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# The Patent

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Canada



# THE CANADIAN PATENT OFFICE RECORD

## LA GAZETTE DU BUREAU DES BREVETS

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

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

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

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

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## Notices

## Avis

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

#### Dates

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

#### Code Numerals

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

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

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

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

#### Dates

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

#### Chiffres de code

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

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

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

## 2. Country Code

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

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

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

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

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

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

## 2. Code des pays

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

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

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

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

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

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

## 5. Advice on Making a Patent Application

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

## 6. Licensing of Patents

### Voluntary Licences

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

### Compulsory Licences

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

## 7. Patents Available for Licence or Sale

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

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

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

None

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

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

## 6. Octroi de licences en vertu des brevets

### Licences librement accordées

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

### Licences obligatoires

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

## 7. Brevets disponibles pour licence ou vente

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

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

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

Aucun

## 9. Applications Open to Public Inspection

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

## 10. Language of Published Documents

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

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

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

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

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

## 9. Demandes mises à la disponibilité du public

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

## 10. Langue du document publié

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

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

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

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

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

## Notices

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

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

### 4. Late payment fee

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

### 4. Taxe pour paiement tardif

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

## Preliminary Examination

## Examen préliminaire

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

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

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

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

\* International fees will be reduced by:

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

\* Les frais seront réduits de:

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

## 12. PCT Notices

## 12. Avis PCT

### Patent Cooperation Treaty (PCT)

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

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

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

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

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

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

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

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

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

### 13. Practice Notice

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

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

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

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

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

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

### 13. Énoncé de pratique

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

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

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

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

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

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

## Notices

Offices.

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

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

## 14. Correspondence Procedures

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

Web Link for MOPOP:

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

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

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

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

Publication date: May 10, 2017

Amendment date: June 17, 2019

### On this page:

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

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

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

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

## 14. Procédures de correspondance

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

Lien Web pour le RPBB :

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

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

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

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

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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.

## Avis

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

TIFF Format:

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

PDF Format:

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

ASCII

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

## Trademarks

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

## Industrial Design

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

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

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

Format TIFF

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

Format PDF

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

ASCII

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

## Marques de commerce

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

## Dessins industriels

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

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

## Notices

### 4. General Information

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

### 5. Time Period Extensions

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

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

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

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

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

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

### 4. Renseignements généraux

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

### 5. Prorogation des délais

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

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

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

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

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

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

## Avis

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## Notices

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

### Time period extensions under the Patent Cooperation Treaty

Rule 80.5 of the Regulations under the PCT provides:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## Notices

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

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

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

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

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

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

#### Trademarks

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

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

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

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

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

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

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

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

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

#### Marques de commerce

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

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

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

## Avis

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

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

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

The *Canadian Patent Office Record* of February 15, 2022 contains applications open to public inspection from January 30, 2022 to February 5, 2022.

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

La *Gazette du bureau des brevets* du 15 février 2022 contient les demandes disponibles au public pour consultation pour la période du 30 janvier 2022 au 5 février 2022.

## 16. Erratum

All information respecting patent application number 3, 053, 995 referred to under the section *Canadian Applications Open to Public Inspection* contained in the July 21, 2020 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, 053, 995 sous la rubrique *Demandes canadiennes mises à la disponibilité* du public dans le numéro du 21 juillet 2020 de la *Gazette du Bureau des brevets* ont été publiées par erreur et doivent être ignorées.

# Canadian Patents Issued

February 15, 2022

## Brevets canadiens délivrés

15 février 2022

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[11] **2,699,924**  
[13] C

[51] **Int.Cl. C12P 19/04 (2006.01) A23L 29/30 (2016.01) A23L 33/125 (2016.01) A23L 33/21 (2016.01) C07H 3/06 (2006.01) C12P 19/00 (2006.01) C12P 19/14 (2006.01)**

[25] EN

[54] **FIBER-CONTAINING CARBOHYDRATE COMPOSITION**

[54] **COMPOSITION DE GLUCIDES CONTENANT DES FIBRES**

[72] HARRISON, MICHAEL D., US

[72] HOFFMAN, ANDREW J., US

[73] TATE & LYLE INGREDIENTS AMERICAS LLC, US

[85] 2010-03-17

[86] 2008-10-06 (PCT/US2008/078904)

[87] (WO2009/051977)

[30] US (11/872,791) 2007-10-16

---

[11] **2,772,183**  
[13] C

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

[25] EN

[54] **PRESSURE AND CIRCULATION CULTURE APPARATUS AND PRESSURE AND CIRCULATION CULTURE SYSTEM**

[54] **DISPOSITIF D'INCUBATION A PRESSURISATION ET CIRCULATION ET SYSTEME D'INCUBATION A PRESSURISATION ET CIRCULATION**

[72] WATANABE, SETUO, JP

[72] MURATA, TOSHIMI, JP

[72] SATOU, MITUHARU, JP

[72] KINOUCI, IBUKI, JP

[72] TAKAI, HIDETADA, JP

[73] PURPOSE CO., LTD., JP

[85] 2012-02-24

[86] 2010-10-08 (PCT/JP2010/006044)

[87] (WO2011/043084)

[30] JP (2009-235291) 2009-10-09

---

[11] **2,799,501**  
[13] C

[51] **Int.Cl. C07F 9/22 (2006.01) C07F 9/24 (2006.01) C07H 21/00 (2006.01)**

[25] EN

[54] **OLIGONUCLEOTIDE ANALOGUES HAVING MODIFIED INTERSUBUNIT LINKAGES AND/OR TERMINAL GROUPS**

[54] **ANALOGUES OLIGONUCLEOTIDIQUES AYANT DES LIAISONS MODIFIEES ENTRE SOUS-UNITES ET/OU DES GROUPES TERMINAUX MODIFIES**

[72] HANSON, GUNNAR J., US

[72] RUDOLPH, ALEXANDER CHARLES, US

[72] CAI, BAO ZHONG, US

[72] ZHOU, MING, US

[72] WELLER, DWIGHT D., US

[73] SAREPTA THERAPEUTICS, INC., US

[85] 2012-11-14

[86] 2011-05-27 (PCT/US2011/038459)

[87] (WO2011/150408)

[30] US (61/349,783) 2010-05-28

[30] US (61/361,878) 2010-07-06

[30] US (61/386,428) 2010-09-24

---

[11] **2,809,441**  
[13] C

[51] **Int.Cl. A61B 17/00 (2006.01) A61B 90/90 (2016.01) G16H 10/00 (2018.01) A61B 5/06 (2006.01) A61B 18/14 (2006.01)**

[25] EN

[54] **SURGICAL INSTRUMENT USAGE DATA MANAGEMENT**

[54] **GESTION DES DONNEES D'UTILISATION D'UN INSTRUMENT CHIRURGICAL**

[72] KIMBALL, CORY G., US

[72] PRICE, DANIEL W., US

[72] CLEM, WILLIAM E., US

[72] MARCOTTE, AMY L., US

[72] SILKAITIS, DANIEL P., US

[72] SCHULTE, JOHN B., US

[72] LAMPING, MICHAEL R., US

[72] BALEK, STEPHEN J., US

[73] ETHICON ENDO-SURGERY, INC., US

[86] (2809441)

[87] (2809441)

[22] 2013-03-12

[30] US (13/426,792) 2012-03-22

---

[11] **2,829,400**  
[13] C

[51] **Int.Cl. A61K 9/19 (2006.01) A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 38/22 (2006.01) A61K 38/26 (2006.01) A61K 38/28 (2006.01)**

[25] EN

[54] **STABLE FORMULATIONS FOR PARENTERAL INJECTION OF PEPTIDE DRUGS**

[54] **FORMULATIONS STABLES POUR INJECTION PARENTERALE DE MEDICAMENTS PEPTIDIQUES**

[72] PRESTRELSKI, STEVEN, US

[72] KINZELL, JOHN, US

[73] XERIS PHARMACEUTICALS, INC., US

[85] 2013-09-06

[86] 2012-03-09 (PCT/US2012/028621)

[87] (WO2012/122535)

[30] US (61/451,568) 2011-03-10

[30] US (61/478,692) 2011-04-25

[30] US (61/553,388) 2011-10-31

[30] US (61/609,123) 2012-03-09

**Canadian Patents Issued  
February 15, 2022**

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[11] **2,831,138**  
[13] C

[51] **Int.Cl. A61N 1/05 (2006.01) A61N 1/372 (2006.01) A61N 1/378 (2006.01)**  
[25] EN  
[54] **IMPLANTABLE LEAD**  
[54] **CONDUCTEUR IMPLANTABLE**  
[72] LARSON, PATRICK, US  
[72] ANDRESEN, CHAD, US  
[72] PERRYMAN, LAURA TYLER, US  
[73] STIMWAVE TECHNOLOGIES INCORPORATED, US  
[85] 2013-09-23  
[86] 2012-04-04 (PCT/US2012/032200)  
[87] (WO2012/138782)  
[30] US (61/471,496) 2011-04-04

---

[11] **2,838,397**  
[13] C

[51] **Int.Cl. G06F 1/329 (2019.01) G06F 1/3206 (2019.01) G06F 9/44 (2018.01)**  
[25] EN  
[54] **MOBILE DEVICE OPERATIONS WITH BATTERY OPTIMIZATION**  
[54] **OPERATIONS DE DISPOSITIF MOBILE PRESENTANT UNE OPTIMISATION DE BATTERIE**  
[72] SEINFELD, MARC, US  
[72] KUO, CHENGI JIMMY, US  
[72] PUTNAM, AARON, US  
[72] WILLIAMS, JEFF, US  
[73] MICROSOFT TECHNOLOGY LICENSING, LLC, US  
[85] 2013-12-04  
[86] 2012-06-06 (PCT/US2012/041035)  
[87] (WO2012/173843)  
[30] US (13/162,133) 2011-06-16

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[11] **2,838,831**  
[13] C

[51] **Int.Cl. A61M 5/142 (2006.01) G16H 20/17 (2018.01) G16H 40/60 (2018.01) A61B 5/02 (2006.01) A61M 5/168 (2006.01) A61M 5/172 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR CLOSED-LOOP PATIENT-ADAPTIVE HEMODYNAMIC MANAGEMENT**  
[54] **SYSTEME ET METHODE POUR GESTION HEMODYNAMIQUE EN BOUCLE FERMEE ADAPTABLE AU PATIENT**  
[72] RINEHART, JOSEPH B., US  
[72] CANNESON, MAXIME P., US  
[73] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US  
[85] 2013-12-09  
[86] 2012-01-12 (PCT/US2012/021051)  
[87] (WO2012/097135)  
[30] US (61/432,081) 2011-01-12

---

[11] **2,838,847**  
[13] C

[51] **Int.Cl. H01R 24/38 (2011.01) H01R 9/05 (2006.01)**  
[25] EN  
[54] **CONNECTOR HAVING A COUPLING MEMBER FOR LOCKING ONTO A PORT AND MAINTAINING ELECTRICAL CONTINUITY**  
[54] **RACCORD DOTE D'UN ORGANE DE COUPLAGE DESTINE A SE VERROUILLER SUR UNE PRISE ET MAINTENIR LA CONTINUITÉ ELECTRIQUE**  
[72] MONTENA, NOAH, US  
[73] PPC BROADBAND, INC., US  
[85] 2013-12-06  
[86] 2012-06-08 (PCT/US2012/041623)  
[87] (WO2012/170861)  
[30] US (13/157,340) 2011-06-10

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[11] **2,839,077**  
[13] C

[51] **Int.Cl. G06F 16/176 (2019.01) G06Q 40/02 (2012.01) G06F 16/188 (2019.01) G06F 12/00 (2006.01)**  
[25] EN  
[54] **VIRTUAL STORAGE SYSTEM AND METHOD OF SHARING ACCESS TO THE VIRTUAL STORAGE SYSTEM FOR ADDING ELECTRONIC DOCUMENTS**  
[54] **SYSTEME DE STOCKAGE VIRTUEL ET METHODE DE PARTAGE D'ACCES AU SYSTEME DE STOCKAGE VIRTUEL POUR L'AJOUT DE DOCUMENTS ELECTRONIQUES**  
[72] DALY, RONALD M., JR., US  
[72] GIAMBALVO, LEONARD, US  
[72] SMILIE, ROBERT JACOB, US  
[73] VIRTUAL STRONGBOX, INC., US  
[86] (2839077)  
[87] (2839077)  
[22] 2014-01-03  
[30] US (13/948,194) 2013-07-23

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**Brevets canadiens délivrés  
15 février 2022**

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[11] **2,853,401**  
[13] C

[51] **Int.Cl. C07D 241/42 (2006.01) C07D 241/44 (2006.01) C07D 401/04 (2006.01) C07D 401/06 (2006.01) C07D 401/12 (2006.01) C07D 401/14 (2006.01) C07D 403/04 (2006.01) C07D 403/06 (2006.01) C07D 403/12 (2006.01) C07D 407/04 (2006.01) C07D 413/04 (2006.01) C07D 413/14 (2006.01) C07D 417/04 (2006.01) C07D 417/12 (2006.01)**

[25] EN

[54] **ANTICANCER BENZOPYRAZINES VIA THE INHIBITION OF FGFR KINASES**

[54] **BENZOPYRAZINES ANTICANCEREUSES PAR LE BIAIS DE L'INHIBITION DE FGFR KINASES**

[72] WOODHEAD, STEVEN JOHN, US

[72] MURRAY, CHRISTOPHER WILLIAM, GB

[72] BERDINI, VALERIO, GB

[72] SAXTY, GORDON, GB

[72] BESONG, GILBERT EBAI, DE

[72] MEERPOEL, LIEVEN, BE

[72] QUEROLLE, OLIVIER ALEXIS GEORGES, FR

[72] PONCELET, VIRGINIE SOPHIE, FR

[73] ASTEX THERAPEUTICS LIMITED, GB

[85] 2014-04-24

[86] 2012-10-26 (PCT/GB2012/052673)

[87] (WO2013/061081)

[30] GB (1118654.1) 2011-10-28

[30] US (61/552,873) 2011-10-28

---

[11] **2,860,247**  
[13] C

[51] **Int.Cl. A61B 5/08 (2006.01) A61B 5/083 (2006.01) A61B 5/097 (2006.01)**

[25] EN

[54] **COLLECTION AND ANALYSIS OF A VOLUME OF EXHALED GAS WITH COMPENSATION FOR THE FREQUENCY OF A BREATHING PARAMETER**

[54] **COLLECTE ET ANALYSE D'UN VOLUME DE GAZ EXHALE AVEC COMPENSATION DE LA FREQUENCE D'UN PARAMETRE DE RESPIRATION**

[72] WONDKA, ANTHONY D., US

[72] BHATNAGAR, ANISH, US

[73] CAPNIA, INC., US

[85] 2014-06-20

[86] 2012-12-20 (PCT/US2012/071085)

[87] (WO2013/096695)

[30] US (61/578,811) 2011-12-21

---

[11] **2,860,794**  
[13] C

[51] **Int.Cl. F16K 31/163 (2006.01) F15B 15/14 (2006.01) F15B 15/24 (2006.01)**

[25] EN

[54] **BIDIRECTIONAL TRAVEL STOP ASSEMBLY FOR COMPACT ACTUATOR**

[54] **ENSEMBLE D'ARRET DE DEPLACEMENT BIDIRECTIONNEL POUR ACTIONNEUR COMPACT**

[72] DEQUARTI, ALBERTO, IT

[72] NAVONE, DAVIDE, IT

[73] SCHLUMBERGER CANADA LIMITED, CA

[86] (2860794)

[87] (2860794)

[22] 2014-08-28

[30] EP (13182290) 2013-08-29

---

[11] **2,862,430**  
[13] C

[51] **Int.Cl. C12N 9/14 (2006.01)**

[25] EN

[54] **GLYCOSYLATION AS A STABILIZER FOR PHYTASE**

[54] **GLYCOSYLATION EN TANT QUE STABILISANT DE PHYTASE**

[72] GEBERT, MARK S., US

[72] LEE, SANG-KYU, US

[72] ORTIZ-MALDONADO, MARILIZ, US

[72] WARD, MICHAEL, US

[73] DANISCO US INC., US

[85] 2014-06-27

[86] 2013-02-01 (PCT/US2013/024415)

[87] (WO2013/119470)

[30] US (61/595,941) 2012-02-07

---

[11] **2,865,427**  
[13] C

[51] **Int.Cl. A61L 31/02 (2006.01) A61L 31/16 (2006.01)**

[25] EN

[54] **ANODIZED TITANIUM DEVICES AND RELATED METHODS**

[54] **DISPOSITIFS EN TITANE ANODISE ET PROCEDES ASSOCIES**

[72] DISEGI, JOHN, US

[73] DEPUY SYNTHES PRODUCTS, INC., US

[85] 2014-08-22

[86] 2013-02-26 (PCT/US2013/027737)

[87] (WO2013/130431)

[30] US (61/606,152) 2012-03-02

---

[11] **2,867,820**  
[13] C

[51] **Int.Cl. H02G 3/08 (2006.01) H02G 3/14 (2006.01)**

[25] EN

[54] **CAST ONE-PIECE OUTLET BOX**

[54] **BOITE DE SORTIE EN UN MORCEAU COULEE**

[72] SATHYANARAYANA, ASHOK ALILUGHATTA, IN

[72] YABRER, PUSHPAK PARIS, IN

[72] SHINDE, SANTOSH GANPAT, IN

[73] SIGMA ELECTRIC MANUFACTURING CORPORATION, US

[86] (2867820)

[87] (2867820)

[22] 2014-10-16

[30] US (61/891,692) 2013-10-16

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February 15, 2022**

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[11] **2,867,841**  
[13] C

[51] **Int.Cl. H04L 1/00 (2006.01) H04L 5/00 (2006.01)**  
[25] EN  
[54] **CONFIGURATION OF COORDINATED MULTIPOINT TRANSMISSION HYPOTHESES FOR CHANNEL STATE INFORMATION REPORTING**  
[54] **CONFIGURATION D'HYPOTHESES DE TRANSMISSION MULTIPOINT COORDONNEE POUR UN RAPPORT D'INFORMATIONS D'ETAT DE CANAL**  
[72] HAMMARWALL, DAVID, SE  
[72] JONGREN, GEORGE, SE  
[72] BERGMAN, SVANTE, SE  
[73] TELEFONAKTIEBOLAGET L M ERICSSON (PUBL), SE  
[85] 2014-09-18  
[86] 2013-03-13 (PCT/SE2013/050235)  
[87] (WO2013/141781)  
[30] US (61/612,920) 2012-03-19

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[11] **2,869,037**  
[13] C

[51] **Int.Cl. A61F 13/53 (2006.01) A61F 13/15 (2006.01) A61F 13/47 (2006.01) A61F 13/476 (2006.01) A61L 15/24 (2006.01) A61L 15/26 (2006.01) A61L 15/60 (2006.01)**  
[25] EN  
[54] **RESILIENT ABSORBENT PRODUCTS WITH ENHANCED RESISTANCE TO TEARING**  
[54] **PRODUITS ABSORBANTS ELASTIQUES A RESISTANCE AMELIOREE AUX DECHIRURES**  
[72] CARDIN, JEANNINE, CA  
[72] FARLEY, MELANIE, CA  
[72] GEORGI, HELMUT, CA  
[73] FEMPRO CONSUMER PRODUCTS ULC, CA  
[86] (2869037)  
[87] (2869037)  
[22] 2014-10-28  
[30] US (61/897,017) 2013-10-29  
[30] US (61/897,312) 2013-10-30  
[30] US (61/900,640) 2013-11-06

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[11] **2,870,945**  
[13] C

[51] **Int.Cl. G21C 7/08 (2006.01) G21C 1/08 (2006.01)**  
[25] EN  
[54] **CRDM INTERNAL ELECTRICAL CONNECTOR**  
[54] **CONNECTEUR ELECTRIQUE INTERNE DE MECANISME D'ENTRAINEMENT DE BARRES DE COMMANDE (CRDM)**  
[72] SHARGOTS, SCOTT J., US  
[72] ALES, MATTHEW W., US  
[72] BERTHOLD, MICHAEL S., US  
[73] BWXT MPOWER, INC., US  
[85] 2014-10-17  
[86] 2013-04-17 (PCT/US2013/036856)  
[87] (WO2013/188003)  
[30] US (13/404,405) 2012-02-27  
[30] US (61/625,484) 2012-04-17  
[30] US (13/863,611) 2013-04-16

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[11] **2,872,120**  
[13] C

[51] **Int.Cl. E21B 43/16 (2006.01) E21B 43/20 (2006.01) E21B 43/30 (2006.01)**  
[25] EN  
[54] **RECOVERING HYDROCARBONS FROM AN UNDERGROUND RESERVOIR**  
[54] **RECUPERATION D'HYDROCARBURES DANS UN RESERVOIR SOUTERRAIN**  
[72] CHAKRABARTY, TAPANTOSH, CA  
[73] IMPERIAL OIL RESOURCES LIMITED, CA  
[86] (2872120)  
[87] (2872120)  
[22] 2014-11-24

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[11] **2,874,895**  
[13] C

[51] **Int.Cl. C08L 23/06 (2006.01) B29D 7/01 (2006.01) C08J 3/20 (2006.01) C08J 5/18 (2006.01) C08K 5/00 (2006.01)**  
[25] EN  
[54] **HIGH MODULUS SINGLE-SITE LLDPE**  
[54] **POLYETHYLENE BASSE DENSITE LINEAIRE A SITE UNIQUE ET A MODULE ELEVE**  
[72] BORSE, NITIN, CA  
[72] AUBEE, NORMAN DORIEEN JOSEPH, CA  
[72] CHISHOLM, P. SCOTT, CA  
[73] NOVA CHEMICALS CORPORATION, CA  
[86] (2874895)  
[87] (2874895)  
[22] 2014-12-16

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[11] **2,881,782**  
[13] C

[51] **Int.Cl. A23J 3/08 (2006.01) A23L 33/19 (2016.01) A23C 21/00 (2006.01) A23J 1/20 (2006.01) A23C 9/142 (2006.01)**  
[25] EN  
[54] **A METHOD FOR THE PREPARATION OF A SERUM PROTEIN CONCENTRATE**  
[54] **PROCEDE POUR LA PREPARATION D'UN CONCENTRE DE PROTEINES SERIQUES**  
[72] REBIERE, CHRISTIAN, IT  
[73] LB LYOPHARM S.R.L., IT  
[85] 2015-02-11  
[86] 2013-08-13 (PCT/IB2013/056610)  
[87] (WO2014/027305)  
[30] IT (RM2012A000412) 2012-08-13

