028650)  
[30] GB (1911577.3) 2019-08-13  
[30] GB (2005720.4) 2020-04-20

[21] **3,147,613**  
[13] A1

[51] **Int.Cl. G16B 20/20 (2019.01) G16B 15/00 (2019.01) G16B 30/10 (2019.01) G16B 40/20 (2019.01)**  
[25] EN  
[54] **METHOD FOR DETECTING CHROMOSOMAL ABNORMALITY BY USING INFORMATION ABOUT DISTANCE BETWEEN NUCLEIC ACID FRAGMENTS**  
[54] **METHODE DE DETECTION D'UNE ANOMALIE CHROMOSOMIQUE A L'AIDE D'INFORMATIONS CONCERNANT LA DISTANCE ENTRE DES FRAGMENTS D'ACIDE NUCLEIQUE**  
[72] KI, CHANG-SEOK, KR  
[72] CHO, EUN HAE, KR  
[72] LEE, JUNNAM, KR  
[71] GREEN CROSS GENOME CORPORATION, KR  
[85] 2022-02-10  
[86] 2020-08-19 (PCT/KR2020/010853)  
[87] (WO2021/034034)  
[30] KR (10-2019-0101246) 2019-08-19  
[30] KR (10-2019-0160407) 2019-12-05  
[30] KR (10-2020-0103240) 2020-08-18

[21] **3,147,623**  
[13] A1

[51] **Int.Cl. A61K 31/53 (2006.01) A61P 25/00 (2006.01) C07D 251/34 (2006.01) C07D 405/04 (2006.01)**  
[25] EN  
[54] **TRIAZINE DERIVATIVES FOR TREATING DISEASES RELATING TO NEUROTROPHINS**  
[54] **DERIVES TRIAZINE POUR LE TRAITEMENT DE MALADIES ASSOCIEES A DES NEUROTROPHINES**  
[72] NORDVALL, GUNNAR, SE  
[72] FORSELL, PONTUS, SE  
[71] ALZECURE PHARMA AB, SE  
[85] 2022-02-10  
[86] 2020-08-28 (PCT/GB2020/052068)  
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[21] **3,147,626**  
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[51] **Int.Cl. E06B 9/323 (2006.01) E06B 9/68 (2006.01)**  
[25] EN  
[54] **WINDOW TREATMENT HAVING AN ADJUSTABLE VALANCE**  
[54] **HABILLAGE DE FENETRE A GARNITURE REGLABLE**  
[72] KIRBY, DAVID A., US  
[72] WU, MAILING REN, US  
[71] LUTRON TECHNOLOGY COMPANY LLC, US  
[85] 2022-02-10  
[86] 2020-08-13 (PCT/US2020/046074)  
[87] (WO2021/030535)  
[30] US (62/886,071) 2019-08-13

[21] **3,147,628**  
[13] A1

[51] **Int.Cl. G02B 5/32 (2006.01) G06F 3/0481 (2022.01) H04N 13/393 (2018.01) G06F 3/01 (2006.01)**  
[25] EN  
[54] **LIGHT FIELD DISPLAY FOR CONSUMER DEVICES**  
[54] **AFFICHAGE DE CHAMP LUMINEUX POUR APPAREILS GRAND PUBLIC**  
[72] KARAFIN, JONATHAN SEAN, US  
[72] BEVENSEE, BRENDAN ELWOOD, US  
[71] LIGHT FIELD LAB, INC., US  
[85] 2022-02-10  
[86] 2019-08-19 (PCT/US2019/047107)  
[87] (WO2021/034315)

[21] **3,147,632**  
[13] A1

[51] **Int.Cl. A61K 31/513 (2006.01) A61K 9/06 (2006.01) C07D 239/54 (2006.01)**  
[25] EN  
[54] **URACIL DERMAL PHARMACEUTICAL FORMULATION**  
[54] **FORMULATION PHARMACEUTIQUE DERMIQUE D'URACILE**  
[72] ISAACMAN, STEVEN, US  
[72] MAHON, ANDREW B., US  
[71] NANOMETICS LLC (D.B.A. PHD BIOSCIENCES), US  
[85] 2022-02-10  
[86] 2020-08-13 (PCT/US2020/046095)  
[87] (WO2021/030542)  
[30] US (62/886,643) 2019-08-14

[21] **3,147,649**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/4439 (2006.01) A61K 31/4545 (2006.01) A61K 31/5377 (2006.01) A61P 19/02 (2006.01) C07D 405/14 (2006.01) C07D 413/14 (2006.01) C07D 487/10 (2006.01)**  
[25] EN  
[54] **PYRAZOLE DERIVATIVES AND USE THEREOF**  
[54] **DERIVE DE PYRAZOLE ET SON UTILISATION**  
[72] LIU, QING SONG, CN  
[72] LIU, JING, CN  
[72] LI, XI XIANG, CN  
[72] WANG, AO LI, CN  
[72] ZOU, FENG MING, CN  
[72] CHEN, CHENG, CN  
[72] LIU, QING WANG, CN  
[72] LIU, JUAN, CN  
[72] CAO, JIANG YAN, CN  
[72] WANG, WEN LIANG, CN  
[72] QI, SHUANG, CN  
[72] WANG, WEN CHAO, CN  
[72] WANG, BEI LEI, CN  
[72] WANG, LI, CN  
[71] HEFEI INSTITUTES OF PHYSICAL SCIENCE, CHINESE ACADEMY OF SCIENCES, CN  
[85] 2022-02-10  
[86] 2020-08-14 (PCT/CN2020/109130)  
[87] (WO2021/036814)  
[30] CN (201910807395.9) 2019-08-29

[21] **3,147,658**  
[13] A1

[51] **Int.Cl. A61K 31/495 (2006.01) A61K 31/513 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **SMALL MOLECULE LIVER X RECEPTOR MODULATORS AND USES THEREOF**  
[54] **MODULATEURS A PETITES MOLECULE DU RECEPTEUR NUCLEAIRE DES OXYSTEROLS ET LEURS UTILISATIONS**  
[72] LIN, CHIN-YO, US  
[72] GILBERTSON, SCOTT, US  
[71] UNIVERSITY OF HOUSTON SYSTEM, US  
[85] 2022-02-10  
[86] 2020-09-01 (PCT/US2020/048908)  
[87] (WO2021/046034)  
[30] US (62/896,068) 2019-09-05

[21] **3,147,661**  
[13] A1

[51] **Int.Cl. B32B 21/00 (2006.01) B32B 21/02 (2006.01) B32B 21/04 (2006.01) B32B 21/10 (2006.01) B32B 21/14 (2006.01) E04F 15/02 (2006.01) E04F 15/10 (2006.01)**  
[25] EN  
[54] **DIGITAL PRINTING ON A WOOD-BASED SUBSTRATE FOR EXTERIOR APPLICATION**  
[54] **IMPRESSION NUMERIQUE SUR UN SUBSTRAT EN BOIS POUR APPLICATION EXTERIEURE**  
[72] LINE, JARROD KEVIN, US  
[72] GUTIERREZ, SARRATH VEGA, US  
[71] LOUISIANA-PACIFIC CORPORATION, US  
[85] 2022-02-10  
[86] 2020-08-12 (PCT/US2020/046020)  
[87] (WO2021/030498)  
[30] US (62/885,329) 2019-08-12

[21] **3,147,663**  
[13] A1

[51] **Int.Cl. D06F 39/12 (2006.01) D06F 37/04 (2006.01) D06F 37/26 (2006.01) D06F 39/14 (2006.01)**  
[25] EN  
[54] **HORIZONTAL AXIS LAUNDRY TREATMENT MACHINE HAVING CORNER ENTRY**  
[54] **MACHINE DE TRAITEMENT DU LINGE A AXE HORIZONTAL AVEC UNE ENTREE DE COIN**  
[72] MIZER, SCOTT EUGENE, US  
[72] LEUNG, BENNY, US  
[71] THE PROCTER & GAMBLE COMPANY, US  
[85] 2022-02-10  
[86] 2020-09-25 (PCT/US2020/070578)  
[87] (WO2021/062441)  
[30] EP (19200044.6) 2019-09-27

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[13] A1

[51] **Int.Cl. C23C 22/34 (2006.01) B05D 3/10 (2006.01) C08G 59/18 (2006.01) C09D 5/08 (2006.01) C09D 163/00 (2006.01) C09J 5/02 (2006.01) C09J 163/00 (2006.01) C23C 22/83 (2006.01) C23G 1/02 (2006.01) C23G 1/12 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR IMPROVED LAP SHEAR STRENGTH AND DISPLACEMENT OF TWO-COMPONENT STRUCTURAL ADHESIVES**

[54] **SYSTEMES ET PROCEDES RESISTANCE AU CISAILLEMENT INTERLAMINAIRE ET DEPLACEMENT AMELIORES D'ADHESIFS STRUCTURAUX BI-COMPOSANTS**

[72] KRILEY, JOSEPH P., US  
[72] POLLUM, JR. MARVIN M., US  
[72] FORTMAN, DAVID J., US  
[72] REARICK, BRIAN K., US  
[72] NAKAJIMA, MASAYUKI, US  
[72] BROWN-TSENG, ELIZABETH S., US  
[72] BOWLES, STEVEN E., US  
[72] FRENCH, MARIA S., US  
[71] PPG INDUSTRIES OHIO, INC., US  
[85] 2022-02-10  
[86] 2020-06-23 (PCT/US2020/039142)  
[87] (WO2021/040868)  
[30] US (62/890,911) 2019-08-23

[21] **3,147,665**  
[13] A1

[51] **Int.Cl. C07D 239/22 (2006.01) A61P 33/06 (2006.01) C07D 405/04 (2006.01) C07D 405/14 (2006.01)**

[25] EN

[54] **ANTIMALARIAL AGENTS**

[54] **AGENTS ANTIPALUDIQUES**

[72] MCCAULEY, JOHN A., US  
[72] FAVUZZA, PAOLA, AU  
[72] KELLY III, MICHAEL J., US  
[72] SLEEBES, BRAD, AU  
[72] THOMPSON, JENNIFER K., AU  
[72] ZHAN, DONGMEI, CN  
[72] GUO, ZHUYAN, US  
[72] HU, BIN, CN  
[72] LEI, ZHIYU, CN  
[72] COWMAN, ALAN F., AU  
[72] DE LERA RUIZ, MANUEL, US  
[72] OLSEN, DAVID B., US  
[72] TRIGLIA, TONY, AU  
[72] ZHANG, CAILING, CN  
[72] ZHAO, LIANYUN, CN  
[71] MERCK SHARP & DOHME CORP., US  
[71] THE WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH, AU  
[71] MSD R&D (CHINA) CO., LTD., CN  
[85] 2022-02-10  
[86] 2020-07-21 (PCT/CN2020/103178)  
[87] (WO2021/027502)  
[30] CN (PCT/CN2019/100781) 2019-08-15

[21] **3,147,666**  
[13] A1

[51] **Int.Cl. F28D 1/047 (2006.01)**

[25] EN

[54] **A BATTERY DEVICE FOR A VENTILATION SYSTEM**

[54] **DISPOSITIF ACCUMULATEUR POUR SYSTEME DE VENTILATION**

[72] LEKEBERG, NILS, SE  
[72] LEKEBERG, HANS, SE  
[71] ENJAY AB, SE  
[85] 2022-02-10  
[86] 2020-07-29 (PCT/SE2020/050756)  
[87] (WO2021/029809)  
[30] SE (1930266-0) 2019-08-12  
[30] SE (2030023-2) 2020-01-28  
[30] SE (2030024-0) 2020-01-28  
[30] SE (2030109-9) 2020-03-30

[21] **3,147,667**  
[13] A1

[51] **Int.Cl. A61K 31/47 (2006.01) C07D 215/233 (2006.01) C07D 215/46 (2006.01)**

[25] EN

[54] **PROCESS FOR PREPARING 1,4-DIHYDRO-4-OXOQUINOLINE-2-CARBOXYLATES AND 4-AMINOQUINOLINE COMPOUNDS THEREFROM**

[54] **PROCEDE DE PREPARATION DE 1,4-DIHYDRO-4-OXOQUINOLINE-2-CARBOXYLATES ET DE COMPOSES DE 4-AMINOQUINOLINE A PARTIR DE CEUX-CI**

[72] KRASUTSKY, SERGIY, US  
[72] TWEEDIE, SCOTT, US  
[72] RAMAMOORTHY, GURUSANKAR, US  
[71] LOHOCLA RESEARCH CORPORATION, US  
[85] 2022-02-10  
[86] 2020-08-12 (PCT/US2020/046038)  
[87] (WO2021/030511)

[21] **3,147,669**  
[13] A1

[51] **Int.Cl. B65H 18/28 (2006.01)**

[25] EN

[54] **ACCUMULATOR FOR PROCESSING LINE AND METHOD OF USING SAME**

[54] **ACCUMULATEUR DE LIGNE DE TRAITEMENT ET PROCEDE D'UTILISATION CORRESPONDANT**

[72] GUSSERT, CORY P., US  
[71] PAPER CONVERTING MACHINE COMPANY, US  
[85] 2022-02-10  
[86] 2020-08-07 (PCT/US2020/045337)  
[87] (WO2021/034512)  
[30] US (62/887,723) 2019-08-16

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[13] A1

[51] **Int.Cl. A61G 3/08 (2006.01)**  
[25] EN  
[54] **MOBILITY DEVICE  
SECUREMENT SYSTEM**  
[54] **SYSTEME DE FIXATION DE  
DISPOSITIF DE MOBILITE**  
[72] CARDONA, EDGARDO, US  
[71] VALEDA COMPANY, LLC, US  
[85] 2022-02-10  
[86] 2020-08-12 (PCT/US2020/045839)  
[87] (WO2021/030382)  
[30] US (62/885,428) 2019-08-12  
[30] US (62/885,481) 2019-08-12

[21] **3,147,672**  
[13] A1

[51] **Int.Cl. C07K 14/32 (2006.01) A01N  
63/22 (2020.01)**  
[25] EN  
[54] **NOVEL TEMPERATURE-  
OPTIMIZED BACILLI**  
[54] **NOUVEAUX BACILLES A  
TEMPERATURE OPTIMISEE**  
[72] CUEVAS, PATRICIA DOMINGUEZ,  
DK  
[72] AZEVEDO, RAQUEL, DK  
[72] BJERRE, KARIN, DK  
[72] NITA, IULIANA, DK  
[72] NEVES, RUTE, DK  
[72] MOELBAK, LARS, DK  
[71] CHR. HANSEN A/S, DK  
[85] 2022-02-10  
[86] 2020-08-28 (PCT/EP2020/074126)  
[87] (WO2021/038072)  
[30] EP (19194343.0) 2019-08-29

[21] **3,147,675**  
[13] A1

[51] **Int.Cl. C08J 5/04 (2006.01) C08J 5/18  
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C08L 9/06 (2006.01) C08L 23/06  
(2006.01) C08L 25/06 (2006.01) C08L  
31/04 (2006.01) C08L 67/00 (2006.01)**  
[25] EN  
[54] **CARBON FIBER REINFORCED  
MOLDING COMPOSITION  
SUITABLE FOR  
ELECTROPHORETIC COATING**  
[54] **COMPOSITION DE MOULAGE  
RENFORCEE DE FIBRES DE  
CARBONE APPROPRIEE POUR  
UN REVETEMENT  
ELECTROPHORETIQUE**  
[72] KRUG III, DAVID J., US  
[72] KAMAR, NICHOLAS T., US  
[72] ASUNCION, MICHAEL Z., US  
[72] PRASCIUS, STEVEN L., US  
[72] SIWAJEK, MICHAEL J., US  
[71] TEIJIN AUTOMOTIVE  
TECHNOLOGIES, INC., US  
[85] 2022-02-10  
[86] 2020-08-14 (PCT/US2020/046342)  
[87] (WO2021/030677)  
[30] US (62/887,264) 2019-08-15

[21] **3,147,676**  
[13] A1

[51] **Int.Cl. B01D 37/00 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS  
FOR SAMPLE FILTRATION**  
[54] **PROCEDES ET COMPOSITIONS  
POUR LA FILTRATION  
D'ECHANTILLONS**  
[72] HOLUB, KRISTOPHER, US  
[72] DUNN, MATTHEW RYAN, US  
[72] LARSEN, ANDREW CARL, US  
[71] DROPWORKS, INC., US  
[85] 2022-02-10  
[86] 2020-08-12 (PCT/US2020/046033)  
[87] (WO2021/030507)  
[30] US (62/886,299) 2019-08-13

[21] **3,147,677**  
[13] A1

[51] **Int.Cl. C07K 14/52 (2006.01) A61K  
38/19 (2006.01) A61K 38/20 (2006.01)  
C07K 7/08 (2006.01) C07K 14/55  
(2006.01) C07K 14/715 (2006.01)  
C12N 15/62 (2006.01)**  
[25] EN  
[54] **ENGINEERED INTERLEUKIN-2  
RECEPTOR BETA AGONISTS**  
[54] **AGONISTES BETA DU  
RECEPTEUR DE  
L'INTERLEUKINE-2 MODIFIES**  
[72] CHEN, YAN, US  
[72] ZHAO, KEHAO, US  
[72] SWANSON, CHRISTINA, US  
[72] NGUYEN, JENNA, US  
[72] KALLEN, NATHAN, US  
[72] HASSAN, SAMUEL CLEMENT, US  
[72] JIANG, NING, US  
[71] ELPIS BIOPHARMACEUTICALS, US  
[85] 2022-02-10  
[86] 2020-08-13 (PCT/US2020/046244)  
[87] (WO2021/030633)  
[30] US (62/886,148) 2019-08-13

[21] **3,147,678**  
[13] A1

[51] **Int.Cl. A61K 38/16 (2006.01) A61K  
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C07K 1/14 (2006.01) C07K 14/415  
(2006.01) C07K 16/18 (2006.01) C12N  
5/04 (2006.01) C12N 5/10 (2006.01)  
C12N 15/12 (2006.01) C12N 15/13  
(2006.01)**  
[25] EN  
[54] **FORMULATIONS OF  
IMMUNOGLOBULIN A**  
[54] **FORMULATIONS  
D'IMMUNOGLOBULINE A**  
[72] OKBAZGHI, SOLOMON, US  
[72] AKOYEV, VLADIMIR, US  
[72] MISRA, SAURAV, US  
[72] ALFANO, RANDALL, US  
[71] VENTRIA BIOSCIENCE INC., US  
[85] 2022-02-10  
[86] 2019-09-05 (PCT/US2019/049709)  
[87] (WO2020/051307)  
[30] US (62/727,345) 2018-09-05  
[30] US (62/780,544) 2018-12-17

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[21] **3,147,679**  
[13] A1

[51] **Int.Cl. A61K 31/4045 (2006.01) C07D 209/04 (2006.01)**  
[25] EN  
[54] **METHODS OF TREATING PSYCHOLOGICAL AND BRAIN DISORDERS**  
[54] **METHODES DE TRAITEMENT DE TROUBLES PSYCHOLOGIQUES ET CEREBRAUX**  
[72] THOMPSON, SCOTT, US  
[71] UNIVERSITY OF MARYLAND, BALTIMORE, US  
[85] 2022-02-10  
[86] 2020-08-13 (PCT/US2020/046149)  
[87] (WO2021/030571)  
[30] US (62/886,090) 2019-08-13

[21] **3,147,680**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 9/127 (2006.01) A61K 31/7125 (2006.01) A61P 11/00 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **EXTRACELLULAR VESICLE-ASO CONSTRUCTS TARGETING STAT6**  
[54] **CONSTRUCTIONS DE VESICULES EXTRACELLULAIRES - ASO CIBLANT STAT6**  
[72] BURZYN, DALIA, US  
[72] KAMERKAR, SUSHRUT, US  
[72] BOUTIN, ADAM T., US  
[72] BROOM, WENDY, US  
[72] SATHYANARAYANAN, SRIRAM, US  
[72] VERMA, AJAY, US  
[71] CODIAK BIOSCIENCES, INC., US  
[85] 2022-02-10  
[86] 2020-08-14 (PCT/US2020/046559)  
[87] (WO2021/030776)  
[30] US (62/886,944) 2019-08-14  
[30] US (62/900,138) 2019-09-13  
[30] US (62/903,518) 2019-09-20  
[30] US (62/936,216) 2019-11-15  
[30] US (62/989,477) 2020-03-13  
[30] US (63/035,392) 2020-06-05

[21] **3,147,685**  
[13] A1

[51] **Int.Cl. E21B 1/00 (2006.01) E21B 10/36 (2006.01) E21B 17/04 (2006.01) E21B 17/042 (2006.01)**  
[25] EN  
[54] **SHOULDER PROTECTED DRILLING ASSEMBLY**  
[54] **ENSEMBLE DE FORAGE PROTEGE PAR UN EPAULEMENT**  
[72] HAMMARGREN, JOHN, SE  
[71] SANDVIK MINING AND CONSTRUCTION TOOLS AB, SE  
[85] 2022-02-10  
[86] 2020-10-09 (PCT/EP2020/078402)  
[87] (WO2021/069657)  
[30] EP (19202722.5) 2019-10-11

[21] **3,147,688**  
[13] A1

[51] **Int.Cl. G07D 11/00 (2019.01) G07D 11/125 (2019.01) B65B 5/10 (2006.01) E05G 1/06 (2006.01) E05G 7/00 (2006.01) G07F 19/00 (2006.01)**  
[25] EN  
[54] **A SYSTEM FOR THE SAFE COUPLING OF A RE-USABLE BAG TO A BANKNOTE HANDLING AND STORING MACHINE AND RELEVANT USE METHOD**  
[54] **SYSTEME POUR LE COUPLAGE SUR D'UN SAC REUTILISABLE A UNE MACHINE DE MANIPULATION ET DE STOCKAGE DE BILLETS DE BANQUE ET PROCEDE D'UTILISATION ASSOCIE**  
[72] RAZZABONI, NICOLETTA, IT  
[72] RAZZABONI, VITTORIO, IT  
[71] CIMA S.P.A., IT  
[85] 2022-02-10  
[86] 2020-09-04 (PCT/IB2020/058234)  
[87] (WO2021/044352)  
[30] IT (102019000015638) 2019-09-05

[21] **3,147,689**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01)**  
[25] EN  
[54] **FRIZZLED RECEPTOR ANTIBODIES AND USES THEREOF**  
[54] **ANTICORPS DE LIAISON AU RECEPTEUR FRIZZLED ET UTILISATIONS ASSOCIEES**  
[72] SIDHU, SACHDEV, CA  
[72] PAN, GUOHUA, CA  
[72] MOFFAT, JASON, CA  
[72] GAKHAL, AMANDEEP, US  
[72] ANGERS, STEPHANE, CA  
[72] STEINHART, ZACHARY, CA  
[72] PAVLOVIC, ZVEZDAN, CA  
[72] ADAMS, JARRETT, CA  
[71] MODMAB THERAPEUTICS INC., CA  
[85] 2022-02-10  
[86] 2020-08-12 (PCT/CA2020/051103)  
[87] (WO2021/026652)  
[30] US (62/885,781) 2019-08-12  
[30] US (62/886,292) 2019-08-13

[21] **3,147,692**  
[13] A1

[51] **Int.Cl. G06Q 20/00 (2012.01)**  
[25] EN  
[54] **REVERSE BID AUCTION**  
[54] **ENCHERES INVERSEES**  
[72] SOLIS, ERIC A., US  
[71] SOLIS, ERIC A., US  
[85] 2022-02-10  
[86] 2020-08-13 (PCT/US2020/046097)  
[87] (WO2021/030543)  
[30] US (62/885,993) 2019-08-13  
[30] US (16/991,552) 2020-08-12

[21] **3,147,693**  
[13] A1

[51] **Int.Cl. E02F 9/00 (2006.01) E02F 9/22 (2006.01)**  
[25] EN  
[54] **FLUID DISTRIBUTION ASSEMBLY**  
[54] **ENSEMBLE DE DISTRIBUTION DE LIQUIDE**  
[72] STRASHNY, IGOR, US  
[72] BAUER, CANDACE, US  
[71] CATERPILLAR GLOBAL MINING LLC, US  
[85] 2022-02-10  
[86] 2020-08-17 (PCT/US2020/046616)  
[87] (WO2021/041071)  
[30] GB (1912276.1) 2019-08-27

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[21] **3,147,694**  
[13] A1

[51] **Int.Cl. B66F 7/24 (2006.01)**  
[25] EN  
[54] **VEHICLE WHEEL ELEVATING DOCK**  
[54] **QUAI DE LEVAGE DE ROUE DE VEHICULE**  
[72] BORCHELLER, TERRY, US  
[71] DESIGN DYNAMICS, INC., US  
[85] 2022-02-10  
[86] 2020-08-13 (PCT/US2020/070406)  
[87] (WO2021/030844)  
[30] US (62/886,488) 2019-08-14  
[30] US (16/804,571) 2020-02-28

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[21] **3,147,697**  
[13] A1

[51] **Int.Cl. C02F 1/04 (2006.01) B01D 1/16 (2006.01) B01D 1/18 (2006.01) B01D 1/20 (2006.01) B01D 3/04 (2006.01) C02F 1/12 (2006.01)**  
[25] EN  
[54] **PRODUCED WATER EVAPORATION SYSTEM**  
[54] **SYSTEME D'EVAPORATION D'EAU PRODUITE**  
[72] JURANITCH, JAMES C., US  
[72] REYNOLDS, ALAN C., US  
[71] XDI HOLDINGS, LLC, US  
[85] 2022-02-10  
[86] 2020-08-12 (PCT/US2020/045918)  
[87] (WO2021/030429)  
[30] US (62/885,663) 2019-08-12

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[21] **3,147,698**  
[13] A1

[51] **Int.Cl. G06N 10/00 (2022.01) B82Y 10/00 (2011.01)**  
[25] EN  
[54] **COMPUTER ARCHITECTURE FOR EXECUTING QUANTUM PROGRAMS**  
[54] **ARCHITECTURE D'ORDINATEUR POUR EXECUTION DE PROGRAMMES QUANTIQUES**  
[72] CAO, YUDONG, US  
[71] ZAPATA COMPUTING, INC., US  
[85] 2022-02-10  
[86] 2020-09-03 (PCT/US2020/049148)  
[87] (WO2021/046184)

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[21] **3,150,781**  
[13] A1

[51] **Int.Cl. A61K 31/05 (2006.01) A61K 36/185 (2006.01)**  
[25] EN  
[54] **WATER-BASED EXTRACTION AND PURIFICATION PROCESSES FOR CANNABINOID ACIDS**  
[54] **PROCEDES D'EXTRACTION ET DE PURIFICATION A BASE D'EAU POUR ACIDES CANNABINOIDES**  
[72] CARRAHER, JACK MCCASLIN, US  
[72] BAKER, ZACH JOSEPH, US  
[71] MEDPHARM IOWA LLC, US  
[85] 2022-02-10  
[86] 2020-08-14 (PCT/US2020/046524)  
[87] (WO2021/034718)  
[30] US (62/890,355) 2019-08-22

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[21] **3,150,850**  
[13] A1

[51] **Int.Cl. B05B 14/462 (2018.01) B01D 15/04 (2006.01) B01D 35/02 (2006.01) B01J 49/00 (2017.01) C09D 7/00 (2018.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR TREATING AND RECLAIMING PAINT FLUSH WASTE**  
[54] **COMPOSITIONS ET PROCEDES POUR LE TRAITEMENT ET LA REGENERATION DE DECHETS DE RINCAGE DE PEINTURE**  
[72] ROGERS, ANTHONY, US  
[71] HERITAGE RESEARCH GROUP, LLC, US  
[85] 2022-02-11  
[86] 2020-08-13 (PCT/US2020/046056)  
[87] (WO2021/030523)  
[30] US (62/885,866) 2019-08-13

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[21] **3,150,851**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61L 26/00 (2006.01) A61N 5/06 (2006.01) A61N 5/067 (2006.01)**  
[25] EN  
[54] **THERAPEUTIC SYSTEMS, DEVICES, AND COMPOSITIONS WITH WOUND HEALING AND TISSUE REGENERATIVE PROPERTIES, USES THEREOF, AND CORRESPONDING METHODS**  
[54] **SYSTEMES, DISPOSITIFS ET COMPOSITIONS THERAPEUTIQUES AYANT DES PROPRIETES DE CICATRISATION DE PLAIE ET DE REGENERATION TISSULAIRE, LEURS UTILISATIONS ET PROCEDES CORRESPONDANTS**  
[72] KALMETA, MARGARET V., US  
[71] BIOREGENTECH, INC., US  
[85] 2022-02-11  
[86] 2020-08-11 (PCT/US2020/045776)  
[87] (WO2021/030354)  
[30] US (62/885,761) 2019-08-12  
[30] US (62/992,579) 2020-03-20

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[21] **3,150,852**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR CARDIOVASCULAR MONITORING AND REPORTING**  
[54] **SYSTEME ET PROCEDE DE SIGNALEMENT ET DE SURVEILLANCE CARDIOVASCULAIRES**  
[72] BARNACKA, ANNA, US  
[72] BRIDGES, CHARLES R., US  
[72] PATEL, SIDDHARTH, US  
[71] BARNACKA, ANNA, US  
[71] BRIDGES, CHARLES R., US  
[71] PATEL, SIDDHARTH, US  
[85] 2022-02-11  
[86] 2020-08-12 (PCT/US2020/046021)  
[87] (WO2021/030499)  
[30] US (62/885,364) 2019-08-12  
[30] US (62/888,075) 2019-08-16  
[30] US (62/888,067) 2019-08-16

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[21] **3,150,853**  
[13] A1