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[11] **2,882,694**  
[13] C

[51] **Int.Cl. C07D 307/91 (2006.01) C07D 489/02 (2006.01)**  
[25] EN  
[54] **PROCESSES FOR PREPARING MORPHINE COMPOUNDS**  
[54] **PROCEDES DE PREPARATION DE COMPOSES DE MORPHINE**  
[72] HUDLICKY, TOMAS, CA  
[72] VARGHESE, VIMAL, CA  
[73] BROCK UNIVERSITY, CA  
[86] (2882694)  
[87] (2882694)  
[22] 2015-02-23  
[30] US (61/943,556) 2014-02-24

**Brevets canadiens délivrés  
15 février 2022**

[11] **2,882,711**  
[13] C

[51] **Int.Cl. A21D 13/60 (2017.01) A23L 29/30 (2016.01) A21D 13/24 (2017.01) A21D 13/28 (2017.01) A21D 13/00 (2017.01) A23G 3/36 (2006.01) A23G 3/42 (2006.01)**

[25] EN

[54] **BLOOM RESISTANT FROZEN BAKERY PRODUCTS**

[54] **PRODUITS DE BOULANGERIE CONGELES RESISTANTS AU BRUNISSEMENT**

[72] TORRES SAN JUAN, JULIO ALBERTO, US

[72] KUTNER, JANE LOUISE, US

[72] GONZALEZ JUAREZ, JUAN GABRIEL, MX

[72] ALANIS VILLARREAL, ROLANDO JESUS, MX

[72] JONES, MILES ELTON, US

[73] DAWN FOOD PRODUCTS, INC., US

[85] 2015-02-20

[86] 2013-08-22 (PCT/US2013/056087)

[87] (WO2014/031808)

[30] US (61/692,483) 2012-08-23

[11] **2,886,645**  
[13] C

[51] **Int.Cl. D21F 11/00 (2006.01) D21G 9/00 (2006.01)**

[25] EN

[54] **APPARATUS, SYSTEM, AND PROCESS FOR DETERMINING CHARACTERISTICS OF A SURFACE OF A PAPERMAKING FABRIC**

[54] **APPAREIL, SYSTEME ET PROCESSUS PERMETTANT DE DETERMINER LES CARACTERISTIQUES D'UNE SURFACE D'UNE TOILE SYNTHETIQUE DE FABRICATION DE PAPIER**

[72] SZE, DANIEL H., US

[73] GPCP IP HOLDINGS LLC, US

[85] 2015-03-27

[86] 2013-11-13 (PCT/US2013/069899)

[87] (WO2014/078419)

[30] US (61/725,749) 2012-11-13

[30] US (14/077,808) 2013-11-12

[30] US (14/077,992) 2013-11-12

[11] **2,887,392**  
[13] C

[51] **Int.Cl. B01J 8/04 (2006.01) B01J 4/00 (2006.01) B01J 19/26 (2006.01) C10G 49/00 (2006.01)**

[25] EN

[54] **MULTIPLE-BED DOWNFLOW REACTOR COMPRISING A MIXING DEVICE, USE OF SAID REACTOR, AS WELL AS MIXING METHOD**

[54] **REACTEUR A CIRCULATION DESCENDANTE A PLUSIEURS LITS COMPORTANT UN DISPOSITIF DE MELANGE, UTILISATION DUDIT REACTEUR ET PROCEDE DE MELANGE**

[72] DEGALEESAN, SUJATA, US

[72] WITKAMP, BENOIT, NL

[73] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL

[85] 2015-04-07

[86] 2013-10-08 (PCT/EP2013/070972)

[87] (WO2014/056935)

[30] EP (12187887.0) 2012-10-10

[11] **2,890,544**  
[13] C

[51] **Int.Cl. C12N 5/02 (2006.01) C12N 5/0775 (2010.01) A61K 35/12 (2015.01)**

[25] EN

[54] **MEDIA FOR CULTURING, PRESERVING, AND ADMINISTERING REGENERATIVE CELLS**

[54] **MILIEUX POUR LA CULTURE, LA PRESERVATION ET L'ADMINISTRATION DE CELLULES REGENERATIVES**

[72] COLEMAN, MICHAEL, US

[72] BRUNO, IVONE, US

[72] MARTINEZ, RUDY, US

[72] SANCHEZ, AMIR, US

[72] ALT, ECKHARD U., US

[72] MARCUM, FRANK D., US

[72] SHEALY, PAUL, US

[73] INGENERON INC., US

[73] ARTHRODYNAMIC HOLDINGS, LLC, US

[85] 2015-05-01

[86] 2013-11-08 (PCT/US2013/069206)

[87] (WO2014/074859)

[30] US (61/724,285) 2012-11-08

[11] **2,892,025**  
[13] C

[51] **Int.Cl. A61K 31/40 (2006.01) A61K 9/10 (2006.01) A61K 9/14 (2006.01) A61K 9/16 (2006.01) A61K 47/32 (2006.01) A61K 47/36 (2006.01) A61K 47/38 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **SOLID DISPERSIONS COMPRISING 4-((2R, 3S, 4R, 5S)-4-(4-CHLORO-2-FLUOROPHENYL)-3-(3-CHLORO-2-FLUORO-PHENYL)-4-CYANO-5-(2,2-DIMETHYL-PROPYL)-PYRROLIDINE-2-CARBONYL)-AMINO}-3- METHOXY -BENZOIC ACID AND PHARMACEUTICAL COMPOSITIONS COMPRISING SAME WITH IMPROVED BIOAVAILABILITY**

[54] **DISPERSIONS SOLIDES COMPRENANT DE L'ACIDE 4-((2R, 3S,4R,5S)-4-(4-CHLORO-2-FLUOROPHENYL)-3-(3-CHLORO-2-FLUOROPHENYL)-4-CYANO-5-(2,2-DIMETHYLPROPYL)-PYRROLIDINE-2-CARBONYL)-AMINO} METHOXY-3 BENZOIQUE ET COMPOSITIONS PHARMACEUTIQUES LES COMPRENANT AYANT UNE BIODISPONIBILITE AMELIOREE**

[72] LOMUSCIO, STEVE, US

[72] MA, HUA, US

[72] MATCHETT, MICHAEL ALLEN, US

[72] SANDHU, HARPREET K., US

[72] SHAH, NAVNIT HARGOVINDAS, US

[72] ZHANG, YU-E, US

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

[85] 2015-05-21

[86] 2014-01-20 (PCT/EP2014/050974)

[87] (WO2014/114575)

[30] US (61/755,074) 2013-01-22

**Canadian Patents Issued  
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[11] **2,892,552**  
[13] C

[51] **Int.Cl. C08F 2/34 (2006.01) B01J 8/24 (2006.01) C08F 4/6592 (2006.01) C08F 210/02 (2006.01)**

[25] EN

[54] **PROCESS FOR POLYMERIZATION IN A FLUIDIZED BED REACTOR**

[54] **PROCEDE DE POLYMERISATION DANS UN REACTEUR A LIT FLUIDISE**

[72] KER, VICTORIA, CA

[72] GUILLEN-CASTELLANOS, SERGIO ALEJANDRO, CA

[72] JIANG, YAN, CA

[73] NOVA CHEMICALS CORPORATION, CA

[86] (2892552)

[87] (2892552)

[22] 2015-05-26

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[11] **2,892,660**  
[13] C

[51] **Int.Cl. C07K 7/08 (2006.01) C12N 5/0783 (2010.01) A61K 35/12 (2015.01) A61K 35/14 (2015.01) A61K 38/00 (2006.01) A61K 39/00 (2006.01) A61K 48/00 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **METHOD FOR ACTIVATING HELPER T CELL**

[54] **PROCEDE POUR ACTIVER DES LYMPHOCYTES T AUXILIAIRES**

[72] KUBO, HIROSHI, JP

[72] SOGO, SHINJI, JP

[72] SUGIYAMA, HARUO, JP

[73] INTERNATIONAL INSTITUTE OF CANCER IMMUNOLOGY, INC., JP

[85] 2015-05-26

[86] 2013-12-16 (PCT/JP2013/083580)

[87] (WO2014/098012)

[30] JP (2012-274494) 2012-12-17

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[11] **2,893,758**  
[13] C

[51] **Int.Cl. B23Q 3/00 (2006.01)**

[25] FR

[54] **CLAMPING DEVICE FOR A PART TO BE WORKED ON AT A WORKBENCH**

[54] **DISPOSITIF DE BRIDAGE D'UNE PIECE A TRAVAILLER SUR UNE TABLE DE TRAVAIL**

[72] THIBAUT, JACQUES, FR

[72] THIBAUT, CHRISTOPHE, FR

[73] THIBAUT, FR

[86] (2893758)

[87] (2893758)

[22] 2015-06-03

[30] FR (14 55255) 2014-06-10

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[11] **2,897,511**  
[13] C

[51] **Int.Cl. H01R 35/04 (2006.01) H01R 25/16 (2006.01)**

[25] EN

[54] **RECONFIGURABLE PLUG STRIP APPARATUS AND METHODS**

[54] **APPAREIL ET PROCEDES DE REGLETTE ELECTRIQUE RECONFIGURABLE RECONFIGURABLE PLUG STRIP APPARATUS AND METHODS**

[72] ZIEN, JACOB DANIEL, US

[72] DIATLO, JORDAN, US

[72] VALLON, KATE SARAH, US

[72] REMY, STEVEN RICHARD, US

[72] GANAS, RICHARD, US

[72] SUTTON, DAVID, US

[72] OXLEY, NICHOLAS, US

[73] QUIRKY IP LICENSING LLC, US

[85] 2015-07-07

[86] 2014-01-07 (PCT/US2014/010541)

[87] (WO2014/107742)

[30] US (61/749,608) 2013-01-07

[30] US (61/803,504) 2013-03-20

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[11] **2,898,111**  
[13] C

[51] **Int.Cl. G01N 33/573 (2006.01) C07K 14/705 (2006.01) G01N 30/90 (2006.01) C07K 14/565 (2006.01) C12N 9/16 (2006.01)**

[25] EN

[54] **A METHOD FOR DETERMINING ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS) RELATED BIOMARKERS, A METHOD TO MONITOR THE DEVELOPMENT AND TREATMENT OF ARDS IN A PATIENT**

[54] **PROCEDE POUR DETERMINER DES BIOMARQUEURS LIES AU SYNDROME DE DETRESSE RESPIRATOIRE AIGUE (SDRA), PROCEDE POUR SUIVRE LE DEVELOPPEMENT ET LE TRAITEMENT DU SDRA CHEZ UN PATIENT**

[72] MAKSIMOW, MIKAEL, FI

[72] SALMI, MARKO, FI

[72] JALKANEN, MARKKU, FI

[72] JALKANEN, SIRPA, FI

[73] FARON PHARMACEUTICALS OY, FI

[85] 2015-07-14

[86] 2014-01-22 (PCT/FI2014/050051)

[87] (WO2014/125164)

[30] FI (20130049) 2013-02-14

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[11] **2,898,672**  
[13] C

[51] **Int.Cl. A61B 5/103 (2006.01) G01N 3/44 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR NON-INVASIVE MEASUREMENT OF SOFT BIOLOGICAL TISSUE**

[54] **SYSTEME ET PROCEDE DE MESURE NON INVASIVE DE TISSUS BIOLOGIQUES MOUS**

[72] PEIPSI, ALEKO, EE

[72] SULLIN, ANTI, EE

[72] LIIK, MART, EE

[73] MYOTON AS, EE

[85] 2015-07-20

[86] 2014-01-21 (PCT/EP2014/051154)

[87] (WO2014/122011)

[30] GB (1302093.8) 2013-02-06

**Brevets canadiens délivrés  
15 février 2022**

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[11] **2,903,976**  
[13] C

[51] **Int.Cl. G01N 33/574 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **MARKERS ASSOCIATED WITH WNT INHIBITORS**  
[54] **MARQUEURS ASSOCIES A DES INHIBITEURS DE LA VOIE WNT**  
[72] CHE, JIANWEI, US  
[72] HARRIS, JENNIFER, US  
[72] HSIEH, HSIN-I, US  
[72] LI, JIE, US  
[72] LIU, JUN, US  
[72] NG, NICHOLAS, US  
[73] NOVARTIS AG, CH  
[85] 2015-09-03  
[86] 2014-03-10 (PCT/IB2014/059585)  
[87] (WO2014/141038)  
[30] US (61/776,334) 2013-03-11

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[11] **2,905,644**  
[13] C

[51] **Int.Cl. A61M 16/10 (2006.01) A61M 16/12 (2006.01) C01B 21/24 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR MONITORING NITRIC OXIDE DELIVERY**  
[54] **APPAREIL ET PROCEDURE POUR LA SURVEILLANCE DE L'ADMINISTRATION D'OXYDE NITRIQUE**  
[72] TOLMIE, CRAIG R., US  
[72] SCHNITMAN, ROBERT, US  
[72] MEDICIS, JOSEPH J., US  
[72] POTENZIANO, JIM, US  
[72] ACKER, JARON, US  
[72] SCHMIDT, JEFFREY, US  
[73] MALLINCKRODT PHARMACEUTICALS IRELAND LIMITED, IE  
[85] 2015-09-10  
[86] 2014-03-13 (PCT/US2014/025442)  
[87] (WO2014/159912)  
[30] US (13/800,287) 2013-03-13

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[11] **2,907,770**  
[13] C

[51] **Int.Cl. A61K 31/137 (2006.01) A61K 9/14 (2006.01) A61P 9/00 (2006.01) A61P 11/00 (2006.01) A61P 37/08 (2006.01)**  
[25] EN  
[54] **EPINEPHRINE FINE PARTICLES AND METHODS FOR USE THEREOF FOR TREATMENT OF CONDITIONS RESPONSIVE TO EPINEPHRINE**  
[54] **PARTICULES FINES D'EPINEPHRINE ET METHODES D'UTILISATION DE CELLES-CI POUR LE TRAITEMENT D'ETATS PATHOLOGIQUES REAGISSANT A L'EPINEPHRINE**  
[72] RAWAS-QALAJI, MUTASEM, US  
[72] RACHID, OUSAMA, CA  
[72] SIMONS, KEITH, CA  
[72] SIMONS, ESTELLE, CA  
[73] NOVA SOUTHEASTERN UNIVERSITY, US  
[85] 2015-09-21  
[86] 2014-03-24 (PCT/US2014/031579)  
[87] (WO2014/153559)  
[30] US (61/804,519) 2013-03-22  
[30] US (61/804,892) 2013-03-25

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[11] **2,907,829**  
[13] C

[51] **Int.Cl. A21D 13/02 (2006.01) B02B 1/04 (2006.01) B02B 1/08 (2006.01) C12C 1/02 (2006.01)**  
[25] EN  
[54] **DOUGH OR BATTER COMPRISING FUNCTIONALIZED GRAINS**  
[54] **PATE COMPRENANT DES CEREALES FONCTIONNALISEES**  
[72] DE PAUW, PAUL, BE  
[72] ARNAUT, FILIP, BE  
[73] PURATOS NV, BE  
[85] 2015-09-22  
[86] 2014-04-11 (PCT/EP2014/057339)  
[87] (WO2014/167081)  
[30] BE (2013/0266) 2013-04-11

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[11] **2,912,175**  
[13] C

[51] **Int.Cl. H01H 9/54 (2006.01) H01H 33/02 (2006.01)**  
[25] FR  
[54] **HYBRID CUTOFF MEMBER FOR AN ELECTRIC CIRCUIT**  
[54] **ORGANE HYBRIDE DE COUPURE POUR CIRCUIT ELECTRIQUE**  
[72] KLONOWSKI, THOMAS, FR  
[72] SERGHINE, CAMEL, FR  
[73] TURBOMECA, FR  
[85] 2015-11-09  
[86] 2014-06-04 (PCT/FR2014/051323)  
[87] (WO2014/202860)  
[30] FR (1355623) 2013-06-17

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[11] **2,913,255**  
[13] C

[51] **Int.Cl. F25B 39/04 (2006.01)**  
[25] EN  
[54] **A CONDENSER ASSEMBLY WITH A FAN CONTROLLER AND A METHOD OF OPERATING SAME**  
[54] **UN MECANISME CONDENSEUR DOTE D'UN CONTROLEUR VENTILE ET UNE METHODE D'EXPLOITATION ASSOCIEE**  
[72] ZOLLI, VINCE, CA  
[72] MEAD, WILLIAM J., CA  
[73] NATIONAL REFRIGERATION & AIR CONDITIONING CANADA CORP., CA  
[86] (2913255)  
[87] (2913255)  
[22] 2015-11-23  
[30] US (14/604,106) 2015-01-23

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**Canadian Patents Issued  
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[11] **2,913,421**  
[13] C

[51] **Int.Cl. A61M 5/172 (2006.01) A61M 5/168 (2006.01) A61M 5/36 (2006.01) A61M 5/50 (2006.01)**  
[25] EN  
[54] **MULTI-SENSOR INFUSION SYSTEM FOR DETECTING AIR OR AN OCCLUSION IN THE INFUSION SYSTEM**  
[54] **SYSTEME DE PERFUSION A MULTIPLES CAPTEURS POUR DETECTER LA PRESENCE D'AIR OU D'UNE OCCLUSION DANS LE SYSTEME DE PERFUSION**  
[72] ORUKLU, MERIYAN, US  
[72] RUCHTI, TIMOTHY L., US  
[72] KOTNIK, PAUL T., US  
[72] BELKIN, ANATOLY S., US  
[72] MARKEY, BRIAN G., US  
[73] ICU MEDICAL, INC., US  
[85] 2015-11-24  
[86] 2014-05-23 (PCT/US2014/039347)  
[87] (WO2014/190264)  
[30] US (61/827,111) 2013-05-24  
[30] US (14/285,797) 2014-05-23

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[11] **2,913,918**  
[13] C

[51] **Int.Cl. A61M 5/36 (2006.01) A61M 5/142 (2006.01)**  
[25] EN  
[54] **INFUSION SYSTEM AND METHOD OF USE WHICH PREVENTS OVER-SATURATION OF AN ANALOG-TO-DIGITAL CONVERTER**  
[54] **SYSTEME DE PERFUSION ET PROCEDE D'UTILISATION EVITANT LA SURSATURATION D'UN CONVERTISSEUR ANALOGIQUE-NUMERIQUE**  
[72] DUMAS, JOHN H., US  
[72] KOTNIK, PAUL T., US  
[72] SUR, KUNAL, US  
[72] BELKIN, ANATOLY S., US  
[72] RUCHTI, TIMOTHY L., US  
[73] ICU MEDICAL, INC., US  
[85] 2015-11-27  
[86] 2014-05-29 (PCT/US2014/039986)  
[87] (WO2014/194065)  
[30] US (61/828,408) 2013-05-29  
[30] US (14/289,796) 2014-05-29

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[11] **2,913,994**  
[13] C

[51] **Int.Cl. G06Q 30/06 (2012.01)**  
[25] EN  
[54] **STORE OF THE FUTURE**  
[54] **MAGASIN DU FUTUR**  
[72] MACLAURIN, MATTHEW BRET, US  
[72] GEISINGER, DAVID, US  
[72] CHIEN, HSIN-YI, US  
[72] JOFFRAY, FLYNN, US  
[72] SKORUPSKI, JAMES ROSS, US  
[72] CYPHER, HEALEY, US  
[73] EBAY INC., US  
[85] 2015-11-30  
[86] 2014-06-04 (PCT/US2014/040952)  
[87] (WO2014/197627)  
[30] US (61/831,607) 2013-06-05  
[30] US (14/109,737) 2013-12-17

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[11] **2,919,981**  
[13] C

[51] **Int.Cl. A61M 1/36 (2006.01)**  
[25] EN  
[54] **UNITARY BODY SYSTEMS AND DEVICES AND METHODS TO USE THE SAME FOR RETROPERFUSION**  
[54] **SYSTEMES ET DISPOSITIFS DE CORPS UNITAIRES ET PROCEDES POUR LES UTILISER POUR UNE RETROPERFUSION**  
[72] CHOI, HYU WON, US  
[72] KASSAB, GHASSAN S., US  
[73] CVDEVICES, LLC, US  
[85] 2016-01-29  
[86] 2014-07-31 (PCT/US2014/049270)  
[87] (WO2015/017714)  
[30] US (61/860,395) 2013-07-31  
[30] US (61/866,280) 2013-08-15  
[30] US (61/917,018) 2013-12-17

---

[11] **2,920,142**  
[13] C

[51] **Int.Cl. A61C 7/08 (2006.01)**  
[25] EN  
[54] **APPLIANCE FOR REDUCING FACIAL AGEING AND/OR ORAL PARAFUNCTIONAL ACTIVITY**  
[54] **APPAREIL DE REDUCTION DU VIEILLISSEMENT FACIAL ET/OU DE L'ACTIVITE PARAFONCTIONNELLE ORALE**  
[72] MOHINDRA, NARESH KUMAR, GB  
[73] MOHINDRA, NARESH KUMAR, GB  
[85] 2016-02-02  
[86] 2014-07-31 (PCT/GB2014/052359)  
[87] (WO2015/019060)  
[30] GB (1314053.8) 2013-08-06

---

[11] **2,920,840**  
[13] C

[51] **Int.Cl. G02B 6/036 (2006.01) G02B 6/44 (2006.01)**  
[25] EN  
[54] **ARMORED OPTICAL FIBER CABLE**  
[54] **CABLE A FIBRES OPTIQUES ARME**  
[72] SANDATE AGUILAR, MARIO SERGIO, MX  
[72] GIMBLET, MICHAEL JOHN, US  
[72] GREENWOOD, JULIAN LATELLE, III, US  
[72] MCALPINE, WARREN WELBORN, US  
[73] CORNING OPTICAL COMMUNICATIONS LLC, US  
[85] 2016-02-09  
[86] 2014-08-04 (PCT/US2014/049522)  
[87] (WO2015/020924)  
[30] US (61/864,104) 2013-08-09  
[30] US (14/099,921) 2013-12-07  
[30] US (14/315,872) 2014-06-26