[51] **Int.Cl. A23N 1/00 (2006.01) A23N 1/02 (2006.01) A47J 19/02 (2006.01)**  
[25] EN  
[54] **MASTICATING JUICER WITH IMPROVED ADJUSTABLE CAP**  
[54] **DISPOSITIF D'EXTRACTION DE JUS PAR BROYAGE A CAPUCHON REGLABLE AMELIORE**  
[72] FIELDS, TIMOTHY, US  
[71] GREENFIELD WORLD TRADE, INC., US  
[85] 2022-02-11  
[86] 2020-08-13 (PCT/US2020/046139)  
[87] (WO2021/030566)  
[30] US (62/887,029) 2019-08-15  
[30] US (16/992,514) 2020-08-13

[21] **3,150,854**  
[13] A1

[51] **Int.Cl. A61B 18/20 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR LASER BASED TREATMENT OF SOFT TISSUE**  
[54] **SYSTEME DE TRAITEMENT DE TISSU MOU BASE SUR UN LASER**  
[72] KERBAGE, CHARLES, US  
[72] BADREDDINE, ALI, US  
[72] COUITT, STEPHEN, US  
[72] MILLER, STEVE, US  
[72] JELISAVCIC, NENAD, US  
[71] CONVERGENT DENTAL, INC., US  
[85] 2022-02-11  
[86] 2020-08-14 (PCT/US2020/046333)  
[87] (WO2021/034645)  
[30] US (62/887,949) 2019-08-16

[21] **3,150,859**  
[13] A1

[51] **Int.Cl. C07K 1/113 (2006.01) C07K 1/34 (2006.01) C07K 14/54 (2006.01) C12N 15/09 (2006.01) C12P 21/02 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS, FORMULATIONS, AND INTERLEUKIN PRODUCTION AND PURIFICATION**  
[54] **COMPOSITIONS, FORMULATIONS ET PRODUCTION ET PURIFICATION D'INTERLEUKINES**  
[72] MACLEAN, DEREK, US  
[72] MRSNY, RANDALL J., US  
[72] YIN, KEVIN, US  
[72] MAHMOOD, TAHIR, US  
[72] KANWAR, BITTOO, US  
[72] PORAT, AMIR, US  
[72] OLSON, CHARLES, US  
[72] POSTLETHWAITE, SALLY, US  
[72] KIM, HYOJIN, US  
[72] FENG, WEIJUN, US  
[72] MANGAT, KHUSHDEEP, US  
[72] DALZIEL, SEAN, US  
[72] TANDALE, RAJENDRA, US  
[72] GAROVVOY, MARVIN, US  
[72] KOLENG, JOHN, US  
[72] BHATT, ELIZABETH, US  
[72] WHITNEY, JAMES ANDREW, US  
[71] APPLIED MOLECULAR TRANSPORT INC., US  
[85] 2022-02-11  
[86] 2020-08-14 (PCT/US2020/046545)  
[87] (WO2021/034727)  
[30] US (62/888,144) 2019-08-16  
[30] US (62/888,237) 2019-08-16  
[30] US (62/887,963) 2019-08-16  
[30] US (62/887,933) 2019-08-16  
[30] US (62/898,934) 2019-09-11  
[30] US (62/898,709) 2019-09-11  
[30] US (62/898,899) 2019-09-11  
[30] US (62/898,729) 2019-09-11  
[30] US (PCT/US2019/050708) 2019-09-11  
[30] US (62/939,495) 2019-11-22  
[30] US (62/970,627) 2020-02-05  
[30] US (62/971,126) 2020-02-06  
[30] US (62/986,579) 2020-03-06  
[30] US (62/986,557) 2020-03-06  
[30] US (63/013,309) 2020-04-21  
[30] US (63/020,996) 2020-05-06  
[30] US (63/033,077) 2020-06-01  
[30] US (63/055,886) 2020-07-23

[21] **3,150,862**  
[13] A1

[51] **Int.Cl. C05G 3/80 (2020.01) C08F 2/44 (2006.01) C08F 220/06 (2006.01)**  
[25] EN  
[54] **FIRE SUPPRESSANT**  
[54] **AGENT D'EXTINCTION D'INCENDIE**  
[72] HINRICHS, RODOLFO, US  
[71] GREEN CANYON VENTURES LLC, US  
[85] 2022-02-11  
[86] 2020-08-13 (PCT/US2020/046099)  
[87] (WO2021/030544)  
[30] US (62/886,388) 2019-08-14

[21] **3,150,880**  
[13] A1

[51] **Int.Cl. B62D 55/08 (2006.01)**  
[25] EN  
[54] **WHEEL OF TRACK SYSTEM FOR TRACTION OF A VEHICLE**  
[54] **ROUE DE SYSTEME DE CHENILLE POUR LA TRACTION D'UN VEHICULE**  
[72] MOREAU, SERGE, CA  
[72] BERGERON, MATTHIEU, CA  
[72] BOILY, PATRICE, CA  
[72] LAPRISE, ALEXANDRE, CA  
[71] CAMSO INC., CA  
[85] 2022-02-11  
[86] 2020-08-12 (PCT/CA2020/051106)  
[87] (WO2021/026654)  
[30] US (62/885,598) 2019-08-12

[21] **3,150,910**  
[13] A1

[51] **Int.Cl. B05D 1/32 (2006.01) B05C 21/00 (2006.01)**  
[25] EN  
[54] **MASKING STRIP FOR USE IN PAINTING VEHICLES**  
[54] **BANDE DE MASQUAGE DESTINEE A ETRE UTILISEE DANS LA PEINTURE DES VEHICULES**  
[72] BARRACO, ANTHONY M., US  
[71] TNS SOLUTIONS, US  
[85] 2022-02-11  
[86] 2020-09-11 (PCT/US2020/050513)  
[87] (WO2021/055252)  
[30] US (16/574,711) 2019-09-18

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[21] **3,150,911**  
[13] A1

[51] **Int.Cl. G21D 5/00 (2006.01) F01K 3/18 (2006.01) F28D 20/00 (2006.01) G21C 1/32 (2006.01) G21D 5/08 (2006.01)**

[25] EN

[54] **NUCLEAR THERMAL PLANT WITH LOAD-FOLLOWING POWER GENERATION**

[54] **CENTRALE THERMIQUE NUCLEAIRE A GENERATION D'ENERGIE EN FONCTION DE LA CHARGE**

[72] CHEATHAM, III, JESSE R., US  
[72] CORBIN, ROBERT A., US  
[72] GILLELAND, JOHN R., US  
[72] HEJZLAR, PAVEL, US  
[72] KRAMER, KEVIN, US  
[72] MARTIN, CHRISTOPHER A., US  
[72] MORRIS, BRIAN, US  
[72] PETROSKI, ROBERT C., US  
[72] SCHLOSS, PHILIP M., US  
[72] WALTER, JOSHUA C., US  
[72] WERNER, MARK R., US  
[71] TERRAPOWER, LLC, US  
[85] 2022-02-11  
[86] 2020-09-16 (PCT/US2020/051128)  
[87] (WO2021/086510)  
[30] US (62/929,003) 2019-10-31  
[30] US (62/986,902) 2020-03-09  
[30] US (PCT/US2020/028011) 2020-04-13  
[30] US (17/023,230) 2020-09-16

[21] **3,150,912**  
[13] A1

[51] **Int.Cl. A61K 8/34 (2006.01) A61K 8/37 (2006.01) A61K 8/44 (2006.01) A61K 8/73 (2006.01) A61Q 11/00 (2006.01)**

[25] EN

[54] **ORAL CARE COMPOSITION COMPRISING A CANNABINOID**

[54] **COMPOSITION DE SOIN BUCCO-DENTAIRE COMPRENANT UN CANNABINOIDE**

[72] ARORA, PAYAL, US  
[72] POTNIS, SHASHANK, IN  
[72] MARTINETTI, MELISSA, US  
[72] HASKEL, ARIEL, US  
[72] SURIANO, DAVID, US  
[72] GREGSON, CONNIE, US  
[72] XU, YUN, US  
[71] COLGATE-PALMOLIVE COMPANY, US  
[85] 2022-02-11  
[86] 2020-10-07 (PCT/US2020/054467)  
[87] (WO2021/071867)  
[30] US (62/911,649) 2019-10-07

[21] **3,150,913**  
[13] A1

[51] **Int.Cl. A61K 8/9789 (2017.01) A61Q 15/00 (2006.01) A61Q 19/00 (2006.01)**

[25] EN

[54] **PERSONAL CARE COMPOSITIONS AND METHODS**

[54] **COMPOSITIONS DE SOINS D'HYGIENE PERSONNELLE, ET PROCEDES**

[72] HERNANDEZ, EDGAR H., MX  
[72] KENNEDY, SHARON, US  
[72] WU, QIANG, US  
[72] MAKSIMOVIC, SRDJAN, US  
[72] MORGAN, ANDRE, US  
[72] POTECHIN, KATHY, US  
[72] BOYD, THOMAS, US  
[71] COLGATE-PALMOLIVE COMPANY, US  
[85] 2022-02-11  
[86] 2020-10-05 (PCT/US2020/070614)  
[87] (WO2021/072419)  
[30] US (62/911,634) 2019-10-07

[21] **3,150,914**  
[13] A1

[51] **Int.Cl. A61K 8/44 (2006.01) A61K 8/49 (2006.01) A61Q 11/00 (2006.01)**

[25] EN

[54] **ORAL CARE COMPOSITIONS AND METHODS OF USE**

[54] **COMPOSITIONS DE SOINS BUCCO-DENTAIRES ET PROCEDES D'UTILISATION**

[72] ARORA, PAYAL, US  
[72] POTNIS, SHASHANK, IN  
[72] MARTINETTI, MELISSA, US  
[72] HASKEL, ARIEL, US  
[72] XU, YUN, US  
[72] SURIANO, DAVID, US  
[71] COLGATE-PALMOLIVE COMPANY, US  
[85] 2022-02-11  
[86] 2020-10-06 (PCT/US2020/070619)  
[87] (WO2021/072423)  
[30] US (62/911,645) 2019-10-07

[21] **3,150,915**  
[13] A1

[51] **Int.Cl. A01N 1/02 (2006.01) B65D 81/38 (2006.01) B65D 85/50 (2006.01)**

[25] EN

[54] **AN INSULATING MEDICAL DEVICE FOR PROTECTING A GRAFT FOR TRANSPLANT**

[54] **DISPOSITIF MEDICAL ISOLANT POUR PROTEGER UN GREFFON POUR UNE GREFFE**

[72] KWARCINSKI, JEREMY, AU  
[72] PLEASS, HENRY, AU  
[72] PANG, TONY, AU  
[72] BOUGHTON, PHILIP, AU  
[72] HAMEED, AHMER, AU  
[72] KHAN, TURAAB, AU  
[71] IISHIELD PTY LTD, AU  
[85] 2022-02-14  
[86] 2020-08-14 (PCT/AU2020/050848)  
[87] (WO2021/026614)  
[30] AU (2019902951) 2019-08-15

[21] **3,150,916**  
[13] A1

[51] **Int.Cl. C01B 32/215 (2017.01)**

[25] EN

[54] **A PROCESS FOR PURIFYING GRAPHITIC MATERIAL**

[54] **PROCEDE DE PURIFICATION DE MATERIAU GRAPHITIQUE**

[72] BUNNEY, KARL, AU  
[72] JACKSON, MICHAEL, AU  
[71] COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, AU  
[85] 2022-02-14  
[86] 2020-08-14 (PCT/AU2020/050849)  
[87] (WO2021/030861)  
[30] AU (2019902980) 2019-08-16

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[21] **3,150,917**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 14/54 (2006.01) C12N 15/869 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL COMPOSITIONS COMPRISING ONCOLYTIC HERPES SIMPLEX VIRUS FOR SYSTEMIC ADMINISTRATION**

[54] **COMPOSITIONS PHARMACEUTIQUES RENFERMANT UN VIRUS HERPES SIMPLEX ONCOLYTIQUE POUR ADMINISTRATION SYSTEMIQUE**

[72] TANG, YUXIN, CN  
[72] LIU, XIANJIE, CN  
[72] YAN, RUNBIN, CN  
[72] ZHOU, GRACE, CN  
[71] IMMIRA CO., LIMITED, CN  
[85] 2022-02-14  
[86] 2019-08-16 (PCT/CN2019/100956)  
[87] (WO2021/030932)

[21] **3,150,918**  
[13] A1

[51] **Int.Cl. G06T 7/73 (2017.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR LOCATING OBJECTS**

[54] **SYSTEMES ET PROCEDES DE LOCALISATION D'OBJETS**

[72] SANIEI, MICHAEL SAIED, US  
[72] SI, XIAOYAN, US  
[72] VYSYARAJU, SIVA PRASAD, US  
[71] BNSF RAILWAY COMPANY, US  
[85] 2022-02-11  
[86] 2020-06-23 (PCT/US2020/039044)  
[87] (WO2021/029971)  
[30] US (16/540,867) 2019-08-14

[21] **3,150,919**  
[13] A1

[51] **Int.Cl. H04W 36/00 (2009.01)**

[25] EN

[54] **COMMUNICATION METHOD AND COMMUNICATIONS APPARATUS**

[54] **PROCEDE DE COMMUNICATION ET APPAREIL DE COMMUNICATION**

[72] QIANG, LI, CN  
[72] YANG, LINPING, CN  
[72] FAN, JING, CN  
[72] TAN, JIAYAO, CN  
[72] LI, MENG, CN  
[71] HUAWAI TECHNOLOGIES CO., LTD., CN  
[85] 2022-02-14  
[86] 2020-07-30 (PCT/CN2020/105977)  
[87] (WO2022/021248)

[21] **3,150,920**  
[13] A1

[51] **Int.Cl. C08L 23/06 (2006.01) C08K 3/013 (2018.01) C08J 3/12 (2006.01) C08J 3/24 (2006.01) C08L 101/00 (2006.01)**

[25] EN

[54] **HIGHLY CROSSLINKED POLYMER PARTICULATE AND METHODS OF MANUFACTURING HIGHLY CROSSLINKED POLYMER PARTICULATE**

[54] **PARTICULES POLYMERES HAUTEMENT RETICULEES ET PROCEDES DE FABRICATION DE PARTICULES POLYMERES HAUTEMENT RETICULEES**

[72] GALUKSA, ALAN A., US  
[72] ENTCHEV, PAVLIN B., US  
[72] HANDY, WILLIAM, US  
[72] SHIRLEY, ROBERT M., US  
[71] EXXONMOBIL UPSTREAM RESEARCH COMPANY, US  
[85] 2022-02-11  
[86] 2020-07-24 (PCT/US2020/043521)  
[87] (WO2021/034452)  
[30] US (62/888,214) 2019-08-16  
[30] US (62/890,188) 2019-08-22  
[30] US (62/944,106) 2019-12-05  
[30] US (62/949,302) 2019-12-17

[21] **3,150,921**  
[13] A1

[51] **Int.Cl. H04W 40/22 (2009.01)**

[25] EN

[54] **RELAY RESELECTION METHOD, DEVICE, AND MEDIUM**

[54] **PROCEDE DE RESELECTION DE RELAIS, DISPOSITIF, ET SUPPORT**

[72] LIANG, JING, CN  
[72] YANG, XIAODONG, CN  
[71] VIVO MOBILE COMMUNICATION CO., LTD., CN  
[85] 2022-02-14  
[86] 2020-08-14 (PCT/CN2020/109208)  
[87] (WO2021/027926)  
[30] CN (201910754814.7) 2019-08-15

[21] **3,150,922**  
[13] A1

[51] **Int.Cl. E21B 33/12 (2006.01) E21B 23/06 (2006.01) E21B 43/10 (2006.01)**

[25] EN

[54] **REACTIVE METAL SEALING ELEMENTS FOR A LINER HANGER**

[54] **ELEMENTS D'ETANCHEITE METALLIQUES REACTIFS POUR UN DISPOSITIF DE SUSPENSION DE COLONNE PERDUE**

[72] GRECI, STEPHEN MICHAEL, US  
[72] FRIPP, MICHAEL LINLEY, US  
[72] SEVADJIAN, EMILE EDMUND, US  
[72] GHARESI, ABDOLREZA, US  
[71] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2022-02-14  
[86] 2019-12-24 (PCT/US2019/068497)  
[87] (WO2021/126279)  
[30] US (16/718,727) 2019-12-18

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[21] **3,150,923**  
[13] A1

[51] **Int.Cl. C08J 3/24 (2006.01) C08J 3/12 (2006.01) C08L 23/06 (2006.01)**

[25] EN

[54] **METHODS OF MANUFACTURING HIGHLY CROSSLINKED POLYMER PARTICULATE**

[54] **PROCEDES DE FABRICATION DE MATIERES PARTICULAIRES POLYMERES HAUTEMENT RETICULEES**

[72] GALUSKA, ALAN A., US  
[72] ENTCHEV, PAVLIN B., US  
[72] HANDY, WILLIAM, US  
[72] SHIRLEY, ROBERT M., US  
[71] EXXONMOBIL UPSTREAM RESEARCH COMPANY, US

[85] 2022-02-14  
[86] 2020-07-24 (PCT/US2020/043504)  
[87] (WO2021/034449)  
[30] US (62/888,221) 2019-08-16  
[30] US (62/888,214) 2019-08-16  
[30] US (62/944,106) 2019-12-05  
[30] US (62/943,978) 2019-12-05

[21] **3,150,924**  
[13] A1

[51] **Int.Cl. G02B 6/38 (2006.01) A61B 5/107 (2006.01)**

[25] EN

[54] **OPTICAL-FIBER CONNECTOR MODULES INCLUDING SHAPE-SENSING SYSTEMS AND METHODS THEREOF**

[54] **MODULES DE CONNECTEUR DE FIBRES OPTIQUES COMPRENANT DES SYSTEMES DE DETECTION DE FORME ET PROCEDES ASSOCIES**

[72] THOMPSON, CHASE, US  
[72] MISENER, ANTHONY KENT, US  
[72] MESSERLY, SHAYNE, US  
[71] BARD ACCESS SYSTEMS, INC., US

[85] 2022-02-11  
[86] 2020-08-07 (PCT/US2020/045498)  
[87] (WO2021/026502)  
[30] US (62/884,602) 2019-08-08

[21] **3,150,925**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/11 (2006.01) A61B 5/22 (2006.01)**

[25] FR

[54] **METHOD AND SYSTEM FOR ANALYSING BIOMECHANICAL ACTIVITY AND EXPOSURE TO A BIOMECHANICAL RISK FACTOR ON A HUMAN SUBJECT IN A CONTEXT OF PHYSICAL ACTIVITY**

[54] **PROCEDE ET SYSTEME POUR L'ANALYSE DE L'ACTIVITE BIOMECHANIQUE ET L'EXPOSITION A UN FACTEUR DE RISQUE BIOMECHANIQUE SUR UN SUJET HUMAIN DANS UN CONTEXTE D'ACTIVITE PHYSIQUE**

[72] PROJETTI, MAXIME, FR  
[71] MOTEN TECHNOLOGIES, FR

[85] 2022-02-14  
[86] 2020-08-13 (PCT/FR2020/051465)  
[87] (WO2021/028641)  
[30] FR (1909206) 2019-08-14

[21] **3,150,926**  
[13] A1

[25] EN

[54] **SYSTEMS AND METHODS FOR CONTEXTUAL IMAGE ANALYSIS**

[54] **SYSTEMES ET PROCEDES POUR ANALYSE D'IMAGE CONTEXTUELLE**

[72] CHERUBINI, ANDREA, IT  
[72] NGO DINH, NHAN, IT  
[71] COSMO ARTIFICIAL INTELLIGENCE - AL LIMITED, IE

[85] 2022-02-14  
[86] 2021-01-29 (PCT/EP2021/052215)  
[87] (WO2021/156159)  
[30] US (62/969,643) 2020-02-03

[21] **3,150,927**  
[13] A1

[51] **Int.Cl. A61F 2/82 (2013.01) A61F 2/95 (2013.01) A61B 17/00 (2006.01) A61F 2/958 (2013.01)**

[25] EN

[54] **MEDICAL IMPLANT, DELIVERY DEVICE, METHOD OF PRODUCING A MEDICAL IMPLANT, AND METHOD OF DELIVERING A MEDICAL IMPLANT**

[54] **IMPLANT MEDICAL, DISPOSITIF D'ADMINISTRATION, PROCEDE DE PRODUCTION D'UN IMPLANT MEDICAL ET PROCEDE D'ADMINISTRATION D'UN IMPLANT MEDICAL**

[72] ROCHE, ELLEN, IE  
[72] KEILLOR, MATTHEW, FR  
[72] POULETTY, PHILIPPE, FR  
[72] PAU, ANTOINE, FR  
[72] GARD, MARCO, IT  
[72] WARNACK, BORIS, CH  
[72] SPENCER, ANDREW, US  
[72] BRUNEAU, MAELLE, FR  
[72] WEISS, TONY, AU  
[72] BURDICK, JASON ALAN, US  
[71] HOLISTICK MEDICAL, FR

[85] 2022-02-14  
[86] 2020-09-11 (PCT/EP2020/075550)  
[87] (WO2021/048409)  
[30] IB (PCT/IB2019/001058) 2019-09-13  
[30] EP (PCT/IB2019/001058) 2019-09-13

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[21] **3,150,928**  
[13] A1

[51] **Int.Cl. E21B 47/022 (2012.01) E21B 44/00 (2006.01)**

[25] EN

[54] **OFFSET WELL ANALYSIS USING WELL TRAJECTORY SIMILARITY**

[54] **ANALYSE DE Puits DE LIMITE UTILISANT UNE SIMILARITE DE TRAJECTOIRE DE Puits**

[72] ZHERNAKOV, VLADIMIR, RU  
[72] SUO, XIAOTONG, US  
[72] CELAYA GALVAN, JOSE, US  
[72] VESSELINOV, VELIZAR, US  
[72] EKLUND, NEIL HOLGER WHITE, US

[71] SCHLUMBERGER CANADA LIMITED, CA

[85] 2022-02-14  
[86] 2020-07-14 (PCT/US2020/041933)  
[87] (WO2021/029996)  
[30] US (16/541,148) 2019-08-15

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[21] **3,150,929**  
[13] A1

[51] **Int.Cl. B65D 55/14 (2006.01) A61J 1/03 (2006.01) B65D 50/02 (2006.01) E05B 37/02 (2006.01) E05B 65/52 (2006.01)**

[25] EN

[54] **LOCKABLE CONTAINER**

[54] **RECIPIENT VERROUILLABLE**

[72] COHEN, MILTON, US

[72] HART, KEIR, US

[72] ESTOQUE, DANIEL, US

[71] SECURE MEDICATION SYSTEMS, LLC, US

[85] 2022-02-14

[86] 2020-08-05 (PCT/US2020/045019)

[87] (WO2021/030118)

[30] US (16/541,868) 2019-08-15

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[21] **3,150,931**  
[13] A1

[51] **Int.Cl. B29C 45/02 (2006.01) B29C 45/00 (2006.01) B29C 45/76 (2006.01) B29D 30/06 (2006.01) B29D 30/08 (2006.01)**

[25] EN

[54] **CONTROL SYSTEM FOR TIRE INJECTION FILLING MIXING MACHINE**

[54] **SYSTEME DE COMMANDE POUR MACHINE DE MELANGE A REMPLISSAGE PAR INJECTION DE PNEUMATIQUE**

[72] LITTLE, JEFF, US

[72] BISHOP, JOHN, US

[71] CARLISLE CONSTRUCTION MATERIALS, LLC, US

[85] 2022-02-14

[86] 2020-08-11 (PCT/US2020/045781)

[87] (WO2021/050187)

[30] US (62/899,318) 2019-09-12

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[21] **3,150,932**  
[13] A1

[51] **Int.Cl. B65D 51/28 (2006.01) B65D 43/02 (2006.01) B65D 51/18 (2006.01) B65D 51/24 (2006.01) B65D 81/32 (2006.01) G01F 11/16 (2006.01)**

[25] EN

[54] **BEVERAGE CONTAINER LID WITH RESERVOIR AND REPETITIVE MEASURING AND DISBURSEMENT MECHANISM**

[54] **COUVERCLE DE RECIPIENT A BOISSON A RESERVOIR ET A MECANISME DE MESURE ET DE DISTRIBUTION REPETITIF**

[72] TONN, ANDREW, US

[72] SWITZER, JOEL R., US

[72] SANFORD, STEPHEN, US

[71] TODDY TECH, LLC, US

[85] 2022-02-14

[86] 2020-08-05 (PCT/US2020/045057)

[87] (WO2021/034504)

[30] US (16/543,325) 2019-08-16

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[21] **3,150,933**  
[13] A1

[51] **Int.Cl. A61K 35/19 (2015.01) C12N 5/078 (2010.01)**

[25] EN

[54] **THROMBOSOMES AS AN ANTICOAGULANT REVERSAL AGENT**

[54] **THROMBOSOMES EN TANT QU'AGENT D'INVERSION ANTICOAGULANT**

[72] MOSKOWITZ, KEITH ANDREW, US

[72] ISHLER, BRADEN CARL, US

[72] DICKERSON, WILLIAM MATTHEW, US

[72] LEE, AMBER NICOLE, US

[72] XU, SHAN, US

[71] CELLPHIRE, INC., US

[85] 2022-02-14

[86] 2020-08-14 (PCT/US2020/046522)

[87] (WO2021/034716)

[30] US (62/887,985) 2019-08-16

[30] US (63/065,337) 2020-08-13

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[21] **3,150,934**  
[13] A1

[51] **Int.Cl. A01D 46/30 (2006.01) G06T 7/90 (2017.01) A01D 46/24 (2006.01)**

[25] EN

[54] **RIPENESS DETECTION SYSTEM USING HUE COLOR SPACE AND PEAK FINDING**

[54] **SYSTEME DE DETECTION DE MATURITE UTILISANT UN ESPACE COLORIMETRIQUE DE TEINTE ET UNE RECHERCHE DE PIC**

[72] KNOPF, RYAN R., US

[72] LESSING, JOSHUA AARON, US

[71] APPHARVEST TECHNOLOGY, INC., US

[85] 2021-08-11

[86] 2020-02-14 (PCT/US2020/018395)

[87] (WO2020/168264)

[30] US (62/806,492) 2019-02-15

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[21] **3,150,935**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2012.01)**

[25] EN

[54] **FILLING ORDERS USING ITEM ADJACENCY**

[54] **REPLISSAGE DE COMMANDES A L'AIDE D'UNE CONTIGUITE D'ARTICLES**

[72] FRANCIS, THOMAS L., US

[71] FRANCIS, THOMAS L., US

[85] 2022-02-11

[86] 2020-08-10 (PCT/US2020/045651)

[87] (WO2021/030285)

[30] US (62/885,284) 2019-08-11

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[21] **3,150,936**  
[13] A1

[51] **Int.Cl. A01N 1/02 (2006.01) A61P 7/02 (2006.01) A61P 7/04 (2006.01)**

[25] EN

[54] **THROMBOSOMES AS AN ANTIPLATELET AGENT REVERSAL AGENT**

[54] **THROMBOSOMES EN TANT QU'AGENT DESACTIVATEUR D'ANTIAGREGANT PLAQUETTAIRE**

[72] MOSKOWITZ, KEITH ANDREW, US  
[72] ISHLER, BRADEN CARL, US  
[72] DICKERSON, WILLIAM MATTHEW, US

[72] TANDON, NARENDRA NATH, US  
[72] LEE, AMBER NICOLE, US  
[71] CELLPHIRE, INC., US  
[85] 2022-02-14  
[86] 2020-08-14 (PCT/US2020/046525)  
[87] (WO2021/034719)  
[30] US (62/887,923) 2019-08-16  
[30] US (63/065,337) 2020-08-13

[21] **3,150,937**  
[13] A1

[51] **Int.Cl. B64C 25/16 (2006.01) B64C 7/00 (2006.01)**

[25] EN

[54] **LANDING GEAR ACOUSTIC SHIELDS**

[54] **ECRANS ANTI-BRUIT DE TRAIN D'ATTERRISSAGE**

[72] FRION, STEPHANE, US  
[71] SAFRAN LANDING SYSTEMS CANADA INC., CA  
[85] 2022-02-14  
[86] 2020-10-30 (PCT/US2020/058216)  
[87] (WO2021/087260)  
[30] US (16/670,909) 2019-10-31

[21] **3,150,938**  
[13] A1

[51] **Int.Cl. A23K 50/42 (2016.01) A23K 10/20 (2016.01) A23K 10/30 (2016.01)**

[25] EN

[54] **DRY PET FOOD MANUFACTURING METHOD**

[54] **PROCEDE DE FABRICATION D'ALIMENT SEC POUR ANIMAUX DE COMPAGNIE**

[72] DAVIES, JONATHAN, GB  
[71] CAMBRIAN INVESTCO LIMITED, GB  
[85] 2022-02-14  
[86] 2019-09-12 (PCT/GB2019/052555)  
[87] (WO2021/048515)  
[30] GB (1912950.1) 2019-09-09

[21] **3,150,940**  
[13] A1

[51] **Int.Cl. B01D 57/02 (2006.01) B01L 3/00 (2006.01) C12Q 1/68 (2018.01) C12Q 1/70 (2006.01) G01N 27/447 (2006.01) G01N 33/68 (2006.01) H01J 49/04 (2006.01)**

[25] EN

[54] **ISOELECTRIC FOCUSING DEVICES AND FIXTURES**

[54] **ACCESSOIRES ET DISPOSITIFS DE FOCALISATION ISOELECTRIQUE**

[72] GENTALEN, ERIK, US  
[72] MACK, SCOTT, US  
[72] GWERDER, ERIC, US  
[72] BOUSSE, LUC, US  
[71] INTABIO, LLC, US  
[85] 2022-02-11  
[86] 2020-08-11 (PCT/US2020/045775)  
[87] (WO2021/030353)  
[30] US (62/885,733) 2019-08-12  
[30] US (62/893,549) 2019-08-29  
[30] US (62/909,675) 2019-10-02  
[30] US (16/799,387) 2020-02-24  
[30] US (16/808,063) 2020-03-03