---

[11] **2,922,086**  
[13] C

[51] **Int.Cl. G01F 1/34 (2006.01) F16K 17/04 (2006.01)**  
[25] EN  
[54] **PRESSURE RELIEF DETECTION FOR USE WITH GAS STORAGE**  
[54] **DETECTION DE DECHARGE DE PRESSION A UTILISER AVEC UN STOCKAGE DE GAZ**  
[72] GORDON, BRYAN, US  
[73] NUVERA FUEL CELLS, LLC, US  
[85] 2016-02-22  
[86] 2014-08-14 (PCT/US2014/051049)  
[87] (WO2015/026621)  
[30] US (61/869,119) 2013-08-23

**Brevets canadiens délivrés  
15 février 2022**

---

[11] **2,923,902**  
[13] C

[51] **Int.Cl. C22B 3/18 (2006.01) C12N 1/20 (2006.01) C22B 3/20 (2006.01) C01G 3/00 (2006.01) C22B 15/00 (2006.01)**

[25] EN

[54] **TANK BIOLEACHING OF COPPER SULFIDE ORES**

[54] **BIOLESSIVAGE DE RESERVOIR DE MINERAI DE SULFURE DE CUIVRE**

[72] POURMAND, ALIASGHAR, IR

[73] MIDDLE EAST MINE AND INDUSTRY COMPANY, IR

[86] (2923902)

[87] (2923902)

[22] 2016-03-16

[30] EP (15199787.1) 2015-12-14

---

[11] **2,924,092**  
[13] C

[51] **Int.Cl. E03F 5/04 (2006.01)**

[25] EN

[54] **CONNECTING MEANS FOR CONNECTING A DISCHARGE PIPE TO A DISCHARGE OPENING**

[54] **MOYENS DE RACCORDEMENT POUR RACCORDER UN TUYAU D'EVACUATION A UNE OUVERTURE D'EVACUATION**

[72] NIVELLES, GEERT, BE

[73] GENI\*US BVBA, BE

[85] 2016-03-11

[86] 2014-09-12 (PCT/IB2014/064465)

[87] (WO2015/036968)

[30] BE (BE201300604) 2013-09-13

---

[11] **2,926,263**  
[13] C

[51] **Int.Cl. F16L 55/28 (2006.01) B08B 9/04 (2006.01) B08B 9/055 (2006.01) F16L 55/38 (2006.01) F16L 55/40 (2006.01) F28G 1/10 (2006.01) F28G 1/12 (2006.01)**

[25] EN

[54] **COLLAR FOR AN INSPECTION OR CLEANING PIG, AND PIG**

[54] **MANCHON POUR RACLEUR D'INSPECTION OU DE NETTOYAGE**

[72] FIELERS, FRANK, DE

[72] KUHACH, NICO, DE

[73] ROSEN SWISS AG, CH

[85] 2016-04-04

[86] 2014-09-26 (PCT/EP2014/002616)

[87] (WO2015/049041)

[30] DE (10 2013 111 019.3) 2013-10-04

---

[11] **2,926,900**  
[13] C

[51] **Int.Cl. A61M 5/142 (2006.01) A61M 5/14 (2006.01) A61M 5/168 (2006.01)**

[25] EN

[54] **LARGE-VOLUME BOLUS PATIENT CONTROLLED DRUG ADMINISTRATION DEVICE WITH LOCK-OUT**

[54] **DISPOSITIF D'ADMINISTRATION DE MEDICAMENT REGULE PAR LE PATIENT POUR BOLUS A GRAND VOLUME, POURVU D'UN VERROUILLAGE**

[72] VU, QUANG NGOC, US

[72] DESAI, SIDDHARTH, US

[72] SACCA, GIUSEPPE, US

[73] AVENT, INC., US

[85] 2016-04-08

[86] 2014-09-09 (PCT/IB2014/064346)

[87] (WO2015/052603)

[30] US (14/051,911) 2013-10-11

---

[11] **2,927,191**  
[13] C

[51] **Int.Cl. G09F 9/33 (2006.01) B82Y 20/00 (2011.01) G02B 6/10 (2006.01) G02F 1/13357 (2006.01)**

[25] EN

[54] **LIGHT EMITTING DIODE (LED) DEVICES**

[54] **DISPOSITIFS A DIODES ELECTROLUMINESCENTES (DEL)**

[72] CHEN, JIAN, US

[72] DUBROW, ROBERT S., US

[72] GENSLER, STEVEN, US

[72] HARTLOVE, JASON, US

[72] LEE, ERNEST, US

[72] WILSON, ROBERT EDWARD, US

[73] NANOSYS, INC., US

[85] 2016-04-12

[86] 2014-10-16 (PCT/US2014/060840)

[87] (WO2015/057930)

[30] US (61/892,027) 2013-10-17

---

[11] **2,928,575**  
[13] C

[51] **Int.Cl. E01F 9/529 (2016.01) E01F 9/692 (2016.01)**

[25] EN

[54] **PORTABLE ROADWAY WARNING DEVICE**

[54] **DISPOSITIF D'AVERTISSEMENT ROUTIER PORTABLE**

[72] METTLER, CHARLES M., US

[72] BROWN, GREGORY H., US

[73] PLASTIC SAFETY SYSTEMS, INC., US

[85] 2016-04-22

[86] 2014-10-17 (PCT/US2014/061073)

[87] (WO2015/061162)

[30] US (61/894,049) 2013-10-22

---

[11] **2,929,744**  
[13] C

[51] **Int.Cl. G01N 21/33 (2006.01) C02F 1/467 (2006.01) C02F 1/76 (2006.01)**

[25] EN

[54] **SPECTROPHOTOMETRIC SENSORS AND METHODS USING SAME**

[54] **CAPTEURS SPECTROPHOTOMETRIQUES ET LEURS PROCEDES D'UTILISATION**

[72] BONNICK, DAVID MACDONALD, GB

[72] BROOKS, MICHAEL, GB

[73] EVOQUA WATER TECHNOLOGIES LIMITED, GB

[85] 2016-05-05

[86] 2014-12-09 (PCT/EP2014/077037)

[87] (WO2015/086592)

[30] GB (1322026.4) 2013-12-12

---

[11] **2,931,030**  
[13] C

[51] **Int.Cl. B29C 45/77 (2006.01) B29C 45/78 (2006.01)**

[25] EN

[54] **RESIN TRANSFER MOLDING WITH RAPID CYCLE TIME**

[54] **MOULAGE PAR TRANSFERT DE RESINE AVEC TEMPS DE CYCLE RAPIDE**

[72] GUHA, PROBR KUMAR, US

[72] SIWAJEK, MICHAEL J., US

[73] CONTINENTAL STRUCTURAL PLASTICS, INC., US

[85] 2016-05-17

[86] 2014-12-03 (PCT/US2014/068326)

[87] (WO2015/084933)

[30] US (61/910,974) 2013-12-03

**Canadian Patents Issued  
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[11] **2,931,151**  
[13] C

[51] **Int.Cl. B29C 70/32 (2006.01) C08J 3/20 (2006.01) C08J 5/18 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR FORMING COMPOSITES**  
[54] **PROCEDE ET SYSTEME DE FORMATION DE COMPOSITES**  
[72] GERAKOPOLOS, RYAN JOAQUIN, CA  
[72] ANGAMMANA, CHITRAL JAYASANKA, CA  
[72] JAYARAM, SHESHAKAMAL, CA  
[73] TRUSSCORE INC., CA  
[85] 2016-05-19  
[86] 2014-11-20 (PCT/CA2014/051110)  
[87] (WO2015/074151)  
[30] US (61/962,964) 2013-11-20

---

[11] **2,934,160**  
[13] C

[51] **Int.Cl. B23K 20/12 (2006.01) B23P 21/00 (2006.01)**  
[25] FR  
[54] **METHOD, DEVICE AND SYSTEM FOR ASSEMBLY OF A PLURALITY OF PANELS**  
[54] **PROCEDE, DISPOSITIF ET SYSTEME D'ASSEMBLAGE D'UNE PLURALITE DE PANNEAUX**  
[72] DARRAS, FRANCK, FR  
[72] WATTIER, YANNICK, FR  
[73] AEROLIA, FR  
[85] 2016-06-16  
[86] 2014-12-19 (PCT/EP2014/078639)  
[87] (WO2015/091903)  
[30] FR (1303001) 2013-12-19

---

[11] **2,934,524**  
[13] C

[51] **Int.Cl. A61K 47/50 (2017.01) A61K 47/66 (2017.01) A61K 38/16 (2006.01) A61P 35/00 (2006.01) C07H 21/00 (2006.01) C07K 2/00 (2006.01) C08G 73/02 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR TREATING CANCER USING PEPTIDE NUCLEIC ACID-BASED AGENTS**  
[54] **METHODES ET COMPOSITIONS POUR LE TRAITEMENT DU CANCER UTILISANT DES AGENTS A BASE D'ACIDES NUCLEIQUES DE PEPTIDES**  
[72] ROTHMAN, JEFFREY K., US  
[72] SCHWARTZ, GARY K., US  
[73] MEMORIAL SLOAN-KETTERING CANCER CENTER, US  
[85] 2016-06-17  
[86] 2014-12-17 (PCT/US2014/070970)  
[87] (WO2015/100113)  
[30] US (61/920,289) 2013-12-23

---

[11] **2,935,090**  
[13] C

[51] **Int.Cl. A23F 5/36 (2006.01) A23F 5/24 (2006.01) A23F 5/30 (2006.01) A23F 5/46 (2006.01)**  
[25] EN  
[54] **AROMA-RETAINING SOLUBLE COFFEE**  
[54] **CAFE SOLUBLE CONSERVANT LES AROMES**  
[72] DE KOK, PETRUS MARIA THERESIA, NL  
[72] OOSTERVELD, ALEXANDER, NL  
[72] HEIJMAN, GERTJAN, NL  
[73] KONINKLIJKE DOUWE EGBERTS B.V., NL  
[85] 2016-06-22  
[86] 2014-12-23 (PCT/NL2014/050903)  
[87] (WO2015/099531)  
[30] EP (13199299.2) 2013-12-23

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[11] **2,936,634**  
[13] C

[51] **Int.Cl. G01S 1/00 (2006.01) H04W 4/02 (2018.01) H05B 45/10 (2020.01) H05B 47/105 (2020.01)**  
[25] EN  
[54] **METHOD FOR A PERSONAL MOBILE DEVICE COMMUNICATION OF SERVICE ORDERS**  
[54] **PROCEDE POUR COMMUNICATION DE COMMANDES DE SERVICE PAR DISPOSITIF MOBILE PERSONNEL**  
[72] LOVELAND, DAMIEN, NL  
[72] VAN DER POEL, LUCAS, NL  
[72] SEKULOVSKI, DRAGAN, NL  
[72] VERMEULEN, AD, NL  
[73] PHILIPS LIGHTING HOLDING B.V., NL  
[86] (2936634)  
[87] (2936634)  
[22] 2010-02-12  
[62] 2,768,883  
[30] US (61/157,106) 2009-03-03

---

[11] **2,937,840**  
[13] C

[51] **Int.Cl. A61K 45/06 (2006.01) A61K 31/00 (2006.01) A61K 31/74 (2006.01) G01N 33/50 (2006.01) G01N 33/569 (2006.01)**  
[25] EN  
[54] **IMMUNOMODULATORY COMPOUNDS**  
[54] **COMPOSES IMMUNOMODULATEURS**  
[72] TAYLOR, GARRY, GB  
[72] CONNARIS, HELEN, GB  
[73] PNEUMAGEN LIMITED, GB  
[85] 2016-07-25  
[86] 2015-01-23 (PCT/GB2015/050161)  
[87] (WO2015/110831)  
[30] GB (1401228.0) 2014-01-24  
[30] GB (1405306.0) 2014-03-25

**Brevets canadiens délivrés  
15 février 2022**

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[11] **2,938,142**  
[13] C

[51] **Int.Cl. C08L 1/02 (2006.01) B32B 3/12 (2006.01) B32B 5/32 (2006.01) B32B 23/00 (2006.01) B32B 37/00 (2006.01) C08B 15/08 (2006.01)**

[25] EN

[54] **POROUS NANOCRYSTALLINE CELLULOSE STRUCTURES**

[54] **STRUCTURES CELLULOSIQUES NANOCRYSTALLINES POREUSES**

[72] LAPIDOT, SHAUL, IL  
[72] ROTH SHALEV, SIGAL, IL  
[72] SLATTEGARD, RIKARD, IL  
[72] SHOSEYOV, ODED, IL  
[72] AZERRAF, CLARITE, IL  
[72] BRASLAVSKY, IDO, IL  
[72] YASHUNSKY, VICTOR, IL  
[73] YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREW UNIVERSITY OF JERUSALEM LTD., IL

[73] MELODEA LTD., IL  
[85] 2016-07-27  
[86] 2015-01-29 (PCT/IL2015/050104)  
[87] (WO2015/114630)  
[30] US (61/933,013) 2014-01-29  
[30] US (61/933,011) 2014-01-29

---

[11] **2,938,512**  
[13] C

[51] **Int.Cl. E05F 15/73 (2015.01)**

[25] EN

[54] **OBJECT DETECTION SYSTEM**

[54] **SYSTEME DE DETECTION D'OBJET**

[72] FITZGIBBON, JAMES J., US  
[73] THE CHAMBERLAIN GROUP LLC, US

[86] (2938512)  
[87] (2938512)  
[22] 2016-08-10  
[30] US (14/833,838) 2015-08-24

---

[11] **2,939,175**  
[13] C

[51] **Int.Cl. F17D 1/04 (2006.01) F17C 13/04 (2006.01) G05D 11/02 (2006.01) G05D 16/16 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR FLOW EQUIPARTITION**

[54] **APPAREIL ET PROCEDE D'EQUIPARTITION D'ECOULEMENT**

[72] BORGHESANI, OMEMO, IT  
[72] ZECCHI, STEFANO, IT  
[73] EMERSON PROCESS MANAGEMENT S.R.L., IT

[85] 2016-08-09  
[86] 2015-03-17 (PCT/IB2015/051939)  
[87] (WO2015/140706)  
[30] IT (BO2014A000139) 2014-03-18

---

[11] **2,939,505**  
[13] C

[51] **Int.Cl. F01D 5/10 (2006.01) B64C 11/14 (2006.01) F16F 15/28 (2006.01)**

[25] EN

[54] **NOSE CONE AND SHAFT BALANCING ASSEMBLY**

[54] **ASSEMBLAGE D'EQUILIBRAGE DE CONE DE NEZ ET D'ARBRE**

[72] BURKHOLDER, GRAHAM, US  
[72] MOLNAR, DANIEL, US  
[72] SCHNEIDER, JARED, US  
[72] KAPPES, MATT, US  
[73] ROLLS-ROYCE NORTH AMERICAN TECHNOLOGIES, INC., US

[86] (2939505)  
[87] (2939505)  
[22] 2016-08-19  
[30] US (14/922,807) 2015-10-26

---

[11] **2,940,408**  
[13] C

[51] **Int.Cl. G06F 3/14 (2006.01) H04W 88/02 (2009.01)**

[25] EN

[54] **COLLABORATION SYSTEM WITH RASTER-TO-VECTOR IMAGE CONVERSION**

[54] **SYSTEME DE COLLABORATION A CONVERSION D'IMAGE TRAME EN IMAGE VECTEUR**

[72] SKLAROFF, JEFF, CA  
[73] SMART TECHNOLOGIES ULC, CA

[86] (2940408)  
[87] (2940408)  
[22] 2016-08-26

---

[11] **2,941,059**  
[13] C

[51] **Int.Cl. B65G 47/14 (2006.01) B65G 47/256 (2006.01)**

[25] FR

[54] **METHOD AND INSTALLATION FOR ORIENTED FEED OF BLANKS**

[54] **PROCEDE ET INSTALLATION DE FOURNITURE ORIENTEE DE FLANS**

[72] GUILLEMENET, JEROME, FR  
[72] PAGNAC, MICHEL, FR  
[72] SAIGNES, FREDERIC, FR  
[72] CUREAU, YANN, FR  
[73] LA MONNAIE DE PARIS, FR

[85] 2016-08-29  
[86] 2015-03-03 (PCT/FR2015/050518)  
[87] (WO2015/132525)  
[30] FR (14 51701) 2014-03-03

---

[11] **2,941,062**  
[13] C

[51] **Int.Cl. B64G 1/10 (2006.01) B64G 1/24 (2006.01)**

[25] EN

[54] **ENERGY EFFICIENT SATELLITE MANEUVERING**

[54] **MANOEUVRE DE SATELLITE A EFFICACITE ENERGETIQUE**

[72] LUI, TIMOTHY S., US  
[72] LEE, KANGSIK, US  
[73] THE BOEING COMPANY, US

[86] (2941062)  
[87] (2941062)  
[22] 2016-09-06  
[30] US (14/940811) 2015-11-13

---

[11] **2,941,930**  
[13] C

[51] **Int.Cl. A61K 33/26 (2006.01) A61K 31/351 (2006.01) A61K 47/10 (2017.01) A61P 7/06 (2006.01)**

[25] EN

[54] **A COMPOSITION COMPRISING AN IRON HYDROXYPYRONE AND A TASTE MASKING AGENT**

[54] **COMPOSITION COMPRENANT UNE HYDROXYPYRONE DE FER ET UN AGENT DE MASQUAGE DU GOUT**

[72] STOCKHAM, MICHAEL ARTHUR, GB  
[73] SHIELD TX (UK) LTD., GB

[85] 2016-09-08  
[86] 2015-03-11 (PCT/GB2015/050711)  
[87] (WO2015/136282)  
[30] GB (1404390.5) 2014-03-12

**Canadian Patents Issued  
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[11] **2,945,039**  
[13] C

[51] **Int.Cl. H04N 19/186 (2014.01) H04N 19/176 (2014.01) H04N 19/463 (2014.01) H04N 19/70 (2014.01) H04N 19/91 (2014.01)**

[25] EN

[54] **MAXIMUM PALETTE PARAMETERS IN PALETTE-BASED VIDEO CODING**

[54] **PARAMETRES DE PALETTE MAXIMALE DANS UN CODAGE VIDEO BASE SUR UNE PALETTE**

[72] JOSHI, RAJAN LAXMAN, US  
[72] SEREGIN, VADIM, US  
[72] PU, WEI, US  
[72] KARCZEWICZ, MARTA, US  
[72] SOLE ROJALS, JOEL, US  
[72] RAPAKA, KRISHNAKANTH, US  
[73] QUALCOMM INCORPORATED, US  
[85] 2016-10-05  
[86] 2015-05-22 (PCT/US2015/032250)  
[87] (WO2015/179804)  
[30] US (62/002,054) 2014-05-22  
[30] US (62/010,313) 2014-06-10  
[30] US (62/015,240) 2014-06-20  
[30] US (62/031,766) 2014-07-31  
[30] US (62/040,978) 2014-08-22  
[30] US (62/114,533) 2015-02-10  
[30] US (62/115,099) 2015-02-11  
[30] US (14/719,228) 2015-05-21

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[11] **2,946,259**  
[13] C

[51] **Int.Cl. B31B 50/62 (2017.01) B31B 50/00 (2017.01)**

[25] EN

[54] **GLUING MACHINE FOR MAKING BOXES**

[54] **MACHINE A ENCOLLER A DES FINS DE FABRICATION DE BOITES**

[72] CAPOIA, GIUSEPPE, IT  
[73] PANOTEC S.R.L., IT  
[85] 2016-10-18  
[86] 2015-05-29 (PCT/IB2015/054047)  
[87] (WO2015/181780)  
[30] IT (UD2014A000091) 2014-05-30

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[11] **2,949,135**  
[13] C

[51] **Int.Cl. F21V 21/116 (2006.01) F21V 19/02 (2006.01)**

[25] EN

[54] **GLOBE CLAMP WITH LEVEL MOUNT**

[54] **ELEMENT DE FIXATION DE GLOBE A SUPPORT DE NIVEAU**

[72] GONGOLA, PAUL JOHN, US  
[72] BLONDIN, SEAN MICHAEL, US  
[73] EATON INTELLIGENT POWER LIMITED, IE  
[85] 2016-11-14  
[86] 2015-06-29 (PCT/US2015/038261)  
[87] (WO2016/003873)  
[30] US (14/320,121) 2014-06-30

---

[11] **2,950,321**  
[13] C

[51] **Int.Cl. E06B 9/42 (2006.01) A47H 1/13 (2006.01)**

[25] EN

[54] **PIVOT MOUNT FOR ROLLER SHADE**

[54] **MONTANT SUR PIVOT POUR STORE A ENROULEUR**

[72] NG, PHILIP, CA  
[72] WILLS, NORMAN, CA  
[73] ZMC METAL COATING INC., CA  
[85] 2016-11-25  
[86] 2015-06-26 (PCT/CA2015/050603)  
[87] (WO2016/026033)  
[30] US (62/040,566) 2014-08-22

---

[11] **2,950,378**  
[13] C

[51] **Int.Cl. H02J 3/18 (2006.01) G05B 17/02 (2006.01) H02J 3/38 (2006.01)**

[25] EN

[54] **METHOD FOR CONTROLLING POWER DISTRIBUTION**

[54] **PROCEDE DE COMMANDE DE DISTRIBUTION DE PUISSANCE**

[72] MURPHY, CONOR, IE  
[72] KEANE, ANDREW, IE  
[72] RICHARDSON, PETER, IE  
[73] UNIVERSITY COLLEGE DUBLIN NATIONAL UNIVERSITY OF IRELAND, DUBLIN, IE  
[85] 2016-11-25  
[86] 2015-06-12 (PCT/EP2015/063213)  
[87] (WO2015/193199)  
[30] GB (1411004.3) 2014-06-20

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[11] **2,952,384**  
[13] C

[51] **Int.Cl. B67C 3/22 (2006.01) B65B 3/12 (2006.01) B67C 3/28 (2006.01)**

[25] EN

[54] **A FILLER MACHINE**

[54] **MACHINE DE REMPLISSAGE**

[72] COSTELLO, ANTHONY WILLIAM, NZ  
[73] PATENT AGENCIES LIMITED, NZ  
[85] 2016-12-14  
[86] 2015-07-20 (PCT/NZ2015/050095)  
[87] (WO2016/013941)  
[30] NZ (627732) 2014-07-21