[21] **3,150,941**  
[13] A1

[51] **Int.Cl. C07C 5/31 (2006.01) C07C 13/605 (2006.01)**

[25] EN

[54] **PROCESS FOR MAKING [1.1.1] PROPELLANE**

[54] **PROCEDE DE FABRICATION DE [1,1,1]PROPELLANE**

[72] UNNI, ADITYA KRISHNAN, US  
[72] PINCHMAN, JOSEPH ROBERT, US  
[72] HUANG, PETER QINHUA, US  
[72] BUNKER, KEVIN DUANE, US  
[71] RECURIUM IP HOLDINGS, LLC, US  
[85] 2022-02-11  
[86] 2020-08-12 (PCT/US2020/045869)  
[87] (WO2021/030401)  
[30] US (62/886,769) 2019-08-14

[21] **3,150,942**  
[13] A1

[51] **Int.Cl. A23J 3/22 (2006.01) A23L 31/00 (2016.01) A23J 3/20 (2006.01)**

[25] EN

[54] **METHODS OF BINDING TEXTURED SUBSTRATES USING MYCELIUM-PRODUCING FUNGI AND FOOD PRODUCTS FORMED THEREFROM**

[54] **PROCEDES DE LIAISON DE SUBSTRATS TEXTURES A L'AIDE DE CHAMPIGNONS PRODUISANT DU MYCELIUM ET PRODUITS ALIMENTAIRES FORMES A PARTIR DE CEUX-CI**

[72] LE, KIMBERLIE, US  
[72] NIXON, JOSHUA, US  
[72] YANG, MARISA, US  
[72] FRELKA, JOHN, US  
[71] TERRAMINO INC., US  
[85] 2022-02-11  
[86] 2020-08-12 (PCT/US2020/045886)  
[87] (WO2021/030412)  
[30] US (62/885,392) 2019-08-12

[21] **3,150,943**  
[13] A1

[51] **Int.Cl. B60Q 1/52 (2006.01) H04W 4/02 (2018.01) H04W 4/46 (2018.01) B60K 35/00 (2006.01) G08G 1/16 (2006.01)**

[25] EN

[54] **SYSTEM FOR COMMUNICATION OF HAZARDOUS VEHICLE AND ROAD CONDITIONS**

[54] **SYSTEME DE COMMUNICATION DE CONDITIONS DE VEHICULE ET DE ROUTE DANGEREUSES**

[72] TUCKER, DAVID M., US  
[72] POWERS, STEPHEN T., US  
[72] INCORVAIA, MIKE, US  
[72] TUCKER, AUSTIN REECE, US  
[71] ESS-HELP, INC., US  
[85] 2022-02-11  
[86] 2020-08-12 (PCT/US2020/045930)  
[87] (WO2021/030435)  
[30] US (62/885,659) 2019-08-12

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[21] **3,150,944**  
[13] A1

[51] **Int.Cl. A62B 25/00 (2006.01) A62B 9/00 (2006.01) A62B 9/04 (2006.01) A62B 7/02 (2006.01)**

[25] EN

[54] **FILLING ELEMENT FOR FILLING UP A SPACE BETWEEN AT LEAST ONE COMPRESSED GAS BOTTLE OF A BREATHING APPARATUS AND A CARRIER PLATE**

[54] **ELEMENT DE REMPLISSAGE POUR REMPLIR UN ESPACE ENTRE AU MOINS UNE BOUTEILLE DE GAZ COMPRI ME D'UN APPAREIL RESPIRATOIRE ET UNE PLAQUE DE SUPPORT**

[72] HOLTkamp, ERIC, DE  
[72] WEBER, WOLFGANG, DE  
[71] MSA EUROPE GMBH, CH  
[85] 2022-02-14  
[86] 2020-09-01 (PCT/EP2020/074276)  
[87] (WO2021/043734)  
[30] DE (10 2019 123 813.7) 2019-09-05

[21] **3,150,945**  
[13] A1

[51] **Int.Cl. G01H 3/14 (2006.01) A61F 11/06 (2006.01) A61F 11/08 (2006.01) A61F 11/14 (2006.01)**

[25] EN

[54] **METHOD FOR SAFE LISTENING AND USER ENGAGEMENT**

[54] **PROCEDE D'ECOUTE SURE ET D'IMPLICATION D'UTILISATEUR**

[72] GUPTA, SHAYAN, US  
[72] LIU, HONGFU, US  
[72] KELLY, SHAWN K., US  
[71] AUDITION TECHNOLOGY, LLC, US  
[85] 2022-02-11  
[86] 2020-08-12 (PCT/US2020/045965)  
[87] (WO2021/030463)  
[30] US (62/885,871) 2019-08-13

[21] **3,150,947**  
[13] A1

[51] **Int.Cl. A61P 25/00 (2006.01) A61P 25/28 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **TREATMENT OF RMS BY SWITCHING THERAPY**

[54] **TRAITEMENT DE LA SEP-R PAR CHANGEMENT DE THERAPIE**

[72] RAMANATHAN, KRISHNAN, CH  
[72] HAERING, DIETER ADRIAN, CH  
[72] BAGGER, MORTEN, CH  
[72] MERSCHHEMKE, MARTIN, CH  
[72] ZIEHN, MARINA, CH  
[72] PINGILI, RATNAKAR, US  
[71] NOVARTIS AG, CH  
[85] 2022-02-14  
[86] 2020-09-10 (PCT/EP2020/075332)  
[87] (WO2021/048280)  
[30] EP (19196789.2) 2019-09-11  
[30] EP (20154736.1) 2020-01-30

[21] **3,150,950**  
[13] A1

[51] **Int.Cl. E04B 7/16 (2006.01) E04D 13/00 (2006.01) E04F 10/10 (2006.01) F24D 15/00 (2022.01) H05B 1/00 (2006.01)**

[25] EN

[54] **HEATER SLAT, SLAT ROOF COMPRISING THE SAME AND METHOD FOR MANUFACTURING THE SAME**

[54] **LATTE CHAUFFANTE, TOIT A LATTES LE COMPRENANT ET SON PROCEDE DE FABRICATION**

[72] ABEEL, BART, BE  
[72] DE FRENE, JOOST, BE  
[72] LEMIEGRE, KRISTOF, BE  
[72] BRABANT, PIETER, BE  
[71] RENSON SUNPROTECTION-SCREENS, BE  
[85] 2022-02-14  
[86] 2020-09-10 (PCT/IB2020/058400)  
[87] (WO2021/048773)  
[30] BE (BE2019/5606) 2019-09-12

[21] **3,150,954**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2012.01) A63F 13/46 (2014.01) G06N 3/08 (2006.01)**

[25] EN

[54] **CLOUD-BASED SYSTEM AND METHOD TO TRACK AND MANAGE OBJECTS**

[54] **SYSTEME ET PROCEDE BASES SUR L'INFONUAGIQUE POUR SUIVRE ET GERER DES OBJETS**

[72] SUNDEL, MICHAEL B., US  
[71] SUNDEL, MICHAEL B., US  
[85] 2022-02-11  
[86] 2020-08-13 (PCT/US2020/046166)  
[87] (WO2021/030578)  
[30] US (62/886,908) 2019-08-14

[21] **3,150,956**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61K 45/06 (2006.01) C07K 14/725 (2006.01)**

[25] EN

[54] **COMBINED CANCER THERAPY INVOLVING CHEMICAL ACTIVATION OF INTEGRINS AND TARGETED CELL IMMUNOTHERAPY**

[54] **POLYTHERAPIE ANTICANCEREUSE IMPLIQUANT L'ACTIVATION CHIMIQUE D'INTEGRINES ET L'IMMUNOTHERAPIE CELLULAIRE CIBLEE**

[72] VALE, RONALD D., US  
[72] MORRISSEY, MEGHAN A., US  
[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US  
[85] 2022-02-11  
[86] 2020-08-14 (PCT/US2020/046467)  
[87] (WO2021/034697)  
[30] US (62/887,978) 2019-08-16

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[21] **3,150,957**  
[13] A1

[51] **Int.Cl. A61C 8/00 (2006.01)**  
[25] EN  
[54] **EXTERNAL DRIVE  
IMPLANTATION APPARATUS  
FOR BENDABLE COLLAR  
IMPLANTS AND METHOD**

[54] **APPAREIL D'IMPLANTATION  
D'ENTRAINEMENT EXTERNE  
POUR IMPLANTS DE COLLIER  
PLIABLES ET PROCEDE**

[72] SIEV, AHARON, IL  
[72] SIEV, RAMI, IL  
[71] NORIS MEDICAL LTD., IL  
[85] 2022-02-14  
[86] 2020-09-09 (PCT/IL2020/050981)  
[87] (WO2021/059262)  
[30] IL (269728) 2019-09-26

[21] **3,150,959**  
[13] A1

[51] **Int.Cl. C07K 5/06 (2006.01) A61K  
47/62 (2017.01) A61K 51/00 (2006.01)  
A61P 35/00 (2006.01)**

[25] EN  
[54] **SMART PEPTIDES AND  
TRANSFORMABLE  
NANOPARTICLES FOR CANCER  
IMMUNOTHERAPY**

[54] **PEPTIDES INTELLIGENTS ET  
NANOPARTICULES  
TRANSFORMABLES POUR UNE  
IMMUNOTHERAPIE  
ANTICANCEREUSE**

[72] LAM, KIT S., US  
[72] ZHANG, LU, US  
[71] THE REGENTS OF THE  
UNIVERSITY OF CALIFORNIA, US  
[85] 2022-02-11  
[86] 2020-08-14 (PCT/US2020/046495)  
[87] (WO2021/030743)  
[30] US (62/886,698) 2019-08-14  
[30] US (62/886,718) 2019-08-14

[21] **3,150,962**  
[13] A1

[51] **Int.Cl. A61B 8/02 (2006.01) A61B  
5/024 (2006.01) A61B 7/00 (2006.01)  
A61B 8/06 (2006.01) H04R 1/10  
(2006.01)**

[25] EN  
[54] **EARBUD FOR DETECTING  
BIOSIGNALS FROM AND  
PRESENTING AUDIO SIGNALS  
AT AN INNER EAR CANAL AND  
METHOD THEREFOR**

[54] **ECOUTEUR BOUTON  
PERMETTANT DE DETECTER  
DES SIGNAUX BIOLOGIQUES A  
PARTIR DE SIGNAUX AUDIO AU  
NIVEAU D'UN CANAL AUDITIF  
INTERNE ET DE LES LUI  
PRESENTER ET PROCEDE  
ASSOCIE**

[72] BARNACKA, ANNA, US  
[72] PANCHAL, JAL MAHENDRA, US  
[72] RING, MARTIN D., US  
[72] DEVLIN, THOMAS, US  
[71] BARNACKA, ANNA, US  
[71] PANCHAL, JAL MAHENDRA, US  
[71] RING, MARTIN D., US  
[71] DEVLIN, THOMAS, US  
[85] 2022-02-11  
[86] 2020-08-17 (PCT/US2020/046718)  
[87] (WO2021/030811)  
[30] US (62/887,553) 2019-08-15

[21] **3,150,963**  
[13] A1

[51] **Int.Cl. A01K 1/12 (2006.01) A01J  
5/003 (2006.01) A01J 5/01 (2006.01)  
A01J 5/013 (2006.01) A01J 5/017  
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9/00 (2006.01) A01K 1/00 (2006.01)**

[25] EN  
[54] **A DAIRY FARM WITH A SINGLE  
OR MULTIPLE FRONTAL  
ELEVATED ROADS**

[54] **FERME LAITIERE AVEC UNE  
SEULE OU PLUSIEURS VOIES  
SURELEVEES FRONTALES**

[72] BRAYER, EYAL, IL  
[71] DAIRYCS AUTOMATIC MILKING  
LTD, IL  
[85] 2022-02-14  
[86] 2020-08-27 (PCT/IL2020/050934)  
[87] (WO2021/038566)  
[30] IL (268978) 2019-08-28  
[30] IL (271314) 2019-12-10  
[30] IL (274851) 2020-05-21

[21] **3,150,964**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) C07K  
14/47 (2006.01) C07K 14/705  
(2006.01) C12N 5/10 (2006.01) C12N  
7/01 (2006.01) C12N 15/12 (2006.01)  
C12N 15/864 (2006.01) C12Q 1/68  
(2018.01)**

[25] EN  
[54] **ADENO-ASSOCIATED VIRUS  
VECTOR DELIVERY OF ALPHA-  
SARCOGLYCAN AND THE  
TREATMENT OF MUSCULAR  
DYSTROPHY**

[54] **ADMINISTRATION DE VECTEUR  
DE VIRUS ADENO-ASSOCIE  
D'ALPHA-SARCOGLYCAN ET  
TRAITEMENT DE DYSTROPHIE  
MUSCULAIRE**

[72] RODINO-KLAPAC, LOUISE, US  
[72] GRIFFIN, DANIELLE, US  
[72] MENDELL, JERRY R., US  
[71] RESEARCH INSTITUTE AT  
NATIONWIDE CHILDREN'S  
HOSPITAL, US  
[85] 2022-02-11  
[86] 2020-08-21 (PCT/US2020/047339)  
[87] (WO2021/035120)  
[30] US (62/889,749) 2019-08-21  
[30] US (63/014,934) 2020-04-24  
[30] US (63/022,843) 2020-05-11

[21] **3,150,966**  
[13] A1

[51] **Int.Cl. B01J 19/00 (2006.01) B81B  
1/00 (2006.01) B81C 1/00 (2006.01)  
G01N 37/00 (2006.01)**

[25] EN  
[54] **METHOD FOR PRODUCING  
MICROCHANNEL DEVICE**

[54] **METHODE DE PRODUCTION DE  
DISPOSITIF DE MICROCANAL**

[72] YAMAMOTO, TAKESHI, JP  
[72] MIURA, JUN, JP  
[72] MIYAZAKI, KEIJI, JP  
[72] TANAKA, HIROKI, JP  
[72] FUKATSU, MAKOTO, JP  
[72] MATSUKAWA, AKIHISA, JP  
[72] KANAZAWA, TAKAYUKI, JP  
[72] MIZUSAWA, KEIGO, JP  
[72] SEKI, MASANORI, JP  
[72] TANAKA, MASANORI, JP  
[71] CANON KABUSHIKI KAISHA, JP  
[85] 2022-02-14  
[86] 2020-08-24 (PCT/JP2020/031882)  
[87] (WO2021/039740)  
[30] JP (2019-156718) 2019-08-29  
[30] JP (2020-130484) 2020-07-31

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[21] **3,150,967**  
[13] A1

[51] **Int.Cl. G06Q 30/04 (2012.01) G06Q 40/00 (2012.01)**

[25] EN

[54] **METHOD OF AND DEVICE FOR SPLITTING OVER-LIMIT INVOICE, COMPUTER EQUIPMENT AND STORAGE MEDIUM**

[54] **PROCEDE ET APPAREIL DE TRAITEMENT DE DIVISION DE FAPIAO EN DEPASSEMENT DE QUOTA, AINSI QUE DISPOSITIF INFORMATIQUE ET SUPPORT D'INFORMATIONS**

[72] LUO, KENING, CN  
[72] DONG, JIAJIA, CN  
[71] 10353744 CANADA LTD., CA  
[85] 2022-01-04  
[86] 2020-06-24 (PCT/CN2020/097963)  
[87] (WO2021/000773)  
[30] CN (201910591853.X) 2019-07-01

[21] **3,150,968**  
[13] A1

[51] **Int.Cl. H04B 3/54 (2006.01) G01C 21/18 (2006.01) G01D 21/02 (2006.01)**

[25] EN

[54] **METHOD OF AND SYSTEM FOR MONITORING CIVIL AIR DEFENSE EQUIPMENT MAINTENANCE**

[54] **PROCEDE ET SYSTEME DE SURVEILLANCE DESTINES A LA MAINTENANCE D'UN DISPOSITIF DE DEFENSE AERIENNE CIVILE**

[72] GU, WEI, CN  
[72] YAN, XIAOCHUN, CN  
[72] XU, GENLIN, CN  
[72] LI, CHENG, CN  
[71] 10353744 CANADA LTD., CA  
[85] 2022-01-07  
[86] 2020-06-24 (PCT/CN2020/097942)  
[87] (WO2021/004276)  
[30] CN (201910608185.7) 2019-07-08

[21] **3,150,969**  
[13] A1

[51] **Int.Cl. G06T 11/60 (2006.01) G06F 3/16 (2006.01) G06T 11/80 (2006.01) H04L 65/1083 (2022.01)**

[25] EN

[54] **SYSTEM TO CHANGE IMAGE BASED ON VOICE**

[54] **SYSTEME POUR CHANGER UNE IMAGE EN FONCTION DE LA VOIX**

[72] SEKINE, KIYOSHI, JP  
[71] INTERACTIVE SOLUTIONS CORP., JP  
[85] 2022-02-14  
[86] 2021-02-12 (PCT/JP2021/005251)  
[87] (WO2022/030036)  
[30] JP (2020-133416) 2020-08-05

[21] **3,150,970**  
[13] A1

[51] **Int.Cl. F04D 29/22 (2006.01) F24F 1/0022 (2019.01) F04D 17/08 (2006.01) F04D 29/28 (2006.01) F24F 12/00 (2006.01)**

[25] EN

[54] **FAN FOR AIR HANDLING UNIT (AHU) ASSEMBLED FROM SEVERAL PARTS WITH RADIAL AND AXIAL RETAINERS**

[54] **VENTILATEUR POUR UNITE DE TRAITEMENT D'AIR (AHU) ASSEMBLE A PARTIR DE PLUSIEURS PARTIES AVEC DES ELEMENTS DE RETENUE RADIAUX ET AXIAUX**

[72] OTTERSTEN, MARTIN, SE  
[71] SWEGON OPERATIONS AB, SE  
[85] 2022-02-14  
[86] 2020-08-20 (PCT/SE2020/050802)  
[87] (WO2021/034260)  
[30] SE (1950948-8) 2019-08-20

[21] **3,150,974**  
[13] A1

[51] **Int.Cl. C08L 23/06 (2006.01) C08J 3/12 (2006.01) C08J 3/24 (2006.01) C09K 8/80 (2006.01)**

[25] EN

[54] **HIGHLY CROSSLINKED POLYMER PARTICULATE**

[54] **MATIERE PARTICULAIRE POLYMERE HAUTEMENT RETICULEE**

[72] GALUSKA, ALAN A., US  
[72] HANDY, WILLIAM, US  
[72] ENTCHEV, PAVLIN B., US  
[72] SHIRLEY, ROBERT M., US  
[71] EXXONMOBIL UPSTREAM RESEARCH COMPANY, US  
[85] 2022-02-14  
[86] 2020-07-24 (PCT/US2020/043481)  
[87] (WO2021/034448)  
[30] US (62/888,214) 2019-08-16  
[30] US (62/944,106) 2019-12-05

[21] **3,150,975**  
[13] A1

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

[25] EN

[54] **TOPICAL TREATMENT OF VITILIGO BY A JAK INHIBITOR**

[54] **TRAITEMENT TOPIQUE DU VITILIGO PAR UN INHIBITEUR DE JAK**

[72] BUTLER, KATHLEEN, US  
[72] LEE, JIM, US  
[72] SUN, KANG, US  
[72] KUO, FIONA, US  
[72] HOWELL, MICHAEL, US  
[71] INCYTE CORPORATION, US  
[85] 2022-02-14  
[86] 2020-06-10 (PCT/US2020/036985)  
[87] (WO2020/252012)  
[30] US (62/859,495) 2019-06-10  
[30] US (62/859,506) 2019-06-10  
[30] US (62/859,532) 2019-06-10  
[30] US (62/859,584) 2019-06-10  
[30] US (62/859,601) 2019-06-10  
[30] US (62/894,496) 2019-08-30  
[30] US (62/894,514) 2019-08-30  
[30] US (62/894,541) 2019-08-30  
[30] US (62/894,564) 2019-08-30  
[30] US (62/894,581) 2019-08-30  
[30] US (62/911,845) 2019-10-07  
[30] US (62/967,879) 2020-01-30

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[21] **3,150,977**  
[13] A1

[51] **Int.Cl. B29D 30/04 (2006.01) B60C 7/00 (2006.01) B60C 7/10 (2006.01)**

[25] EN

[54] **SYSTEM FOR PREDICTING AUGER FAILURE IN A TIRE INJECTION FILLING MIXING MACHINE**

[54] **SYSTEME POUR PREDIRE UNE DEFAILLANCE DE VIS SANS FIN DANS UNE MACHINE DE MELANGE ET DE REMPLISSAGE PAR INJECTION DE PNEU**

[72] LITTLE, JEFF, US

[72] BISHOP, JOHN, US

[71] CARLISLE CONSTRUCTION MATERIALS, LLC, US

[85] 2022-02-14

[86] 2020-08-11 (PCT/US2020/045789)

[87] (WO2021/050188)

[30] US (62/899,466) 2019-09-12

[21] **3,150,978**  
[13] A1

[51] **Int.Cl. C07K 14/55 (2006.01) A61K 38/00 (2006.01)**

[25] EN

[54] **MODIFIED INTERLEUKIN 2 (IL-2) POLYPEPTIDES, CONJUGATES AND USES THEREOF**

[54] **POLYPEPTIDES D'INTERLEUKINE 2 (IL-2) MODIFIES, CONJUGUES ET UTILISATIONS DE CEUX-CI**

[72] XU, XIAO, US

[72] HUANG, HAINING, US

[72] FENG, YU, US

[72] MOGNOL, GIULIANA, US

[72] JIN, CAN, US

[72] GUIMET, DIANA, US

[71] CYTIMM THERAPEUTICS, INC., US

[85] 2022-02-14

[86] 2020-08-11 (PCT/US2020/045810)

[87] (WO2021/030374)

[30] US (62/887,359) 2019-08-15

[30] US (63/025,095) 2020-05-14

[21] **3,150,990**  
[13] A1

[51] **Int.Cl. C08F 4/649 (2006.01) C08F 210/16 (2006.01)**

[25] EN

[54] **CONTROL OF UNSATURATION IN POLYMERS PRODUCED IN SOLUTION PROCESS**

[54] **CONTROLE DE L'INSATURATION DANS DES POLYMERES PRODUITS DANS UN PROCEDE EN SOLUTION**

[72] WANG, QINYAN, US

[72] FAN, CHENG, CA

[72] ZORICAK, PETER, CA

[71] NOVA CHEMICALS CORPORATION, CA

[85] 2022-02-14

[86] 2020-09-28 (PCT/IB2020/059050)

[87] (WO2021/064545)

[30] US (62/908,731) 2019-10-01

[21] **3,151,004**  
[13] A1

[51] **Int.Cl. C12N 15/09 (2006.01) C12Q 1/6869 (2018.01) C12N 15/10 (2006.01) C12N 15/13 (2006.01) C12P 19/34 (2006.01)**

[25] EN

[54] **PROBE-CAPTURE METHOD FOR TCR ALPHA AND BETA CHAIN VDJ-RECOVERY FROM OLIGO-DT REVERSE TRANSCRIBED RNA**

[54] **PROCEDE DE CAPTURE DE SONDE POUR LA RECUPERATION DE VDJ DE CHAINE BETA DE TCR ALPHA ET BETA A PARTIR D'ARN TRANSCRIT INVERSE D'OLIGO-DT**

[72] PAN, WENJING, US

[72] BYRNE-STEEL, MIRANDA, US

[72] BROWN, BRITTANY, US

[72] SONG, LI, US

[72] HAN, JIAN, US

[71] IREPERTOIRE, INC., US

[85] 2022-02-14

[86] 2020-08-14 (PCT/US2020/046433)

[87] (WO2021/030716)

[30] US (62/886,663) 2019-08-14

[21] **3,151,008**  
[13] A1

[51] **Int.Cl. A61B 18/02 (2006.01)**

[25] EN

[54] **DUAL STAGE CRYOCOOLER**

[54] **CRYOREFRIGERATEUR DOUBLE ETAGE**

[72] RAMADHYANI, SATISH, US

[72] KVEEN, GRAIG, US

[72] NATESAN, HARISHANKAR, US

[71] BIOCOMPATIBLES UK LIMITED, GB

[85] 2022-02-14

[86] 2020-08-14 (PCT/US2020/046464)

[87] (WO2021/030732)

[30] US (62/886,853) 2019-08-14

[21] **3,151,013**  
[13] A1

[51] **Int.Cl. G01N 33/53 (2006.01) C12Q 1/26 (2006.01) G01N 33/94 (2006.01)**

[25] EN

[54] **HOMOGENEOUS ENZYME IMMUNOASSAY FOR KERATINIZED STRUCTURES**

[54] **DOSAGE IMMUNOLOGIQUE ENZYMATIQUE HOMOGENE POUR STRUCTURES KERATINISEES**

[72] LONI, ELVAN, US

[72] HILL, VIRGINIA ANN, US

[72] SCHAFFER, MICHAEL I., US

[72] STOWE, GARY NEIL, US

[71] PSYCHEMEDICS CORPORATION, US

[85] 2022-02-14

[86] 2020-08-14 (PCT/US2020/046459)

[87] (WO2021/030729)

[30] US (62/887,191) 2019-08-15

[30] US (62/889,870) 2019-08-21

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[21] **3,151,018**  
[13] A1

[51] **Int.Cl. H01M 6/12 (2006.01) H01M 4/62 (2006.01) H01M 6/40 (2006.01) C08J 3/075 (2006.01) C08J 3/24 (2006.01) C08L 101/16 (2006.01) G02F 1/153 (2006.01) H01G 9/20 (2006.01) H01M 6/52 (2006.01)**

[25] EN  
[54] **BIODEGRADABLE ELECTROCHEMICAL DEVICE**  
[54] **DISPOSITIF ELECTROCHIMIQUE BIODEGRADABLE**

[72] CHOPRA, NAVEEN, CA  
[72] HU, NAN-XING, CA  
[72] MCGUIRE, GREGORY, CA  
[72] BLACK, ROBERT, CA  
[72] LAFORGUE, ALEXIS, CA  
[72] LAM, EDMOND, CA  
[72] LEUNG, CHI WOON, CA  
[72] LIU, YALI, CA  
[72] REGNIER, SOPHIE, CA  
[72] CHAPLEAU, NATHALIE, CA  
[72] MOKRINI, ASMAE, CA  
[71] XEROX CORPORATION, US  
[71] NATIONAL RESEARCH COUNCIL OF CANADA, CA  
[85] 2022-02-14  
[86] 2020-08-19 (PCT/US2020/046932)  
[87] (WO2021/034899)  
[30] US (62/889,114) 2019-08-20

[21] **3,151,021**  
[13] A1

[51] **Int.Cl. C07K 14/015 (2006.01) C12N 15/864 (2006.01)**

[25] EN  
[54] **AAV CAPSID VARIANTS FOR GENE THERAPY**  
[54] **VARIANTS CAPSIDIQUES D'AAV POUR THERAPIE GENIQUE**

[72] SWEENEY, HUGH LEE, US  
[71] UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INCORPORATED, US  
[85] 2022-02-14  
[86] 2020-08-14 (PCT/US2020/046543)  
[87] (WO2021/030764)  
[30] US (62/886,915) 2019-08-14

[21] **3,151,023**  
[13] A1

[51] **Int.Cl. B24C 7/00 (2006.01) B24C 1/00 (2006.01)**

[25] EN  
[54] **PARTICLE BLAST APPARATUS**  
[54] **APPAREIL DE PROJECTION DE PARTICULES**

[72] BROECKER, RICHARD, US  
[72] MALLALEY, DANIEL, US  
[72] MOORE, RICHARD, US  
[71] COLD JET, LLC, US  
[85] 2022-02-14  
[86] 2020-08-20 (PCT/US2020/047101)  
[87] (WO2021/035001)  
[30] US (62/890,044) 2019-08-21

[21] **3,151,026**  
[13] A1

[51] **Int.Cl. B29D 28/00 (2006.01)**

[25] EN  
[54] **MESH NETWORK**  
[54] **RESEAU MAILLE**

[72] LANDERTSHAMER, FRIEDRICH, AT  
[71] VOLM COMPANIES, INC., US  
[85] 2022-02-14  
[86] 2020-09-09 (PCT/US2020/049902)  
[87] (WO2021/050518)  
[30] AT (A 50787/2019) 2019-09-10

[21] **3,151,029**  
[13] A1

[51] **Int.Cl. A61B 17/34 (2006.01) A61B 34/10 (2016.01) A61B 34/20 (2016.01) A61B 5/06 (2006.01) A61B 8/00 (2006.01) A61B 8/08 (2006.01)**

[25] EN  
[54] **SYSTEMS AND METHODS FOR ULTRASOUND PROBE NEEDLE TRACKING STATUS INDICATORS**  
[54] **SYSTEMES ET PROCEDES POUR INDICATEURS D'ETAT DE SUIVI D'AIGUILLE DE SONDE ULTRASONORE**

[72] DURFEE, TYLER L., US  
[72] CHRISTIAN, KELLY J., US  
[72] BURNSIDE, EDDIE K., US  
[72] TANNER, BRIAN STEVEN, US  
[71] BARD ACCESS SYSTEMS, INC., US  
[85] 2022-02-14  
[86] 2020-09-04 (PCT/US2020/049518)  
[87] (WO2021/046429)  
[30] US (62/895,852) 2019-09-04