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[11] **2,952,811**  
[13] C

[51] **Int.Cl. B01D 3/06 (2006.01) B01D 21/26 (2006.01) B04B 7/00 (2006.01) B04C 7/00 (2006.01) C07C 29/76 (2006.01)**

[25] EN

[54] **SALT REMOVAL AND TRANSPORT SYSTEM FOR USE IN A MONOETHYLENEGLYCOL (MEG) RECLAMATION PROCESS**

[54] **SYSTEME D'ELIMINATION ET DE TRANSPORT DE SEL DESTINE A ETRE UTILISE DANS UN PROCEDE DE RECUPERATION DE MONOETHYLENEGLYCOL (MEG)**

[72] SAMS, GARY W., US  
[72] LEE, JOSEPH MIN-HSIUN, US  
[73] SCHLUMBERGER CANADA LIMITED, CA  
[85] 2016-12-16  
[86] 2015-06-05 (PCT/US2015/034361)  
[87] (WO2015/195361)  
[30] US (14/307,217) 2014-06-17

**Brevets canadiens délivrés  
15 février 2022**

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[11] **2,954,329**  
[13] C

[51] **Int.Cl. A23D 7/005 (2006.01) A23L 29/10 (2016.01) A23D 7/00 (2006.01) A23D 7/04 (2006.01)**

[25] EN

[54] **POURABLE OIL-IN-WATER COOKING COMPOSITION**

[54] **COMPOSITION VERSABLE HUILE-DANS-L'EAU POUR LA CUISSON**

[72] HOGERVORST, WIM THEODORUS, NL

[72] VERDUYN, ALEXANDER, NL

[72] WIERSMA, JONNA ALEIDE, NL

[73] UPFIELD EUROPE B.V., NL

[85] 2017-01-05

[86] 2015-06-30 (PCT/EP2015/064829)

[87] (WO2016/005230)

[30] EP (14176778.0) 2014-07-11

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[11] **2,954,561**  
[13] C

[51] **Int.Cl. G06F 1/16 (2006.01) G01S 11/12 (2006.01)**

[25] EN

[54] **POSITIONING A WEARABLE DEVICE FOR DATA COLLECTION**

[54] **POSITIONNEMENT D'UN DISPOSITIF VESTIMENTAIRE PERMETTANT LA COLLECTE DE DONNEES**

[72] MIROV, RUSSELL NORMAN, US

[72] HOMYK, ANDREW, US

[72] ASKEW, MARK WEST, US

[72] THOMPSON, JASON DONALD, US

[73] VERILY LIFE SCIENCES LLC, US

[85] 2017-01-06

[86] 2015-07-09 (PCT/US2015/039659)

[87] (WO2016/007698)

[30] US (14/329,341) 2014-07-11

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[11] **2,954,735**  
[13] C

[51] **Int.Cl. B65D 81/34 (2006.01)**

[25] EN

[54] **METAL RECEPTACLE FOR MICROWAVE OVENS**

[54] **RECIPIENT METALLIQUE POUR LE FOUR A MICRO-ONDES**

[72] ALVAREZ-ZAVALA, ALBERTO, MX

[73] ENVASES UNIVERSALES DE MEXICO, S.A. P.I. DE C.V., MX

[85] 2017-01-10

[86] 2014-07-15 (PCT/IB2014/063128)

[87] (WO2016/009252)

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[11] **2,955,446**  
[13] C

[51] **Int.Cl. B62D 55/26 (2006.01) B62D 55/18 (2006.01) B62D 55/21 (2006.01) G01M 17/03 (2006.01) G01N 3/56 (2006.01) E02F 9/00 (2006.01)**

[25] EN

[54] **CRAWLER SHOE HAVING WEAR MEASUREMENT FEATURES**

[54] **PATIN DE CHENILLE AYANT DES CARACTERISTIQUES DE MESURE D'USURE**

[72] HAKES, DAVID J., US

[72] LAWSON, ROGER E., US

[72] OERTLEY, THOMAS E., US

[73] CATERPILLAR INC., US

[85] 2017-01-17

[86] 2015-07-14 (PCT/US2015/040244)

[87] (WO2016/014277)

[30] US (14/338,120) 2014-07-22

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[11] **2,958,240**  
[13] C

[51] **Int.Cl. B01J 13/00 (2006.01) C08J 5/02 (2006.01)**

[25] EN

[54] **VOIDED LATEX PARTICLES**

[54] **PARTICULES DE LATEX VIDEES**

[72] LIU, LILY, US

[72] DEVONPORT, WAYNE, US

[72] STARK, DANIEL E., US

[72] BOUDREAUX, MATTHEW F., US

[73] ARKEMA INC., US

[85] 2017-02-15

[86] 2015-08-07 (PCT/US2015/044119)

[87] (WO2016/028511)

[30] US (62/040,557) 2014-08-22

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[11] **2,961,096**  
[13] C

[51] **Int.Cl. H02S 50/00 (2014.01) H02J 3/14 (2006.01)**

[25] EN

[54] **POWER DISTRIBUTION PRIORITY CONTROLLER AND CONTROLLING METHOD OF A PHOTOVOLTAIC POWER GENERATION SYSTEM**

[54] **CONTROLEUR DE PRIORITE DE DISTRIBUTION D'ENERGIE ET PROCEDE DE COMMANDE POUR SYSTEME DE PRODUCTION D'ENERGIE PHOTOVOLTAIQUE**

[72] YANG, DU, CN

[72] SU, YUHAI, CN

[72] JIN, GUOHUA, CN

[72] XIAO, HUANMING, CN

[72] WANG, WENCAN, CN

[73] GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI, CN

[85] 2017-03-13

[86] 2015-08-21 (PCT/CN2015/087847)

[87] (WO2016/150091)

[30] CN (201510131049.5) 2015-03-24

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[11] **2,963,919**  
[13] C

[51] **Int.Cl. A23D 7/00 (2006.01) A23D 7/02 (2006.01) A23D 9/02 (2006.01)**

[25] EN

[54] **PROCESS FOR PREPARING A FAT SLURRY AND FOR PREPARING A SPREAD WITH SAID SLURRY**

[54] **PROCEDE POUR PREPARER UNE BOUE DE MATIERES GRASSES ET UNE TARTINADE LA COMPORTANT**

[72] GREBENKAMPER, KAI, NL

[72] KROON, CORNELIS JOHANNES, NL

[72] LEENHOUTS, ABRAHAM, NL

[72] THE, ROGIER ANTOINE FLORIS, NL

[73] UPFIELD EUROPE B.V., NL

[85] 2017-04-04

[86] 2015-09-18 (PCT/EP2015/071483)

[87] (WO2016/058782)

[30] EP (EP14188659.8) 2014-10-13

**Canadian Patents Issued  
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[11] **2,965,823**  
[13] C

[51] **Int.Cl. H02G 5/06 (2006.01) H02B 1/28 (2006.01) H02G 5/08 (2006.01)**

[25] EN

[54] **ELECTRICAL POWER SUPPLY STRUCTURES**

[54] **STRUCTURES D'APPROVISIONNEMENT D'ALIMENTATION ELECTRIQUE**

[72] COX, MARTIN, CA

[72] MUDHAR, PARRY SINGH, CA

[72] NGUYEN, TUAN ANH, CA

[72] LEDER, VLADISLAV, CA

[73] SUPERIOR TRAY SYSTEMS INC., CA

[86] (2965823)

[87] (2965823)

[22] 2017-05-02

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[11] **2,974,703**  
[13] C

[51] **Int.Cl. E21B 29/06 (2006.01) E21B 29/00 (2006.01) E21B 33/13 (2006.01) E21B 33/138 (2006.01)**

[25] EN

[54] **DOWNHOLE CUTTING AND SEALING APPARATUS**

[54] **APPAREIL DE COUPE ET D'OBTURATION DE FOND DE TROU**

[72] PIPCHUK, DOUGLAS, CA

[72] COOPER, IAIN MICHAEL, US

[73] SCHLUMBERGER CANADA LIMITED, CA

[85] 2017-07-21

[86] 2016-01-27 (PCT/US2016/015026)

[87] (WO2016/123166)

[30] US (62/108,393) 2015-01-27

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[11] **2,974,753**  
[13] C

[51] **Int.Cl. E01C 19/08 (2006.01) B28C 5/46 (2006.01) B60P 3/00 (2006.01) F27B 17/00 (2006.01)**

[25] EN

[54] **PORTABLE ASPHALT HEATER APPARATUS AND METHOD**

[54] **APPAREIL DE CHAUFFAGE D'ASPHALTE PORTATIF ET PROCEDE**

[72] SMITH, ADAM THORNTON, CA

[72] GROENING, LUCAS BRENT, CA

[72] ASEFI, MAJID, CA

[73] THE CITY OF CALGARY, CA

[86] (2974753)

[87] (2974753)

[22] 2017-07-28

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[11] **2,977,143**  
[13] C

[51] **Int.Cl. B05B 15/70 (2018.01) B64F 5/10 (2017.01) B05D 1/06 (2006.01) B25J 9/00 (2006.01)**

[25] EN

[54] **APPARATUS, SYSTEM, AND METHOD FOR PERFORMING AUTOMATED FINISHING OPERATIONS ON A WORKPIECE**

[54] **APPAREIL, SYSTEME ET METHODE D'EXECUTION D'OPERATIONS DE FINITION AUTOMATISEES SUR UNE PIECE DE TRAVAIL**

[72] MORIARTY, BENNETT M., US

[72] CROTHERS, PHILLIP J., US

[72] ARTHUR, SHANE E., US

[72] SMITH, BRIAN W., US

[73] THE BOEING COMPANY, US

[86] (2977143)

[87] (2977143)

[22] 2017-08-23

[30] US (15/347485) 2016-11-09

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[11] **2,977,471**  
[13] C

[51] **Int.Cl. F16L 55/18 (2006.01) F16L 55/165 (2006.01)**

[25] EN

[54] **INSERTION TOOL FOR REHABILITATION TUBULAR LINER IN PIPES AND PIPELINES**

[54] **OUTIL D'INSERTION DESTINE A LA REHABILITATION DE REVETEMENT TUBULAIRE DANS LES TUYAUX ET LES PIPELINES**

[72] GAGNON, GILLES, CA

[72] VEILLEUX, SERGE, CA

[72] SEVIGNY VEILLEUX, VINCENT, CA

[73] SANEXEN ENVIRONMENTAL SERVICES INC., CA

[86] (2977471)

[87] (2977471)

[22] 2017-08-25

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[11] **2,978,095**  
[13] C

[51] **Int.Cl. C07K 1/22 (2006.01) B01D 15/12 (2006.01) B01D 15/20 (2006.01) C07K 1/14 (2006.01) C07K 16/00 (2006.01) C12P 21/00 (2006.01)**

[25] EN

[54] **USE OF ALKALINE WASHES DURING CHROMATOGRAPHY TO REMOVE IMPURITIES**

[54] **UTILISATION DE LAVAGES ALCALINS DURANT UNE CHROMATOGRAPHIE POUR ELIMINER LES IMPURETES**

[72] WANG, JUE, US

[72] JAFFE, NEIL E., US

[72] PATEL, KRINA, US

[73] BRISTOL-MYERS SQUIBB COMPANY, US

[85] 2017-08-28

[86] 2016-03-11 (PCT/US2016/021984)

[87] (WO2016/149088)

[30] US (62/132,974) 2015-03-13

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[11] **2,978,556**  
[13] C

[51] **Int.Cl. C08L 51/08 (2006.01) B33Y 10/00 (2015.01)**

[25] EN

[54] **THERMOPLASTIC COMPOSITES COMPRISING WATER-SOLUBLE PEO GRAFT POLYMERS USEFUL FOR 3-DIMENSIONAL ADDITIVE MANUFACTURING**

[54] **COMPOSITES THERMOPLASTIQUES COMPRENANT DES POLYMERES GREFFES A BASE DE POLYETHYLENE OXYDE (PEO) HYDROSOLUBLES UTILES POUR UNE FABRICATION ADDITIVE TRIDIMENSIONNELLE**

[72] STOLYAROV, DANIEL, US

[72] POMESTCHENKO, IRINA, US

[73] GRAPHENE 3D LAB INC., US

[85] 2017-09-01

[86] 2016-02-29 (PCT/US2016/020031)

[87] (WO2016/140906)

[30] US (62/126,962) 2015-03-02

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[11] **2,982,641**  
[13] C

[51] **Int.Cl. G01S 5/00 (2006.01) G01S 5/02 (2010.01) G01S 5/18 (2006.01)**  
[25] EN  
[54] **LOCATION SYSTEM**  
[54] **SYSTEME DE LOCALISATION**  
[72] OLSEN, OYSTEIN, NO  
[72] BOOIJ, WILFRED, NO  
[73] SONITOR TECHNOLOGIES AS, NO  
[85] 2017-10-12  
[86] 2016-04-21 (PCT/GB2016/051113)  
[87] (WO2016/174396)  
[30] GB (1507208.5) 2015-04-28

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[11] **2,988,553**  
[13] C

[51] **Int.Cl. C30B 29/66 (2006.01) B82Y 20/00 (2011.01) B82Y 40/00 (2011.01) C12Q 1/686 (2018.01) F24S 70/10 (2018.01) C01G 7/00 (2006.01) C12P 1/00 (2006.01) C12P 19/34 (2006.01) C12Q 1/00 (2006.01) C12Q 1/68 (2018.01) C30B 7/00 (2006.01) C30B 7/14 (2006.01)**  
[25] EN  
[54] **BIPYRAMID-TEMPLATED SYNTHESIS OF MONODISPERSE NOBLE METAL NANOCRYSTALS**  
[54] **SYNTHESE A MATRICE BIPYRAMIDALE DE NANOCRISTAUX DE METAL NOBLE MONODISPERSES**  
[72] WEIZMANN, YOSSI, US  
[72] GIBSON, KYLE, US  
[72] LEE, JUNG-HOON, US  
[72] CHEGLAKOV, ZOYA, US  
[73] THE UNIVERSITY OF CHICAGO, US  
[85] 2017-12-06  
[86] 2016-05-09 (PCT/US2016/031522)  
[87] (WO2016/200525)  
[30] US (62/172,481) 2015-06-08

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[11] **2,990,252**  
[13] C

[51] **Int.Cl. G06F 17/00 (2019.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR BLUEPRINT-BASED CLOUD MANAGEMENT**  
[54] **SYSTEMES ET METHODE DE GESTION NUAGIQUE FONDEE SUR UN DOCUMENT PROVISoire**  
[72] PADMANABH, GIRI, US  
[72] GOYAL, BRAJESH, US  
[72] THAKRAR, UTPAL, US  
[72] MADHAVAN, ASHOK, US  
[73] SERVICENOW, INC., US  
[86] (2990252)  
[87] (2990252)  
[22] 2017-12-28  
[30] US (15/587,610) 2017-05-05

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[11] **2,991,594**  
[13] C

[51] **Int.Cl. A61F 2/46 (2006.01)**  
[25] EN  
[54] **INTEGRATED SYSTEM FOR CLEANING BONE AND MILLING THE CLEANED BONE TO FORM BONE CHIPS**  
[54] **SYSTEME INTEGRE POUR NETTOYER UN OS ET BROYER L'OS NETTOYE POUR FORMER DES FRAGMENTS D'OS**  
[72] STRATTON, DENNIS, US  
[72] VELDKAMP, DAVID J., US  
[72] HEFFERNAN, ERIC M., US  
[72] GOLDENBERG, DAVE S., US  
[72] CHAMBERLIN, CHRIS, US  
[72] DIEHL, ERIC K., US  
[72] BERNERO, JOHN P., US  
[72] LAM, VINCENT, US  
[72] ORAND, AUSTIN, US  
[73] STRYKER CORPORATION, US  
[86] (2991594)  
[87] (2991594)  
[22] 2010-11-05  
[62] 2,780,112  
[30] US (61/258,667) 2009-11-06

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[11] **2,992,529**  
[13] C

[51] **Int.Cl. G06F 16/40 (2019.01) H04N 21/258 (2011.01) H04N 21/462 (2011.01) G06F 16/41 (2019.01) G06F 16/48 (2019.01)**  
[25] EN  
[54] **PREDICTION OF FUTURE VIEWS OF VIDEO SEGMENTS TO OPTIMIZE SYSTEM RESOURCE UTILIZATION**  
[54] **PREDICTION DE FUTURS VISIONNAGES DE SEGMENTS VIDEO POUR OPTIMISER L'UTILISATION DE RESSOURCES SYSTEME**  
[72] NEUMEIER, ZEEV, US  
[72] COLLETTE, MICHAEL, US  
[73] INSCAPE DATA, INC., US  
[85] 2018-01-12  
[86] 2016-07-15 (PCT/US2016/042611)  
[87] (WO2017/011792)  
[30] US (62/193,331) 2015-07-16

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[11] **2,992,599**  
[13] C

[51] **Int.Cl. H04N 21/442 (2011.01) H04N 21/462 (2011.01) H04N 21/6373 (2011.01) H04N 21/81 (2011.01) H04N 21/845 (2011.01)**  
[25] EN  
[54] **TRANSPORTING CODED AUDIO DATA**  
[54] **TRANSPORT DE DONNEES AUDIO CODEES**  
[72] STOCKHAMMER, THOMAS, US  
[72] SEN, DIPANJAN, US  
[72] PETERS, NILS GUNTHER, US  
[72] KIM, MOO YOUNG, US  
[73] QUALCOMM INCORPORATED, US  
[85] 2018-01-15  
[86] 2016-08-25 (PCT/US2016/048740)  
[87] (WO2017/035376)  
[30] US (62/209,779) 2015-08-25  
[30] US (62/209,764) 2015-08-25  
[30] US (15/246,370) 2016-08-24

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[11] **2,994,470**  
[13] C

[51] **Int.Cl. A01B 29/06 (2006.01) A01B 29/00 (2006.01)**

[25] EN

[54] **A ROLLER ASSEMBLY**

[54] **ENSEMBLE ROULEAU**

[72] DUFTY, RAYMOND JEFFREY, AU

[73] DUFTY, RAYMOND JEFFREY, AU

[73] RIX, DOROTHEA ISABEL MAUD, AU

[85] 2018-02-01

[86] 2016-08-08 (PCT/AU2016/095002)

[87] (WO2017/024364)

[30] AU (2015903165) 2015-08-07

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[11] **2,996,275**  
[13] C

[51] **Int.Cl. H04N 21/462 (2011.01) H04N 21/434 (2011.01) H04N 21/6334 (2011.01) G06F 21/44 (2013.01)**

[25] EN

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

[54] **DISPOSITIF DE RECEPTION, DISPOSITIF DE TRANSMISSION, ET PROCEDE DE TRAITEMENT DE DONNEES**

[72] YAMAGISHI, YASUAKI, JP

[73] SONY CORPORATION, JP

[85] 2018-02-21

[86] 2016-08-03 (PCT/JP2016/072748)

[87] (WO2017/038353)

[30] JP (2015-168521) 2015-08-28

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[11] **2,996,975**  
[13] C

[51] **Int.Cl. A61K 38/57 (2006.01) A61P 9/10 (2006.01)**

[25] EN

[54] **METHODS FOR TREATMENT OF DISEASES**

[54] **METHODES DE TRAITEMENT DE MALADIES**

[72] GELBER, COHAVA, US

[73] SERPIN PHARMA, LLC, US

[85] 2018-02-27

[86] 2016-08-26 (PCT/US2016/048999)

[87] (WO2017/040287)

[30] US (62/211,296) 2015-08-28

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[11] **2,998,569**  
[13] C

[51] **Int.Cl. B23K 26/10 (2006.01) B23K 26/08 (2014.01) B23K 26/38 (2014.01)**

[25] EN

[54] **LASER PROCESSING METHOD AND LASER PROCESSING DEVICE**

[54] **PROCEDE DE TRAITEMENT AU LASER ET DISPOSITIF DE TRAITEMENT AU LASER**

[72] SATO, TAKANORI, JP

[72] YOSHIDA, SHIN, JP

[72] KOIKE, MASAHIRO, JP

[72] FUKAMI, KENICHI, JP

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

[85] 2018-03-13

[86] 2016-09-16 (PCT/JP2016/077540)

[87] (WO2017/047785)

[30] JP (2015-184678) 2015-09-18

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[11] **2,999,288**  
[13] C

[51] **Int.Cl. H04S 7/00 (2006.01) G10L 19/008 (2013.01)**

[25] EN

[54] **SCREEN RELATED ADAPTATION OF HIGHER ORDER AMBISONIC (HOA) CONTENT**

[54] **ADAPTATION ECRAN DE CONTENU AMBISONIQUE D'ORDRE SUPERIEUR**

[72] PETERS, NILS GUNTHER, US

[72] MORRELL, MARTIN JAMES, US

[72] SEN, DIPANJAN, US

[73] QUALCOMM INCORPORATED, US

[85] 2018-03-20

[86] 2016-10-12 (PCT/US2016/056606)

[87] (WO2017/066300)

[30] US (62/241,709) 2015-10-14

[30] US (62/244,149) 2015-10-20

[30] US (62/255,353) 2015-11-13

[30] US (15/290,223) 2016-10-11

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[11] **3,000,430**  
[13] C

[51] **Int.Cl. C10G 53/04 (2006.01) C10G 31/06 (2006.01)**

[25] EN

[54] **PARTIAL UPGRADING OF BITUMEN WITH THERMAL TREATMENT AND SOLVENT DEASPHALTING**

[54] **VALORISATION PARTIELLE DU BITUME AVEC TRAITEMENT THERMIQUE ET DESASPHALTAGE AU SOLVANT**

[72] HUQ, IFTIKHAR, CA

[72] REDDY, PRABHAKAR, CA

[72] DE KLERK, ARNO, CA

[73] SUNCOR ENERGY INC., CA

[86] (3000430)

[87] (3000430)

[22] 2018-04-06

[30] CA (2963436) 2017-04-06

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[11] **3,002,714**  
[13] C

[51] **Int.Cl. B65H 19/29 (2006.01) B31D 5/00 (2017.01)**

[25] EN

[54] **DUNNAGE SYSTEM AND METHOD USING A COIL ACCUMULATOR**

[54] **SYSTEME DE FARDAGE ET PROCEDE UTILISANT UN ACCUMULATEUR A BOBINE**

[72] METHORST, ERWIN, NL

[72] LAMMERS, NICO, NL

[72] ROTHKRANZ, REINHARD L.M.H., NL

[73] RANPAK CORP., US

[85] 2018-04-19

[86] 2016-10-24 (PCT/US2016/058462)