[21] **3,151,033**  
[13] A1

[51] **Int.Cl. E04D 5/14 (2006.01) C09J 7/38 (2018.01) E04D 5/00 (2006.01)**

[25] EN  
[54] **ROOFING UNDERLAYMENT USING A PRESSURE SENSITIVE ADHESIVE AND METHODS FOR MAKING AND USING THE SAME**  
[54] **SOUS-COUCHE DE COUVERTURE UTILISANT UNE ADHESIF SENSIBLE A LA PRESSION ET SES PROCEDES DE FABRICATION ET D'UTILISATION**

[72] KEULER, DAVID P., US  
[72] BAUSCH, CORY C., US  
[72] ALPER, MARK D., US  
[71] BOSTIK, INC., US  
[85] 2022-02-14  
[86] 2020-08-25 (PCT/US2020/047809)  
[87] (WO2021/041418)  
[30] US (62/891,710) 2019-08-26

[21] **3,151,044**  
[13] A1

[51] **Int.Cl. A61K 31/407 (2006.01) A61K 9/24 (2006.01)**

[25] EN  
[54] **COMPOSITIONS AND METHODS USING NON-STEROIDAL ANTI-INFLAMMATORY DRUGS**  
[54] **COMPOSITIONS ET PROCEDES UTILISANT DES MEDICAMENTS ANTI-INFLAMMATOIRES NON STERODIENS**

[72] LATEFI, NAZLIE, US  
[71] APPLIED BIOLOGICAL LABORATORIES, INC., US  
[85] 2022-02-14  
[86] 2020-08-22 (PCT/US2020/047551)  
[87] (WO2021/035198)  
[30] US (62/890,517) 2019-08-22

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[21] **3,151,083**  
[13] A1

[51] **Int.Cl. B01D 46/54 (2006.01) B01D 39/16 (2006.01) D04H 3/16 (2006.01)**  
[25] EN  
[54] **SPUNBONDED AIR-FILTRATION WEB**  
[54] **BANDE DE FILTRATION D'AIR FILEE-LIEE**  
[72] STELTER, JOHN D., US  
[72] BECKER, ZACKARY J., US  
[72] BERRIGAN, MICHAEL R., US  
[72] FLAGE, ALEXANDER P., US  
[72] FOX, ANDREW R., US  
[72] GERHARDT, BRYAN L., US  
[72] JASUJA, HIMANSHU, US  
[72] KOPECKY, WILLIAM J., US  
[72] SAGER, PATRICK J., US  
[72] SMITH, SAMANTHA D., US  
[72] THELEN, JACOB J., US  
[72] WILLGOHS, KENT B., US  
[71] 3M INNOVATIVE PROPERTIES COMPANY, US  
[85] 2022-02-11  
[86] 2020-08-12 (PCT/IB2020/057599)  
[87] (WO2021/028851)  
[30] US (62/886,129) 2019-08-13

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[21] **3,151,084**  
[13] A1

[51] **Int.Cl. G09F 9/30 (2006.01) G06Q 30/02 (2012.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR CONTROLLING DISPLAY OF ELECTRONIC LABELS**  
[54] **PROCEDE ET DISPOSITIF DE COMMANDE D'AFFICHAGE POUR UNE ETIQUETTE ELECTRONIQUE**  
[72] ZHANG, PENG, CN  
[72] WANG, HUAN, CN  
[72] BU, YA, CN  
[72] XUE, HAIJUN, CN  
[72] ZHANG, HUAN, CN  
[71] 10353744 CANADA LTD., CA  
[85] 2022-01-04  
[86] 2020-06-24 (PCT/CN2020/097940)  
[87] (WO2021/000769)  
[30] CN (201910588039.2) 2019-07-01

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[21] **3,151,085**  
[13] A1

[51] **Int.Cl. G05D 23/19 (2006.01) B23K 13/01 (2006.01) B23K 13/08 (2006.01) H05B 6/06 (2006.01) C21D 1/42 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR TEMPERATURE CHARACTERIZATION IN WELDING**  
[54] **PROCEDE ET APPAREIL DE CARACTERISATION DE TEMPERATURE LORS DE SOUDAGE**  
[72] ANDERSON, DYLAN, US  
[71] ILLNOIS TOOL WORKS INC., US  
[85] 2022-02-11  
[86] 2020-08-21 (PCT/US2020/047419)  
[87] (WO2021/035146)  
[30] US (62/890,181) 2019-08-22  
[30] US (16/995,018) 2020-08-17

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[21] **3,151,086**  
[13] A1

[51] **Int.Cl. E04B 1/348 (2006.01)**  
[25] EN  
[54] **MOLDED MULTI-PART POLYMER STRUCTURAL PLASTIC BUILDING ASSEMBLY SYSTEM FOR LAND AND WATER**  
[54] **SYSTEME D'ASSEMBLAGE DE CONSTRUCTION EN PLASTIQUE STRUCTURAL POLYMERE A PIECES MULTIPLES MOULEES A UTILISER SUR TERRE ET DANS L'EAU**  
[72] WEE, CHARLES I., US  
[71] WEE, CHARLES I., US  
[85] 2022-02-11  
[86] 2020-08-21 (PCT/US2020/047484)  
[87] (WO2021/041244)  
[30] US (16/550,123) 2019-08-23

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[21] **3,151,087**  
[13] A1

[51] **Int.Cl. C07K 14/015 (2006.01) C12N 15/113 (2010.01) C12N 7/01 (2006.01) C12N 15/35 (2006.01) C12N 15/86 (2006.01) C12N 15/864 (2006.01)**  
[25] EN  
[54] **ADENO-ASSOCIATED VIRAL VECTORS FOR CROSSING THE HUMAN BLOOD BRAIN BARRIER**  
[54] **VECTEURS VIRAUX ADENO-ASSOCIES POUR TRAVERSER LA BARRIERE HEMATO-ENCEPHALIQUE HUMAINE**  
[72] KAY, MARK A., US  
[72] SONG, REN, US  
[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US  
[85] 2022-02-11  
[86] 2020-08-26 (PCT/US2020/047917)  
[87] (WO2021/041489)  
[30] US (62/893,723) 2019-08-29

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[21] **3,151,088**  
[13] A1

[51] **Int.Cl. G06Q 30/02 (2012.01) G06Q 30/06 (2012.01) G06K 19/06 (2006.01) G06Q 30/00 (2012.01)**  
[25] EN  
[54] **INTERMEDIATE MENU, VISUAL DESIGN TEMPLATE, AND INTERACTIVE LABEL**  
[54] **MENU INTERMEDIAIRE, MODELE DE CONCEPTION VISUELLE ET ETIQUETTE INTERACTIVE**  
[72] PHILLIPS, JOHN S., US  
[72] BUCKLEY, GREGORY, US  
[72] REEVES, WILLIAM, US  
[71] PEPSICO, INC., US  
[85] 2022-02-11  
[86] 2020-08-31 (PCT/US2020/048801)  
[87] (WO2021/042054)  
[30] US (62/894,770) 2019-08-31

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[21] **3,151,090**  
[13] A1

[51] **Int.Cl. A61F 5/37 (2006.01) A47G 9/02 (2006.01) A61G 7/00 (2006.01) A61G 7/05 (2006.01)**

[25] EN

[54] **PATIENT IMMOBILIZATION DEVICE, SYSTEM AND METHOD FOR IMMOBILIZING A PATIENT**

[54] **DISPOSITIF D'IMMOBILISATION D'UN PATIENT, SYSTEME ET PROCEDE DE MISE AU REPOS D'UN PATIENT**

[72] VOGELE, MICHAEL, DE

[71] ISYS MEDIZINTECHNIK GMBH, AT

[85] 2021-10-13

[86] 2020-04-24 (PCT/EP2020/061563)

[87] (WO2020/216951)

[30] US (62/839,420) 2019-04-26

[21] **3,151,093**  
[13] A1

[51] **Int.Cl. G06F 8/38 (2018.01) G06F 9/451 (2018.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR GUI DEVELOPMENT AND DEPLOYMENT IN A REAL TIME SYSTEM**

[54] **SYSTEME ET PROCEDE DE DEVELOPPEMENT ET DE DEPLOIEMENT D'INTERFACE UTILISATEUR GRAPHIQUE DANS UN SYSTEME EN TEMPS REEL**

[72] RAJA, JESSAYEN, IN

[72] KARTHIKEYAN, KANNAN, IN

[72] MANIKANDAN, CHINNAPPAN, IN

[71] ROBERT BOSCH GMBH, DE

[71] ROBERT BOSCH ENGINEERING AND BUSINESS SOLUTIONS PRIVATE LIMITED, IN

[85] 2022-02-15

[86] 2020-07-15 (PCT/EP2020/070028)

[87] (WO2021/013655)

[30] IN (201941030074) 2019-07-25

[21] **3,151,096**  
[13] A1

[51] **Int.Cl. G16H 50/50 (2018.01) G16B 5/30 (2019.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR DISPLAYING AND MONITORING A PATIENT'S BLOOD COAGULATION FUNCTION**

[54] **METHODE ET SYSTEME D'AFFICHAGE ET DE SURVEILLANCE DE LA FONCTION DE COAGULATION SANGUINE D'UN PATIENT**

[72] TSCHOLL, DAVID W., CH

[72] NOETHIGER, CHRISTOPH B., CH

[72] SPAHN, DONAT R., CH

[71] UNIVERSITAT ZURICH, CH

[85] 2022-02-15

[86] 2020-08-17 (PCT/EP2020/073005)

[87] (WO2021/032683)

[30] EP (19193196.3) 2019-08-22

[21] **3,151,098**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A01N 65/00 (2009.01) A61K 31/7088 (2006.01) C12N 15/63 (2006.01) C12N 15/82 (2006.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **RNA-BASED THERAPEUTIC METHODS TO PROTECT ANIMALS AGAINST PATHOGENIC BACTERIA AND / OR PROMOTE BENEFICIAL EFFECTS OF SYMBIOTIC AND COMMENSAL BACTERIA**

[54] **PROCEDES THERAPEUTIQUES A BASE D'ARN POUR PROTEGER DES ANIMAUX CONTRE DES BACTERIES PATHOGENES ET/OU FAVORISER LES EFFETS BENEFIQUES DE BACTERIES SYMBIOTIQUES ET COMMENSALES**

[72] NAVARRO, LIONEL, FR

[72] SINGLA RASTOGI, MEENU, IN

[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS), FR

[71] ECOLE NORMALE SUPERIEURE, FR

[71] INSERM (INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE), FR

[85] 2022-02-15

[86] 2020-08-19 (PCT/EP2020/073231)

[87] (WO2021/032794)

[30] EP (PCT/EP2019/072170) 2019-08-19

[21] **3,151,101**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2012.01) G06F 21/60 (2013.01)**

[25] EN

[54] **SECURE RESOURCE MANAGEMENT TO PREVENT RESOURCE ABUSE**

[54] **GESTION DE RESSOURCES SECURISEE PERMETTANT D'EMPECHER UN ABUS DE RESSOURCES**

[72] PRADHAN, LIGAJ, US

[72] PATEL, PIYUSH, US

[72] BONDUGULA, RAJKUMAR, US

[71] EQUIFAX INC., US

[85] 2022-02-11

[86] 2020-09-03 (PCT/US2020/049150)

[87] (WO2021/050346)

[30] US (62/900,213) 2019-09-13

[21] **3,151,102**  
[13] A1

[51] **Int.Cl. F28F 9/02 (2006.01) F24F 12/00 (2006.01) F24F 13/04 (2006.01) F24F 13/14 (2006.01) F28F 9/22 (2006.01)**

[25] EN

[54] **A GAS FLOW SYSTEM**

[54] **SYSTEME D'ECOULEMENT DE GAZ**

[72] TRIP, VINCENT, NL

[72] VAN DER LEE, ARTHUR, NL

[71] DUTCH INNOVATION IN AIR TREATMENT B.V., NL

[85] 2022-02-15

[86] 2020-08-24 (PCT/EP2020/073650)

[87] (WO2021/037807)

[30] NL (2023734) 2019-08-30

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[21] **3,151,106**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61K 39/12 (2006.01) A61K 39/245 (2006.01) A61P 35/00 (2006.01) C07K 14/05 (2006.01) C07K 14/725 (2006.01)**

[25] EN

[54] **TCR CONSTRUCTS SPECIFIC FOR EBV-DERIVED ANTIGENS**

[54] **CONSTRUCTIONS DE TCR SPECIFIQUES DES ANTIGENES DERIVES DU VEB**

[72] LORENZ, FELIX, DE

[72] DUDANIEC, KRYSZYNA, PL

[72] UCKERT, WOLFGANG, DE

[71] MAX-DELBRUCK-CENTRUM FUR MOLEKULARE MEDIZIN IN DER HELMHOLTZ-GEMEINSCHAFT, DE

[85] 2022-02-15

[86] 2020-08-28 (PCT/EP2020/074065)

[87] (WO2021/038031)

[30] EP (19194724.1) 2019-08-30

[21] **3,151,107**  
[13] A1

[51] **Int.Cl. C07K 14/705 (2006.01) A61K 35/17 (2015.01) C07K 16/18 (2006.01) C12N 5/10 (2006.01)**

[25] EN

[54] **CAR-T CELLS SPECIFIC FOR MODIFIED PROTEINS IN EXTRACELLULAR SPACES**

[54] **LYMPHOCYTES T A CAR SPECIFIQUES POUR DES PROTEINES MODIFIEES DANS DES ESPACES EXTRACELLULAIRES**

[72] BLUESTONE, JEFFREY A., US

[72] RAFFIN, CAROLINE, US

[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US

[85] 2022-02-14

[86] 2020-08-10 (PCT/US2020/045603)

[87] (WO2021/030257)

[30] US (62/886,736) 2019-08-14

[21] **3,151,108**  
[13] A1

[51] **Int.Cl. A61F 13/02 (2006.01)**

[25] EN

[54] **A MEDICAL DRESSING COMPRISING A BACKING LAYER WITH THREE DIMENSIONAL FEATURES**

[54] **PANSEMENT MEDICAL COMPRENANT UNE COUCHE DE SUPPORT AVEC DES CARACTERISTIQUES TRIDIMENSIONNELLES**

[72] JOHANNISON, ULF, SE

[72] AHSANI, SAMI, SE

[72] DAHLBERG, ANDERS, SE

[71] MOLNLYCKE HEALTH CARE AB, SE

[85] 2022-02-15

[86] 2020-09-10 (PCT/EP2020/075328)

[87] (WO2021/048278)

[30] EP (19197307.2) 2019-09-13

[21] **3,151,110**  
[13] A1

[51] **Int.Cl. A61K 31/404 (2006.01) A61K 31/4985 (2006.01) A61K 45/06 (2006.01) A61P 29/00 (2006.01) A61P 43/00 (2006.01)**

[25] EN

[54] **METHODS OF TREATING A SUBJECT WITH A CDC42-SPECIFIC INHIBITOR**

[54] **METHODES DE TRAITEMENT D'UN SUJET AU MOYEN D'UN INHIBITEUR SPECIFIQUE DE CDC42**

[72] GEIGER, HARTMUT, US

[72] ZHENG, YI, US

[71] CHILDREN'S HOSPITAL MEDICAL CENTER, US

[85] 2022-02-14

[86] 2020-08-13 (PCT/US2020/046209)

[87] (WO2021/034616)

[30] US (62/888,027) 2019-08-16

[21] **3,151,111**  
[13] A1

[51] **Int.Cl. A61K 8/9783 (2017.01) A61K 8/64 (2006.01) A61Q 19/08 (2006.01)**

[25] FR

[54] **USE OF A COMPOSITION CONTAINING AN EXTRACT OF TULIPA GESNERIANA**

[54] **UTILISATION D'UNE COMPOSITION COMPRENANT UN EXTRAIT DE TULIPA GESNERIANA**

[72] HOCQUAUX, MICHEL, FR

[72] AUBAGNAC, JEAN-CHRISTOPHE, FR

[71] FRANCE COSMEPHYLL-LAB, FR

[85] 2022-02-15

[86] 2020-09-04 (PCT/EP2020/074824)

[87] (WO2021/044013)

[30] FR (FR1909730) 2019-09-04

[21] **3,151,112**  
[13] A1

[51] **Int.Cl. A61K 31/551 (2006.01) A61K 45/06 (2006.01) C07D 513/14 (2006.01)**

[25] EN

[54] **TETRACYCLIC COMPOUNDS AND THEIR SALTS, COMPOSITIONS, AND METHODS FOR THEIR USE**

[54] **COMPOSES TETRACYCLIQUES ET LEURS SELS, COMPOSITIONS ET PROCEDES D'UTILISATION**

[72] SOONG, JOHN, US

[71] SENHWA BIOSCIENCES, INC., CN

[85] 2022-02-14

[86] 2020-08-14 (PCT/US2020/046329)

[87] (WO2021/030671)

[30] US (62/886,621) 2019-08-14

[30] US (62/946,774) 2019-12-11

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[21] **3,151,114**  
[13] A1

[51] **Int.Cl. B01J 23/42 (2006.01) B01J 29/04 (2006.01) B01J 35/00 (2006.01) C07C 5/00 (2006.01)**

[25] EN

[54] **IMPROVED METHOD FOR THE CATALYZED HYDROISOMERISATION OF HYDROCARBONS**

[54] **PROCEDE AMELIORE POUR L'HYDROISOMERISATION CATALYSEE D'HYDROCARBURES**

[72] RAKOCZY, RAINER ALBERT, DE

[72] HARDER, JOHANNES, DE

[71] CLARIANT INTERNATIONAL LTD, CH

[85] 2022-02-15

[86] 2020-09-04 (PCT/EP2020/074823)

[87] (WO2021/048026)

[30] DE (10 2019 124 731.4) 2019-09-13

[21] **3,151,116**  
[13] A1

[51] **Int.Cl. A61K 31/551 (2006.01) A61K 45/06 (2006.01) C07D 513/14 (2006.01)**

[25] EN

[54] **CRYSTALLINE FORMS OF QUINOLINE ANALOGS AND SALTS THEREOF, COMPOSITIONS, AND THEIR METHODS FOR USE**

[54] **FORMES CRISTALLINES D'ANALOGUES DE LA QUINOLEINE ET SELS ASSOCIES, COMPOSITIONS ET LEURS METHODES D'UTILISATION**

[72] LIU, HSHIOU-TING, US

[71] SENHWA BIOSCIENCES, INC., CN

[85] 2022-02-14

[86] 2020-08-14 (PCT/US2020/046368)

[87] (WO2021/030686)

[30] US (62/886,633) 2019-08-14

[30] US (62/946,765) 2019-12-11

[21] **3,151,118**  
[13] A1

[51] **Int.Cl. B66B 29/08 (2006.01) B66B 23/22 (2006.01)**

[25] EN

[54] **PASSENGER CONVEYOR SYSTEM**

[54] **SYSTEME DE TRANSPORT DE PASSAGERS**

[72] VLASAK, PAVEL, IT

[72] GREMLICA, ZDENEK, CZ

[72] DRENCKO, JIRI, CZ

[71] INNOVA PATENT GMBH, AT

[85] 2022-02-15

[86] 2020-08-31 (PCT/EP2020/074194)

[87] (WO2021/043709)

[30] AT (A 50764/2019) 2019-09-02

[21] **3,151,122**  
[13] A1

[51] **Int.Cl. A61K 31/4535 (2006.01) A61K 31/4545 (2006.01) A61K 31/4709 (2006.01) A61K 31/519 (2006.01)**

[25] EN

[54] **COMBINED TRANSGENE AND INTRON-DERIVED MIRNA THERAPY FOR TREATMENT OF SCA1**

[54] **THERAPIE PAR MIARN DERIVE D'UN INTRON ET TRANSGENE COMBINES POUR LE TRAITEMENT DE SCA1**

[72] DAVIDSON, BEVERLY L., US

[72] CARRELL, ELLIE, US

[72] MONTEYS, ALEJANDRO MAS, US

[72] KEISER, MEGAN S., US

[71] THE CHILDREN'S HOSPITAL OF PHILADELPHIA, US

[85] 2022-02-14

[86] 2020-08-14 (PCT/US2020/046499)

[87] (WO2021/030745)

[30] US (62/887,209) 2019-08-15

[21] **3,151,124**  
[13] A1

[51] **Int.Cl. C22C 38/04 (2006.01) C21D 1/26 (2006.01) C21D 9/46 (2006.01) C21D 8/02 (2006.01) C23C 2/06 (2006.01) C25D 3/22 (2006.01)**

[25] EN

[54] **HIGH STRENGTH STEEL PRODUCTS AND ANNEALING PROCESSES FOR MAKING THE SAME**

[54] **PRODUITS EN ACIER A HAUTE RESISTANCE ET PROCEDES DE RECUIT POUR LES FABRIQUER**

[72] HOYDICK, DAVID PAUL, US

[72] SILVA, EDUARDO AUGUSTO, US

[72] MCCOSBY, MATTHEW MICHAEL, US

[71] UNITED STATES STEEL CORPORATION, US

[85] 2022-02-14

[86] 2020-08-18 (PCT/US2020/046847)

[87] (WO2021/034851)

[30] US (16/544,127) 2019-08-19

[21] **3,151,126**  
[13] A1

[51] **Int.Cl. A61M 25/01 (2006.01) A61B 17/00 (2006.01) A61B 17/34 (2006.01)**

[25] EN

[54] **MIDLINE CATHETER PLACEMENT DEVICE**

[54] **DISPOSITIF DE PLACEMENT DE CATHETER MI-LONG**

[72] ISAACSON, SHAWN RAY, US

[72] HARDING, WESTON FINCH, US

[72] SHERMER, CHARLES D., US

[72] STIPE, DANIEL M., US

[71] BECTON, DICKINSON AND COMPANY, US

[85] 2022-02-14

[86] 2020-08-18 (PCT/US2020/046860)

[87] (WO2021/034862)

[30] US (62/888,946) 2019-08-19

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[21] **3,151,131**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) C12N 15/115 (2010.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **OPTIMIZED NUCLEIC ACID PROBES FOR ANALYTE DETECTION**

[54] **SONDES D'ACIDE NUCLEIQUE OPTIMISEES POUR LA DETECTION D'ANALYTES**

[72] GILBOA-GEFFEN, ADI, US

[72] VILLAREAL, VALERIE, US

[72] MURPHY, PATRICK, US

[72] TRINH, NHAT NAM, US

[71] DOTS TECHNOLOGY CORP., US

[85] 2022-02-14

[86] 2020-08-20 (PCT/US2020/047093)

[87] (WO2021/034995)

[30] US (62/889,081) 2019-08-20

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[21] **3,151,134**  
[13] A1

[51] **Int.Cl. C02F 1/68 (2006.01) A01N 37/16 (2006.01) C02F 1/72 (2006.01)**

[25] EN

[54] **A METHOD FOR DISRUPTING BIOFILMS IN WASTEWATER SYSTEMS**

[54] **PROCEDE DE DESTRUCTION DE BIOFILMS DANS DES SYSTEMES D'EAUX USEES**

[72] REDFERN, DAVID, AU

[72] BAYLEY, SIMON, AU

[71] GRENOF PTY LTD, AU

[85] 2022-02-15

[86] 2020-09-26 (PCT/AU2020/051029)

[87] (WO2021/056078)

[30] AU (2019903649) 2019-09-27

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[21] **3,151,141**  
[13] A1

[51] **Int.Cl. H04W 76/15 (2018.01) H04W 76/16 (2018.01) H04L 12/14 (2006.01) H04M 15/00 (2006.01)**

[25] EN

[54] **POLICY CONTROL FOR MULTIPLE ACCESSES**

[54] **CONTROLE DE POLITIQUE POUR ACCES MULTIPLES**

[72] QIAO, WEIHUA, US

[72] DINAN, ESMAEL, US

[72] PARK, KYUNGMIN, US

[72] RYU, JINSOOK, US

[72] TALEBI FARD, PEYMAN, US

[72] KIM, TAEHUN, US

[71] OFINNO, LLC, US

[85] 2022-02-14

[86] 2020-08-24 (PCT/US2020/047598)

[87] (WO2021/035206)

[30] US (62/890,140) 2019-08-22

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[21] **3,151,147**  
[13] A1

[51] **Int.Cl. G01N 23/223 (2006.01)**

[25] EN

[54] **APPARATUS FOR THE MEASUREMENT OF MINERAL SLURRIES**

[54] **APPAREIL DE MESURE DE BOUES MINERALES**

[72] ROACH, GREGORY JOHN, AU

[71] MICROTRACE PTY LIMITED, AU

[85] 2022-02-15

[86] 2019-08-15 (PCT/AU2019/050852)

[87] (WO2020/034002)

[30] AU (2018903029) 2018-08-17

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[21] **3,151,163**  
[13] A1

[51] **Int.Cl. A01D 41/127 (2006.01)**

[25] EN

[54] **METHODS AND IMAGING SYSTEMS FOR HARVESTING**

[54] **PROCEDES ET SYSTEMES D'IMAGERIE POUR LA RECOLTE**

[72] SWANSON, TODD, US

[72] STOLLER, JASON, US

[72] HERRMANN, AARON, US

[71] PRECISION PLANTING LLC, US

[85] 2022-02-15

[86] 2020-11-20 (PCT/IB2020/060962)

[87] (WO2021/116802)

[30] US (62/945,289) 2019-12-09

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[21] **3,151,166**  
[13] A1

[51] **Int.Cl. A01B 79/00 (2006.01) A01C 21/00 (2006.01) G01N 1/14 (2006.01) E02D 1/00 (2006.01)**

[25] EN

[54] **SOIL WATER COLLECTION AND ANALYSIS SYSTEMS AND RELATED METHODS**

[54] **SYSTEMES DE COLLECTE ET D'ANALYSE D'EAU DU SOL ET PROCEDES ASSOCIES**

[72] KOCH, DALE, US

[72] MINARICH, NICHOLAS, US

[72] SWANSON, TODD, US

[72] NELSON, RACHEL, US

[72] VACCARI, ADAM, US

[71] PRECISION PLANTING LLC, US

[85] 2022-02-15

[86] 2020-09-28 (PCT/IB2020/059043)

[87] (WO2021/074722)

[30] US (62/916,180) 2019-10-16

[30] US (62/934,049) 2019-11-12

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[21] **3,151,172**  
[13] A1

[51] **Int.Cl. A01C 5/06 (2006.01) A01B 63/24 (2006.01) A01C 7/20 (2006.01)**

[25] EN

[54] **AGRICULTURAL TRENCH DEPTH ADJUSTMENT FOR ROW UNIT**

[54] **REGLAGE DE PROFONDEUR DE TRANCHEE AGRICOLE POUR RAYONNEUR**

[72] SLONEKER, DILLION, US

[72] HODEL, JEREMY, US

[72] SCHLIPF, BEN, US

[71] PRECISION PLANTING LLC, US

[85] 2022-02-15

[86] 2020-09-22 (PCT/IB2020/058833)

[87] (WO2021/064514)

[30] US (62/910,240) 2019-10-03

[30] US (62/910,254) 2019-10-03

[30] US (62/910,271) 2019-10-03

[30] US (62/934,796) 2019-11-13

[30] US (62/934,816) 2019-11-13

[30] US (62/934,826) 2019-11-13

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[21] **3,151,178**  
[13] A1

[51] **Int.Cl. A01C 5/06 (2006.01) A01B 63/24 (2006.01) A01C 7/20 (2006.01)**

[25] EN

[54] **AGRICULTURAL TRENCH DEPTH SYSTEMS, METHODS, AND APPARATUS**

[54] **SYSTEMES, PROCEDES ET APPAREIL DE PROFONDEUR DE TRANCHEE AGRICOLE**

[72] HODEL, JEREMY, US  
[72] SCHLIPF, BEN, US  
[72] SLONEKER, DILLION, US  
[71] PRECISION PLANTING LLC, US

[85] 2022-02-15

[86] 2020-09-22 (PCT/IB2020/058831)

[87] (WO2021/064513)

[30] US (62/910,240) 2019-10-03  
[30] US (62/910,254) 2019-10-03  
[30] US (62/910,271) 2019-10-03  
[30] US (62/934,796) 2019-11-13  
[30] US (62/934,816) 2019-11-13  
[30] US (62/934,826) 2019-11-13

[21] **3,151,181**  
[13] A1

[51] **Int.Cl. G06F 17/40 (2006.01) G06F 16/00 (2019.01)**

[25] EN

[54] **SCALABLE INTERACTIVE DATA COLLECTION SYSTEM**

[54] **SYSTEME DE COLLECTE DE DONNEES INTERACTIF EVOLUTIF**

[72] CHEHLAWI, JAD, CA  
[72] NGUELOHE, ARSENE TOUMANI, CA

[71] TELOSTOUCH INC., CA

[85] 2022-02-15

[86] 2020-08-17 (PCT/IB2020/057740)

[87] (WO2021/028891)

[30] US (62/887,192) 2019-08-15

[21] **3,151,187**  
[13] A1

[51] **Int.Cl. F42D 1/05 (2006.01) F42B 3/12 (2006.01)**

[25] EN

[54] **SECURE COMMUNICATION BETWEEN DEVICES IN A BLASTING SYSTEM**

[54] **COMMUNICATION SECURISEE ENTRE DISPOSITIFS DANS UN SYSTEME DE DYNAMITAGE**

[72] POSTHUMUS, ANDRIES WILLEM, ZA  
[72] RORKE, ANTHONY JOHN, ZA

[71] OMNIA GROUP (PROPRIETARY) LIMITED, ZA

[85] 2022-02-15

[86] 2020-08-07 (PCT/IB2020/057487)

[87] (WO2021/033070)

[30] ZA (2019/05422) 2019-08-16

[21] **3,151,203**  
[13] A1

[51] **Int.Cl. C12N 15/117 (2010.01) A61K 31/7125 (2006.01) A61P 1/00 (2006.01) A61P 37/04 (2006.01)**