[87] (WO2017/070670)

[30] US (62/245,648) 2015-10-23

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[11] **3,012,385**  
[13] C

[51] **Int.Cl. G01N 33/24 (2006.01) C10G 1/04 (2006.01)**  
[25] EN  
[54] **CONTROLLING BITUMEN RECOVERY FROM AN OIL SANDS ORE BODY BY USING A PREDICTIVE ORE PROCESSABILITY MODEL IN PRODUCING A BLENDED ORE FEEDSTOCK**  
[54] **REGULATION DE LA RECUPERATION DU BITUME DES GISEMENTS DE SABLES BITUMINEUX EN UTILISANT UN MODELE PREDICTIF PERMETTANT DE TRAITER DES MINERAUX EN PRODUISANT UNE MATIERE DE BASE DE MINERAUX MELANGES**  
[72] LONG, JUN, CA  
[72] SPENCE, JONATHAN, CA  
[72] WALLACE, DEAN, CA  
[72] HOSKINS, SHANE, CA  
[72] TA, CHUNG H., CA  
[72] MUELLER, DAVID, CA  
[72] PAREEK, PRIYANKA, CA  
[73] SYNCRUDE CANADA LTD. IN TRUST FOR THE OWNERS OF THE SYNCRUDE PROJECT, CA  
[86] (3012385)  
[87] (3012385)  
[22] 2018-07-25

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[11] **3,015,142**  
[13] C

[51] **Int.Cl. C01B 37/02 (2006.01) C01B 39/36 (2006.01) C01B 39/40 (2006.01) C07C 211/63 (2006.01)**  
[25] EN  
[54] **SMALL CRYSTAL, HIGH SURFACE AREA EMM-30 ZEOLITES, THEIR SYNTHESIS AND USE**  
[54] **ZEOLITHES EMM-30 A PETITS CRISTAUX ET SURFACE ELEVEE, LEUR SYNTHESE ET UTILISATION**  
[72] BURTON, ALLEN W., US  
[72] STROHMAIER, KARL G., US  
[72] AFEWORKI, MOBAAE, US  
[72] KLIEWER, CHRISTINE E., US  
[73] EXXONMOBIL RESEARCH AND ENGINEERING COMPANY, US  
[85] 2018-08-17  
[86] 2017-01-18 (PCT/US2017/013879)  
[87] (WO2017/142666)  
[30] US (62/297,181) 2016-02-19

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[11] **3,015,629**  
[13] C

[51] **Int.Cl. H05K 7/20 (2006.01)**  
[25] EN  
[54] **LINEAR AIR FLOW DISTRIBUTION FOR A COOLING SYSTEM**  
[54] **DISTRIBUTION DE FLUX D'AIR LINEAIRE POUR SYSTEME DE REFROIDISSEMENT**  
[72] BENCIVENGA, ERNEST, US  
[72] FILLIO, THOMAS D., US  
[73] ARRIS ENTERPRISES LLC, US  
[85] 2018-08-23  
[86] 2017-02-23 (PCT/US2017/019145)  
[87] (WO2017/147303)  
[30] US (62/298,632) 2016-02-23  
[30] US (15/440,728) 2017-02-23

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[11] **3,017,072**  
[13] C

[51] **Int.Cl. C21D 8/02 (2006.01) B21B 15/00 (2006.01) C21D 9/46 (2006.01) C21D 9/50 (2006.01)**  
[25] EN  
[54] **METHOD FOR MANUFACTURING COLD-ROLLED, WELDED STEEL SHEETS, AND SHEETS THUS PRODUCED**  
[54] **PROCEDE DE FABRICATION DE TOLES D'ACIERS LAMINEES A FROID ET SOUDEES, ET TOLES AINSI PRODUITES**  
[72] DECHASSEY, EMMANUEL, ES  
[72] SILVY LELIGOIS, CHRISTOPHE, ES  
[72] CHICHARRO HERRANZ, FRANCISCO, ES  
[72] POLO MESTRE, VICENTE, ES  
[72] THEYSSIER, MARIE-CHRISTINE, FR  
[72] CELOTTO, THIERRY, FR  
[72] KACZYNSKI, CHRISTINE, FI  
[72] DUPUY, THOMAS, FR  
[72] NGO, QUANG-TIEN, FR  
[73] ARCELORMITTAL, LU  
[85] 2018-09-07  
[86] 2017-02-27 (PCT/IB2017/000176)  
[87] (WO2017/163115)  
[30] IB (PCT/IB2016/000378) 2016-03-25

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[11] **3,018,723**  
[13] C

[51] **Int.Cl. H04N 21/2343 (2011.01) H04N 21/239 (2011.01) H04N 21/438 (2011.01) H04N 21/44 (2011.01) H04N 21/442 (2011.01) H04N 21/845 (2011.01) H04N 21/858 (2011.01) H04L 47/28 (2022.01) H04L 65/80 (2022.01)**  
[25] EN  
[54] **PLAYBACK SYNCHRONIZATION AMONG ADAPTIVE BITRATE STREAMING CLIENTS**  
[54] **SYNCHRONISATION DE LECTURE PARI MI DES CLIENTS DE DIFFUSION EN FLUX CONTINU DE DEBIT BINAIRE ADAPTATIF**  
[72] SUN, WENDELL, US  
[73] ARRIS ENTERPRISES LLC, US  
[85] 2018-09-21  
[86] 2017-03-10 (PCT/US2017/021793)  
[87] (WO2017/165130)  
[30] US (62/311,547) 2016-03-22  
[30] US (62/363,522) 2016-07-18  
[30] US (15/454,823) 2017-03-09

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[11] **3,019,140**  
[13] C

[51] **Int.Cl. A61F 7/00 (2006.01)**  
[25] EN  
[54] **INDIRECTLY COOLED CRYOTHERAPY APPARATUS**  
[54] **APPAREIL DE CRYOTHERAPIE A REFROIDISSEMENT INDIRECT**  
[72] TREMBLEY, JEAN-PHILIPPE, US  
[72] VIROUX, PATRICK, US  
[72] TIEMESSEN, IVO JOHANNES HENDRIKUS, US  
[73] AIR PRODUCTS AND CHEMICALS, INC., US  
[85] 2018-09-26  
[86] 2017-04-03 (PCT/US2017/025705)  
[87] (WO2017/176621)  
[30] US (62/317,953) 2016-04-04  
[30] US (62/453,670) 2017-02-02

**Canadian Patents Issued  
February 15, 2022**

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[11] **3,021,440**  
[13] C

[51] **Int.Cl. C09K 3/00 (2006.01) C09K 5/10 (2006.01) C09K 5/20 (2006.01)**  
[25] EN  
[54] **VISCOMETRIC PROPERTIES IMPROVER**  
[54] **AGENT D'AMELIORATION DES PROPRIETES VISCOMETRIQUES**  
[72] KAMENOUE, SHOGO, JP  
[73] KAO CORPORATION, JP  
[85] 2018-10-17  
[86] 2017-05-09 (PCT/JP2017/017512)  
[87] (WO2017/203967)  
[30] JP (2016-104190) 2016-05-25

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[11] **3,022,833**  
[13] C

[51] **Int.Cl. G01N 35/10 (2006.01) B01L 3/00 (2006.01) G01N 35/00 (2006.01)**  
[25] EN  
[54] **COMMON LINE SELECTOR VALVE FOR A SYSTEM**  
[54] **VANNE COMMUNE DE SELECTION DE CONDUITE POUR UN SYSTEME**  
[72] DREWS, BRADLEY KENT, US  
[73] ILLUMINA, INC., US  
[85] 2018-10-31  
[86] 2017-12-21 (PCT/US2017/067838)  
[87] (WO2018/128843)  
[30] US (62/442,677) 2017-01-05  
[30] GB (1704761.4) 2017-03-24  
[30] US (15/841,095) 2017-12-13

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[11] **3,024,518**  
[13] C

[51] **Int.Cl. A61K 35/545 (2015.01) A61K 35/30 (2015.01) A61P 1/00 (2006.01) A61P 11/00 (2006.01) A61P 21/00 (2006.01) A61P 25/00 (2006.01) A61P 25/02 (2006.01) A61P 25/08 (2006.01) A61P 25/14 (2006.01) A61P 25/18 (2006.01) A61P 25/28 (2006.01) C12N 5/0775 (2010.01)**  
[25] EN  
[54] **AMELIORATION AND TREATMENT OF PERINATAL BRAIN DAMAGE WITH PLURIPOTENT STEM CELLS**  
[54] **ATTENUATION ET TRAITEMENT DE LESIONS CEREBRALES PERINATALES AVEC DES CELLULES SOUCHES PLURIPOTENTES**  
[72] SATO, YOSHIKI, JP  
[72] SUZUKI, TOSHIHIKO, JP  
[72] SHIMIZU, SHINOBU, JP  
[72] MIZUNO, MASAOKI, JP  
[72] HAYAKAWA, MASAHIRO, JP  
[72] DEZAWA, MARI, JP  
[73] NATIONAL UNIVERSITY CORPORATION NAGOYA UNIVERSITY, JP  
[73] LIFE SCIENCE INSTITUTE, INC., JP  
[85] 2018-11-15  
[86] 2017-05-16 (PCT/JP2017/018416)  
[87] (WO2017/199976)  
[30] JP (2016-098186) 2016-05-16

---

[11] **3,026,933**  
[13] C

[51] **Int.Cl. H04N 21/633 (2011.01) H04N 21/234 (2011.01) H04N 21/643 (2011.01) H04L 12/12 (2006.01) H04L 27/34 (2006.01)**  
[25] EN  
[54] **ELASTIC SWITCHED DIGITAL VIDEO (SDV) TRAFFIC CONTROL WITH ADAPTIVE BIT RATE STREAMING**  
[54] **CONTROLE DE TRAFIC VIDEO NUMERIQUE COMMUTE ELASTIQUE A DIFFUSION EN CONTINU ADAPTATIVE DE DEBIT BINAIRE**  
[72] DUBREUIL, THOMAS L., US  
[72] HEIMAN, ROBERT S., US  
[73] ARRIS ENTERPRISES LLC, US  
[86] (3026933)  
[87] (3026933)  
[22] 2018-12-10  
[30] US (62/598,663) 2017-12-14

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[11] **3,027,376**  
[13] C

[51] **Int.Cl. A61B 17/128 (2006.01) A61B 17/08 (2006.01) A61B 17/10 (2006.01) A61B 17/122 (2006.01)**  
[25] EN  
[54] **SURGICAL CLIP AND CLIP MANIPULATION DEVICE THEREFOR**  
[54] **CLIP CHIRURGICAL ET DISPOSITIF DE MANIPULATION DE CLIP S'Y RAPPORTANT**  
[72] SOUTORINE, MIKHAIL, AU  
[72] CHERNOV-HARAEV, ARTEM NIKOLAEVICH, RU  
[72] PROKOSHKIN, SERGEI DMITRIEVICH, RU  
[72] RYKLINA, ELENA PROKOPIEVNA, RU  
[72] KHMELEVSKAYA, IRINA YURIEVNA, RU  
[72] KOROTITSKIY, ANDREY VICTOROVICH, RU  
[72] IPATKIN, ROUSLAN VALEREEVICH, RU  
[73] THE FEDERAL STATE AUTONOMOUS EDUCATIONAL INSTITUTION OF THE HIGHER PROFESSIONAL EDUCATION "NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY "MISIS", RU  
[73] GLOBETEK 2000 PTY LTD, AU  
[86] (3027376)  
[87] (3027376)  
[22] 2011-12-07  
[62] 2,856,747  
[30] RU (PCT/RU2010/000735) 2010-12-07

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**Brevets canadiens délivrés  
15 février 2022**

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[11] **3,027,679**  
[13] C

[51] **Int.Cl. G02B 6/44 (2006.01)**  
[25] EN  
[54] **OPTICAL FIBER CABLE**  
[54] **CABLE A FIBRE OPTIQUE**  
[72] ISAJI, MIZUKI, JP  
[72] OHNO, MASATOSHI, JP  
[72] SATO, SHINNOSUKE, JP  
[72] TOMIKAWA, KOUJI, JP  
[72] NAMAZUE, AKIRA, JP  
[72] OSATO, KEN, JP  
[72] NAKAGAWA, NAOKI, JP  
[72] AOYAGI, YUJI, JP  
[72] TETSUTANI, SHIGEKATSU, JP  
[73] FUJIKURA LTD., JP  
[73] NIPPON TELEGRAPH AND  
TELEPHONE CORPORATION, JP  
[85] 2018-12-13  
[86] 2017-07-31 (PCT/JP2017/027736)  
[87] (WO2018/025814)  
[30] JP (2016-153695) 2016-08-04

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[11] **3,028,703**  
[13] C

[51] **Int.Cl. G01C 21/20 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR  
PATH DETERMINATION**  
[54] **SYSTEME ET METHODES DE  
DETERMINATION DE PARCOURS**  
[72] WANG, YANLONG, CN  
[73] BEIJING VOYAGER TECHNOLOGY  
CO., LTD., CN  
[85] 2018-12-28  
[86] 2018-12-28 (PCT/CN2018/124540)  
[87] (WO2020/133118)  
[30] CN (201811615760.8) 2018-12-27

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[11] **3,029,371**  
[13] C

[51] **Int.Cl. A61M 5/20 (2006.01) A61M  
5/24 (2006.01) A61M 5/315 (2006.01)  
A61M 5/32 (2006.01) G10H 7/00  
(2006.01) G10L 13/00 (2006.01)**  
[25] EN  
[54] **DEVICES, SYSTEMS AND  
METHODS FOR MEDICAMENT  
DELIVERY**  
[54] **APPAREILS, SYSTEMES ET  
METHODES POUR  
ADMINISTRATION D'UN  
MEDICAMENT**  
[72] EDWARDS, ERIC SHAWN, US  
[72] EDWARDS, EVAN THOMAS, US  
[72] LICATA, MARK J., US  
[72] WEINZEIRL, DAVID A., US  
[72] MEYERS, PAUL F., US  
[72] WILLIAMSON, SPENCER T., US  
[72] WORRELL, KAI R., US  
[73] KALEO, INC., US  
[86] (3029371)  
[87] (3029371)  
[22] 2007-03-28  
[62] 2,905,774  
[30] US (60/787,046) 2006-03-29  
[30] US (11/621,236) 2007-01-09  
[30] US (11/671,025) 2007-02-05

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[11] **3,030,967**  
[13] C

[51] **Int.Cl. A61K 31/436 (2006.01) A61K  
31/407 (2006.01) A61K 31/4353  
(2006.01) A61K 31/519 (2006.01)  
A61K 31/55 (2006.01) A61K 31/675  
(2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **COMBINATION OF A BCL-2  
INHIBITOR AND A MCL-1 USES  
AND PHARMACEUTICAL  
COMPOSITIONS THEREOF**  
[54] **COMBINAISON D'UN  
INHIBITEUR DE BCL-2 ET D'UN  
INHIBITEUR DE MCL-1,  
UTILISATIONS ET  
COMPOSITIONS  
PHARMACEUTIQUES ASSOCIEES**  
[72] WEI, ANDREW, AU  
[72] MOUJALLED, DONIA, AU  
[72] POMILIO, GIOVANNA, AU  
[72] MARAGNO, ANA LETICIA, FR  
[72] GENESTE, OLIVIER, FR  
[72] CLAPERON, AUDREY, FR  
[72] MAACKKE, HEIKO, CH  
[72] HALILOVIC, ENSAR, US  
[72] PORTER, DALE, US  
[72] MORRIS, ERICK, US  
[72] WANG, YOUZHEN, US  
[72] SANGHAVI, SNEHA, US  
[72] MISTRY, PRAKASH, CH  
[73] LES LABORATOIRES SERVIER, FR  
[73] NOVARTIS AG, CH  
[85] 2019-01-15  
[86] 2017-07-21 (PCT/EP2017/068453)  
[87] (WO2018/015526)  
[30] EP (16180918.1) 2016-07-22  
[30] EP (16306420.7) 2016-10-28  
[30] US (62/464,554) 2017-02-28  
[30] US (62/517,252) 2017-06-09

**Canadian Patents Issued  
February 15, 2022**

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[11] **3,031,768**  
[13] C

[51] **Int.Cl. D06L 1/02 (2006.01) C11D 17/04 (2006.01)**  
[25] EN  
[54] **DRYER SHEETS COMPRISING BRANCHED POLYESTER POLYMERS**  
[54] **ASSOUPLEISSANT EN FEUILLE RENFERMANT DES POLYMERES DE POLYESTER RAMIFIES**  
[72] PANANDIKER, RAJAN KESHAV, US  
[72] KLUESENER, BERNARD WILLIAM, US  
[72] DORIA, HEATHER ANNE, US  
[73] THE PROCTER & GAMBLE COMPANY, US  
[86] (3031768)  
[87] (3031768)  
[22] 2019-01-29  
[30] US (62/623,034) 2018-01-29  
[30] US (62/675,823) 2018-05-24

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[11] **3,033,129**  
[13] C

[51] **Int.Cl. A01K 97/01 (2006.01)**  
[25] EN  
[54] **ICE FISHING TRAP**  
[54] **PIEGE DE PECHE BLANCHE**  
[72] DRESCH, JAMES V., US  
[73] DRESCH, JAMES V., US  
[86] (3033129)  
[87] (3033129)  
[22] 2019-02-07  
[30] US (15932089) 2018-02-08

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[11] **3,036,555**  
[13] C

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/145 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR DETERMINING A CARBOHYDRATE INTAKE EVENT FROM GLUCOSE MONITORING DATA INDICATIVE OF A GLUCOSE LEVEL, AND A NON-TRANSITORY COMPUTER READABLE MEDIUM**  
[54] **PROCEDE ET SYSTEME POUR DETERMINER UN EVENEMENT D'ABSORPTION DE GLUCIDE A PARTIR DE DONNEES DE SURVEILLANCE DE GLUCOSE INDIQUANT UN TAUX DE GLUCOSE, ET SUPPORT LISIBLE PAR ORDINAT EUR NON TRANSITOIRE**  
[72] REICHEL, ANDREAS, DE  
[72] WIESNER, TOBIAS, DE  
[72] STEIGER, BERND, DE  
[73] F. HOFFMANN-LA ROCHE AG, CH  
[85] 2019-03-11  
[86] 2017-09-29 (PCT/EP2017/074774)  
[87] (WO2018/060424)  
[30] EP (16191724.0) 2016-09-30

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[11] **3,036,889**  
[13] C

[51] **Int.Cl. A61K 47/00 (2006.01) A61K 47/68 (2017.01) A61K 47/10 (2017.01) A61K 47/36 (2006.01)**  
[25] EN  
[54] **LONG ACTING MULTI-SPECIFIC MOLECULES AND RELATED METHODS**  
[54] **MOLECULES MULTI-SPECIFIQUES A ACTION PROLONGEE ET PROCEDES ASSOCIES**  
[72] LIU, SHU-MIN, US  
[72] WU, DECHUN, US  
[73] SHENZHEN ENDURING BIOTECH, LTD., CN  
[85] 2019-03-13  
[86] 2017-10-11 (PCT/US2017/056118)  
[87] (WO2018/075308)  
[30] US (62/408,865) 2016-10-17

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[11] **3,037,033**  
[13] C

[51] **Int.Cl. F16K 11/00 (2006.01) F16K 11/18 (2006.01) F16K 31/60 (2006.01)**  
[25] EN  
[54] **FAUCET HANDLE HUB**  
[54] **MOYEU DE POIGNEE DE ROBINET**  
[72] MANGA, JOSEPH, US  
[73] BRASSTECH, INC., US  
[86] (3037033)  
[87] (3037033)  
[22] 2019-03-18  
[30] US (16/283,386) 2019-02-22

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[11] **3,038,606**  
[13] C

[51] **Int.Cl. H04N 21/472 (2011.01) H04N 21/431 (2011.01) H04N 21/482 (2011.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR NAVIGATING PROGRAM LISTINGS IN A MEDIA GUIDANCE APPLICATION**  
[54] **SYSTEMES ET PROCEDES DE NAVIGATION DANS DES LISTES DE PROGRAMMES DANS UNE APPLICATION DE GUIDAGE MULTIMEDIA**  
[72] SINHA, GAURAV, US  
[72] ARAI, CHINA, US  
[72] CONNESS, JASON, US  
[72] PETERSON, BRIAN, US  
[73] ROVI GUIDES, INC., US  
[86] (3038606)  
[87] (3038606)  
[22] 2010-10-07  
[62] 2,780,557  
[30] US (61/288123) 2009-12-18  
[30] US (12/773204) 2010-05-04  
[30] US (12/773205) 2010-05-04

**Brevets canadiens délivrés  
15 février 2022**

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[11] **3,038,610**  
[13] C

[51] **Int.Cl. C08J 11/10 (2006.01) C08J 11/24 (2006.01) C08L 67/02 (2006.01)**

[25] EN

[54] **ENZYMATIC PROCESS FOR DEPOLYMERIZATION OF POST-CONSUMER POLY(ETHYLENE TEREPHTHALATE) BY A GLYCOLYSIS REACTION, PROCESS FOR RECYCLING POST-CONSUMER POLY(ETHYLENE TEREPHTHALATE) AND RECYCLED POLY(ETHYLENE TEREPHTHALATE)**

[54] **PROCEDE ENZYMATIQUE POUR LA DEPOLYMERISATION DE POLY(TEREPHTALATE D'ETHYLENE) POSTCONSOMMATION PAR UNE REACTION DE GLYCOLYSE, PROCEDE DE RECYCLAGE DE POLY(TEREPHTALATE D'ETHYLENE) POSTCONSOMMATION ET POLY(TEREPHTALATE D'ETHYLENE) RECYCLE**

[72] DE CASTRO, ALINE MACHADO, BR

[72] DE OLIVEIRA, ADRIANO CARNIEL, BR

[72] VALONI, ERIKA DE ARAUJO, BR

[72] TEIXEIRA, DANIELLE ALTOMARI, BR

[72] DA MOTTA, CESAR REZENDE, BR

[73] PETROLEO BRASILEIRO S.A. - PETROBRAS, BR

[85] 2019-03-27

[86] 2017-09-14 (PCT/GB2017/052719)

[87] (WO2019/053392)