[25] EN

[54] **OLIGONUCLEOTIDE-BASED THERAPY FOR ULCERATIVE COLITIS**

[54] **THERAPIE A BASE D'OLIGONUCLEOTIDES POUR RECTOCOLITE HEMORRAGIQUE**

[72] ZERHOUNI, PETER, SE  
[72] SANDWALL, PERNILLA, SE  
[72] KNITTEL, THOMAS, SE

[71] INDEX PHARMACEUTICALS AB, SE

[85] 2022-02-14

[86] 2020-08-21 (PCT/EP2020/073566)

[87] (WO2021/037764)

[30] GB (1912191.2) 2019-08-24

[21] **3,151,204**  
[13] A1

[51] **Int.Cl. G10L 19/02 (2013.01)**

[25] EN

[54] **TIME-VARYING TIME-FREQUENCY TILINGS USING NON-UNIFORM ORTHOGONAL FILTERBANKS BASED ON MDCT ANALYSIS/SYNTHESIS AND TDAR**

[54] **PAVAGES TEMPS-FREQUENCE VARIANT DANS LE TEMPS UTILISANT DES BANCS DE FILTRES ORTHOGONAUX NON UNIFORMES FONDES SUR UNE ANALYSE/SYNTHESE MDCT ET TDAR**

[72] WERNER, NILS, DE  
[72] EDLER, BERND, DE

[71] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE

[85] 2022-02-14

[86] 2020-08-25 (PCT/EP2020/073742)

[87] (WO2021/037847)

[30] EP (19194145.9) 2019-08-28

[21] **3,151,205**  
[13] A1

[51] **Int.Cl. F24H 7/04 (2006.01) F24H 15/00 (2022.01) C09K 5/08 (2006.01) C09K 5/14 (2006.01) F24D 11/00 (2022.01) F28D 20/00 (2006.01) F28F 27/02 (2006.01)**

[25] EN

[54] **A STORAGE BOILER**

[54] **CHAUDIERE DE STOCKAGE**

[72] DU PLESSIS, JOHAN, GB  
[72] CARVER, CHRISTOPHER, GB  
[72] KILLASPY, GEORGE, GB

[71] TEPEO LTD, GB

[85] 2022-02-14

[86] 2020-08-25 (PCT/EP2020/073770)

[87] (WO2021/037865)

[30] GB (1912424.7) 2019-08-29

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[21] **3,151,206**  
[13] A1

[51] **Int.Cl. B32B 7/06 (2019.01) B29C 41/22 (2006.01) B32B 27/40 (2006.01) C08J 5/24 (2006.01) C08J 7/04 (2020.01)**

[25] EN

[54] **IN-MOLD COMPOSITE SURFACING FILM**

[54] **FILM DE SURFACAGE DANS LE MOULE POUR COMPOSITES**

[72] ORVIS, ERIC, US

[72] AMICK, MATTHEW PAUL, US

[71] AKZO NOBEL COATINGS INTERNATIONAL B.V., NL

[85] 2022-02-14

[86] 2020-08-26 (PCT/EP2020/073816)

[87] (WO2021/037889)

[30] US (62/891,675) 2019-08-26

[30] EP (19199937.4) 2019-09-26

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[21] **3,151,207**  
[13] A1

[51] **Int.Cl. D21C 11/06 (2006.01) D21C 11/10 (2006.01) D21C 11/12 (2006.01) D21C 11/00 (2006.01)**

[25] EN

[54] **A PROCESS FOR MANUFACTURING AN UPGRADED BIO-OIL FROM BLACK LIQUOR**

[54] **PROCEDE DE FABRICATION D'UNE BIO-HUILE AMELIOREE A PARTIR DE LIQUEUR NOIRE**

[72] MARTENS, JOHAN, BE

[72] RADHAKRISHNAN, SAMBHU, BE

[72] VERHEYDEN, LOES, BE

[72] ZEEUW, AREND JAN, NL

[72] DE WAELE, BART, BE

[72] CARR, ROBERT HENRY, BE

[72] MEYER, NATHALIE, BE

[71] HUNTSMAN INTERNATIONAL LLC, US

[85] 2022-02-14

[86] 2020-08-27 (PCT/EP2020/074025)

[87] (WO2021/043671)

[30] EP (19194830.6) 2019-09-02

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[21] **3,151,208**  
[13] A1

[51] **Int.Cl. B62D 55/10 (2006.01) B62D 55/04 (2006.01) B62D 55/125 (2006.01)**

[25] EN

[54] **ASSEMBLY FOR CONVERTING A WHEEL DRIVE HARVESTER TO TRACK DRIVE**

[54] **ENSEMBLE DE CONVERSION D'UNE MOISSONNEUSE A ENTRAINEMENT A ROUE EN UN ENTRAINEMENT A CHENILLE**

[72] SWISHER, DON E., US

[72] JORDAN, GLYN, US

[71] SWISHER, DON E., US

[71] JORDAN, GLYN, US

[85] 2022-02-14

[86] 2019-08-16 (PCT/US2019/046798)

[87] (WO2020/037192)

[30] US (62/719,287) 2018-08-17

[30] US (16/539,748) 2019-08-13

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[21] **3,151,210**  
[13] A1

[51] **Int.Cl. G05B 19/404 (2006.01) B25J 9/16 (2006.01)**

[25] EN

[54] **METHOD AND A MEDIUM FOR COGGING COMPENSATING A MOTOR DRIVING SIGNAL**

[54] **PROCEDE ET MOYEN POUR COMPENSER LA SAILLANCE D'UN SIGNAL DE COMMANDE DE MOTEUR**

[72] SHREWSBURY, BRANDON THOMAS, US

[71] HALODI ROBOTICS A/S, NO

[85] 2022-02-14

[86] 2019-08-20 (PCT/EP2019/072279)

[87] (WO2021/032290)

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[21] **3,151,213**  
[13] A1

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

[25] EN

[54] **TREATING NON-ALCOHOLIC STEATOHEPATITIS (NASH) AND HEPATOCELLULAR CARCINOMA (HCC) WITH COMPOUNDS BINDING THE ECTODOMAIN OF PLATELET GLYCOPROTEIN IB (GPIB) ALPHA**

[54] **TRAITEMENT DE LA STEATOHEPATITE NON ALCOOLIQUE (NASH) ET DU CARCINOME HEPATOCELLULAIRE (CHC) AVEC DES COMPOSES LIANT L'ECTODOMAINE DE LA GLYCOPROTEINE PLAQUETTAIRE IB (GPIB) ALPHA**

[72] HEIKENWALDER, MATHIAS, DE

[72] NIESWANDT, BERNHARD, DE

[71] DEUTSCHES KREBSFORSCHUNGSZENTRUM STIFTUNG DES OFFENTLICHEN RECHTS, DE

[85] 2022-02-15

[86] 2020-08-28 (PCT/EP2020/074085)

[87] (WO2021/038043)

[30] EP (19194037.8) 2019-08-28

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[21] **3,151,218**  
[13] A1

[51] **Int.Cl. A61K 31/5383 (2006.01) A61P 25/28 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) C07D 487/04 (2006.01) C07D 498/04 (2006.01)**

[25] EN

[54] **4,4A,5,7,8,8A-HEXAPYRIDO[4,3-B][1,4]OXAZIN-3-ONE COMPOUNDS AS MAGL INHIBITORS**

[54] **COMPOSES DE 4,4A,5,7,8,8A-HEXAPYRIDO[4,3-B][1,4]OXAZIN-3-ONE UTILISES EN TANT QU'INHIBITEURS DE MAGL**

[72] GRETHER, UWE, CH  
[72] HORNSPERGER, BENOIT, CH  
[72] KROLL, CARSTEN, CH  
[72] KUHN, BERND, CH  
[72] LUTZ, MARIUS DANIEL RINALDO, CH  
[72] O'HARA, FIONN, CH  
[72] RICHTER, HANS, CH  
[71] F. HOFFMAN-LA ROCHE AG, CH  
[85] 2022-02-15  
[86] 2020-09-07 (PCT/EP2020/074897)  
[87] (WO2021/048036)  
[30] EP (19196089.7) 2019-09-09

[21] **3,151,220**  
[13] A1

[51] **Int.Cl. C01B 32/55 (2017.01) F25D 3/12 (2006.01)**

[25] EN

[54] **DEVICE FOR METERING CARBON DIOXIDE SNOW**

[54] **DISPOSITIF DE MESURE DE NEIGE CARBONIQUE**

[72] TEBIB, EMIR, FR  
[72] SCHIRMACHER, JOHANNA, DE  
[71] MESSER GROUP GMBH, DE  
[85] 2022-02-14  
[86] 2020-07-16 (PCT/EP2020/070163)  
[87] (WO2021/032377)  
[30] DE (10 2019 005 745.7) 2019-08-16

[21] **3,151,224**  
[13] A1

[51] **Int.Cl. C12N 5/071 (2010.01) C12N 5/00 (2006.01) C12P 21/00 (2006.01)**

[25] EN

[54] **CELL CULTURE MEDIUM FOR CULTIVATING CELLS, METHOD FOR CULTIVATING CELLS AND METHOD FOR EXPRESSING AT LEAST ONE RECOMBINANT PROTEIN IN A CELL CULTURE**

[54] **MILIEU DE CULTURE CELLULAIRE POUR LA CULTURE DE CELLULES, PROCEDE DE CULTURE CELLULAIRE ET PROCEDE D'EXPRESSION D'AU MOINS UNE PROTEINE RECOMBINEE DANS UNE CULTURE CELLULAIRE**

[72] KOBER, LARS, DE  
[72] HERRMANN, SARAH, DE  
[71] UGA BIOPHARMA GMBH, DE  
[85] 2022-02-14  
[86] 2020-08-14 (PCT/EP2020/072896)  
[87] (WO2021/032637)  
[30] EP (19192089.1) 2019-08-16

[21] **3,151,230**  
[13] A1

[51] **Int.Cl. A61L 27/04 (2006.01) A61L 27/10 (2006.01) A61L 27/34 (2006.01) A61L 27/44 (2006.01) A61L 29/08 (2006.01) A61L 29/10 (2006.01) A61L 29/12 (2006.01) A61L 31/02 (2006.01) A61L 31/10 (2006.01) A61L 31/12 (2006.01)**

[25] EN

[54] **COMPOSITE MATERIAL, IMPLANT COMPRISING THEREOF, USE OF THE COMPOSITE MATERIAL AND METHODS FOR PREPARING THE COMPOSITE MATERIAL AND A MEDICAL DEVICE**

[54] **MATERIAU COMPOSITE, IMPLANT LE COMPRENANT, UTILISATION DU MATERIAU COMPOSITE ET PROCEDES DE PREPARATION DU MATERIAU COMPOSITE ET DE DISPOSITIF MEDICAL**

[72] LAHTEENKORVA, KIMMO, FI  
[72] NUMMINEN, TOMI, FI  
[71] BIORETEC OY, FI  
[85] 2022-02-14  
[86] 2020-08-21 (PCT/EP2020/073515)  
[87] (WO2021/032882)  
[30] EP (19397525.7) 2019-08-21

[21] **3,151,232**  
[13] A1

[51] **Int.Cl. A61K 31/5025 (2006.01) A61K 31/519 (2006.01) A61P 31/14 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL COMPOUNDS**

[54] **COMPOSES PHARMACEUTIQUES**

[72] COCKERILL, GEORGE STUART, GB  
[72] GOOD, JAMES, GB  
[72] AVERY, CRAIG ALEX, GB  
[72] COCHRANE, EDWARD JAMES, GB  
[72] WARNER, ANDREW JOSEPH, GB  
[71] REVIRAL LIMITED, GB  
[85] 2022-02-15  
[86] 2020-08-20 (PCT/GB2020/052008)  
[87] (WO2021/032992)  
[30] GB (1911944.5) 2019-08-20

[21] **3,151,244**  
[13] A1

[51] **Int.Cl. G06F 16/27 (2019.01) G06Q 20/06 (2012.01) G06Q 20/38 (2012.01) H04L 9/32 (2006.01) H04L 12/16 (2006.01)**

[25] EN

[54] **A METHOD AND SYSTEM FOR A DECENTRALIZED TRANSACTIONAL COMMUNICATION PROTOCOL**

[54] **PROCEDE ET SYSTEME POUR UN PROTOCOLE DE COMMUNICATION TRANSACTIONNELLE DECENTRALISE**

[72] BEAUDET, JEAN-PHILIPPE, CA  
[72] POPERT-FORTIER, PATRICIA, CA  
[72] QIAN, YUMING, CA  
[71] ZEU TECHNOLOGIES, INC., CA  
[85] 2022-02-15  
[86] 2020-08-17 (PCT/CA2020/051124)  
[87] (WO2021/030906)  
[30] US (62/888,091) 2019-08-16  
[30] CA (PCT/CA2020/050056) 2020-01-20  
[30] CA (PCT/CA2020/051065) 2020-08-05

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[21] **3,151,246**  
[13] A1

[51] **Int.Cl. G16B 40/20 (2019.01)**  
[25] EN  
[54] **COMPUTER-IMPLEMENTED METHOD AND APPARATUS FOR ANALYSING GENETIC DATA**  
[54] **PROCEDE ET APPAREIL MIS EN ŒUVRE PAR ORDINATEUR POUR ANALYSER DES DONNEES GENETIQUES**  
[72] PLAGNOL, VINCENT YANN MARIE, GB  
[72] MOORE, RACHEL, GB  
[72] KRAPOHL, EVA MARIA LAURA, GB  
[71] GENOMICS PLC, GB  
[85] 2022-02-15  
[86] 2020-08-28 (PCT/GB2020/052060)  
[87] (WO2021/038234)  
[30] GB (1912331.4) 2019-08-28

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[21] **3,151,249**  
[13] A1

[51] **Int.Cl. B63B 21/04 (2006.01) A01K 61/65 (2017.01) B63B 21/20 (2006.01) B63B 21/00 (2006.01)**  
[25] EN  
[54] **COUPLING DEVICE FOR USE IN A MOORING SYSTEM FOR FLOATING STRUCTURES**  
[54] **DISPOSITIF DE COUPLAGE DESTINE A ETRE UTILISE DANS UN SYSTEME D'AMARRAGE POUR STRUCTURES FLOTTANTES**  
[72] MILDE, KENNETH, NO  
[71] AKVA GROUP ASA, NO  
[85] 2022-02-15  
[86] 2020-05-19 (PCT/NO2020/050128)  
[87] (WO2021/029771)  
[30] NO (20190985) 2019-08-15

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[21] **3,151,250**  
[13] A1

[51] **Int.Cl. A61B 17/072 (2006.01) A61B 17/068 (2006.01) A61B 17/115 (2006.01)**  
[25] EN  
[54] **CLOSURE DRIVING MECHANISM AND SURGICAL STAPLER**  
[54] **MECANISME D'ENTRAINEMENT POUR FERMETURE ET AGRAFEUSE D'INSTRUMENT MEDICAL D'ANASTOMOSE LE COMPRENANT**  
[72] SHAN, TENG, CN  
[71] TOUCHSTONE INTERNATIONAL MEDICAL SCIENCE CO., LTD., CN  
[85] 2022-02-15  
[86] 2020-08-27 (PCT/CN2020/111791)  
[87] (WO2021/037153)  
[30] CN (201910806837.8) 2019-08-29  
[30] CN (201921425349.4) 2019-08-29

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[21] **3,151,254**  
[13] A1

[51] **Int.Cl. A61B 17/115 (2006.01)**  
[25] EN  
[54] **CLOSURE DRIVING MECHANISM AND MEDICAL STAPLER INCLUDING THE SAME**  
[54] **MECANISME D'ENTRAINEMENT DE FERMETURE ET AGRAFEUSE MEDICALE LE COMPRENANT**  
[72] SHAN, TENG, CN  
[72] CAO, YUANYANG, CN  
[71] TOUCHSTONE INTERNATIONAL MEDICAL SCIENCE CO., LTD., CN  
[85] 2022-02-15  
[86] 2020-08-27 (PCT/CN2020/111792)  
[87] (WO2021/037154)  
[30] CN (201910807054.1) 2019-08-29  
[30] CN (201921425089.0) 2019-08-29  
[30] CN (201910806840.X) 2019-08-29  
[30] CN (201921424809.1) 2019-08-29

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[21] **3,151,256**  
[13] A1

[51] **Int.Cl. H04B 1/40 (2015.01) H04B 1/44 (2006.01)**  
[25] EN  
[54] **RADIO FREQUENCY FRONT-END CIRCUIT AND MOBILE TERMINAL**  
[54] **CIRCUIT FRONTAL RADIOFREQUENCE ET TERMINAL MOBILE**  
[72] SHENG, XUEFENG, CN  
[71] VIVO MOBILE COMMUNICATION CO., LTD., CN  
[85] 2022-02-15  
[86] 2020-07-21 (PCT/CN2020/103318)  
[87] (WO2021/031771)  
[30] CN (201910757149.7) 2019-08-16

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[21] **3,151,258**  
[13] A1

[51] **Int.Cl. A61B 17/115 (2006.01)**  
[25] EN  
[54] **CLOSURE DRIVING MECHANISM AND SURGICAL STAPLER**  
[54] **MECANISME D'ENTRAINEMENT DE FERMETURE ET AGRAFEUSE MEDICALE LE COMPRENANT**  
[72] SHAN, TENG, CN  
[71] TOUCHSTONE INTERNATIONAL MEDICAL SCIENCE CO., LTD., CN  
[85] 2022-02-15  
[86] 2020-08-27 (PCT/CN2020/111794)  
[87] (WO2021/037155)  
[30] CN (201910806818.5) 2019-08-29  
[30] CN (201921425066.X) 2019-08-29

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[21] **3,151,260**  
[13] A1

[51] **Int.Cl. A01C 23/00 (2006.01) A01M 7/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR TESTING AGRICULTURAL IMPLEMENTS**  
[54] **SYSTEMES ET PROCEDES POUR TESTER DES OUTILS AGRICOLES**  
[72] SCHLIPF, BEN, US  
[72] KLOPFENSTEIN, MATTHEW, US  
[71] PRECISION PLANTING LLC, US  
[85] 2022-02-15  
[86] 2020-06-04 (PCT/IB2020/055275)  
[87] (WO2021/069976)  
[30] US (62/911,715) 2019-10-07

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[21] **3,151,261**  
[13] A1

[51] **Int.Cl. G01G 17/08 (2006.01) A01K 29/00 (2006.01)**

[25] EN

[54] **WEIGHT DETERMINATION OF AN ANIMAL BASED ON 3D IMAGING**

[54] **DETERMINATION DU POIDS D'UN ANIMAL SUR LA BASE D'UNE IMAGERIE 3D**

[72] LASSEN, JAN, DK  
[72] BORCHERSEN, SOREN, DK  
[71] VIKING GENETICS FMBA, DK  
[85] 2021-11-09  
[86] 2020-06-26 (PCT/EP2020/068095)  
[87] (WO2020/260631)  
[30] EP (19182740.1) 2019-06-26

[21] **3,151,271**  
[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01) G01N 33/68 (2006.01)**

[25] EN

[54] **METHOD FOR ASSESSING RISK OF CUTANEOUS ADVERSE DRUG REACTIONS CAUSED BY EPIDERMAL GROWTH FACTOR RECEPTOR INHIBITOR, DETECTION KIT THEREOF, AND USE THEREOF**

[54] **METHODES D'EVALUATION DU RISQUE D'EFFETS INDESIRABLES CUTANES DE MEDICAMENTS CAUSES PAR UN INHIBITEUR DE RECEPTEUR DU FACTEUR DE CROISSANCE EPIDERMIQUE, TROUSSE DE DETECTION ET UTILISATION**

[72] CHUNG, WEN-HUNG, CN  
[72] HUNG, SHUEN-IU, CN  
[72] CHEN, CHUN-BING, CN  
[72] LU, CHUN-WEI, CN  
[72] WANG, CHUANG-WEI, CN  
[71] CHANG GUNG MEMORIAL HOSPITAL, LINKOU, CN  
[85] 2022-02-15  
[86] 2019-08-16 (PCT/CN2019/100908)  
[87] (WO2021/030925)

[21] **3,151,275**  
[13] A1

[51] **Int.Cl. A01C 7/10 (2006.01) A01C 23/00 (2006.01) A01M 7/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR TESTING AN AGRICULTURAL IMPLEMENT**

[54] **SYSTEME ET PROCEDE DE TEST D'UN OUTIL AGRICOLE**

[72] SCHLIPF, BEN, US  
[72] KLOPFENSTEIN, MATTHEW, US  
[71] PRECISION PLANTING LLC, US  
[85] 2022-02-15  
[86] 2020-07-07 (PCT/IB2020/056373)  
[87] (WO2021/064481)  
[30] US (62/908,138) 2019-09-30

[21] **3,151,301**  
[13] A1

[51] **Int.Cl. A61B 17/16 (2006.01)**

[25] EN

[54] **DISPOSABLE PERFORATOR**

[54] **PERFORATEUR JETABLE**

[72] UJVARI, MIHALY GYULA, HU  
[71] EMD KFT., HU  
[85] 2022-02-15  
[86] 2019-07-25 (PCT/HU2019/050037)  
[87] (WO2020/035709)  
[30] HU (P1800291) 2018-08-17

[21] **3,151,313**  
[13] A1

[51] **Int.Cl. F42D 1/05 (2006.01) F42B 3/12 (2006.01)**

[25] EN

[54] **SECURE ARMING AND FIRING IN AN ELECTRONIC BLASTING SYSTEM**

[54] **ARMEMENT ET MISE A FEU SECURISES DANS UN SYSTEME DE DYNAMITAGE ELECTRONIQUE**

[72] POSTHUMUS, ANDRIES WILLEM, ZA  
[72] RORKE, ANTHONY JOHN, ZA  
[71] OMNIA GROUP (PROPRIETARY) LIMITED, ZA  
[85] 2022-02-15  
[86] 2020-08-07 (PCT/IB2020/057486)  
[87] (WO2021/033069)  
[30] ZA (2019/05421) 2019-08-16

[21] **3,151,315**  
[13] A1

[51] **Int.Cl. F42D 1/05 (2006.01) F42B 3/12 (2006.01)**

[25] EN

[54] **SAFELY TESTING OR PROGRAMMING DETONATORS IN AN ELECTRONIC BLASTING SYSTEM**

[54] **TEST OU PROGRAMMATION EN TOUTE SECURITE DE DETONATEURS DANS UN SYSTEME DE DYNAMITAGE ELECTRONIQUE**

[72] POSTHUMUS, ANDRIES WILLEM, ZA  
[72] RORKE, ANTHONY JOHN, ZA  
[71] OMNIA GROUP (PROPRIETARY) LIMITED, ZA  
[85] 2022-02-15  
[86] 2020-08-07 (PCT/IB2020/057485)  
[87] (WO2021/033068)  
[30] ZA (2019/05420) 2019-08-16

[21] **3,151,334**  
[13] A1

[51] **Int.Cl. A61K 31/57 (2006.01) A61P 25/16 (2006.01) A61P 25/28 (2006.01)**

[25] EN

[54] **TOPICAL NEUROSTEROID FORMULATIONS**

[54] **FORMULATIONS TOPIQUES DE NEUROSTEREOIDE**

[72] BRINTON, ROBERTA DIAZ, US  
[72] RODGERS, KATHLEEN, US  
[72] KIM, YU JIN, US  
[72] MANSOUR, HEIDI, US  
[71] ARIZONA BOARD OF REGENTS ON BEHALF OF THE UNIVERSITY OF ARIZONA, US  
[85] 2022-02-15  
[86] 2020-08-19 (PCT/US2020/046905)  
[87] (WO2021/034883)  
[30] US (62/888,826) 2019-08-19

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[21] **3,151,335**  
[13] A1

[51] **Int.Cl. H04W 16/24 (2009.01) H04W 24/02 (2009.01) H04W 28/02 (2009.01) H04W 72/12 (2009.01) H01Q 21/28 (2006.01)**

[25] EN

[54] **METHODS, SYSTEMS, KITS AND APPARATUSES FOR PROVIDING END-TO-END, SECURED AND DEDICATED FIFTH GENERATION TELECOMMUNICATION**

[54] **PROCEDES, SYSTEMES, KITS ET APPAREILS DE FOURNITURE D'UNE TELECOMMUNICATION DE CINQUIEME GENERATION SECURISEE ET DEDIEE, DE BOUT EN BOUT**

[72] ATWAL, PETER, US  
[72] CURRIER, RICHARD HOYT, JR., US  
[72] TROBOUGH, JOHN CHARLES, US  
[72] SPALDING, ROBERT S., III, US  
[71] Q NETWORKS, LLC, US  
[85] 2022-02-15  
[86] 2020-08-19 (PCT/US2020/046949)  
[87] (WO2021/034906)  
[30] US (62/888,742) 2019-08-19  
[30] US (62/937,601) 2019-11-19

[21] **3,151,336**  
[13] A1

[51] **Int.Cl. C12N 5/0793 (2010.01) C12N 9/96 (2006.01) C12N 15/85 (2006.01) C12N 15/90 (2006.01) C12Q 1/68 (2018.01) G01N 33/569 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR IDENTIFYING REGULATORS OF CELL TYPE FATE SPECIFICATION**

[54] **COMPOSITIONS ET METHODES D'IDENTIFICATION DE REGULATEURS DE SPECIFICATION DE DEVENIR DE TYPE CELLULAIRE**

[72] GERSBACH, CHARLES A., US  
[72] BLACK, JOSHUA B., US  
[72] KWON, JENNIFER, US  
[72] ADKAR, SHAUNAK, US  
[71] DUKE UNIVERSITY, US  
[85] 2022-02-15  
[86] 2020-08-19 (PCT/US2020/047083)  
[87] (WO2021/034987)  
[30] US (62/888,922) 2019-08-19  
[30] US (62/889,361) 2019-08-20  
[30] US (62/961,084) 2020-01-14

[21] **3,151,337**  
[13] A1

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

[25] EN

[54] **FORMULATION OPTIMIZATION FOR BISPECIFIC ANTIBODIES**

[54] **OPTIMISATION DE FORMULATION POUR DES ANTICORPS BISPECIFIQUES**

[72] ZHOU, CHEN, US  
[72] WANG, WENHUA, US  
[72] LIU, DINGJIANG, US  
[71] REGENERON PHARMACEUTICALS, INC., US  
[85] 2022-02-15  
[86] 2020-08-20 (PCT/US2020/047156)  
[87] (WO2021/035028)  
[30] US (62/889,354) 2019-08-20

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[13] A1

[51] **Int.Cl. C12N 5/071 (2010.01) C12N 5/07 (2010.01) C12N 5/00 (2006.01)**

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[54] **METHODS AND COMPOSITIONS FOR CULTURING ALVEOLAR CELLS**

[54] **METHODES ET COMPOSITIONS DE CULTURE DE CELLULES ALVEOLAIRES**

[72] ROUDSARI, LAILA, US  
[72] ROBINSON, DAREN, US  
[72] RUSCHE, BENJAMIN, US  
[72] DOCKHAM, ASHLEY R., US  
[72] NAIR, SAJINI, US  
[71] UNITED THERAPEUTICS CORPORATION, US  
[85] 2022-02-15  
[86] 2020-08-26 (PCT/US2020/048016)  
[87] (WO2021/041555)  
[30] US (62/892,206) 2019-08-27

[21] **3,151,340**  
[13] A1

[51] **Int.Cl. A61K 8/30 (2006.01) A61K 31/18 (2006.01) A61Q 17/04 (2006.01) C07C 49/786 (2006.01) C08B 37/00 (2006.01)**

[25] EN

[54] **COMPOSITIONS FOR SUNSCREEN COMPOUNDS AND METHODS THEREOF**

[54] **COMPOSITIONS DE COMPOSES D'ECRAN SOLAIRE ET PROCEDES CORRESPONDANTS**

[72] GRAVETT, DAVID, US  
[71] PMIDG, LLC, US  
[85] 2022-02-15  
[86] 2020-08-18 (PCT/US2020/046811)  
[87] (WO2021/034834)  
[30] US (62/888,526) 2019-08-18  
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[13] A1

[51] **Int.Cl. A61K 31/045 (2006.01) A61K 31/047 (2006.01) A61K 31/075 (2006.01) C07C 31/00 (2006.01) C07C 31/18 (2006.01) C07C 31/24 (2006.01)**

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[54] **PHOSPHATIDYLSERINE BINDING MOLECULES BLOCK IMMUNE SUPPRESSION OF TUMOR ASSOCIATED EXOSOMES**

[54] **MOLECULES DE LIAISON A LA PHOSPHATIDYLSERINE BLOQUANT LA SUPPRESSION IMMUNITAIRE D'EXOSOMES ASSOCIES A UNE TUMEUR**

[72] BANKERT, RICHARD B., US  
[72] PAK, KOON YAN, US  
[72] GRAY, BRIAN D., US  
[72] BALU-IYER, SATHY V., US  
[72] KELLEHER, RAYMOND, US  
[72] SHENOY, GAUTAM, US  
[72] BHATTA, MAULASRI, US  
[71] THE RESEARCH FOUNDATION FOR THE STATE UNIVERSITY OF NEW YORK, US  
[71] MOLECULAR TARGETING TECHNOLOGIES, INC., US  
[71] IMMUNE MODULATORY THERAPIES LLC, US  
[85] 2022-02-15  
[86] 2020-08-17 (PCT/US2020/046712)  
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[25] EN	[25] EN	[25] EN
[54] <b>THERAPEUTIC IMMUNE CELLS WITH IMPROVED FUNCTION AND METHODS FOR MAKING THE SAME</b>	[54] <b>METHODS AND COMPOSITIONS FOR ENHANCING AAV-MEDIATED HOMOLOGOUS RECOMBINATION USING RIBONUCLEOTIDE REDUCTASE INHIBITORS</b>	[54] <b>COMPOSITIONS AND PARTICLES FOR PAYLOAD DELIVERY</b>
[54] <b>CELLULES IMMUNITAIRES THERAPEUTIQUES AYANT UNE FONCTION AMELIOREE ET LEURS PROCEDES DE FABRICATION</b>	[54] <b>PROCEDES ET COMPOSITIONS POUR AMELIORER LA RECOMBINAISON HOMOLOGUE MEDIEE PAR AAV A L'AIDE D'INHIBITEURS DE LA RIBONUCLEOTIDE REDUCTASE</b>	[54] <b>COMPOSITIONS ET PARTICULES POUR ADMINISTRATION DE CHARGE UTILE</b>
[72] HE, SHAN, US	[72] KAY, MARK A., US	[72] MRSNY, RANDALL J., US
[72] KALOS, MICHAEL, US	[72] TSUJI, SHINOSUKE, US	[72] MACLEAN, DEREK, US
[71] JANSSEN BIOTECH, INC., US	[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US	[72] SEKAR, MICHAEL, US
[85] 2022-02-15	[85] 2022-02-15	[72] YIN, KEVIN, US
[86] 2020-08-13 (PCT/IB2020/057625)	[86] 2020-08-17 (PCT/US2020/046700)	[72] MAHMOOD, TAHIR, US
[87] (WO2021/033089)	[87] (WO2021/034776)	[72] LIU, KEYI, US
[30] US (62/887,800) 2019-08-16	[30] US (62/888,934) 2019-08-19	[72] HUNTER, THOMAS CARL, US
	[30] US (63/029,248) 2020-05-22	[71] APPLIED MOLECULAR TRANSPORT INC., US
		[85] 2022-02-15
		[86] 2020-08-14 (PCT/US2020/046547)
		[87] (WO2021/034728)
		[30] US (62/888,282) 2019-08-16
		[30] US (62/888,400) 2019-08-16
		[30] US (62/888,133) 2019-08-16
		[30] US (62/888,238) 2019-08-16
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		[30] US (62/887,933) 2019-08-16
		[30] US (62/888,237) 2019-08-16
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		[30] US (62/986,579) 2020-03-06
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		[30] US (63/033,180) 2020-06-01
		[30] US (63/033,151) 2020-06-01
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[21] <b>3,151,345</b> [13] A1		
[51] <b>Int.Cl. A61B 8/00 (2006.01) A61B 8/08 (2006.01)</b>		
[25] EN		
[54] <b>SYSTEMS AND METHODS FOR PORTABLE ULTRASOUND GUIDED CANNULATION</b>		
[54] <b>PROCEDES ET SYSTEMES DESTINES A UN DISPOSITIF PORTATIF ECHOGUIDE DE CANULATION</b>		
[72] BRATTAIN, LAURA J., US		
[72] SAMIR, ANTHONY E., US		
[72] TELFER, BRIAN A., US		
[72] DELOSA, NANCY, US		
[72] GJESTEBY, LARS, US		
[72] PIERCE, THEODORE T., US		
[72] JOHNSON, MATTHEW, US		
[72] HILL, WESTIN, US		
[72] CHAMORRO, ANDRES, US		
[71] MASSACHUSETTS INSTITUTE OF TECHNOLOGY, US		
[85] 2022-02-15		
[86] 2020-08-17 (PCT/US2020/046702)		
[87] (WO2021/034777)		
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[51] **Int.Cl. B41F 16/00 (2006.01) B41F 16/02 (2006.01) B41F 17/00 (2006.01)**  
[25] EN  
[54] **HEAT PRESS, COMPONENTS, APPARATUSES, SYSTEMS, AND METHODS**  
[54] **PRESSE A CHAUD, COMPOSANTS, APPAREILS, SYSTEMES ET PROCEDES**  
[72] ELZEY, JAMES ALAN, US  
[72] PENG, XIAO, CN  
[72] CHEN, YUNG TSENG, US  
[72] RESUELLO, ILDEFONSO M., US  
[72] STOPP, GRAYSON, US  
[72] KORBULY, MARC, US  
[72] CRISP, THOMAS, US  
[72] HERBST, SCOT, US  
[71] CRICUT, INC., US  
[85] 2022-02-15  
[86] 2020-08-14 (PCT/US2020/046436)  
[87] (WO2021/034687)  
[30] US (62/888,518) 2019-08-18  
[30] US (62/897,096) 2019-09-06  
[30] US (63/022,304) 2020-05-08

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[13] A1

[51] **Int.Cl. C12Q 1/70 (2006.01) A61K 35/17 (2015.01) A61K 39/12 (2006.01)**  
[25] EN  
[54] **THIRD PARTY VIRUS-SPECIFIC T CELL COMPOSITIONS, AND METHODS OF MAKING AND USING THE SAME IN ANTI-VIRAL PROPHYLAXIS**  
[54] **COMPOSITIONS DE LYMPHOCYTES T SPECIFIQUES D'UN VIRUS TIERS, ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION DANS LA PROPHYLAXIE ANTIVIRALE**  
[72] VERA VALDES, JUAN FERNANDO, US  
[72] LEEN, ANN MARIE, US  
[72] TZANNOU, IFIGENEIA, US  
[71] BAYLOR COLLEGE OF MEDICINE, US  
[85] 2022-02-15  
[86] 2020-08-14 (PCT/US2020/046389)  
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[30] US (62/887,806) 2019-08-16

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[13] A1

[51] **Int.Cl. B64C 27/26 (2006.01) B64C 15/12 (2006.01) B64C 27/28 (2006.01) B64C 27/52 (2006.01) G05D 1/10 (2006.01)**  
[25] EN  
[54] **SEPARATED LIFT-THRUST VTOL AIRCRAFT WITH ARTICULATED ROTORS**  
[54] **AERONEF VTOL A LEVAGE-POUSSEE SEPARÉ DOTE DE ROTORS ARTICULES**  
[72] BAITY, SEAN MARSHALL, US  
[72] MILLER, STEPHEN W., US  
[71] TEXTRON SYSTEMS CORPORATION, US  
[85] 2022-02-15  
[86] 2020-08-14 (PCT/US2020/046317)  
[87] (WO2021/034640)  
[30] US (62/887,764) 2019-08-16

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[13] A1

[51] **Int.Cl. G01D 21/02 (2006.01) G01K 11/324 (2021.01) G01D 5/353 (2006.01) G01H 9/00 (2006.01)**  
[25] EN  
[54] **SIMULTANEOUS DISTRIBUTED TEMPERATURE AND VIBRATION SENSING USING MULTIMODE OPTICAL FIBER**  
[54] **DETECTION REPARTIE SIMULTANEE DE TEMPERATURE ET DE VIBRATION A L'AIDE D'UNE FIBRE OPTIQUE MULTIMODE**  
[72] HVEDING, FRODE, SA  
[72] ASHRY, ISLAM, SA  
[72] YUAN, MAO, SA  
[72] OOI, BOON SIEW, SA  
[72] ARSALAN, MUHAMMAD, SA  
[71] SAUDI ARABIAN OIL COMPANY, SA  
[71] KING ABDULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, SA  
[85] 2022-02-15  
[86] 2020-08-14 (PCT/US2020/046300)  
[87] (WO2021/030656)  
[30] US (16/541,998) 2019-08-15

[21] **3,151,360**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01)**  
[25] EN  
[54] **DEVICE AND METHOD FOR APPLICATION OF COSMETIC COMPOSITIONS THROUGH A GRATED END EFFECTOR**  
[54] **DISPOSITIF ET PROCEDE D'APPLICATION DE COMPOSITIONS COSMETIQUES A TRAVERS UN EFFECTEUR TERMINAL A GRILLE**  
[72] BINNER, CURT, US  
[72] SERBIAK, BENJAMIN, US  
[71] JOHNSON & JOHNSON CONSUMER INC., US  
[85] 2022-02-15  
[86] 2020-08-13 (PCT/US2020/046211)  
[87] (WO2021/034618)  
[30] US (62/888,025) 2019-08-16

[21] **3,151,364**  
[13] A1

[51] **Int.Cl. A01D 91/00 (2006.01) A01B 79/00 (2006.01) A01D 46/30 (2006.01)**  
[25] EN  
[54] **APPLYING AND USING FIDUCIAL MARKINGS ON AGRICULTURAL APPARATUSES**  
[54] **APPLICATION ET UTILISATION DE MARQUAGES DE REPERE SUR DES APPAREILS AGRICOLES**  
[72] GRANT, ELLIOTT, US  
[71] X DEVELOPMENT LLC, US  
[85] 2022-02-15  
[86] 2020-08-13 (PCT/US2020/046108)  
[87] (WO2021/034590)  
[30] US (16/543,111) 2019-08-16

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[13] A1

[51] **Int.Cl. C30B 29/10 (2006.01) C09D 5/12 (2006.01) C23C 22/00 (2006.01) C30B 7/14 (2006.01)**

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[54] **TITANIUM AND MAGNESIUM COMPOUND FOR CORROSION-RESISTANT COATINGS**

[54] **COMPOSE DU TITANE ET DU MAGNESIUM POUR DES REVETEMENTS ANTICORROSION**

[72] VAJO, JOHN J., US

[72] GRAETZ, JASON, US

[72] ADJORLOLO, ALAIN A., US

[71] THE BOEING COMPANY, US

[85] 2022-02-15

[86] 2020-08-10 (PCT/US2020/045672)

[87] (WO2021/030296)

[30] US (16/541,754) 2019-08-15

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[13] A1

[51] **Int.Cl. A24F 47/00 (2020.01) A61M 15/00 (2006.01) A61M 15/06 (2006.01)**

[25] EN

[54] **PUSH CONNECTOR FOR VAPE CARTRIDGES**

[54] **CONNECTEUR A AJUSTEMENT PAR POUSSEE POUR CARTOUCHES DE VAPOTAGE**

[72] KIRSH, YISROEL, US

[72] WAGNER, AKIVA, US

[72] BATES, ROBERT STEPHEN WALTER, US

[71] VAPOR DOSING TECHNOLOGIES, INC., US

[85] 2022-02-15

[86] 2019-12-11 (PCT/US2019/065644)

[87] (WO2021/034341)

[30] US (PCT/US2019/046853) 2019-08-16

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[13] A1

[51] **Int.Cl. A01C 5/06 (2006.01) A01B 63/24 (2006.01) A01C 7/20 (2006.01)**

[25] EN

[54] **AGRICULTURAL TRENCH DEPTH SYSTEMS, METHODS, AND APPARATUS**

[54] **SYSTEMES, PROCEDES ET APPAREIL DE PROFONDEUR DE TRANCHEE AGRICOLE**

[72] SLONEKER, DILLION, US

[72] HODEL, JEREMY, US

[72] SCHLIPF, BEN, US

[71] PRECISION PLANTING LLC, US

[85] 2022-02-15

[86] 2020-09-22 (PCT/IB2020/058834)

[87] (WO2021/064515)

[30] US (62/910,240) 2019-10-03

[30] US (62/910,254) 2019-10-03

[30] US (62/910,271) 2019-10-03

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[21] **3,151,371**  
[13] A1

[51] **Int.Cl. A23K 40/30 (2016.01) A23K 50/80 (2016.01)**

[25] EN

[54] **COMPLETE FOOD FOR AQUACULTURE ANIMALS FORMED FROM INSECT LARVAE**

[54] **ALIMENT COMPLET POUR ANIMAUX D'AQUACULTURE FORME A PARTIR DE LARVES D'INSECTES**

[72] FECHER, YAIR, IL

[71] GENUFEED LTD., IL

[85] 2022-02-15

[86] 2020-07-22 (PCT/IL2020/050812)

[87] (WO2021/014443)

[30] US (62/876,794) 2019-07-22

[21] **3,151,383**  
[13] A1

[51] **Int.Cl. G06F 16/2453 (2019.01)**

[25] EN

[54] **METHOD OF AND DEVICE FOR ENQUIRING, BY PAGINATION, SUB-TABLES DIVIDED FROM DATABASE, AND COMPUTER EQUIPMENT**

[54] **METHODE ET DISPOSITIF POUR DEMANDER, PAR PAGINATION, DES SOUS-TABLEAUX DIVISES DE LA BASE DE DONNEES ET MATERIEL INFORMATIQUE**

[72] ZHANG, XIMING, CN

[72] MAO, XIAOYONG, CN

[72] QIN, GANG, CN

[72] SI, XIAOBO, CN

[72] YE, GUOHUA, CN

[71] 10353744 CANADA LTD., CA

[85] 2022-02-15

[86] 2020-06-24 (PCT/CN2020/097830)

[87] (WO2021/031687)

[30] CN (201910759047.9) 2019-08-16

[21] **3,151,385**  
[13] A1

[51] **Int.Cl. C07K 14/705 (2006.01) C12N 15/113 (2010.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR THE TREATMENT OF CANCER USING A TET2 ENGINEERED T CELL THERAPY**

[54] **COMPOSITIONS ET METHODES DE TRAITEMENT DU CANCER FAISANT APPEL A UNE THERAPIE CELLULAIRE PAR LYMPHOCYTES T A TET2 MODIFIE**

[72] SENNINO, BARBARA, US

[72] JACOBY, KYLE, US

[72] MANDL-CASHMAN, STEFANIE, US

[72] DUBREUIL, MICHAEL M., US

[72] GAGNON, JOHN, US

[72] FRANZUSOFF, ALEX, US

[71] PACT PHARMA, INC., US

[85] 2021-10-12

[86] 2020-04-30 (PCT/US2020/030704)

[87] (WO2020/223478)

[30] US (62/841,753) 2019-05-01

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[13] A1

[51] **Int.Cl. B01J 20/20 (2006.01) C01B 32/30 (2017.01) C01B 32/312 (2017.01) B01D 53/04 (2006.01) B01J 20/28 (2006.01) D01F 9/16 (2006.01) F02M 25/08 (2006.01)**

[25] EN  
[54] **ADSORBENT FOR CANISTER**  
[54] **ADSORBANT POUR ABSORBEUR**  
[72] IMAI, DAISUKE, JP  
[72] WATANABE, YOSHIHIDE, JP  
[72] TAKATA, YUU, JP  
[72] OZAWA, SHUNSUKE, JP  
[72] YOSHIDA, CHIE, JP  
[71] NIPPON PAPER INDUSTRIES CO., LTD., JP  
[85] 2022-02-15  
[86] 2020-08-20 (PCT/JP2020/031504)  
[87] (WO2021/033753)  
[30] JP (2019-151380) 2019-08-21

[21] **3,151,397**  
[13] A1

[51] **Int.Cl. B66F 9/02 (2006.01) B65G 41/00 (2006.01) B65G 67/04 (2006.01) B65G 67/60 (2006.01) B66C 23/72 (2006.01)**

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[54] **LOADING DEVICE AND PYLON FOR A LOADING DEVICE**  
[54] **DISPOSITIF DE CHARGEMENT ET PYLONE POUR UN DISPOSITIF DE CHARGEMENT**  
[72] BRULLMANN, ADRIAN, CH  
[72] KOSTIC, BOGOLJUB, CH  
[71] BUHLER AG, CH  
[85] 2021-11-11  
[86] 2020-06-16 (PCT/EP2020/066592)  
[87] (WO2021/018462)

[21] **3,151,400**  
[13] A1

[51] **Int.Cl. A23L 7/10 (2016.01) A23L 5/00 (2016.01) A23L 7/109 (2016.01) A23L 33/21 (2016.01) A21D 2/36 (2006.01) A21D 13/00 (2017.01) A21D 13/06 (2017.01)**

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[54] **WHEAT BRAN COMPOSITION AND METHOD FOR PRODUCING SAME**  
[54] **COMPOSITION DE SON DE BLE ET SON PROCEDE DE PRODUCTION**  
[72] MURAKAMI, KOJI, JP  
[72] OZAKI, KATSUTOSHI, JP  
[72] ISHIZUKA, KOJI, JP  
[72] NISHITSUJI, HITOMI, JP  
[72] NOZAKI, SATOMI, JP  
[71] NISSHIN FLOUR MILLING INC., JP  
[71] NISSHIN SEIFUN WELNA INC., JP  
[71] NISSHIN SEIFUN GROUP INC., JP  
[85] 2022-02-15  
[86] 2020-09-29 (PCT/JP2020/036811)  
[87] (WO2021/065869)  
[30] JP (2019-180401) 2019-09-30

[21] **3,151,403**  
[13] A1

[51] **Int.Cl. A01K 67/033 (2006.01) A61K 31/519 (2006.01) A61K 31/55 (2006.01) A61K 45/06 (2006.01) A61P 1/18 (2006.01) A61P 35/00 (2006.01) A61P 43/00 (2006.01) C07D 471/04 (2006.01) C07D 487/04 (2006.01) C12N 9/99 (2006.01) C12N 15/12 (2006.01) G01N 33/15 (2006.01) G01N 33/50 (2006.01)**

[25] EN  
[54] **METHOD FOR SCREENING ANTICANCER AGENT AND COMBINATION DRUG OF KINASE INHIBITORS FOR TREATMENT OF PANCREATIC CANCER**  
[54] **METHODE DE CRIBLAGE D'AGENT ANTICANCEREUX ET MEDICAMENT COMBINE D'INHIBITEURS DE KINASES POUR LE TRAITEMENT DU CANCER DU PANCREAS**  
[72] SONOSHITA, MASAHIRO, JP  
[72] SEKIYA, SHO, JP  
[72] HIRANO, SATOSHI, JP  
[71] NATIONAL UNIVERSITY CORPORATION HOKKAIDO UNIVERSITY, JP  
[85] 2022-02-15  
[86] 2021-03-01 (PCT/JP2021/007651)  
[87] (WO2021/172582)  
[30] JP (2020-032112) 2020-02-27

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[21] **3,151,414**  
[13] A1

[51] **Int.Cl. A61K 38/01 (2006.01) A61K 38/07 (2006.01) A61P 25/28 (2006.01) C07K 5/10 (2006.01) C07K 7/06 (2006.01) C07K 14/435 (2006.01)**

[25] EN

[54] **PEPTIDE FOR IMPROVING MEMORY AND PREVENTING OR ALLEVIATING COGNITIVE IMPAIRMENT, COMPOSITION CONTAINING SAME AND PREPARATION METHOD THEREFOR**

[54] **PEPTIDE POUR AMELIORER LA MEMOIRE ET PREVENIR OU SOULAGER UN TROUBLE COGNITIF, COMPOSITION LE CONTENANT ET SON PROCEDE DE PREPARATION**

[72] LEE, JI WON, KR  
[71] NATURESENSE CO., LTD., KR  
[85] 2022-02-15  
[86] 2020-08-28 (PCT/KR2020/011579)  
[87] (WO2021/075707)  
[30] KR (10-2019-0128320) 2019-10-16  
[30] KR (10-2019-0131513) 2019-10-22  
[30] KR (10-2019-0133333) 2019-10-25  
[30] KR (10-2019-0134292) 2019-10-28  
[30] KR (10-2019-0134293) 2019-10-28  
[30] KR (10-2019-0141469) 2019-11-07  
[30] KR (10-2019-0144273) 2019-11-12  
[30] KR (10-2019-0144275) 2019-11-12  
[30] KR (10-2019-0144448) 2019-11-12  
[30] KR (10-2019-0144499) 2019-11-12  
[30] KR (10-2019-0150276) 2019-11-21  
[30] KR (10-2019-0153393) 2019-11-26  
[30] KR (10-2019-0160472) 2019-12-05  
[30] KR (10-2019-0160478) 2019-12-05  
[30] KR (10-2019-0160480) 2019-12-05  
[30] KR (10-2019-0160484) 2019-12-05  
[30] KR (10-2019-0162437) 2019-12-09  
[30] KR (10-2019-0162438) 2019-12-09  
[30] KR (10-2019-0162439) 2019-12-09  
[30] KR (10-2019-0162441) 2019-12-09

[21] **3,151,420**  
[13] A1

[51] **Int.Cl. A61K 31/197 (2006.01) A61K 31/20 (2006.01) A61P 17/02 (2006.01) A61P 17/04 (2006.01) A61P 17/06 (2006.01) A61P 17/10 (2006.01) A61P 29/00 (2006.01) A61P 37/00 (2006.01)**

[25] EN

[54] **PERIPHERAL NERVE AGONISTS SUPPRESS INFLAMMATION**

[54] **AGONISTES DU SYSTEME NERVEUX PERIPHERIQUE SUPPRIMANT LES INFLAMMATIONS**

[72] KAPLAN, DANIEL H., US  
[71] UNIVERSITY OF PITTSBURGH - OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION, US  
[85] 2022-02-15  
[86] 2020-08-27 (PCT/US2020/048183)  
[87] (WO2021/041662)  
[30] US (62/893,433) 2019-08-29

[21] **3,151,422**  
[13] A1

[51] **Int.Cl. A61K 31/555 (2006.01) A61K 33/34 (2006.01)**

[25] EN

[54] **COPPER-ATSM FOR TREATING NEURODEGENERATIVE DISORDERS ASSOCIATED WITH MITOCHONDRIAL DYSFUNCTION**

[54] **CUIVRE-ATSM POUR LE TRAITEMENT DE TROUBLES NEURODEGENERATIFS ASSOCIES A UN DYSFONCTIONNEMENT MITOCHONDRIAL**

[72] MEYER, KATHRIN CHRISTINE, US  
[72] DENNYS-RIVERS, CASSANDRA NICOLE, US  
[71] RESEARCH INSTITUTE AT NATIONWIDE CHILDREN'S HOSPITAL, US  
[85] 2022-02-15  
[86] 2020-08-31 (PCT/US2020/048779)  
[87] (WO2021/042048)  
[30] US (62/894,622) 2019-08-30  
[30] US (62/943,131) 2019-12-03  
[30] US (63/062,945) 2020-08-07

[21] **3,151,426**  
[13] A1

[51] **Int.Cl. A23L 2/58 (2006.01) C09K 23/00 (2022.01)**

[25] EN

[54] **PROCESS FOR PREPARING TRANSPARENT EMULSIONS**

[54] **PROCEDE DE PREPARATION D'EMULSIONS TRANSPARENTES**

[72] AHTCHI-ALI, BADREDDINE, US  
[72] TCHOLAKOVA, SLAVKA STOYANOVA, BG  
[72] DENKOV, NIKOLAI DENKOV, BG  
[72] TSIBRANSKA-GYOREVA, SONYA RUSIYANOVA, BG  
[72] GAZOLU-RUSANOVA, DILEK FAHRETIN, BG  
[71] PEPSICO, INC., US  
[85] 2022-02-15  
[86] 2020-09-01 (PCT/US2020/048939)  
[87] (WO2021/046052)  
[30] US (16/559,920) 2019-09-04

[21] **3,151,474**  
[13] A1

[51] **Int.Cl. A61K 31/7088 (2006.01) A61K 38/00 (2006.01) A61K 38/16 (2006.01) A61K 48/00 (2006.01) A61P 43/00 (2006.01) C07H 21/04 (2006.01)**

[25] EN

[54] **METHODS AND COMPOUNDS MODIFYING MITOCHONDRIAL FUNCTION**

[54] **PROCEDES ET COMPOSES MODIFIANT LA FONCTION MITOCHONDRIALE**

[72] WANG, XINNAN, US  
[72] HSIEH, CHUNG-HAN, US  
[72] VANHAUWAERT, ROELAND, BE  
[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US  
[85] 2022-02-15  
[86] 2020-09-04 (PCT/US2020/049431)  
[87] (WO2021/046368)  
[30] US (62/896,450) 2019-09-05

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[21] **3,151,476**  
[13] A1

[51] **Int.Cl. A61M 5/20 (2006.01) A61M 5/315 (2006.01) A61M 5/32 (2006.01)**  
[25] EN  
[54] **DRUG DELIVERY DEVICE**  
[54] **DISPOSITIF D'ADMINISTRATION DE MEDICAMENT**  
[72] FINKELSTEIN, EMIL, US  
[72] SKALL, SOREN FORBECH, US  
[72] EILERTSEN, LARS, US  
[72] MELANDER, MATIAS, US  
[72] JENSEN, JAN, US  
[71] AMGEN INC., US  
[85] 2022-02-15  
[86] 2020-09-29 (PCT/US2020/053178)  
[87] (WO2021/067208)  
[30] US (62/908,504) 2019-09-30  
[30] US (62/961,031) 2020-01-14

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[21] **3,151,477**  
[13] A1

[51] **Int.Cl. C08L 53/00 (2006.01) C08J 3/20 (2006.01) C08L 23/06 (2006.01) C08L 23/12 (2006.01)**  
[25] EN  
[54] **POLYPROPYLENE - POLYETHYLENE BLENDS WITH IMPROVED PROPERTIES**  
[54] **MELANGES DE POLYPROPYLENE-POLYETHYLENE PRESENTANT DES PROPRIETES AMELIOREES**  
[72] KAHLLEN, SUSANNE MARGARETE, AT  
[72] BRAUN, HERMANN, AT  
[72] LIU, YI, AT  
[72] CIGON, META, AT  
[72] KNAPEN,, PHILIP, BE  
[71] BOREALIS AG, AT  
[85] 2022-02-16  
[86] 2020-08-04 (PCT/EP2020/071843)  
[87] (WO2021/032458)  
[30] EP (19192200.4) 2019-08-19

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[21] **3,151,478**  
[13] A1

[51] **Int.Cl. B65D 85/804 (2006.01)**  
[25] EN  
[54] **ALUMINUM FLAT ROLLED PRODUCTS WITH HIGH RECYCLED CONTENT FOR LIGHT GAUGE PACKAGING SOLUTIONS AND RELATED METHODS**  
[54] **PRODUITS LAMINES A PLAT D'ALUMINIUM A HAUTE TENEUR EN MATERIAUX RECYCLES POUR SOLUTIONS DE CONDITIONNEMENT A FAIBLE EPAISSEUR ET PROCEDES ASSOCIES**  
[72] FRANK, MARTIN, US  
[72] KNECHTEL, MICHAEL, US  
[72] BOTTENHEFT, MARTIN, US  
[72] LENZEN, PATRICK, US  
[72] GAUDIN, SERGE, US  
[72] KAMP, NICOLAS C., US  
[72] JOHNSON, KEVIN MARK, US  
[72] DORAN, ANDY, US  
[72] NEUMANN, PATRICK, US  
[71] NOVELIS INC., US  
[85] 2022-02-15  
[86] 2020-10-02 (PCT/US2020/053941)  
[87] (WO2021/067695)  
[30] US (62/909,291) 2019-10-02

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[21] **3,151,479**  
[13] A1

[51] **Int.Cl. B05D 1/02 (2006.01) B29C 41/50 (2006.01) B65D 1/26 (2006.01)**  
[25] EN  
[54] **METHODS, APPARATUS, AND CHEMICAL COMPOSITIONS FOR SELECTIVELY COATING FIBER-BASED FOOD CONTAINERS**  
[54] **PROCEDES, APPAREIL ET COMPOSITIONS CHIMIQUES POUR LE REVETEMENT SELECTIF DE RECIPIENTS ALIMENTAIRES A BASE DE FIBRES**  
[72] CHUNG, YOKE D., US  
[72] ZHANG, YIYUN, US  
[72] GONZALEZ, RIC, US  
[72] LUCERO, STEVE, US  
[72] WANG, MIN, US  
[71] FOOTPRINT INTERNATIONAL, LLC, US  
[85] 2022-02-15  
[86] 2020-12-22 (PCT/US2020/066526)  
[87] (WO2021/133760)  
[30] US (16/726,180) 2019-12-23

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[21] **3,151,480**  
[13] A1

[51] **Int.Cl. A61M 5/20 (2006.01)**  
[25] EN  
[54] **DRUG DELIVERY DEVICE**  
[54] **DISPOSITIF D'ADMINISTRATION DE MEDICAMENT**  
[72] PLAMBECH, CHRISTIAN, US  
[72] MELANDER, MATIAS, US  
[72] SVENDSEN, BJARKE LYKKE LUDVIG, US  
[72] DUDMAN, JOSHUA JAY, US  
[72] SORENSEN, MICHAEL, US  
[72] BOYAVAL, MARGAUX FRANCES, US  
[72] KUO, AVON, US  
[71] AMGEN INC., US  
[85] 2022-02-15  
[86] 2020-09-29 (PCT/US2020/070590)  
[87] (WO2021/067989)  
[30] US (62/908,472) 2019-09-30  
[30] US (62/975,557) 2020-02-12

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[21] **3,151,481**  
[13] A1

[51] **Int.Cl. A24F 40/46 (2020.01) A24D 1/20 (2020.01) A24F 40/42 (2020.01) A24F 40/465 (2020.01) A24B 15/16 (2020.01)**  
[25] EN  
[54] **CONSUMABLE FOR AN AEROSOL GENERATING DEVICE, METHOD AND SYSTEM FOR MANUFACTURING A CONSUMABLE**  
[54] **CONSOMMABLE POUR UN DISPOSITIF DE GENERATION D'AEROSOL, PROCEDE ET SYSTEME DE FABRICATION D'UN CONSOMMABLE**  
[72] ROGAN, ANDREW ROBERT JOHN, GB  
[71] JT INTERNATIONAL SA, CH  
[85] 2022-02-16  
[86] 2020-10-29 (PCT/EP2020/080457)  
[87] (WO2021/084039)  
[30] EP (19206025.9) 2019-10-29

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[21] **3,151,482**  
[13] A1

[51] **Int.Cl. G01N 33/68 (2006.01)**  
[25] EN  
[54] **CARDIOVASCULAR RISK EVENT PREDICTION AND USES THEREOF**  
[54] **PREDICTION D'EVENEMENT DE RISQUE CARDIO-VASCULAIRE ET UTILISATIONS ASSOCIEES**  
[72] HINTERBERG, MICHAEL, US  
[72] DATTA, GARGI, US  
[71] SOMALOGIC OPERATING CO., INC., US  
[85] 2022-02-15  
[86] 2020-09-02 (PCT/US2020/048981)  
[87] (WO2021/046074)  
[30] US (62/895,383) 2019-09-03