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[11] **3,039,663**  
[13] C

[51] **Int.Cl. H04N 19/119 (2014.01) H04N 19/176 (2014.01) H04N 19/186 (2014.01) H04N 19/44 (2014.01) H04N 19/463 (2014.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR ENCODING/DECODING IMAGE**

[54] **PROCEDE ET APPAREIL DE CODAGE/DECODAGE D'IMAGE**

[72] MIN, JUNG-HYE, KR

[72] PARK, MIN-WOO, KR

[72] JIN, BO-RA, KR

[72] KIM, CHAN-YUL, KR

[73] SAMSUNG ELECTRONICS CO., LTD., KR

[85] 2019-04-05

[86] 2016-10-10 (PCT/KR2016/011299)

[87] (WO2018/070552)

---

[11] **3,043,814**  
[13] C

[51] **Int.Cl. C12N 1/20 (2006.01) A01N 1/02 (2006.01) C12P 19/04 (2006.01)**

[25] EN

[54] **CRYOPROTECTIVE AGENT CONTAINING EXOPOLYSACCHARIDE FROM PSEUDOALTEROMONAS SP. CY01**

[54] **AGENT CRYOPROTECTEUR CONTENANT UN EXOPOLYSACCHARIDE ISSU DE PSEUDOALTEROMONAS SP. CY01**

[72] YIM, JOUNG HAN, KR

[72] KIM, IL-CHAN, KR

[72] HAN, SE JONG, KR

[72] YOUN, UI JOUNG, KR

[72] LEE, HONG KUM, KR

[72] KIM, SUNG JIN, KR

[72] KANG, PIL-SUNG, KR

[72] KIM, JUNG EUN, KR

[72] KIM, TAI KYOUNG, KR

[72] PARK, HA JU, KR

[72] SONG, JIN HAENG, KR

[72] KIM, MIN JU, KR

[72] HONG, JU MI, KR

[72] JO, DONG-GYU, KR

[73] ALTEROBIOTECH INC., KR

[85] 2019-05-14

[86] 2017-12-18 (PCT/KR2017/014909)

[87] (WO2018/207988)

[30] KR (10-2017-0058701) 2017-05-11

[30] US (15/836,138) 2017-12-08

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[11] **3,043,837**  
[13] C

[51] **Int.Cl. B29C 48/885 (2019.01) B29C 49/64 (2006.01)**

[25] EN

[54] **COOLING DEVICE WITH A COOLING GAS RING AND A FLOW GUIDING DEVICE**

[54] **DISPOSITIF DE REFROIDISSEMENT A ANNEAU DE GAZ DE REFROIDISSEMENT ET DISPOSITIF DE GUIDAGE D'ECOULEMENT**

[72] ZIMMERMANN, RICHARD, DE

[72] FAHLING, GERD, DE

[73] KDESIGN GMBH, DE

[86] (3043837)

[87] (3043837)

[22] 2019-05-21

[30] EP (18173543.2) 2018-05-22

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[11] **3,044,760**  
[13] C

[51] **Int.Cl. E01F 13/00 (2006.01)**

[25] EN

[54] **TEMPORARY BARRIER SYSTEM**

[54] **SYSTEME DE BARRIERE TEMPORAIRE**

[72] FOSTER, ROY A., CA

[73] FOSTER, ROY A., CA

[86] (3044760)

[87] (3044760)

[22] 2019-05-30

[30] US (16424350) 2019-05-28

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[11] **3,045,581**  
[13] C

[51] **Int.Cl. E04C 3/38 (2006.01) E04B 1/18 (2006.01) E04B 1/38 (2006.01) E04B 1/98 (2006.01) E04C 5/16 (2006.01) F16B 1/00 (2006.01)**

[25] EN

[54] **METHOD OF FORMING A CURVED BRACE**

[54] **METHODE DE FORMATION D'UN CONTREVENT COURBE**

[72] FOX, SAMUEL, US

[73] FOX HARDWOOD LUMBER COMPANY, L.L.C., US

[86] (3045581)

[87] (3045581)

[22] 2019-06-07

[30] US (16/433,129) 2019-06-06

**Canadian Patents Issued  
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[11] **3,045,861**  
[13] C

[51] **Int.Cl. A45F 5/02 (2006.01) A41D 13/00 (2006.01) A41D 13/015 (2006.01) A41D 13/05 (2006.01) A63B 71/12 (2006.01) F41H 1/02 (2006.01)**

[25] EN

[54] **FLEXIBLE MATERIAL WITH RADIAL MOLLE CUT PATTERN**

[54] **MATERIAU SOUPLE AYANT UN MODELE DE COUPE DE L'EQUIPEMENT MOU RADIAL**

[72] LEMARBE, RANDALL JERED, US

[73] POINT BLANK ENTERPRISES, INC., US

[86] (3045861)

[87] (3045861)

[22] 2019-06-12

[30] US (16/023,976) 2018-06-29

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[11] **3,048,418**  
[13] C

[51] **Int.Cl. C25B 15/08 (2006.01) A61K 33/00 (2006.01)**

[25] EN

[54] **ION-EXCHANGE MEMBRANE ELECTROLYSIS DEVICE**

[54] **APPAREIL D'ELECTROLYSE A MEMBRANE ECHANGEUSE D'IONS**

[72] LIN, HSIN-YUNG, CN

[73] LIN, HSIN-YUNG, CN

[86] (3048418)

[87] (3048418)

[22] 2019-07-03

[30] CN (201810752166.7) 2018-07-10

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[11] **3,051,871**  
[13] C

[51] **Int.Cl. B01D 53/047 (2006.01)**

[25] EN

[54] **IMPROVED CARBON MOLECULAR SIEVE ADSORBENT**

[54] **ADSORBANT DE TYPE TAMIS MOLECULAIRE CARBONE AMELIORE**

[72] WHITLEY, ROGER DEAN, US

[72] BHADRA, SHUBHRA JYOTI, US

[72] ARSLAN, ERDEM, US

[72] CAO, YONG, CN

[72] GOLDEN, TIMOTHY CHRISTOPHER, FR

[73] AIR PRODUCTS AND CHEMICALS, INC., US

[86] (3051871)

[87] (3051871)

[22] 2019-08-12

[30] US (16/103,115) 2018-08-14

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[11] **3,052,144**  
[13] C

[51] **Int.Cl. A47C 17/86 (2006.01) A47C 4/02 (2006.01) A47C 7/62 (2006.01) A47C 17/02 (2006.01) F16B 12/00 (2006.01)**

[25] EN

[54] **MODULAR SOFA CONSTRUCTION AND METHODS FOR ASSEMBLY**

[54] **STRUCTURE DE CANAPE MODULAIRE ET SES PROCEDES D'ASSEMBLAGE**

[72] KUHL, STEPHEN, US

[72] CHOPRA, KABEER, US

[72] AMICK, LEAH K.S., US

[72] KOH, PAUL, US

[72] KUBO, ALEX, US

[73] BURROW, INC., US

[85] 2019-07-30

[86] 2018-01-25 (PCT/US2018/015198)

[87] (WO2018/140582)

[30] US (15/419,957) 2017-01-30

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[11] **3,053,118**  
[13] C

[51] **Int.Cl. A61B 17/00 (2006.01) A61B 17/12 (2006.01)**

[25] EN

[54] **SEALING DEVICE AND DELIVERY SYSTEM**

[54] **DISPOSITIF D'ETANCHEITE ET SYSTEME DE POSE**

[72] BROWN, TYLER J., US

[72] HUA, KHOA, US

[72] NELSON, DEVIN M., US

[72] RUST, KEITH O., US

[73] W. L. GORE & ASSOCIATES, INC., US

[86] (3053118)

[87] (3053118)

[22] 2015-06-05

[62] 2,949,111

[30] US (62/009,026) 2014-06-06

[30] US (14/731,205) 2015-06-04

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[11] **3,053,313**  
[13] C

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

[25] EN

[54] **METHOD FOR SUPERSEDING LOG-IN OF USER THROUGH PKI-BASED AUTHENTICATION BY USING SMART CONTACT AND BLOCKCHAIN DATABASE, AND SERVER EMPLOYING SAME**

[54] **PROCEDE DE REMPLACEMENT D'OUVERTURE DE SESSION D'UTILISATEUR PAR L'INTERMEDIAIRE D'UNE AUTHENTICATION BASEE SUR PKI A L'AIDE DE CONTRAT INTELLIGENT ET DE BASE DE DONNEES DE CHAINE DE BLOCS, ET SERVEUR L'UTILISANT**

[72] RA, SEUNG IL, KR

[72] KIM, HEE SOON, KR

[72] HONG, JAY WU, KR

[72] UHR, JOON SUN, KR

[73] COINPLUG, INC., KR

[85] 2019-08-12

[86] 2018-01-19 (PCT/KR2018/000914)

[87] (WO2018/151427)

[30] KR (10-2017-0019772) 2017-02-14

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[11] **3,053,870**  
[13] C

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

[25] EN

[54] **FLEXIBLE LITHIUM BATTERY**

[54] **BATTERIE AU LITHIUM SOUPLE**

[72] YANG, SZU-NAN, CN

[73] PROLOGIUM TECHNOLOGY CO., LTD., CN

[73] PROLOGIUM HOLDING INC., KY

[85] 2019-08-16

[86] 2018-08-15 (PCT/CN2018/100673)

[87] (WO2019/062368)

[30] CN (201710908081.9) 2017-09-29

**Brevets canadiens délivrés  
15 février 2022**

[11] **3,055,508**

[13] C

- [51] **Int.Cl. A41C 3/12 (2006.01)**  
[25] EN  
[54] **BRASSIERE**  
[54] **SOUTIEN-GORGE**  
[72] TSUTSUI, KOUTA, JP  
[72] DEGUCHI, JUNKO, JP  
[72] KINOUCI, HIROYUKI, JP  
[73] ASAHI KASEI KABUSHIKI KAISHA, JP  
[85] 2019-09-05  
[86] 2018-03-13 (PCT/JP2018/009800)  
[87] (WO2018/168875)  
[30] JP (2017-047539) 2017-03-13

[11] **3,055,647**

[13] C

- [51] **Int.Cl. G06Q 20/40 (2012.01)**  
[25] EN  
[54] **PAYMENT SYSTEM BASED ON SHARED FUNDS-MANAGEMENT SERVER, AND METHOD, DEVICE AND SERVER THEREFOR**  
[54] **SYSTEME DE PAIEMENT BASE SUR UN SERVEUR PARTAGE DE GESTION DE FONDS, ET PROCEDE, DISPOSITIF ET SERVEUR ASSOCIES**  
[72] ZHANG, YI, CN  
[73] 10353744 CANADA LTD., CA  
[86] (3055647)  
[87] (3055647)  
[22] 2015-05-28  
[62] 2,988,439  
[30] CN (201510219344.6) 2015-04-30

[11] **3,055,816**

[13] C

- [51] **Int.Cl. G02B 27/64 (2006.01) G02B 13/00 (2006.01) H04N 5/232 (2006.01)**  
[25] EN  
[54] **MULTI-APERTURE IMAGING DEVICE, IMAGING SYSTEM AND METHOD FOR MAKING AVAILABLE A MULTI-APERTURE IMAGING DEVICE**  
[54] **DISPOSITIF DE REPRODUCTION MULTIOUVERTURE, SYSTEME DE REPRODUCTION ET PROCEDE DE FOURNITURE D'UN DISPOSITIF DE REPRODUCTION MULTI-OUVERTURE**  
[72] WIPPERMANN, FRANK, DE  
[72] DUPARRE, JACQUES, DE  
[73] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2019-09-09  
[86] 2018-03-01 (PCT/EP2018/054997)  
[87] (WO2018/162304)  
[30] DE (10 2017 204 035.1) 2017-03-10

[11] **3,056,162**

[13] C

- [51] **Int.Cl. H04W 28/20 (2009.01) H04W 72/04 (2009.01)**  
[25] EN  
[54] **TRANSMISSION BANDWIDTH CONFIGURATION METHOD AND TRANSMISSION NODE**  
[54] **PROCEDE DE CONFIGURATION DE BANDES PASSANTES DE TRANSMISSION ET NŒUD DE TRANSMISSION**  
[72] XIN, YU, CN  
[72] ZHOU, WUBIN, CN  
[73] ZTE CORPORATION, CN  
[85] 2019-09-11  
[86] 2017-10-19 (PCT/CN2017/106918)  
[87] (WO2018/082450)  
[30] CN (201610963740.4) 2016-11-04

[11] **3,058,338**

[13] C

- [51] **Int.Cl. B64G 1/28 (2006.01)**  
[25] EN  
[54] **SATELLITE ATTITUDE CONTROL SYSTEM USING EIGEN VECTOR, NON-LINEAR DYNAMIC INVERSION, AND FEEDFORWARD CONTROL**  
[54] **SYSTEME DE COMMANDE DE L'ATTITUDE D'UN SATELLITE UTILISANT UN VECTEUR PROPRE, UNE INVERSION DYNAMIQUE NON LINEAIRE ET UNE COMMANDE PREDICTIVE**  
[72] DERRICK, JOHN BENTON, II, US  
[73] GENERAL ATOMICS, US  
[86] (3058338)  
[87] (3058338)  
[22] 2019-10-09  
[30] US (16/170,157) 2018-10-25

[11] **3,058,351**

[13] C

- [51] **Int.Cl. E21B 41/00 (2006.01) E21B 33/12 (2006.01) E21B 34/06 (2006.01)**  
[25] EN  
[54] **DOWNHOLE TOOLS HAVING CONTROLLED DEGRADATION AND METHOD**  
[54] **OUTILS DE FOND DE TROU A DEGRADATION CONTROLEE ET PROCEDE**  
[72] ZHANG, ZHIHUI, US  
[72] XU, ZHIYUE, US  
[72] SHYU, GOANG-DING, US  
[72] PEREZ, JUAN CARLOS FLORES, US  
[72] DOANE, JAMES, US  
[72] XU, YINGQING, US  
[73] BAKER HUGHES HOLDINGS LLC, US  
[85] 2019-09-27  
[86] 2017-11-17 (PCT/US2017/062292)  
[87] (WO2018/182796)  
[30] US (15/472,382) 2017-03-29  
[30] US (15/599,128) 2017-05-18

**Canadian Patents Issued  
February 15, 2022**

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[11] **3,058,809**  
[13] C

[51] **Int.Cl. B63C 11/16 (2006.01)**  
[25] FR  
[54] **DIVING MASK HAVING A BODY PROVIDED WITH AN EXHALED AIR EXHAUST DEVICE COMPRISING A NON-RETURN VALVE**  
[54] **MASQUE DE PLONGEE AYANT UN CORPS MUNI D'UN DISPOSITIF D'ECHAPPEMENT D'AIR EXPIRE COMPORTANT UNE VALVE ANTI-RETOUR**  
[72] SORIGUE, QUENTIN, FR  
[72] VANDAMME, JONATHAN, FR  
[73] DECATHLON, FR  
[85] 2019-10-01  
[86] 2018-03-30 (PCT/FR2018/050815)  
[87] (WO2018/185416)  
[30] FR (1752871) 2017-04-03

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[11] **3,060,033**  
[13] C

[51] **Int.Cl. H04N 19/117 (2014.01) H04N 19/105 (2014.01) H04N 19/11 (2014.01) H04N 19/176 (2014.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR PERFORMING IMAGE DECODING ON BASIS OF INTRA PREDICTION IN IMAGE CODING SYSTEM**  
[54] **PROCEDE ET DISPOSITIF DE REALISATION DE DECODAGE D'IMAGE BASE SUR UNE INTRAPREDICTION DANS UN SYSTEME DE CODAGE D'IMAGE**  
[72] YOO, SUNMI, KR  
[72] LEE, JAEHO, KR  
[72] CHOI, JANGWON, KR  
[72] SEO, JUNG DONG, KR  
[72] HEO, JIN, KR  
[73] LG ELECTRONICS INC., KR  
[85] 2019-10-15  
[86] 2018-01-05 (PCT/KR2018/000226)  
[87] (WO2018/221817)  
[30] US (62/512,737) 2017-05-31

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[11] **3,060,140**  
[13] C

[51] **Int.Cl. G01N 33/542 (2006.01) C08B 37/02 (2006.01) G01N 33/66 (2006.01)**  
[25] EN  
[54] **USING A BLUE-SHIFTED REFERENCE DYE IN AN OPTICAL GLUCOSE ASSAY**  
[54] **UTILISATION D'UN COLORANT DE REFERENCE DECALE VERS LE BLEU DANS UN DOSAGE OPTIQUE DU GLUCOSE**  
[72] AASMUL, SOREN, DK  
[72] SVENNING KRISTENSEN, JESPER, DK  
[73] MEDTRONIC MINIMED, INC., US  
[85] 2019-10-15  
[86] 2018-04-27 (PCT/US2018/029823)  
[87] (WO2018/200973)  
[30] US (15/581,540) 2017-04-28

---

[11] **3,062,005**  
[13] C

[51] **Int.Cl. A61K 47/34 (2017.01) A61K 9/10 (2006.01) A61K 33/00 (2006.01) A61P 17/02 (2006.01) A61P 17/10 (2006.01) C08J 3/09 (2006.01) C08L 83/04 (2006.01)**  
[25] EN  
[54] **TOPICAL GELS COMPRISING NITRIC OXIDE-RELEASING POLYSILOXANE MACROMOLECULES AND USES THEREOF**  
[54] **GELS TOPIQUES RENFERMANT DE L'OXYDE NITRIQUE LIBERANT DES MACROMOLECULESDE POLYSILOXANEGELS LEURS UTILISATIONS**  
[72] STASKO, NATHAN, US  
[72] BAUMAN, SUSANNE, US  
[72] JOSHI, PRANAV R., US  
[73] NOVAN, INC., US  
[86] (3062005)  
[87] (3062005)  
[22] 2010-08-20  
[62] 2,771,308  
[30] US (61/235,933) 2009-08-21

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[11] **3,062,019**  
[13] C

[51] **Int.Cl. F21S 4/28 (2016.01) F21K 9/00 (2016.01) H05B 45/10 (2020.01) H05B 47/115 (2020.01) F21V 23/00 (2015.01)**  
[25] EN  
[54] **LOW VOLTAGE LED UNDER CABINET LIGHT BAR**  
[54] **ECLAIRAGE A DEL BASSE TENSION SOUS LES ARMOIRES**  
[72] DANVILLE, DENNIS, US  
[72] BARRETT, BRIAN THOMAS, CN  
[72] BLANCHETTE, GARY, US  
[73] AMAX INCORPORATED, US  
[86] (3062019)  
[87] (3062019)  
[22] 2019-11-18  
[30] US (16/198.586) 2018-11-21

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[11] **3,063,197**  
[13] C

[51] **Int.Cl. H01Q 1/24 (2006.01) H01Q 9/26 (2006.01) H01Q 21/00 (2006.01) H01Q 21/26 (2006.01)**  
[25] EN  
[54] **DUAL-POLARIZED RADIATING ELEMENT AND ANTENNA**  
[54] **ELEMENT RAYONNANT A DOUBLE POLARISATION ET ANTENNE**  
[72] SEGADOR ALVAREZ, JUAN, DE  
[72] TANG, TAO, DE  
[72] BISCONTINI, BRUNO, DE  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2019-11-01  
[86] 2017-05-04 (PCT/EP2017/060689)  
[87] (WO2018/202304)

**Brevets canadiens délivrés  
15 février 2022**

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[11] **3,064,024**  
[13] C

[51] **Int.Cl. C25D 5/16 (2006.01) C23C 28/00 (2006.01) C25D 5/18 (2006.01) C25D 5/26 (2006.01) C25D 7/00 (2006.01) C25D 11/38 (2006.01)**

[25] EN

[54] **STEEL SHEET FOR CANS, AND PRODUCTION METHOD THEREFOR**

[54] **TOLE D'ACIER POUR BOITES METALLIQUES ET PROCEDE DE PRODUCTION ASSOCIE**

[72] NAKAGAWA, YUSUKE, JP  
[72] SUZUKI, TAKESHI, JP  
[72] SUTO, MIKITO, JP  
[72] KOJIMA, KATSUMI, JP  
[72] BABA, YUYA, JP  
[72] SOU, HANYOU, JP  
[72] YAMANAKA, YOICHIRO, JP  
[72] TOKUI, SHUNSUKE, JP  
[73] JFE STEEL CORPORATION, JP  
[85] 2019-11-18  
[86] 2018-06-05 (PCT/JP2018/021548)  
[87] (WO2018/225726)  
[30] JP (2017-114531) 2017-06-09

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[11] **3,064,731**  
[13] C

[51] **Int.Cl. C25D 5/16 (2006.01) C23C 28/00 (2006.01) C25D 5/18 (2006.01) C25D 5/26 (2006.01) C25D 7/00 (2006.01) C25D 11/38 (2006.01)**

[25] EN

[54] **STEEL SHEET FOR CANS, AND PRODUCTION METHOD THEREFOR**

[54] **TOLE D'ACIER DESTINEE A DES CANETTES ET PROCEDE DE PRODUCTION S'Y RAPPORTANT**

[72] NAKAGAWA, YUSUKE, JP  
[72] SUZUKI, TAKESHI, JP  
[72] SUTO, MIKITO, JP  
[72] KOJIMA, KATSUMI, JP  
[72] BABA, YUYA, JP  
[72] SOU, HANYOU, JP  
[72] YAMANAKA, YOICHIRO, JP  
[72] TOKUI, SHUNSUKE, JP  
[73] JFE STEEL CORPORATION, JP  
[85] 2019-11-22  
[86] 2018-06-05 (PCT/JP2018/021570)  
[87] (WO2018/225739)  
[30] JP (2017-114530) 2017-06-09

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[11] **3,065,240**  
[13] C

[51] **Int.Cl. A61K 9/70 (2006.01) A61K 31/27 (2006.01) A61P 25/16 (2006.01) A61P 25/28 (2006.01)**

[25] EN

[54] **TRANSDERMAL THERAPEUTIC SYSTEM FOR ADMINISTERING AN ACTIVE SUBSTANCE**

[54] **SYSTEME THERAPEUTIQUE TRANSDERMIQUE POUR L'ADMINISTRATION D'UN PRINCIPE ACTIF**

[72] LANGER, BRITTA, DE  
[72] SCHURAD, BJOERN, DE  
[72] PRINZ, HEIKE, DE  
[73] LUYE PHARMA AG, DE  
[86] (3065240)  
[87] (3065240)  
[22] 2011-12-14  
[62] 2,817,461  
[30] EP (10194968.3) 2010-12-14