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[21] **3,151,485**  
[13] A1

[51] **Int.Cl. C12Q 1/6806 (2018.01) C12Q 1/6869 (2018.01) C40B 40/06 (2006.01) C40B 50/06 (2006.01)**  
[25] EN  
[54] **A MULTIPLEX METHOD OF PREPARING A SEQUENCING LIBRARY**  
[54] **PROCEDE MULTIPLEX DE PREPARATION D'UNE BANQUE DE SEQUENCAGE**  
[72] CAMPBELL, NATHAN, US  
[71] PARLANCA LIMITED, IE  
[85] 2022-02-16  
[86] 2020-09-11 (PCT/EP2020/075529)  
[87] (WO2021/048393)  
[30] US (62/898,752) 2019-09-11  
[30] EP (19198454.1) 2019-09-19

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[21] **3,151,486**  
[13] A1

[51] **Int.Cl. B62B 9/08 (2006.01) B62B 7/06 (2006.01) B62B 7/08 (2006.01) B62B 9/20 (2006.01)**  
[25] EN  
[54] **WHEELED CARRYING APPARATUS**  
[54] **APPAREIL DE TRANSPORT A ROUES**  
[72] GUO, ZHENG-WEN, CN  
[72] WANG, ER XUE, CN  
[72] HU, SHOUFENG, CN  
[72] SUN, MINGXING, CN  
[72] YIN, HONGTAO, CN  
[71] WONDERLAND SWITZERLAND AG, CH  
[85] 2022-02-16  
[86] 2020-09-10 (PCT/EP2020/075385)  
[87] (WO2021/048304)  
[30] CN (201910858955.3) 2019-09-11  
[30] CN (202010370191.6) 2020-04-30

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[21] **3,151,487**  
[13] A1

[51] **Int.Cl. B62B 9/20 (2006.01) B62B 7/06 (2006.01) B62B 7/08 (2006.01) B62B 9/08 (2006.01)**  
[25] EN  
[54] **WHEELED CARRYING APPARATUS**  
[54] **APPAREIL DE TRANSPORT A ROUES**  
[72] GUO, ZHENG-WEN, CN  
[72] WANG, ER XUE, CN  
[72] HU, SHOUFENG, CN  
[72] SUN, MINGXING, CN  
[72] CHIANG, CHENG-NAN, TW  
[71] WONDERLAND SWITZERLAND AG, CH  
[85] 2022-02-16  
[86] 2020-09-10 (PCT/EP2020/075381)  
[87] (WO2021/048302)  
[30] CN (201910858955.3) 2019-09-11  
[30] CN (202010370191.6) 2020-04-30

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[21] **3,151,488**  
[13] A1

[51] **Int.Cl. G01N 27/74 (2006.01) G01N 33/543 (2006.01)**  
[25] FR  
[54] **KIT AND MOLECULE FOR CAPTURING A MOLECULE WITH MAGNETIC MEANS**  
[54] **KIT ET METHODE DE CAPTURE D'UNE MOLECULE AVEC DES MOYENS MAGNETIQUES**  
[72] BLAIRE, GUILLAUME, FR  
[72] CUGAT, ORPHEE, FR  
[72] VIEILLE, VICTOR, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[71] INSTITUT POLYTECHNIQUE DE GRENOBLE, FR  
[85] 2022-02-16  
[86] 2020-08-31 (PCT/EP2020/074233)  
[87] (WO2021/038107)  
[30] FR (FR1909561) 2019-08-30

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[21] **3,151,489**  
[13] A1

[51] **Int.Cl. A61B 17/17 (2006.01) A61B 34/10 (2016.01) A61B 17/16 (2006.01)**  
[25] EN  
[54] **SURGICAL INSTRUMENT MOUNTED DISPLAY SYSTEM**  
[54] **SYSTEME D'AFFICHAGE MONTE SUR UN INSTRUMENT CHIRURGICAL**  
[72] MATA, MARIO, US  
[71] DEPUY SYNTHES PRODUCTS, INC., US  
[85] 2021-06-08  
[86] 2019-12-04 (PCT/IB2019/060444)  
[87] (WO2020/121126)  
[30] US (16/218,873) 2018-12-13

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[21] **3,151,490**  
[13] A1

[51] **Int.Cl. G01R 31/36 (2020.01) H01M 10/48 (2006.01) H02J 7/00 (2006.01) H01M 10/633 (2014.01) H01M 10/44 (2006.01)**

[25] EN

[54] **METHOD FOR ESTIMATING THE TEMPERATURE RISE RATE OF A BATTERY UNDER PULSED HEATING**

[54] **PROCEDE D'ESTIMATION DE LA VITESSE D'AUGMENTATION DE TEMPERATURE D'UNE BATTERIE SOUS CHAUFFAGE PULSE**

[72] QIN, YUDI, CN  
[72] LU, LANGUANG, CN  
[72] HAN, XUEBING, CN  
[72] OUYANG, MINGGAO, CN  
[72] LI, JIANQIU, CN  
[71] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL  
[85] 2022-02-16  
[86] 2020-08-27 (PCT/EP2020/074019)  
[87] (WO2021/038007)  
[30] CN (201910806648.0) 2019-08-29

[21] **3,151,491**  
[13] A1

[51] **Int.Cl. F03D 80/50 (2016.01) F03D 13/10 (2016.01)**

[25] EN

[54] **SUPPORT SYSTEM FOR MAIN SHAFT OF WIND TURBINE**

[54] **SYSTEME DE SUPPORT POUR ARBRE PRINCIPAL DE TURBINE EOLIENNE**

[72] AITKEN, GLEN D., CA  
[72] MAIJ, EELKO, NL  
[71] LIFTWERX HOLDINGS INC., CA  
[85] 2022-02-16  
[86] 2020-08-19 (PCT/CA2020/051130)  
[87] (WO2021/046632)  
[30] US (62/899,315) 2019-09-12

[21] **3,151,492**  
[13] A1

[51] **Int.Cl. A01G 9/20 (2006.01) A01G 9/24 (2006.01)**

[25] EN

[54] **AUTOMATED GROWING SYSTEMS**

[54] **SYSTEMES DE CULTURE AUTOMATISES**

[72] MUELLER, INGO, CA  
[72] MCCLELLAN, TROY, CA  
[71] AGRIFORCE GROWING SYSTEMS LTD., CA  
[85] 2022-02-16  
[86] 2020-08-26 (PCT/CA2020/051161)  
[87] (WO2021/035348)  
[30] US (62/891,562) 2019-08-26

[21] **3,151,493**  
[13] A1

[51] **Int.Cl. C08L 95/00 (2006.01) C08L 21/00 (2006.01) C08L 91/06 (2006.01) C08J 11/10 (2006.01)**

[25] EN

[54] **MODIFICATION OF ASPHALT FORMULATIONS CONTAINING RECYCLED MATERIALS WITH POLYMERS DERIVED FROM DEPOLYMERIZED PLASTICS**

[54] **MODIFICATION DE FORMULATIONS D'ASPHALTE CONTENANT DES MATERIAUX RECYCLES AYANT DES POLYMERES DERIVES DE PLASTIQUES DEPOLYMERISES**

[72] ALMEY, JOHN, CA  
[72] DI MONDO, DOMENIC, CA  
[71] GREENMANTRA RECYCLING TECHNOLOGIES LTD., CA  
[85] 2022-02-16  
[86] 2020-08-27 (PCT/CA2020/051166)  
[87] (WO2021/035351)  
[30] US (62/892,129) 2019-08-27

[21] **3,151,495**  
[13] A1

[51] **Int.Cl. C08L 23/16 (2006.01) C08J 3/20 (2006.01) C08L 23/06 (2006.01) C08L 23/12 (2006.01) C08L 23/14 (2006.01)**

[25] EN

[54] **POLYPROPYLENE - POLYETHYLENE BLENDS WITH IMPROVED PROPERTIES**

[54] **MELANGES DE POLYPROPYLENE ~ POLYETHYLENE PRESENTANT DES PROPRIETES AMELIOREES**

[72] KAHLLEN, SUSANNE MARGARETE, AT  
[72] BRAUN, HERMANN, AT  
[72] LIU, YI, AT  
[72] CIGON, META, AT  
[72] KNAPEN, PHILIP, BE  
[71] BOREALIS AG, AT  
[85] 2022-02-16  
[86] 2020-08-04 (PCT/EP2020/071844)  
[87] (WO2021/032459)  
[30] EP (19192203.8) 2019-08-19

[21] **3,151,496**  
[13] A1

[51] **Int.Cl. G01R 31/387 (2019.01) G01R 31/392 (2019.01) H01M 10/48 (2006.01) H01M 10/633 (2014.01) H01M 10/44 (2006.01)**

[25] EN

[54] **DURABILITY TEST METHOD AND SYSTEM AND DATA TABLE GENERATION METHOD FOR BATTERY PULSED HEATING**

[54] **PROCEDE ET SYSTEME DE TEST DE DURABILITE ET PROCEDE DE GENERATION DE TABLE DE DONNEES POUR LE CHAUFFAGE PULSE D'UNE BATTERIE**

[72] QIN, YUDI, CN  
[72] LU, LANGUANG, CN  
[72] LI, YALUN, CN  
[72] OUYANG, MINGGAO, CN  
[72] LI, JIANQIU, CN  
[71] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL  
[85] 2022-02-16  
[86] 2020-08-27 (PCT/EP2020/073981)  
[87] (WO2021/037984)  
[30] CN (201910806603.3) 2019-08-29

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[21] **3,151,497**  
[13] A1

[51] **Int.Cl. H01M 10/633 (2014.01) B60L 58/25 (2019.01) B60L 58/27 (2019.01) H01M 10/48 (2006.01) H01M 10/0525 (2010.01) G01R 31/36 (2020.01) H01M 10/44 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR DETERMINING PARAMETERS OF BATTERY PULSED HEATING**

[54] **PROCEDE ET SYSTEME DE DETERMINATION DE PARAMETRES DE CHAUFFAGE PULSE DE BATTERIE**

[72] QIN, YUDI, CN  
[72] LU, LANGUANG, CN  
[72] CHU, ZHENGYU, CN  
[72] LIU, JINHAI, CN  
[72] OUYANG, MINGGAO, CN  
[72] LI, JIANQIU, CN

[71] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL

[85] 2022-02-16  
[86] 2020-08-27 (PCT/EP2020/073967)  
[87] (WO2021/037975)  
[30] CN (201910806436.2) 2019-08-29

[21] **3,151,500**  
[13] A1

[51] **Int.Cl. B01J 19/24 (2006.01)**

[25] EN

[54] **REACTOR FOR THE HYDROTHERMAL TREATMENT OF BIOMASS**

[54] **REACTEUR POUR LE TRAITEMENT HYDROTHERMIQUE DE BIOMASSE**

[72] VAN DER MEIJDEN, CHRISTIAAN MARTINUS, NL  
[72] PELS, JAN REMMERT, NL  
[71] NEDERLANDSE ORGANISATIE VOOR TOEGEPASTNATUURWETENSCHAPPELIJK ONDERZOEK TNO, NL

[85] 2022-02-16  
[86] 2020-08-20 (PCT/EP2020/073342)  
[87] (WO2021/032842)  
[30] EP (19192881.1) 2019-08-21

[21] **3,151,501**  
[13] A1

[51] **Int.Cl. A01C 7/08 (2006.01) A01B 63/32 (2006.01) A01B 73/02 (2006.01) A01C 23/00 (2006.01) A01M 7/00 (2006.01)**

[25] EN

[54] **AGRICULTURAL APPARATUS WITH IMPROVED SUSPENSION**

[54] **ENGIN AGRICOLE A SUSPENSION AMELIOREE**

[72] OBERHEIDE, FRIEDRICH, DE  
[72] BORCHERT, ANNA-GRET, DE  
[72] GROSSE PRUES, FRANK, DE  
[72] AUSTERMANN, STEFAN, DE  
[71] AMAZONEN-WERKE H. DREYER SE & CO. KG, DE

[85] 2022-02-16  
[86] 2020-08-06 (PCT/EP2020/072145)  
[87] (WO2021/037519)  
[30] DE (10 2019 123 175.2) 2019-08-29

[21] **3,151,503**  
[13] A1

[51] **Int.Cl. B01D 53/04 (2006.01) B01D 53/26 (2006.01)**

[25] FR

[54] **FACILITY FOR TREATMENT BY ADSORBENTS**

[54] **INSTALLATION DE TRAITEMENT PAR ADSORBANTS**

[72] KREIM, VIRGINIE, FR  
[72] GEIGER, PHILIPPE, FR  
[71] CMI EUROPE ENVIRONNEMENT, FR

[85] 2022-02-16  
[86] 2020-08-18 (PCT/EP2020/073118)  
[87] (WO2021/032748)  
[30] FR (FR1909285) 2019-08-19

[21] **3,151,505**  
[13] A1

[51] **Int.Cl. A01C 23/00 (2006.01) A01B 63/32 (2006.01) A01B 73/02 (2006.01) A01C 7/08 (2006.01) A01M 7/00 (2006.01)**

[25] EN

[54] **AGRICULTURAL APPARATUS WITH IMPROVED SUSPENSION**

[54] **ENGIN AGRICOLE A SUSPENSION AMELIOREE**

[72] OBERHEIDE, FRIEDRICH, DE  
[72] BORCHERT, ANNA-GRET, DE  
[72] GROSSE PRUES, FRANK, DE  
[72] AUSTERMANN, STEFAN, DE  
[71] AMAZONEN-WERKE H. DREYER SE & CO. KG, DE

[85] 2022-02-16  
[86] 2020-08-06 (PCT/EP2020/072134)  
[87] (WO2021/037517)  
[30] DE (10 2019 123 190.6) 2019-08-29

[21] **3,151,509**  
[13] A1

[51] **Int.Cl. H01L 33/48 (2010.01) F21S 4/24 (2016.01) H01L 25/075 (2006.01)**

[25] EN

[54] **LED LIGHT STRIP SUBSTRATE, LED LIGHT STRIP AND TERMINAL DEVICE**

[54] **SUBSTRAT DE BANDE LUMINEUSE A DEL, BANDE LUMINEUSE A DEL ET DISPOSITIF TERMINAL**

[72] PENG, SHENGQIN, CN  
[72] ZHONG, YUN, CN  
[71] SHENZHEN SINGSUN TECHNOLOGY CO., LTD., CN

[85] 2022-02-16  
[86] 2020-01-07 (PCT/CN2020/070764)  
[87] (WO2021/098031)  
[30] CN (201911125257.9) 2019-11-18  
[30] CN (201921987307.X) 2019-11-18

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[51] <b>Int.Cl. A24F 40/40 (2020.01) A24F 40/05 (2020.01) A24F 40/10 (2020.01) A24F 40/42 (2020.01) A24F 40/60 (2020.01) A24F 40/65 (2020.01) A61M 11/00 (2006.01) A61M 15/00 (2006.01)</b>	[51] <b>Int.Cl. G06F 21/56 (2013.01) G06N 20/00 (2019.01)</b>	[51] <b>Int.Cl. B29C 64/124 (2017.01) B33Y 10/00 (2015.01) B33Y 70/00 (2020.01) B29C 64/393 (2017.01) B33Y 40/20 (2020.01) C08J 3/20 (2006.01) C08J 5/00 (2006.01) C08J 5/12 (2006.01) C08J 7/16 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>DETACHABLE ATOMIZATION ASSEMBLY FOR AEROSOL DELIVERY DEVICE</b>	[54] <b>SECURITY SERVER FOR DYNAMIC VERIFICATION OF WEB CONTENT, END USER'S REMOTE DEVICE, SYSTEM COMPRISING SAID END USER'S REMOTE DEVICE AND SERVER, AND METHOD IMPLEMENTED BY SAID SYSTEM</b>	[54] <b>SPATIALLY CONTROLLED FUNCTIONALITY OF POLYMERIC PRODUCTS</b>
[54] <b>ENSEMBLE D'ATOMISATION AMOVIBLE POUR DISPOSITIF DE DISTRIBUTION D'AEROSOL</b>	[54] <b>SERVEUR DE SECURITE POUR VERIFICATION DYNAMIQUE DE CONTENU WEB, DISPOSITIF DISTANT DE L'UTILISATEUR FINAL, SYSTEME COMPRENANT LEDIT DISPOSITIF DISTANT DE L'UTILISATEUR FINAL ET SERVEUR, ET PROCEDE MIS EN OEUVRE PAR LEDIT SYSTEME</b>	[54] <b>FONCTIONNALITE A COMMANDE SPATIALE DE PRODUITS POLYMERES</b>
[72] HEJAZI, VAHID, US	[72] YOUSSEF, MOHAMED AMINE, BE	[72] SAMPSON, KATHLEEN, CA
[71] RAI STRATEGIC HOLDINGS, INC., US	[72] ANDRIES, GERT-JAN, BE	[72] DEORE, BHAVANA, CA
[85] 2022-02-16	[72] MEUTER, CEDRIC, BE	[72] PAQUET, CHANTAL, CA
[86] 2020-08-17 (PCT/IB2020/057731)	[72] TIMMERMANS, PETER, BE	[72] LACELLE, THOMAS, CA
[87] (WO2021/033128)	[71] WORLDLINE, BE	[72] MALENFANT, PATRICK ROLAND LUCIEN, CA
[30] US (16/544,326) 2019-08-19	[85] 2022-02-16	[71] NATIONAL RESEARCH COUNCIL OF CANADA, CA
[21] <b>3,151,512</b> [13] A1	[72] ANDRIES, GERT-JAN, BE	[85] 2022-02-16
[51] <b>Int.Cl. C08L 23/12 (2006.01) C08J 3/20 (2006.01) C08L 23/06 (2006.01)</b>	[72] MEUTER, CEDRIC, BE	[86] 2020-08-26 (PCT/IB2020/057983)
[25] EN	[72] TIMMERMANS, PETER, BE	[87] (WO2021/044261)
[54] <b>POLYPROPYLENE - POLYETHYLENE BLENDS WITH IMPROVED PROPERTIES</b>	[71] WORLDLINE, BE	[30] US (62/895,218) 2019-09-03
[54] <b>MELANGES DE POLYPROPYLENE - POLYETHYLENE PRESENTANT DES PROPRIETES AMELIOREES</b>	[85] 2022-02-16	[30] IB (PCT/IB2019/058923) 2019-10-18
[72] KAHLEN, SUSANNE MARGARETE, AT	[86] 2020-08-19 (PCT/EP2020/073151)	[30] US (62/923,043) 2019-10-18
[72] BRAUN, HERMANN, AT	[87] (WO2021/037618)	[30] US (62/923,103) 2019-10-18
[72] LIU, YI, AT	[30] EP (19193499.1) 2019-08-23	[30] US (62/923,136) 2019-10-18
[72] CIGON, META, AT		
[72] KNAPEN, PHILIP, BE		
[71] BOREALIS AG, AT		
[85] 2022-02-16		
[86] 2020-08-04 (PCT/EP2020/071845)		
[87] (WO2021/032460)		
[30] EP (19192201.2) 2019-08-19		

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[21] **3,151,516**  
[13] A1

[51] **Int.Cl. A61K 31/5383 (2006.01) A61P 25/28 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) C07D 498/04 (2006.01)**

[25] EN

[54] **4,4A,5,7,8,8A-HEXAPYRIDO[4,3-B][1,4]OXAZIN-3-ONE COMPOUNDS AS MAGL INHIBITORS**

[54] **COMPOSES 4,4A,5,7,8,8 A-HEXAPYRIDO [4,3-B] [1,4] OXAZIN-3-ONE EN TANT QU'INHIBITEURS DE MAGL**

[72] BENZ, JOERG, CH  
[72] GOBBI, LUCA, CH  
[72] GREYER, UWE, CH  
[72] GROEBKE ZBINDEN, KATRIN, CH  
[72] HORNSPERGER, BENOIT, CH  
[72] KROLL, CARSTEN, CH  
[72] KUHN, BERND, CH  
[72] MARTIN, RAINER E., CH  
[72] O'HARA, FIONN, CH  
[72] PUELLMANN, BERND, CH  
[72] RICHTER, HANS, CH  
[72] RITTER, MARTIN, CH  
[71] F. HOFFMANN-LA ROCHE AG, CH  
[85] 2022-02-16  
[86] 2020-09-10 (PCT/EP2020/075260)  
[87] (WO2021/048242)  
[30] EP (19196879.1) 2019-09-12

[21] **3,151,518**  
[13] A1

[51] **Int.Cl. G06F 40/00 (2020.01)**

[25] EN

[54] **NATURAL LANGUAGE PROCESSING COMPREHENSION AND RESPONSE SYSTEM AND METHODS**

[54] **PROCEDES ET SYSTEME DE REPOSE ET DE COMPREHENSION DE TRAITEMENT DE LANGAGE NATUREL**

[72] ROBERTS, GREGORY F., US  
[72] SORAH, MICHAEL ALLEN, US  
[71] ROSOKA SOFTWARE, INC., US  
[85] 2022-02-16  
[86] 2020-08-14 (PCT/US2020/046372)  
[87] (WO2021/034666)  
[30] US (62/888,387) 2019-08-16

[21] **3,151,519**  
[13] A1

[51] **Int.Cl. A61K 51/04 (2006.01) A61K 51/06 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND RELATED METHODS FOR THE ABLATION OF M2 MACROPHAGES AND MYELOID DERIVED SUPPRESSOR CELLS**

[54] **COMPOSITIONS ET METHODES ASSOCIEES POUR L'ABLATION DE MACROPHAGES M2 ET DE CELLULES MYELOIDES SUPPRESSIVES**

[72] RALPH, DAVID, US  
[71] NAVIDEA BIOPHARMACEUTICALS, INC., US  
[85] 2022-02-16  
[86] 2020-08-19 (PCT/US2020/047036)  
[87] (WO2021/034953)  
[30] US (62/888,727) 2019-08-19

[21] **3,151,522**  
[13] A1

[51] **Int.Cl. H04W 52/02 (2009.01)**

[25] EN

[54] **POWER SAVING SCHEMES IN WIRELESS COMMUNICATION**

[54] **SCHEMAS D'ECONOMIE D'ENERGIE DANS DES COMMUNICATIONS SANS FIL**

[72] GUO, QIUJIN, CN  
[72] CHEN, MENGZHU, CN  
[72] WU, HAO, CN  
[72] XU, JUN, CN  
[72] MA, XIAOYING, CN  
[71] ZTE CORPORATION, CN  
[85] 2022-02-16  
[86] 2019-08-16 (PCT/CN2019/101017)  
[87] (WO2021/030942)

[21] **3,151,525**  
[13] A1

[51] **Int.Cl. H04N 19/86 (2014.01)**

[25] EN

[54] **ALF APS CONSTRAINTS IN VIDEO CODING**

[54] **CONTRAINTES APS ALF DANS UN CODAGE VIDEO**

[72] CHEN, JIANLE, US  
[72] HENDRY, FNU, US  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2022-02-16  
[86] 2020-07-10 (PCT/US2020/041666)  
[87] (WO2020/215102)  
[30] US (62/888,267) 2019-08-16

[21] **3,151,526**  
[13] A1

[51] **Int.Cl. H04B 7/04 (2017.01)**

[25] EN

[54] **A METHOD OF PANEL-SPECIFIC REPORTING FOR DL AND UL TRANSMISSION**

[54] **PROCEDE DE RAPPORT SPECIFIQUE A UN PANNEAU POUR TRANSMISSION DL ET UL**

[72] GAO, BO, CN  
[72] LU, ZHAOHUA, CN  
[72] LI, YU NGOK, CN  
[72] XIAO, HUAHUA, CN  
[72] ZHANG, SHUJUAN, CN  
[71] ZTE CORPORATION, CN  
[85] 2022-02-16  
[86] 2019-08-16 (PCT/CN2019/101153)  
[87] (WO2021/030990)

[21] **3,151,528**  
[13] A1

[51] **Int.Cl. B07C 5/36 (2006.01)**

[25] EN

[54] **SORTING SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE DE TRI**

[72] LIU, KAI, CN  
[71] BEIJING GEEKPLUS TECHNOLOGY CO., LTD., CN  
[85] 2022-02-16  
[86] 2020-03-16 (PCT/CN2020/079529)  
[87] (WO2021/031556)  
[30] CN (201910766018.5) 2019-08-19

[21] **3,151,529**  
[13] A1

[51] **Int.Cl. A61K 31/4178 (2006.01) A61K 31/4168 (2006.01) A61K 31/473 (2006.01)**

[25] EN

[54] **CONJUGATED INHIBITORS OF DNA DAMAGE RESPONSE**

[54] **INHIBITEURS CONJUGUES DE LA REPOSE A L'ENDOMMAGEMENT DE L'ADN**

[72] FONTAINE, SHAUN D., US  
[72] HEARN, BRIAN R., US  
[72] SANTI, DANIEL V., US  
[71] PROLYNX LLC, US  
[85] 2022-02-16  
[86] 2020-08-28 (PCT/US2020/048608)  
[87] (WO2021/041964)  
[30] US (62/893,075) 2019-08-28

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[21] **3,151,530**

[13] A1

[51] **Int.Cl. B65C 9/18 (2006.01) B09B 3/00 (2022.01) B31D 1/02 (2006.01) B65H 37/00 (2006.01) B65H 41/00 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR THE PROVISION OF LABELS**

[54] **APPAREIL ET PROCEDE POUR LA FOURNITURE D'ETIQUETTES**

[72] COOPER, MICHAEL JOHN, GB

[71] CATCHPOINT LIMITED, GB

[85] 2022-02-16

[86] 2020-08-21 (PCT/GB2020/052025)

[87] (WO2021/038210)

[30] GB (1912131.8) 2019-08-23

[30] GB (2004505.0) 2020-03-27

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[21] **3,151,533**

[13] A1

[51] **Int.Cl. H04L 27/00 (2006.01)**

[25] EN

[54] **STAGE AUTOMATION SYSTEM**

[54] **SYSTEME D'AUTOMATISATION D'ETAGE**

[72] MAST, RYAN, US

[71] EXATO IP LLC, US

[85] 2022-02-16

[86] 2020-08-14 (PCT/US2020/046476)

[87] (WO2021/034703)

[30] US (62/887,998) 2019-08-16

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[30] US (16/751,984) 2020-01-24

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[21] **3,151,557**

[13] A1

[51] **Int.Cl. F16B 37/06 (2006.01)**

[25] EN

[54] **RIVET NUT WITH COMPRESSION LIMITER SHOULDER**

[54] **ECROU A RIVET AVEC EPAULEMENT LIMITEUR DE COMPRESSION**

[72] KUNTZE, CHRISTOPHER J., US

[72] SALZMANN, HEINER, US

[72] BARTA, JAN, CZ

[71] MAGNA EXTERIORS INC., CA

[85] 2022-02-15

[86] 2020-08-14 (PCT/US2020/046446)

[87] (WO2021/034690)

[30] US (62/888,193) 2019-08-16

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[21] <b>3,077,877</b> [13] A1	[21] <b>3,149,935</b> [13] A1	[21] <b>3,150,112</b> [13] A1
<p>[51] <b>Int.Cl. A47L 19/04 (2006.01)</b> [25] EN [54] <b>DRYING APPLIANCE</b> [54] <b>APPAREIL DE SECHAGE</b> [72] KLUG, JASON CHARLES, US [72] NELSON, AARON BASIL, US [71] DORAI HOME, INC., US [22] 2020-04-09 [41] 2020-10-09 [30] US (62/828,245) 2019-04-02 [30] US (16/838,737) 2020-04-02</p>	<p>[51] <b>Int.Cl. C12N 1/08 (2006.01) A01H 6/20 (2018.01) A01H 6/82 (2018.01) A01H 4/00 (2006.01) A01H 5/00 (2018.01) C12N 5/04 (2006.01) C12N 15/00 (2006.01)</b> [25] EN [54] <b>HAPLOID EMBRYOGENESIS</b> [54] <b>EMBRYOGENESE HAPLOIDE</b> [72] ANGENENT, GERRIT CORNELIS, NL [72] BOUTILIER, KIMBERLY, NL [72] HUI, LI, CN [72] SORIANO CASTAN, MERCEDES, ES [71] STICHTING WAGENINGEN RESEARCH, NL [22] 2014-09-24 [41] 2015-04-02 [62] 2,923,830 [30] EP (PCT/EP2013/069851) 2013-09-24</p>	<p>[25] EN [54] <b>SURGICAL ACCESS SYSTEM</b> [54] <b>SYSTEME D'ACCES CHIRURGICAL</b> [72] MARK, JOSEPH L., US [72] KASSAN, AMIN, US [72] LAMAR, CHAD, US [72] DOUGHERTY, BRIAN C., US [71] NICO INCORPORATION, US [22] 2012-10-24 [41] 2013-05-02 [62] 3,010,024 [30] US (13/280,015) 2011-10-24 [30] US (13/444,713) 2012-04-11 [30] US (13/444,722) 2012-04-11 [30] US (13/444,732) 2012-04-11 [30] US (13/474,433) 2012-05-17</p>
<p style="text-align: center;">[21] <b>3,149,920</b> [13] A1</p> <p>[51] <b>Int.Cl. C07K 14/78 (2006.01) C12N 1/19 (2006.01) C12N 1/21 (2006.01) C12N 5/10 (2006.01) C12N 15/12 (2006.01) C40B 30/04 (2006.01) C40B 40/10 (2006.01) C40B 50/00 (2006.01)</b> [25] EN [54] <b>FIBRONECTIN TYPE III DOMAIN BASED SCAFFOLD COMPOSITIONS, METHODS AND USES</b> [54] <b>COMPOSITIONS D'ECHAFAUDAGE A BASE DE DOMAINES DE LA FIBRONECTINE DE TYPE III, PROCEDES ET UTILISATIONS</b> [72] JACOBS, STEVEN, US [72] O'NEIL, KARYN, US [71] JANSSEN BIOTECH, INC., US [22] 2009-10-27 [41] 2010-05-06 [62] 2,741,834 [30] US (61/110,120) 2008-10-31</p>	<p style="text-align: center;">[21] <b>3,150,090</b> [13] A1</p> <p>[25] EN [54] <b>MODIFIED ALKANESULFONIC ACID AND USES THEREOF</b> [54] <b>ACIDE ALCANESULFONIQUE MODIFIE ET UTILISATIONS CONNEXES</b> [72] PURDY, CLAY, CA [72] WYNNYK, KYLE G., CA [72] DAWSON, KARL W., CA [72] WEISSENBERGER, MARKUS, CA [71] SIXRING INC., CA [22] 2021-02-26 [41] 2021-08-28 [62] 3,110,558 [30] CA (3,074,198) 2020-02-28</p>	<p style="text-align: center;">[21] <b>3,150,126</b> [13] A1</p> <p>[25] EN [54] <b>CABLE HEATING APPARATUS AND METHOD</b> [54] <b>APPAREIL ET PROCEDE DE CHAUFFAGE DE CABLE</b> [72] GUIMOND, JOSH DEREK, CA [71] 674540 NB INC., CA [22] 2017-12-06 [41] 2018-06-14 [62] 3,046,133 [30] US (62/431,097) 2016-12-07</p>