---

[11] **3,066,590**  
[13] C

[51] **Int.Cl. E06B 1/70 (2006.01)**

[25] EN

[54] **SILL SYSTEMS FOR SLIDING FENESTRATION UNITS**

[54] **SYSTEMES DE SEUIL POUR MODULES DE FENETRAGE COULISSANTS**

[72] ANDERSON, HOWARD C., US  
[72] BREUER, ANDY, US  
[72] MORSE, ANDREW, US  
[72] RITZERT, JOSEPH A., US  
[72] SCHRODER, PAUL D., US  
[72] VOS, JADEN P., US  
[73] PELLA CORPORATION, US  
[86] (3066590)  
[87] (3066590)  
[22] 2020-01-06  
[30] US (62/791,447) 2019-01-11

---

[11] **3,068,965**  
[13] C

[51] **Int.Cl. A61F 5/00 (2006.01)**

[25] EN

[54] **STOMACH LINING PATCH WITH CENTRAL FIXATION**

[54] **PATCH DE MUQUEUSE D'ESTOMAC AVEC FIXATION CENTRALE**

[72] ZHANG, JI, US  
[72] ESKAROS, SHERIF A., US  
[72] MOONEY, NATHAN K., US  
[73] W. L. GORE & ASSOCIATES, INC., US  
[85] 2020-01-03  
[86] 2017-07-07 (PCT/US2017/041066)  
[87] (WO2019/009917)

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[11] **3,071,868**  
[13] C

[51] **Int.Cl. C22C 38/02 (2006.01) C22C 38/04 (2006.01)**

[25] EN

[54] **USE OF A Q&P STEEL FOR PRODUCING A SHAPED COMPONENT FOR HIGH-WEAR APPLICATIONS**

[54] **UTILISATION D'UN ACIER TREMPE ET REVENU (Q&P) POUR LA FABRICATION D'UN ELEMENT MIS EN FORME POUR DES APPLICATIONS A HAUTE USURE**

[72] KOLBE, NINA, DE  
[72] KUHN, PATRICK, DE  
[72] LATUSKE, CLEMENS, DE  
[72] THIESSEN, RICHARD GEORG, NL  
[73] THYSSENKRUPP STEEL EUROPE AG, DE  
[73] THYSSENKRUPP AG, DE  
[85] 2020-02-03  
[86] 2017-08-22 (PCT/EP2017/071147)  
[87] (WO2019/037838)

**Canadian Patents Issued  
February 15, 2022**

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[11] **3,074,402**  
[13] C

[51] **Int.Cl. H04W 74/02 (2009.01)**  
[25] EN  
[54] **CONTROL FLOW  
ENHANCEMENTS FOR LTE-  
UNLICENSED**  
[54] **AMELIORATIONS DE FLUX DE  
COMMANDE POUR LTE SANS  
LICENCE**  
[72] YERRAMALLI, SRINIVAS, US  
[72] LUO, TAO, US  
[72] DAMNJANOVIC, ALEKSANDAR,  
US  
[72] CHEN, WANSHI, US  
[72] GAAL, PETER, US  
[73] QUALCOMM INCORPORATED, US  
[86] (3074402)  
[87] (3074402)  
[22] 2016-05-10  
[62] 2,981,985  
[30] US (62/165,814) 2015-05-22  
[30] US (15/149,752) 2016-05-09

---

[11] **3,074,971**  
[13] C

[51] **Int.Cl. B07B 1/00 (2006.01) B07B  
15/00 (2006.01)**  
[25] EN  
[54] **A MOBILE SCREENING  
APPARATUS**  
[54] **APPAREIL DE CRIBLAGE  
MOBILE**  
[72] ANDERSON, JOHN, AU  
[73] AAA SCREENS PTY LTD, AU  
[86] (3074971)  
[87] (3074971)  
[22] 2013-03-11  
[62] 2,903,563  
[30] AU (2012900959) 2012-03-09

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[11] **3,075,369**  
[13] C

[51] **Int.Cl. B26B 27/00 (2006.01) B26F  
1/24 (2006.01)**  
[25] EN  
[54] **BAG CUTTER AND PIERCER**  
[54] **COUPE-SACS ET DISPOSITIF DE  
PERCAGE DE SACS**  
[72] VOTOLATO, EARL, US  
[73] SPELLBOUND DEVELOPMENT  
GROUP, INC., US  
[73] SPELLBOUND DEVELOPMENT  
GROUP, INC., US  
[86] (3075369)  
[87] (3075369)  
[22] 2013-07-10  
[62] 2,820,690  
[30] US (13/546,212) 2012-07-11  
[30] US (13/653,920) 2012-10-17

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[11] **3,077,993**  
[13] C

[51] **Int.Cl. G01N 29/44 (2006.01) G01N  
29/04 (2006.01) G01S 15/88 (2006.01)  
G01N 29/30 (2006.01)**  
[25] EN  
[54] **METHOD FOR PRIORITIZING  
DATA PROCESSING OF A  
PLURALITY OF ULTRASONIC  
SCAN DATA FILES**  
[54] **METHODE POUR ETABLIR LA  
PRIORITE DU TRAITEMENT DES  
DONNEES D'UNE MAJORITE DE  
FICHIERS DE DONNEES DE  
BALAYAGE ULTRASONIQUE**  
[72] DAVIS, JOHN MARK, US  
[72] COBBS, ARCHIBALD LEACH, US  
[72] HANSEN, CHARLES ALLAN, US  
[72] BUBLITZ, NICHOLAS JAMES, US  
[72] DAVIS, SAMUEL MATTHEW, US  
[73] VERIPHASE, INC., US  
[85] 2020-03-27  
[86] 2019-05-18 (PCT/US2019/033011)  
[87] (WO2020/204968)  
[30] US (16/375,611) 2019-04-04  
[30] US (16/402,715) 2019-05-03

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[11] **3,081,228**  
[13] C

[51] **Int.Cl. G01N 33/52 (2006.01) C12Q  
1/48 (2006.01) G01N 33/53 (2006.01)**  
[25] EN  
[54] **ASSAY BUFFER, COMPOSITIONS  
CONTAINING THE SAME, AND  
METHODS OF USING THE SAME**  
[54] **TAMPON DE DOSAGE,  
COMPOSITIONS CONTENANT CE  
TAMPON ET PROCEDES  
D'UTILISATION  
CORRESPONDANTS**  
[72] TSIONSKY, MICHAEL, US  
[72] GLEZER, ELI N., US  
[72] ALTUNATA, SELEN, US  
[72] SIGAL, GEORGE, US  
[72] LELAND, JONATHAN K., US  
[72] BILLADEAU, MARK A., US  
[72] LEYTNER, SVETLANA, US  
[72] MARTIN, MARK, US  
[72] HELMS, LARRY, US  
[73] MESO SCALE TECHNOLOGIES,  
LLC, US  
[86] (3081228)  
[87] (3081228)  
[22] 2002-09-10  
[62] 2,932,756  
[30] US (60/318,289) 2001-09-10  
[30] US (60/363,498) 2002-03-11

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[11] **3,086,601**  
[13] C

[51] **Int.Cl. H04W 16/04 (2009.01)**  
[25] EN  
[54] **RADIO ACCESS NETWORK SLICE**  
[54] **TRANCHE DE RESEAU D'ACCES  
RADIO**  
[72] LAUSTER, REINHARD, AT  
[73] DEUTSCHE TELEKOM AG, DE  
[85] 2020-06-22  
[86] 2018-10-24 (PCT/EP2018/079187)  
[87] (WO2019/120695)  
[30] EP (17210124.8) 2017-12-22

**Brevets canadiens délivrés  
15 février 2022**

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[11] **3,087,312**  
[13] C

[51] **Int.Cl. G01N 21/87 (2006.01) G01N 21/88 (2006.01)**  
[25] EN  
[54] **DIAMOND CLARITY MEASUREMENT PROCESS AND SYSTEM**  
[54] **PROCEDE ET SYSTEME DE MESURE DE CLARTE DE DIAMANT**  
[72] CHENG, KA WING, CN  
[72] WONG, KIN WING, CN  
[72] CHAN, KONG, CN  
[72] CHENG, JUAN, CN  
[72] TANG, WING CHI, CN  
[72] HUI, KOON CHUNG, CN  
[73] GOLDWAY TECHNOLOGY LIMITED, CN  
[85] 2020-06-29  
[86] 2018-12-28 (PCT/CN2018/125051)  
[87] (WO2019/129238)  
[30] HK (17113980.6) 2017-12-29

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[11] **3,087,746**  
[13] C

[51] **Int.Cl. G01N 22/00 (2006.01) F03D 80/40 (2016.01) B64D 15/20 (2006.01) G01N 22/04 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR DETECTING ICE FORMATION ON A SURFACE USING RESONANT SENSORS**  
[54] **METHODE ET APPAREIL POUR DETECTER LA FORMATION DE GLACE SUR UNE SURFACE A L'AIDE DE CAPTEURS RESONANTS**  
[72] GOLOVIN, KEVIN, CA  
[72] ZARIFI, MOHAMMAD, CA  
[72] WILTSHIRE, BENJAMIN, CA  
[72] MIRSHAHIDI, KIANA, CA  
[72] KOZAK, RYAN, CA  
[73] THE UNIVERSITY OF BRITISH COLUMBIA, CA  
[86] (3087746)  
[87] (3087746)  
[22] 2020-07-23  
[30] US (62/877,399) 2019-07-23

---

[11] **3,099,033**  
[13] C

[51] **Int.Cl. E04H 15/00 (2006.01) E04H 15/48 (2006.01)**  
[25] EN  
[54] **CUSTOMIZABLE TENTING SYSTEM**  
[54] **SYSTEME DE MONTAGE DE TENTE PERSONNALISABLE**  
[72] WISEMAN, JAMES JOHN, US  
[73] WISEMAN, JAMES JOHN, US  
[85] 2020-10-30  
[86] 2019-05-06 (PCT/US2019/030967)  
[87] (WO2019/213670)  
[30] US (62/666,817) 2018-05-04

---

[11] **3,101,121**  
[13] C

[51] **Int.Cl. B29C 64/153 (2017.01)**  
[25] EN  
[54] **THREE-DIMENSIONAL SHAPING METHOD AND THREE-DIMENSIONAL SHAPING APPARATUS**  
[54] **PROCEDE DE FORMAGE TRIDIMENSIONNEL ET APPAREIL DE FORMAGE TRIDIMENSIONNEL**  
[72] AMAYA, KOICHI, JP  
[72] YOSHIDA, MITSUYOSHI, JP  
[72] TOMITA, SEIICHI, JP  
[72] SASAKI, SHOTA, JP  
[73] MATSUURA MACHINERY CORPORATION, JP  
[85] 2020-11-26  
[86] 2020-05-19 (PCT/JP2020/019712)  
[87] (WO2021/079548)  
[30] JP (2019-192192) 2019-10-21

---

[11] **3,101,634**  
[13] C

[51] **Int.Cl. G06Q 10/08 (2012.01) G06Q 50/28 (2012.01)**  
[25] EN  
[54] **LOGISTICS VERIFICATION SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE DE VERIFICATION LOGISTIQUE**  
[72] ZHANG, YI, CN  
[73] 10353744 CANADA LTD., CA  
[86] (3101634)  
[87] (3101634)  
[22] 2014-09-12  
[62] 3,075,380

---

[11] **3,104,447**  
[13] C

[51] **Int.Cl. C22C 23/04 (2006.01) A61L 27/04 (2006.01) A61L 29/02 (2006.01)**  
[25] EN  
[54] **MAGNESIUM ALLOY**  
[54] **ALLIAGE DE MAGNESIUM**  
[72] UEDA, HIRONORI, JP  
[72] INOUE, MASASHI, JP  
[72] SASAKI, MAKOTO, JP  
[73] JAPAN MEDICAL DEVICE TECHNOLOGY CO., LTD., JP  
[85] 2020-12-18  
[86] 2018-07-09 (PCT/JP2018/025869)  
[87] (WO2020/012529)

---

[11] **3,108,854**  
[13] C

[51] **Int.Cl. C12N 5/00 (2006.01) A61K 31/409 (2006.01) A61K 51/04 (2006.01)**  
[25] EN  
[54] **COMPOSITION OF A BILIRUBIN STOCK AND A METHOD OF PREPARATION THEREOF**  
[54] **COMPOSITION D'UNE MATIERE PREMIERE DE BILIRUBINE ET SON PROCEDE DE PREPARATION**  
[72] GALGALKAR, SUDIPA, IN  
[72] CHAKRABORTY, ISHITA, IN  
[72] MS, RAGAVENDAR, IN  
[72] LEDDEN, DAVID, US  
[73] SIEMENS HEALTHCARE DIAGNOSTICS INC., US  
[85] 2021-02-05  
[86] 2019-07-31 (PCT/US2019/044359)  
[87] (WO2020/033200)  
[30] US (62/716,557) 2018-08-09

---

[11] **3,111,747**  
[13] C

[51] **Int.Cl. G06Q 50/30 (2012.01) H04W 4/024 (2018.01) H04W 4/029 (2018.01) H04W 64/00 (2009.01)**  
[25] EN  
[54] **TRANSPORT COORDINATION SYSTEM**  
[54] **SYSTEME DE COORDINATION DE TRANSPORT**  
[72] GORMLEY, GREG, GB  
[73] SKOOT RIDE.COM LTD, GB  
[86] (3111747)  
[87] (3111747)  
[22] 2021-03-10  
[30] US (16/819810) 2020-03-16

**Canadian Patents Issued  
February 15, 2022**

---

[11] **3,114,546**  
[13] C

[51] **Int.Cl. E21B 29/06 (2006.01) E21B 7/04 (2006.01) E21B 29/08 (2006.01) E21B 34/06 (2006.01) E21B 43/17 (2006.01)**

[25] EN

[54] **METHOD OF CONTROLLING A WELL**

[54] **PROCEDE DE REGULATION D'UN Puits**

[72] ROSS, SHAUN COMPTON, GB

[72] JARVIS, LESLIE DAVID, GB

[73] METROL TECHNOLOGY LIMITED, GB

[85] 2021-03-26

[86] 2018-09-18 (PCT/GB2018/052658)

[87] (WO2019/063972)

[30] GB (1715584.7) 2017-09-26

---

[11] **3,115,002**  
[13] C

[51] **Int.Cl. H01R 4/10 (2006.01) H01R 4/18 (2006.01) H01R 43/048 (2006.01)**

[25] EN

[54] **CONNECTORS FOR FLEXIBLE BUSBAR AND METHODS OF CONNECTING**

[54] **CONNECTEURS POUR BARRE OMNIBUS SOUPLE ET PROCEDES DE CONNEXION**

[72] CASTONGUAY, KEVIN NORMAND, US

[72] TROMBLEY, LOGAN MICHAEL, US

[72] MONTIMINY, ARMAND THOMAS, US

[72] ROBICHEAU, RICHARD E., US

[73] HUBBELL INCORPORATED, US

[86] (3115002)

[87] (3115002)

[22] 2016-03-21

[62] 2,980,304

[30] US (62/137,130) 2015-03-23

---

[11] **3,115,685**  
[13] C

[51] **Int.Cl. F16L 59/12 (2006.01) F16L 59/14 (2006.01)**

[25] EN

[54] **A PIPE INSULATION SPACER SYSTEM**

[54] **SYSTEME D'ENTRETOISE D'ISOLATION DE CONDUITE**

[72] BRIGHAM, GRAHAM, CA

[73] INTEGRITY PRODUCTS AND SUPPLIES INC., CA

[86] (3115685)

[87] (3115685)

[22] 2021-04-21

---

[11] **3,116,714**  
[13] C

[51] **Int.Cl. E01F 15/10 (2006.01)**

[25] EN

[54] **MOBILE TRAFFIC BARRIER**

[54] **BARRIERE DE CIRCULATION MOBILE**

[72] POWELL, BENJAMIN FRASER, CA

[72] GHUMAN, MOHAMMAD TAIHA, CA

[72] ALBERSON, DEAN CLINTON, US

[73] VANDORF MB1 INC., CA

[85] 2021-03-29

[86] 2019-10-07 (PCT/IB2019/001112)

[87] (WO2020/070556)

[30] US (62/741,602) 2018-10-05

[30] US (16/595,323) 2019-10-07

---

[11] **3,125,705**  
[13] C

[51] **Int.Cl. G06F 9/44 (2018.01)**

[25] EN

[54] **CONTROLLING TASKS PERFORMED BY A COMPUTING SYSTEM**

[54] **CONTROLE DE TACHES EXECUTEES PAR UN SYSTEME INFORMATIQUE**

[72] STANFILL, CRAIG W., US

[73] AB INITIO TECHNOLOGY LLC, US

[86] (3125705)

[87] (3125705)

[22] 2014-04-23

[62] 2,909,748

[30] US (61/815,052) 2013-04-23

---

[11] **3,134,158**  
[13] C

[51] **Int.Cl. A01G 20/00 (2018.01) A01G 20/10 (2018.01) A01G 20/12 (2018.01) A01G 20/15 (2018.01) A01B 76/00 (2006.01)**

[25] EN

[54] **SOD ROLL STACKING HEAD**

[54] **TETE D'EMPILEMENT DE ROULEAUX DE GAZON**

[72] APOSHIAN, STEVEN, US

[72] ASTON, ERIC, US

[72] DECKER, WILLIAM, US

[72] JEPSON, SETH, US

[72] LEBLANC, MARK, US

[72] NEUNER, AUSTIN, US

[73] FIREFLY AUTOMATIX, INC., US

[85] 2021-10-08

[86] 2020-04-08 (PCT/US2020/027130)

[87] (WO2020/210271)

[30] US (16/379,251) 2019-04-09

---

[11] **3,137,156**  
[13] C

[51] **Int.Cl. E04H 9/02 (2006.01) E04B 1/30 (2006.01) E04B 1/36 (2006.01)**

[25] EN

[54] **STRUCTURAL BRACE CORE HAVING A CUTOUT PATTERN**

[54] **NOYAU DE PIECE DE CONTREVENTEMENT DE STRUCTURE AYANT UN MOTIF DE DECOUPE**

[72] SAXEY, BRANDT, US

[73] COREBRACE, LLC, US

[85] 2021-10-18

[86] 2020-04-23 (PCT/US2020/029454)

[87] (WO2020/219633)

[30] US (16/392,956) 2019-04-24

# Canadian Applications Open to Public Inspection

January 30, 2022 to February 5, 2022

## Demandes canadiennes mises à la disponibilité du public

30 janvier 2022 au 5 février 2022

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[21] **3,088,629**  
[13] A1  
[51] **Int.Cl. A43C 15/02 (2006.01)**  
[25] EN  
[54] **MID-SOLE TRACTION DEVICE**  
[54] **DISPOSITIF D'ADHERENCE DE**  
**SEMELLE INTERMEDIAIRE**  
[72] DENTE, CLAUDIO, CA  
[71] DENTEC SAFETY SPECIALISTS  
INC., CA  
[22] 2020-07-31  
[41] 2022-01-31

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[21] **3,088,632**  
[13] A1  
[51] **Int.Cl. A63B 67/06 (2006.01) A63B**  
**63/00 (2006.01) A63B 71/02 (2006.01)**  
[25] EN  
[54] **GAME PLAYING APPARATUS**  
[54] **APPAREIL DE JEU**  
[72] CHARITY, RICK, CA  
[71] CHARITY, RICK, CA  
[22] 2020-07-31  
[41] 2022-01-31  
[30] US (16/944,670) 2020-07-31

---

[21] **3,088,637**  
[13] A1  
[51] **Int.Cl. A43C 15/04 (2006.01)**  
[25] EN  
[54] **HEEL TRACTION DEVICE**  
[54] **DISPOSITIF D'ADHERENCE DE**  
**TALON**  
[72] DENTE, CLAUDIO, CA  
[71] DENTEC SAFETY SPECIALISTS  
INC., CA  
[22] 2020-07-31  
[41] 2022-01-31

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[21] **3,088,639**  
[13] A1  
[51] **Int.Cl. E04B 2/82 (2006.01) A47F 5/10**  
**(2006.01) E04B 2/74 (2006.01) E06B**  
**9/04 (2006.01) F16S 1/02 (2006.01)**  
**G09F 1/12 (2006.01)**  
[25] EN  
[54] **MODULAR FRAME SYSTEM FOR**  
**TRADE SHOWS**  
[54] **SYSTEME MODULAIRE DE**  
**CADRE POUR SALONS**  
**PROFESSIONNELS**  
[72] TIAN, GUOXUAN, CA  
[71] JADE DISPLAYS INTERNATIONAL  
CORP., CA  
[22] 2020-07-31  
[41] 2022-01-31

---

[21] **3,088,664**  
[13] A1  
[51] **Int.Cl. G06Q 40/02 (2012.01)**  
[25] EN  
[54] **QUICKBOOKS ONLINE**  
**DIAGNOSTICS TOOL**  
[54] **OUTIL DE DIAGNOSTIC EN**  
**LIGNE QUICKBOOKS**  
[72] BUHRMANN, LOUIS, CA  
[71] BUHRMANN, LOUIS, CA  
[22] 2020-08-01  
[41] 2022-02-01

---

[21] **3,088,665**  
[13] A1  
[51] **Int.Cl. F24T 50/00 (2018.01) E21B**  
**7/00 (2006.01) E21B 43/30 (2006.01)**  
**F01K 13/00 (2006.01) F01K 25/00**  
**(2006.01) F03G 4/00 (2006.01)**  
[25] EN  
[54] **A PROCESS FOR PRODUCING**  
**CLEAN ENERGY FROM**  
**HYDROCARBON RESERVOIRS**  
[54] **PROCEDE DE PRODUCTION**  
**D'ENERGIE PROPRE A PARTIR**  
**DE RESERVOIRS**  
**D'HYDROCARBURES**  
[72] AIKMAN, MICHAEL JOHN LUNDIN,  
CA  
[71] TRINDADE RESERVOIR SERVICES  
INC., CA  
[22] 2020-07-31  
[41] 2022-01-31