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[21] **3,150,199**  
[13] A1

[25] EN  
[54] **WEEKLY DOSING REGIMENS FOR ANTI-CD30 VC-PAB-MMAE ANTIBODY DRUG-CONJUGATES**  
[54] **REGIMES POSOLOGIQUES HEBDOMADAIRES POUR DES CONJUGUES ANTICORPS ANTI-CD30 VC-PAB-MMAE - MEDICAMENT**  
[72] SIEVERS, ERIC, US  
[72] KENNEDY, DANA, US  
[72] IHLE, NATHAN, US  
[72] SUN, MICHAEL, US  
[71] SEAGEN INC., US  
[22] 2010-01-08  
[41] 2010-07-15  
[62] 3,051,090  
[30] US (61/143,713) 2009-01-09  
[30] US (61/152,205) 2009-02-12  
[30] US (61/175,719) 2009-05-05  
[30] US (61/264,222) 2009-11-24

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[21] **3,150,219**  
[13] A1

[51] **Int.Cl. B01J 19/08 (2006.01) H05H 1/48 (2006.01)**  
[25] EN  
[54] **POWER CORE, PULSED PLASMA ENGINE, AND METHOD**  
[54] **NOYAU D'ALIMENTATION, MOTEUR A IMPULSION DE PLASMA ET METHODE**  
[72] KLOSTERMANN, HEINRICH FRANZ, US  
[71] KLOSTERMANN, HEINRICH FRANZ, US  
[22] 2014-06-25  
[41] 2015-12-30  
[62] 2,953,467

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[21] **3,150,231**  
[13] A1

[25] EN  
[54] **METHODS OF USE OF PHENOXYPROPYLAMINE COMPOUNDS TO TREAT DEPRESSION**  
[54] **METHODES D'UTILISATION DE COMPOSES DE PHENOXYPROPYLAMINE POUR TRAITER LA DEPRESSION**  
[72] PELLEGRINI, LORENZO, US  
[72] KARABELAS, ARGERIS, US  
[72] LUTHRINGER, REMY, CH  
[71] MINERVA NEUROSCIENCES, INC., US  
[22] 2014-01-24  
[41] 2014-07-31  
[62] 2,898,279  
[30] US (61/756,208) 2013-01-24  
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[21] **3,150,289**  
[13] A1

[25] EN  
[54] **MANIFOLDS FOR PROVIDING HYDRAULIC FLUID TO A SUBSEA BLOWOUT PREVENTER AND RELATED METHODS**  
[54]  
[72] BABBITT, GUY ROBERT, US  
[72] KERSEY, JAMES EDWARD, US  
[72] ECHTER, NICHOLAS PAUL, US  
[72] WEYER-GEIGEL, KRISTINA, US  
[71] TRANSOCEAN INNOVATION LABS, LTD., KY  
[22] 2014-09-27  
[41] 2015-04-16  
[62] 2,926,404  
[30] US (61/887,698) 2013-10-07  
[30] US (61/887,825) 2013-10-07  
[30] US (61/887,728) 2013-10-07

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[21] **3,150,310**  
[13] A1

[51] **Int.Cl. F16B 13/10 (2006.01)**  
[25] EN  
[54] **ANCHOR ASSEMBLY WITH TOGGLE FOR HOLLOW WALLS**  
[54]  
[72] MCDUFF, PIERRE, CA  
[72] POLLAK, ALEXANDRE, CA  
[72] NGUYEN, LANG, CA  
[72] BOUCHARD, ANDRE (DECEASED), CA  
[71] COBRA FIXATIONS CIE LTEE - COBRA ANCHORS CO. LTD., CA  
[22] 2006-03-21  
[41] 2006-09-28  
[62] 3,053,067  
[30] CA (2,502,008) 2005-03-21  
[30] US (60/685,501) 2005-05-31

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[21] **3,150,329**  
[13] A1

[51] **Int.Cl. C12N 15/40 (2006.01) C07K 14/18 (2006.01) C12N 7/00 (2006.01) C12N 7/01 (2006.01) C12N 7/04 (2006.01)**  
[25] EN  
[54] **HIGH YIELD YELLOW FEVER VIRUS STRAIN WITH INCREASED PROPAGATION IN CELLS**  
[54] **SOUCHE DU VIRUS DE LA FIEVRE JAUNE A HAUT RENDEMENT AVEC PROPAGATION ACCRUE DANS DES CELLULES**  
[72] LEE, CYNTHIA K., US  
[72] MONATH, THOMAS P., US  
[72] GUERTIN, PATRICK M., US  
[72] HAYMAN, EDWARD G., US  
[71] PNUVAX INC., CA  
[22] 2010-07-23  
[41] 2011-02-03  
[62] 2,973,863  
[30] US (61/230483) 2009-07-31

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,150,333**  
[13] A1

[51] **Int.Cl. C12N 15/40 (2006.01) C07K 14/18 (2006.01) C12N 7/00 (2006.01) C12N 7/01 (2006.01) C12N 7/04 (2006.01)**

[25] EN

[54] **HIGH YIELD YELLOW FEVER VIRUS STRAIN WITH INCREASED PROPAGATION IN CELLS**

[54] **SOUCHE DU VIRUS DE LA FIEVRE JAUNE A HAUT RENDEMENT AVEC PROPAGATION ACCRUE DANS DES CELLULES**

[72] LEE, CYNTHIA K., US  
[72] MONATH, THOMAS P., US  
[72] GUERTIN, PATRICK M., US  
[72] HAYMAN, EDWARD G., US  
[71] PNUVAX INC., CA  
[22] 2010-07-23  
[41] 2011-02-03  
[62] 2,973,863  
[30] US (61/230483) 2009-07-31

[21] **3,150,336**  
[13] A1

[51] **Int.Cl. F16H 61/66 (2006.01) F16H 59/10 (2006.01) F16H 59/44 (2006.01) F16H 61/02 (2006.01) F16H 61/662 (2006.01)**

[25] EN

[54] **ELECTRONIC SHIFTING OF A TRANSMISSION**

[54] **CHANGEMENT DE VITESSES ELECTRONIQUE D'UNE TRANSMISSION**

[72] NELSON, STEPHEN L., US  
[72] FREDRICKSON, DONOVAN L., US  
[72] KOENIG, DAVID J., US  
[72] CARLSON, RYAN D., US  
[72] DECKARD, AARON D., US  
[71] POLARIS INDUSTRIES INC., US  
[22] 2015-11-18  
[41] 2016-06-02  
[62] 2,968,368  
[30] US (14/554,648) 2014-11-26

[21] **3,150,342**  
[13] A1

[25] EN

[54] **NOVEL METHODS AND CULTURE MEDIA FOR CULTURING PLURIPOTENT STEM CELLS**

[54] **NOUVEAUX PROCEDES ET MILIEUX DE CULTURE DESTINES A LA CULTURE DE CELLULES SOUCHES PLURIPOTENTES**

[72] AMIT, MICHAL, IL  
[72] ITSKOVITZ-ELDOR, JOSEPH, IL  
[71] TECHNION RESEARCH & DEVELOPMENT FOUNDATION LIMITED, IL  
[22] 2011-09-07  
[41] 2012-03-15  
[62] 2,810,488  
[30] US (61/380,388) 2010-09-07

[21] **3,150,345**  
[13] A1

[25] EN

[54] **METHOD AND SYSTEM FOR PATIENT FLOW**

[54] **PROCEDE ET SYSTEME POUR FLUX DE PATIENTS**

[72] VANIER, LARRY, CA  
[72] MATLOW, DAN, CA  
[71] MEDWORKXX INC., CA  
[22] 2014-03-25  
[41] 2014-09-28  
[62] 2,847,513  
[30] US (61/806,159) 2013-03-28

[21] **3,150,349**  
[13] A1

[25] EN

[54] **SINGLE PHASE FAULT ISOLATION AND RESTORATION FOR POWER DISTRIBUTION NETWORK**

[54] **LOCALISATION DES ANOMALIES MONOPHASEE ET RETABLISSEMENT POUR UN RESEAU DE DISTRIBUTION ELECTRIQUE**

[72] KELLER, ERICH, US  
[72] DIFONZO, NICHOLAS CARMINE, US  
[71] G & W ELECTRIC COMPANY, US  
[22] 2020-09-28  
[41] 2021-04-07  
[62] 3,094,663  
[30] US (16/595,272) 2019-10-07  
[30] US (16/595,257) 2019-10-07

[21] **3,150,397**  
[13] A1

[51] **Int.Cl. B01D 61/20 (2006.01) B01D 35/26 (2006.01) B01D 63/02 (2006.01)**

[25] EN

[54] **DUAL PUMPING ARRANGEMENT FOR A HOLLOW FIBER FILTER**

[54] **AGENCEMENT DE POMPAGE DOUBLE POUR UN FILTRE A FIBRES CREUSES**

[72] PAVLIK, RUDOLF, US  
[71] REPLIGEN CORPORATION, US  
[22] 2018-12-21  
[41] 2019-07-04  
[62] 3,087,310  
[30] US (15/856,204) 2017-12-28

[21] **3,150,404**  
[13] A1

[51] **Int.Cl. C12N 7/01 (2006.01) C07K 14/18 (2006.01) C12N 7/00 (2006.01) C12N 7/04 (2006.01) C12N 15/40 (2006.01)**

[25] EN

[54] **HIGH YIELD YELLOW FEVER VIRUS STRAIN WITH INCREASED PROPAGATION IN CELLS**

[54] **SOUCHE DU VIRUS DE LA FIEVRE JAUNE A HAUT RENDEMENT AVEC PROPAGATION ACCRUE DANS DES CELLULES**

[72] LEE, CYNTHIA K., US  
[72] MONATH, THOMAS P., US  
[72] GUERTIN, PATRICK M., US  
[72] HAYMAN, EDWARD G., US  
[71] PNUVAX INC., CA  
[22] 2010-07-23  
[41] 2011-02-03  
[62] 2,973,863  
[30] US (61/230483) 2009-07-31

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[21] **3,150,411**  
[13] A1

[51] **Int.Cl. C12N 7/01 (2006.01) C07K 14/18 (2006.01) C12N 7/00 (2006.01) C12N 7/04 (2006.01) C12N 15/40 (2006.01)**

[25] EN

[54] **HIGH YIELD YELLOW FEVER VIRUS STRAIN WITH INCREASED PROPAGATION IN CELLS**

[54]

[72] LEE, CYNTHIA K., US

[72] MONATH, THOMAS P., US

[72] GUERTIN, PATRICK M., US

[72] HAYMAN, EDWARD G., US

[71] PNUVAX INC., CA

[22] 2010-07-23

[41] 2011-02-03

[62] 2,973,863

[30] US (61/230483) 2009-07-31

[21] **3,150,417**  
[13] A1

[51] **Int.Cl. C12N 15/40 (2006.01) C07K 14/18 (2006.01) C12N 7/00 (2006.01) C12N 7/01 (2006.01) C12N 7/04 (2006.01)**

[25] EN

[54] **HIGH YIELD YELLOW FEVER VIRUS STRAIN WITH INCREASED PROPAGATION IN CELLS**

[54]

[72] LEE, CYNTHIA K., US

[72] MONATH, THOMAS P., US

[72] GUERTIN, PATRICK M., US

[72] HAYMAN, EDWARD G., US

[71] PNUVAX INC., CA

[22] 2010-07-23

[41] 2011-02-03

[62] 2,973,863

[30] US (61/230483) 2009-07-31

[21] **3,150,421**  
[13] A1

[51] **Int.Cl. E02D 1/04 (2006.01)**

[25] EN

[54] **ESTIMATING INTRA-FIELD PROPERTIES WITHIN A FIELD USING HYPERSPECTRAL REMOTE SENSING**

[54] **ESTIMATION DE PROPRIETES INTRA-CHAMP DANS UN CHAMP GRACE A UNE DETECTION HYPERSPECTRALE A DISTANCE**

[72] XIANG, HAITAO, US

[72] YANG, XIANYUAN, US

[72] KOSHINICK, NICK, US

[72] CISEK, NICK, US

[71] THE CLIMATE CORPORATION, US

[22] 2016-09-20

[41] 2017-03-30

[62] 2,999,865

[30] US (14/866,160) 2015-09-25

[21] **3,150,430**  
[13] A1

[51] **Int.Cl. C12N 15/40 (2006.01) C07K 14/18 (2006.01) C12N 7/00 (2006.01) C12N 7/01 (2006.01) C12N 7/04 (2006.01)**

[25] EN

[54] **HIGH YIELD YELLOW FEVER VIRUS STRAIN WITH INCREASED PROPAGATION IN CELLS**

[54] **SOUCHE DU VIRUS DE LA FIEVRE JAUNE A HAUT RENDEMENT AVEC PROPAGATION ACCRUE DANS DES CELLULES**

[72] LEE, CYNTHIA K., US

[72] MONATH, THOMAS P., US

[72] GUERTIN, PATRICK M., US

[72] HAYMAN, EDWARD G., US

[71] PNUVAX INC., CA

[22] 2010-07-23

[41] 2011-02-03

[62] 2,973,863

[30] US (61/230483) 2009-07-31

[21] **3,150,440**  
[13] A1

[25] EN

[54] **TRACE ELEMENT SOLUTION FOR ANIMALS**

[54] **SOLUTION D'OLIGO-ELEMENTS POUR ANIMAUX**

[72] SMITH, WILLIAM A., IE

[71] WARBURTON TECHNOLOGY LIMITED, IE

[22] 2009-11-30

[41] 2010-06-17

[62] 3,075,135

[30] ZA (2008/10426) 2008-12-09

[21] **3,150,471**  
[13] A1

[25] EN

[54] **TRACE ELEMENT SOLUTION FOR ANIMALS**

[54] **SOLUTION D'OLIGO-ELEMENTS POUR ANIMAUX**

[72] SMITH, WILLIAM A., IE

[71] WARBURTON TECHNOLOGY LIMITED, IE

[22] 2009-11-30

[41] 2010-06-17

[62] 3,075,135

[30] ZA (2008/10426) 2008-12-09

[21] **3,150,637**  
[13] A1

[51] **Int.Cl. G10L 19/022 (2013.01)**

[25] EN

[54] **DOWNSCALED DECODING**

[54] **DECODAGE A ECHELLE REDUITE**

[72] SCHNELL, MARKUS, DE

[72] LUTZKY, MANFRED, DE

[72] FOTOPOULOU, ELENI, DE

[72] SCHMIDT, KONSTANTIN, DE

[72] BENNDORF, CONRAD, DE

[72] TOMASEK, ADRIAN, DE

[72] ALBERT, TOBIAS, DE

[72] SEIDL, TIMON, DE

[71] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE

[22] 2016-06-10

[41] 2016-12-22

[62] 2,989,252

[30] EP (15172282.4) 2015-06-16

[30] EP (15189398.9) 2015-10-12

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,150,643**  
[13] A1

[51] **Int.Cl. G10L 19/06 (2013.01)**  
[25] EN  
[54] **DOWNSCALED DECODING**  
[54] **DECODAGE A ECHELLE REDUITE**  
[72] ALBERT, TOBIAS, DE  
[72] BENNDORF, CONRAD, DE  
[72] FOTOPLOULOU, ELENI, DE  
[72] LUTZKY, MANFRED, DE  
[72] SCHMIDT, KONSTANTIN, DE  
[72] SCHNELL, MARKUS, DE  
[72] SEIDL, TIMON, DE  
[72] TOMASEK, ADRIAN, DE  
[71] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[22] 2016-06-10  
[41] 2016-12-22  
[62] 2,989,252  
[30] EP (15172282.4) 2015-06-16  
[30] EP (15189398.9) 2015-10-12

[21] **3,150,675**  
[13] A1

[25] EN  
[54] **DOWNSCALED DECODING**  
[54] **DECODAGE A ECHELLE REDUITE**  
[72] SCHNELL, MARKUS, DE  
[72] LUTZKY, MANFRED, DE  
[72] FOTOPLOULOU, ELENI, DE  
[72] SCHMIDT, KONSTANTIN, DE  
[72] BENNDORF, CONRAD, DE  
[72] TOMASEK, ADRIAN, DE  
[72] ALBERT, TOBIAS, DE  
[72] SEIDL, TIMON, DE  
[71] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[22] 2016-06-10  
[41] 2016-12-22  
[62] 2,989,252  
[30] EP (15172282.4) 2015-06-16  
[30] EP (15189398.9) 2015-10-12

[21] **3,150,698**  
[13] A1

[25] EN  
[54] **SELF-FOAMING HOT MELT ADHESIVE COMPOSITION AND METHODS OF MAKING AND USING SAME**  
[54] **COMPOSITIONS ADHESIVES THERMOFUSIBLES AUTO-EXPANSIVES ET LEURS PROCEDES DE PREPARATION ET D'UTILISATION**  
[72] STUMPHAUZER, WILLIAM C., US  
[71] FOAMMATIC, LLC, US  
[22] 2015-08-17  
[41] 2016-02-25  
[62] 2,956,970  
[30] US (62/038,321) 2014-08-17

[21] **3,150,658**  
[13] A1

[25] EN  
[54] **METHODS OF TREATING CHOLANGIOCARCINOMA**  
[54]  
[72] MILLER, VINCENT A., US  
[72] ALI, SIRAJ MAHAMED, US  
[72] HAWRYLUK, MATTHEW J., US  
[72] HE, JIE, US  
[72] LIPSON, DORON, US  
[72] ROSS, JEFFREY S., US  
[72] STEPHENS, PHILIP JAMES, US  
[71] FOUNDATION MEDICINE, INC., US  
[22] 2014-01-17  
[41] 2014-07-24  
[62] 2,898,326  
[30] US (61/754,509) 2013-01-18  
[30] US (61/756,372) 2013-01-24

[21] **3,150,683**  
[13] A1

[51] **Int.Cl. G10L 19/022 (2013.01)**  
[25] EN  
[54] **DOWNSCALED DECODING**  
[54] **DECODAGE A ECHELLE REDUITE**  
[72] ALBERT, TOBIAS, DE  
[72] BENNDORF, CONRAD, DE  
[72] FOTOPLOULOU, ELENI, DE  
[72] LUTZKY, MANFRED, DE  
[72] SCHMIDT, KONSTANTIN, DE  
[72] SCHNELL, MARKUS, DE  
[72] SEIDL, TIMON, DE  
[72] TOMASEK, ADRIAN, DE  
[71] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[22] 2016-06-10  
[41] 2016-12-22  
[62] 2,989,252  
[30] EP (15172282.4) 2015-06-16  
[30] EP (15189398.9) 2015-10-12

[21] **3,150,706**  
[13] A1

[51] **Int.Cl. G06Q 40/02 (2012.01) G06Q 20/38 (2012.01)**  
[25] EN  
[54] **LENDING METHOD, AND DATA INTERACTION PROCESSING METHOD, DEVICE AND SYSTEM**  
[54]  
[72] ZHANG, YI, CN  
[71] 10353744 CANADA LTD., CA  
[22] 2015-05-29  
[41] 2016-12-08  
[62] 2,987,445

[21] **3,150,710**  
[13] A1

[25] EN  
[54] **METHOD FOR PREPARING HETEROCYCLIC DERIVATIVE COMPOUND, COMPOSITION CONTAINING SAME COMPOUND, AND HYDRATE OF SAME COMPOUND**  
[54] **PROCEDE DE PREPARATION D'UN COMPOSE DERIVE HETEROCYCLIQUE, COMPOSITION LE CONTENANT, ET HYDRATE DUDIT COMPOSE**  
[72] PYUN, DO KYU, KR  
[72] OO, KYOUNG JIN, KR  
[71] JW PHARMACEUTICAL CORPORATION, KR  
[22] 2018-05-24  
[41] 2019-10-23  
[62] 3,061,301

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

[21] **3,150,816**  
[13] A1

[51] **Int.Cl. F16H 59/36 (2006.01) B60K 23/00 (2006.01) F16H 59/50 (2006.01) F16H 61/16 (2006.01) F16H 61/18 (2006.01) F16H 63/40 (2006.01)**

[25] EN  
[54] **ELECTRONIC CONTROL OF A TRANSMISSION**  
[54] **CONTROLE ELECTRONIQUE D'UNE TRANSMISSION**

[72] MCGUIRE, MATTHEW P., US  
[72] SYTSMA, COLE A., US  
[72] KROSSCHELL, BRIAN D., US  
[71] POLARIS INDUSTRIES INC., US  
[22] 2016-11-21  
[41] 2017-05-26  
[62] 3,003,485  
[30] US (14/947,737) 2015-11-20

[21] **3,150,860**  
[13] A1

[51] **Int.Cl. H04N 21/462 (2011.01)**

[25] EN  
[54] **PLAYLISTS AND BOOKMARKS IN AN INTERACTIVE MEDIA GUIDANCE APPLICATION SYSTEM**

[54] **PLAYLISTS AND BOOKMARKS IN AN INTERACTIVE MEDIA GUIDANCE APPLICATION SYSTEM**

[72] RADLOFF, JON P., US  
[72] CARROLL, THOMAS J., US  
[72] HEYNER, MARK, US  
[72] CARPENTER, KENNETH F., JR., US  
[72] GAYDOU, DANNY, US  
[71] ROVI GUIDES, INC., US  
[22] 2006-03-02  
[41] 2006-09-08  
[62] 2,600,017  
[30] US (60/658,270) 2005-03-02  
[30] US (60/667,870) 2005-04-01

[21] **3,150,872**  
[13] A1

[51] **Int.Cl. C12N 5/078 (2010.01) C12N 5/071 (2010.01) C12N 5/0735 (2010.01)**

[25] EN  
[54] **METHODS FOR PRODUCING ENUCLEATED ERYTHROID CELLS DERIVED FROM PLURIPOTENT STEM CELLS**  
[54] **PROCEDES DE PRODUCTION DE CELLULES ERYTHROCYTAIRES ENUCLEES ISSUES DE CELLULES SOUCHES PLURIPOTENTES**

[72] LANZA, ROBERT, US  
[72] LU, SHI-JIANG, US  
[71] ASTELLAS INSTITUTE FOR REGENERATIVE MEDICINE, US  
[22] 2009-05-06  
[41] 2009-11-12  
[62] 2,722,766  
[30] US (61/126,803) 2008-05-06  
[30] US (61/189,491) 2008-08-19  
[30] US (61/190,282) 2008-08-26

[21] **3,150,946**  
[13] A1

[51] **Int.Cl. H02G 3/06 (2006.01) H02G 3/04 (2006.01)**

[25] EN  
[54] **PERFORATED TRAY SPLICING SYSTEM**

[54] **PERFORATED TRAY SPLICING SYSTEM**

[72] CARDIN, DANIEL, CA  
[72] LALANCETTE, DANIEL, CA  
[71] ABB SCHWEIZ AG, CH  
[22] 2021-06-17  
[41] 2021-12-19  
[30] US (16/907,057) 2020-06-19

[21] **3,150,985**  
[13] A1

[25] EN  
[54] **METHODS AND PRODUCTS FOR EXPRESSING PROTEINS IN CELLS**  
[54] **PROCEDES ET PRODUITS POUR L'EXPRESSION DE PROTEINES DANS DES CELLULES**

[72] ANGEL, MATTHEW, US  
[72] ROHDE, CHRISTOPHER, US  
[71] FACTOR BIOSCIENCE INC., US  
[22] 2013-11-01  
[41] 2014-05-08  
[62] 2,890,110  
[30] US (61/721,302) 2012-11-01  
[30] US (61/785,404) 2013-03-14  
[30] US (61/842,874) 2013-07-03

[21] **3,151,007**  
[13] A1

[25] EN  
[54] **MAST AND SUBSTRUCTURE**

[54] **MAST AND SUBSTRUCTURE**

[72] REDDY, PADIRA, US  
[72] GUPTA, ASHISH, US  
[72] HAUSE, RYAN, US  
[71] NABORS DRILLING TECHNOLOGIES USA, INC., US  
[22] 2017-06-06  
[41] 2018-01-18  
[62] 3,027,526  
[30] US (62/361,827) 2016-07-13

[21] **3,151,032**  
[13] A1

[25] EN  
[54] **SEARCH REGION FOR MOTION VECTOR REFINEMENT**  
[54] **REGION DE RECHERCHE DESTINEE A L'AMELIORATION DE VECTEUR DE MOUVEMENT**

[72] ESENLIK, SEMIH, DE  
[72] KOTRA, ANAND MEHER, DE  
[72] ZHAO, ZHIJIE, DE  
[72] GAO, HAN, DE  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[22] 2017-06-30  
[41] 2019-01-03  
[62] 3,068,595

[21] **3,151,050**  
[13] A1

[25] EN  
[54] **ESTIMATING MATERIAL PROPERTIES**

[54] **ESTIMATING MATERIAL PROPERTIES**

[72] ROBINSON, DANIELLE K., AU  
[72] MELKUMYAN, ARMAN, AU  
[72] CHLINGARYAN, ANNA, AU  
[71] TECHNOLOGICAL RESOURCES PTY LTD, AU  
[71] THE UNIVERSITY OF SYDNEY, AU  
[22] 2014-01-16  
[41] 2014-09-12  
[62] 2,903,580  
[30] AU (2013900742) 2013-03-05

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KEMIRA OYJ	2,928,805	LANGER, ROBERT S.	2,884,870	MA, BEIYANG	3,024,774
KEMPENAERS, PETER J.	2,928,572	LAPPEENRANNAN		MABEE, MYLES	2,986,590
KERN, MATTHIAS	2,839,717	TEKNILLINEN		MACEWAN, MATTHEW R.	3,066,269
KHALAJ, STEVE SAEED	2,926,021	YLIOPISTO	2,921,651	MACHHAMMER, OTTO	2,839,717
KIDA, SHINYA	2,940,272	LARAMEE, BRITTANY	3,062,885	MADHYASTHA, SRINIVASA	2,903,266
KIDD, MARK	2,929,858	LARCHER, JEAN ERIC	2,953,455	MAGNA EXTERIORS INC.	3,078,520
KIDDE TECHNOLOGIES, INC.	2,894,014	LATTUADA, LUCIANO	3,002,897	MAGNA INTERNATIONAL	
KIKUCHI, HARUHISA	2,940,272	LAUFER, BURKHARDT	2,907,830	INC.	2,908,347
KIM, SOON KI	3,059,694	LAUX, JOSEPH J.	3,078,520	MAK, KWOK	2,915,313
KINDLER, ALOIS	2,883,141	LAUX, WOLFGANG	2,916,183	MANN+HUMMEL GMBH	2,910,683
KINTZIG, HANS	3,021,364	LAVAGNOLI, SERGIO	2,966,688	MANSELL, BRIAN E.	2,829,920
KIRBY, ANDREA	2,927,289	LAWSON, CRAIG R.	2,974,580	MARCHAND, VINCIANE	2,923,116
KIRBY, GLEN HAROLD	2,883,157	LEAH, ROBERT	2,942,471	MARCILLA, RAFAEL	3,002,415
KITAHARA, JUN	2,925,449	LEATHAM, DAVID M.	2,829,920	MARCOUS, NEIL	2,867,697
KITAZATO, NAOHISA	2,925,449	LEBLANC, LUC STEPHANE	2,883,157	MARICAP OY	2,917,371
KLEEFSTRA, MARTIJN	3,003,387	LECOMTE, FABIEN CLAUDE	2,930,142	MARK, GREGORY THOMAS	2,907,492
KLINGLER, DIRK	2,839,717	LEEB, GERALD	2,883,766	MARKFORGED, INC.	2,907,492
KLOCKE, STEPHANIE	2,891,707	LEFSRUD, KEVIN	2,913,330	MARSMAN, HERMAN GEERT	2,997,522
KLOPFER, PIA	2,901,531	LELLOUCHE, FRANCOIS	3,000,522	MARTIN, PIERRE	2,930,207
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KOBAYASHI, HIROOMI	3,006,812	LEONELLI, JEAN-BAPTISTE	2,915,695	MASSACHUSETTS INSTITUTE	
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KOLSTE, TYLER	3,064,424	LI, JUNYI	3,055,432	MATTILA, TERHI	2,928,695
KONECRANES GLOBAL		LI, SUJIAO	3,087,795	MCBEATH, SEAN	3,054,129
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