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[21] **3,088,666**  
[13] A1  
[51] **Int.Cl. G01S 17/89 (2020.01) G01S**  
**7/4911 (2020.01) G01S 15/89 (2006.01)**  
[25] EN  
[54] **INTERNAL LAYER**  
**ILLUMINATION METHOD AND**  
**APPARATUS FOR IMAGING AND**  
**DETECTION IN TURBID MEDIA**  
[54] **METHODE D'ILLUMINATION DE**  
**COUCHE INTERNE ET APPAREIL**  
**D'IMAGERIE ET DE DETECTION**  
**DANS UNE SUBSTANCE**  
**TROUBLE**  
[72] LIU, SHANGQING, CA  
[71] LIU, SHANGQING, CA  
[22] 2020-08-01  
[41] 2022-02-01

**Canadian Applications Open to Public Inspection  
January 30, 2022 to February 5, 2022**

[21] **3,088,670**  
[13] A1

[51] **Int.Cl. A01N 65/20 (2009.01) A01N 65/08 (2009.01) A01N 65/42 (2009.01) A01N 25/02 (2006.01) A01P 3/00 (2006.01)**

[25] EN

[54] **BROAD SPECTRUM ORGANIC FUNGICIDE & BACTERICIDE**

[54] **FONGICIDE ET BACTERICIDE ORGANIQUES A SPECTRE LARGE**

[72] SANTOSH KUMAR, ALBERT, IN

[71] ECOLUTION.AG LLC, US

[22] 2020-07-31

[41] 2022-01-31

[21] **3,088,877**  
[13] A1

[51] **Int.Cl. F03G 7/10 (2006.01) H02J 15/00 (2006.01) H02K 7/18 (2006.01)**

[25] EN

[54] **A GENERATOR**

[54] **GENERATRICE**

[72] COSGROVE, SEAN, CA

[71] COSGROVE, SEAN, CA

[22] 2020-08-04

[41] 2022-02-04

[21] **3,089,017**  
[13] A1

[51] **Int.Cl. A63F 13/822 (2014.01) A63F 13/332 (2014.01)**

[25] EN

[54] **MURDER MYSTERY DINNER PARTY MOBILE APP GAME**

[54] **APPLICATION MOBILE DE JEU DE MEURTRE-MYSTERE A UN SOUPER-RECEPTION**

[72] EUTENEIER, JALYN, CA

[71] EUTENEIER, JALYN, CA

[22] 2020-08-05

[41] 2022-02-05

[21] **3,089,030**  
[13] A1

[51] **Int.Cl. B01D 46/44 (2006.01) B01D 47/02 (2006.01)**

[25] EN

[54] **AIR PURIFYING VENT SYSTEM**

[54] **SYSTEME D'EVENT D'EPURATION DE L'AIR**

[72] GRANT, ROHAN C. O., CA

[71] GRANT, ROHAN C. O., CA

[22] 2020-08-05

[41] 2022-02-02

[30] US (16/945,902) 2020-08-02

[21] **3,089,035**  
[13] A1

[51] **Int.Cl. A63F 1/00 (2006.01) A63F 1/02 (2006.01) A63F 1/18 (2006.01)**

[25] EN

[54] **HOCKEY CARD GAME**

[54] **JEU DE CARTES DE HOCKEY**

[72] COMMANDA, ROBERT J., CA

[71] COMMANDA, ROBERT J., CA

[22] 2020-08-05

[41] 2022-02-02

[30] US (16/945,899) 2020-08-02

[21] **3,089,043**  
[13] A1

[51] **Int.Cl. A45D 97/00 (2011.01)**

[25] EN

[54] **CYLINDER HAIR STRETCH DEVICE**

[54] **DISPOSITIF D'ETIREMENT DES CHEVEUX CYLINDRIQUE**

[72] CHAMBERS, TERRY, CA

[71] CHAMBERS, TERRY, CA

[22] 2020-08-05

[41] 2022-02-05

[21] **3,089,081**  
[13] A1

[51] **Int.Cl. F16K 17/08 (2006.01) A01G 25/00 (2006.01)**

[25] EN

[54] **PRESSURE ACTUATED VALVES AND METHODS OF USE**

[54] **SOUPAPES A COMMANDE HYDRAULIQUE ET METHODES D'UTILISATION**

[72] MALCOLM, DAVID B., US

[71] MALCO, LLC, US

[22] 2020-08-05

[41] 2022-02-05

[21] **3,089,463**  
[13] A1

[51] **Int.Cl. A63C 1/30 (2006.01) A43B 5/16 (2006.01) A63B 69/00 (2006.01)**

[25] EN

[54] **OFF-ICE TRAINING BLADE AND SKATE**

[54] **PATIN ET LAME DE PATIN D'ENTRAINEMENT HORS GLACE**

[72] RIOU, KELLY, CA

[72] DRAGAN, ZENON, CA

[72] FURMAN, CORY, CA

[71] RIOU, KELLY, CA

[22] 2020-08-05

[41] 2022-02-05

[21] **3,089,504**  
[13] A1

[51] **Int.Cl. E04B 2/74 (2006.01) A47B 41/00 (2006.01)**

[25] EN

[54] **SOCIAL DISTANCING COLUMNAR CUBICLE SYSTEM**

[54] **SYSTEME DE CUBICULE A COLONNES POUR L'ELOIGNEMENT SOCIAL**

[72] JOLIE, JOE, CA

[71] FENOVATION LIMITED, CA

[22] 2020-08-05

[41] 2022-02-05

[21] **3,089,601**  
[13] A1

[51] **Int.Cl. A23L 29/20 (2016.01) A23L 5/10 (2016.01) A23L 23/00 (2016.01) A23L 29/00 (2016.01)**

[25] EN

[54] **VISCOUS SAUCE SUITABLE FOR PRESSURE COOKER**

[54] **SAUCE VISQUEUSE ADAPTEE A L'AUTOCUISEUR**

[72] LARSON, TRAVIS A., US

[72] MCPHERSON, ANDREW, US

[72] TOPINKA, JOHN B., US

[72] PETERSON, KATHERINE ANN, US

[72] SCHMIDT, GAVIN M., US

[72] BELICIU, COSMIN, US

[72] HOWELER, MICHAEL, US

[72] ANDREWS, MICHAEL, US

[71] KRAFT FOODS GROUP BRANDS LLC, US

[22] 2020-08-10

[41] 2022-02-05

[30] US (16/985899) 2020-08-05

[21] **3,091,069**  
[13] A1

[51] **Int.Cl. A61L 2/10 (2006.01) A61L 2/24 (2006.01)**

[25] EN

[54] **AUTOMATED MOBILE ROBOT WITH UVC LIGHTS FOR DISINFECTING A FACILITY**

[54] **ROBOT MOBILE AUTOMATISE AVEC LUMIERES A ULTRAVIOLET C POUR LA DESINFECTION D'UNE INSTALLATION**

[72] DREFFS, DAVID, US

[72] DOW, ROBERT, US

[71] BOTLEY LLC, US

[22] 2020-08-25

[41] 2022-01-31

[30] US (63/059,834) 2020-07-31

**Demandes canadiennes mises à la disponibilité du public**  
**30 janvier 2022 au 5 février 2022**

[21] **3,092,664**  
[13] A1

[51] **Int.Cl. G09F 9/33 (2006.01) G09F 7/18 (2006.01)**  
[25] EN  
[54] **MAGNETIC AUTO-POSITIONING LED STRIP SYSTEM**  
[54] **SYSTEME DE BANDE DE DEL A POSITIONNEMENT AUTOMATIQUE MAGNETIQUE**  
[72] HUANG, MING, CA  
[71] HUANG, MING, CA  
[22] 2020-10-20  
[41] 2022-02-01

[21] **3,092,973**  
[13] A1

[51] **Int.Cl. A21C 15/00 (2006.01) A23P 20/20 (2016.01) A21D 13/32 (2017.01) A47J 37/06 (2006.01)**  
[25] EN  
[54] **SANDWICH MAKER**  
[54] **GRILLE-SANDWICH**  
[72] WANG, FEI-CHEN, TW  
[72] CHANG, I-TING, TW  
[72] HUANG, SHYH-HARN, TW  
[71] PRESIDENT CHAIN STORE CORP., CN  
[22] 2020-09-11  
[41] 2022-02-04  
[30] TW (109210077) 2020-08-04

[21] **3,097,533**  
[13] A1

[51] **Int.Cl. C22C 18/04 (2006.01) C22C 1/02 (2006.01) C22C 1/06 (2006.01)**  
[25] EN  
[54] **ZINC ALLOY AND MANUFACTURING METHOD THEREOF**  
[54] **ALLIAGE DE ZINC ET METHODE DE FABRICATION CONNEXE**  
[72] XU, CHUANKAI, CN  
[72] HU, ZHENQING, CN  
[71] LOTA XIAMEN INDUSTRY CO. LTD., CN  
[71] XIAMEN LOTA INTERNATIONAL CO., LTD., CN  
[22] 2020-10-30  
[41] 2022-02-05  
[30] CN (202010776657.2) 2020-08-05

[21] **3,102,734**  
[13] A1

[51] **Int.Cl. G06Q 50/16 (2012.01) G06N 20/00 (2019.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR DERIVING RATING FOR PROPERTIES**  
[54] **SYSTEMES ET METHODES DE DERIVATION DE COTES POUR DES CARACTERISTIQUES**  
[72] DHANDAPANI, CHANDRA, US  
[72] CHINOY, SOHIN, US  
[72] BHATNAGAR, AVNEESH, US  
[72] POLAVARAPU, SHARAT, US  
[71] CBRE, INC., US  
[22] 2020-12-16  
[41] 2022-01-31  
[30] US (16/944,982) 2020-07-31

[21] **3,105,845**  
[13] A1

[51] **Int.Cl. A63B 69/00 (2006.01) A43B 5/16 (2006.01) A63C 1/32 (2006.01)**  
[25] EN  
[54] **OFF-ICE TRAINING BLADE AND SKATE**  
[54] **PATIN ET LAME DE PATIN D'ENTRAINEMENT HORS GLACE**  
[72] RIOU, KELLY, CA  
[72] DRAGAN, ZENON, CA  
[72] FURMAN, CORY, CA  
[71] ALEIN KINETICS TECHNOLOGIES INC., CA  
[22] 2021-01-14  
[41] 2022-02-05  
[30] CA (3089463) 2020-08-05

[21] **3,107,297**  
[13] A1

[51] **Int.Cl. G06F 16/90 (2019.01) G06F 21/60 (2013.01)**  
[25] EN  
[54] **DATA PROTECTION QUERY INTERFACE**  
[54] **INTERFACE DE RECHERCHE A PROTECTION DES DONNEES**  
[72] JONES, DANIEL D., US  
[71] MX TECHNOLOGIES, INC., US  
[22] 2021-01-28  
[41] 2022-01-31  
[30] US (63/059,877) 2020-07-31  
[30] US (17/145,272) 2021-01-08

[21] **3,109,293**  
[13] A1

[51] **Int.Cl. A47J 36/12 (2006.01)**  
[25] EN  
[54] **COOKWARE SET WITH LID SUPPORT**  
[54] **BATTERIE DE CUISINE AVEC SUPPORT POUR COUVERCLE**  
[72] RAJASEKARAN, MOHAN, US  
[71] E. MISHAN & SONS, INC., US  
[22] 2021-02-17  
[41] 2022-01-31  
[30] US (16/873,668) 2020-07-31

[21] **3,110,944**  
[13] A1

[51] **Int.Cl. E21B 43/34 (2006.01) B01D 21/30 (2006.01)**  
[25] EN  
[54] **AUTOMATED SAND SEPARATOR DISCHARGE SYSTEM**  
[54] **SYSTEME DE DECHARGE AUTOMATIQUE DE SABLE D'UN SEPARATEUR DE SABLE**  
[72] PITCHER, JASON LEO, US  
[71] BATFER INVESTMENT S.A., UY  
[22] 2021-03-02  
[41] 2022-02-04  
[30] US (16/984,976) 2020-08-04

[21] **3,112,088**  
[13] A1

[51] **Int.Cl. A47B 13/00 (2006.01) G16H 50/80 (2018.01) A47B 9/00 (2006.01) A47B 21/013 (2006.01) G06Q 10/00 (2012.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR MITIGATING TRANSMISSION OF A CONTAGIOUS INFECTION WITHIN A SHARED WORKSPACE**  
[54] **METHODES ET SYSTEMES POUR ATTENUER LA TRANSMISSION D'UNE INFECTION CONTAGIEUSE DANS UN MILIEU DE TRAVAIL PARTAGE**  
[72] DESROCHES, LEON, CA  
[71] DESROCHES, LEON, CA  
[22] 2021-03-12  
[41] 2022-01-31  
[30] US (63/059,351) 2020-07-31

**Canadian Applications Open to Public Inspection  
January 30, 2022 to February 5, 2022**

[21] **3,112,603**  
[13] A1

[51] **Int.Cl. H02B 1/03 (2006.01) H02B 1/46 (2006.01)**  
[25] EN  
[54] **INSULATING BLOCK CONFIGURED FOR TOOL-FREE INSTALLATION IN AN ELECTRICAL ASSEMBLY**  
[54] **BLOC D'ISOLATION CONFIGURE POUR UNE INSTALLATION SANS OUTIL DANS UN MONTAGE ELECTRIQUE**  
[72] HRENCHIR, EMILY, US  
[72] HAGEN, BRIAN, US  
[72] LEACH, DOUG, US  
[72] MCCARTHY, WILLIAM, US  
[71] MILBANK MANUFACTURING CO., US  
[22] 2021-03-18  
[41] 2022-01-31  
[30] US (16/945033) 2020-07-31

[21] **3,112,663**  
[13] A1

[51] **Int.Cl. A01N 65/20 (2009.01) A01N 65/42 (2009.01) A23L 19/00 (2016.01) A01N 25/30 (2006.01) A01P 3/00 (2006.01) A23B 7/154 (2006.01) A23L 3/3472 (2006.01)**  
[25] EN  
[54] **NOVEL ORGANIC FUNGICIDE**  
[54] **NOUVEAU FONGICIDE ORGANIQUE**  
[72] SANTOSH KUMAR, ALBERT, IN  
[71] ECOLUTION.AG LLC, US  
[22] 2021-03-19  
[41] 2022-01-31  
[30] CA (3,088,670) 2020-07-31

[21] **3,112,669**  
[13] A1

[51] **Int.Cl. A01N 65/20 (2009.01) A01N 65/42 (2009.01) A23L 19/00 (2016.01) A23L 33/105 (2016.01) A01N 25/30 (2006.01) A01P 3/00 (2006.01) A23L 3/3472 (2006.01)**  
[25] EN  
[54] **NOVEL ORGANIC FUNGICIDE FOR USE AGAINST FUSARIUM WILT**  
[54] **NOUVEAU FONGICIDE ORGANIQUE CONTRE LA FUSARIOSE**  
[72] SANTOSH KUMAR, ALBERT, IN  
[71] ECOLUTION.AG LLC, US  
[22] 2021-03-19  
[41] 2022-01-31  
[30] US (3,088,670) 2020-07-31

[21] **3,112,688**  
[13] A1

[51] **Int.Cl. H04W 24/00 (2009.01) H04W 28/18 (2009.01) G05B 99/00 (2006.01)**  
[25] EN  
[54] **WIRELESS HUB EMULATOR**  
[54] **EMULATEUR DE POSTE D'ACCUEIL SANS FIL**  
[72] SANDERS, ALAN DAVID, US  
[71] ABL IP HOLDING LLC, US  
[22] 2021-03-19  
[41] 2022-02-04  
[30] US (16/984,252) 2020-08-04

[21] **3,114,527**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2012.01) A47G 29/14 (2006.01) A47G 29/30 (2006.01) E05G 1/02 (2006.01) E05G 1/06 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR PARCEL TRANSPORT AND TRACKING OPERATED RESPONSIVE TO DATA BEARING RECORDS**  
[54] **SYSTEME DE TRANSPORT DE COLIS ET SUIVI EXPLOITE EN REPONSE A DES DOSSIERS CONTENANT DES DONNEES**  
[72] ESTILL, JIM, CA  
[72] REDFERN, DARREN, CA  
[71] SHIPPERBEE, INC., CA  
[22] 2021-04-09  
[41] 2022-02-05  
[30] US (63/061,476) 2020-08-05

[21] **3,114,982**  
[13] A1

[51] **Int.Cl. A43C 15/02 (2006.01)**  
[25] EN  
[54] **MID-SOLE TRACTION DEVICE**  
[54] **DISPOSITIF D'ADHERENCE DE SEMELLE INTERMEDIAIRE**  
[72] DENTE, CLAUDIO, CA  
[71] DENTEC SAFETY SPECIALISTS INC., CA  
[22] 2021-04-14  
[41] 2022-01-31  
[30] CA (3,088,629) 2020-07-31

[21] **3,120,623**  
[13] A1

[51] **Int.Cl. A42B 3/18 (2006.01) A41D 13/05 (2006.01)**  
[25] EN  
[54] **FACE SHIELD SYSTEMS FOR SECURING REMOVABLE FACE SHIELD LENSES**  
[54] **SYSTEMES D'ECRAN FACIAL POUR ATTACHER DES LENTILLES AMOVIBLES D'ECRAN FACIAL**  
[72] HUH, MOON, US  
[72] MUSKE, MITCHELL, US  
[71] ILLINOIS TOOL WORKS, INC., US  
[22] 2021-06-02  
[41] 2022-01-30  
[30] US (16/943,438) 2020-07-30

[21] **3,121,540**  
[13] A1

[51] **Int.Cl. G06F 16/95 (2019.01) G06F 40/20 (2020.01) G06Q 30/00 (2012.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR SUGGESTING ALTERNATIVE PHRASES FOR TEXT-BASED WEB CONTENT**  
[54] **METHODES ET SYSTEMES POUR PROPOSER DES PHRASES DE REMPLACEMENT A L'EGARD DE CONTENU WEB EN FORMAT TEXTE**  
[72] WICHMAN, ERIC, CA  
[71] SHOPIFY INC., CA  
[22] 2021-06-08  
[41] 2022-01-30  
[30] US (16/943,051) 2020-07-30

[21] **3,121,772**  
[13] A1

[51] **Int.Cl. G01S 15/89 (2006.01) G01S 7/536 (2006.01) G01S 15/96 (2006.01)**  
[25] EN  
[54] **BEAMFORMING SONAR SYSTEM WITH IMPROVED SONAR IMAGE FUNCTIONALITY AND ASSOCIATED METHODS**  
[54] **SYSTEME SONAR A FORMATION DE FAISCEAUX PRESENTANT UNE FONCTION D'IMAGE SONAR AMELIOREE ET METHODES CONNEXES**  
[72] PROCTOR, ALAN LEE, US  
[71] NAVICO HOLDING AS, NO  
[22] 2021-06-10  
[41] 2022-01-31  
[30] US (16/944,186) 2020-07-31

**Demandes canadiennes mises à la disponibilité du public  
30 janvier 2022 au 5 février 2022**

[21] **3,123,077**  
[13] A1

[51] **Int.Cl. A61F 9/06 (2006.01) A42B 3/04 (2006.01) A42B 3/18 (2006.01) A42B 3/20 (2006.01) A42B 3/22 (2006.01) B23K 9/32 (2006.01)**

[25] EN

[54] **SMART WELDING HELMET MODULES WITH ADAPTABLE HELMET DEVICES**

[54] **MODULES DE CASQUE DE SOUDEUR INTELLIGENTS AVEC DISPOSITIFS AJUSTABLES POUR CASQUE**

[72] BECKER, WILLIAM JOSHUA, US

[72] MUSKE, MITCHELL JAMES, US

[72] RAPPL, JAMES FRANCIS, US

[71] ILLINOIS TOOL WORKS INC., US

[22] 2021-06-22

[41] 2022-01-31

[30] US (63/059,575) 2020-07-31

[30] US (63/125,097) 2020-12-14

[30] US (17/340,380) 2021-06-07

[21] **3,123,288**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2012.01) G06Q 10/10 (2012.01) G06F 16/955 (2019.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR OBTAINING INFORMATION FROM A DIGITAL MESSAGE**

[54] **SYSTEMES ET METHODES POUR OBTENIR DES RENSEIGNEMENTS D'UN MESSAGE NUMERIQUE**

[72] MANGGALA, PUTRA, CA

[72] OLSSON, VERA, CA

[72] VLASENKO, ANTON, CA

[71] SHOPIFY INC., CA

[22] 2021-06-25

[41] 2022-01-30

[30] US (16/943029) 2020-07-30

[30] EP (21173653.3) 2021-05-12

[21] **3,123,556**  
[13] A1

[51] **Int.Cl. F17C 5/02 (2006.01) B67D 7/08 (2010.01)**

[25] EN

[54] **DEVICE AND METHOD FOR FILLING WITH LIQUEFIED GAS**

[54] **DISPOSITIF ET METHODE DE REMPLISSAGE DE GAZ LIQUEFIE**

[72] PENNEC, YAN, FR

[72] PETITPAS, GUILLAUME, FR

[71] L'AIR LIQUIDE SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, FR

[22] 2021-06-30

[41] 2022-02-05

[30] FR (2008283) 2020-08-05

[21] **3,123,571**  
[13] A1

[51] **Int.Cl. A61B 17/072 (2006.01) A61B 17/068 (2006.01)**

[25] EN

[54] **SURGICAL STAPLING DEVICE WITH STAPLE CARTRIDGE HAVING DUMMY PORTION**

[54] **AGRAFEUSE CHIRURGICALE AVEC CARTOUCHE D'AGRAFES COMPORTANT UNE PARTIE FACTICE**

[72] GEORGE, SABASTIAN KODUTHULLY, IN

[72] SHANMUGAVEL, LOGAMURUGARAJ, IN

[71] COVIDIEN LP, US

[22] 2021-06-30

[41] 2022-02-03

[30] US (16/983,169) 2020-08-03

[21] **3,123,799**  
[13] A1

[51] **Int.Cl. E04C 2/38 (2006.01) B32B 3/08 (2006.01) B32B 5/18 (2006.01) B32B 5/20 (2006.01) B32B 5/32 (2006.01) B32B 27/40 (2006.01) E04B 1/80 (2006.01) E04C 2/20 (2006.01)**

[25] EN

[54] **FOAM WALL STRUCTURES AND METHODS FOR THEIR MANUFACTURE**

[54] **STRUCTURES DE PAROIS EN MOUSSE ET METHODES DE FABRICATION**

[72] LAMBACH, JAMES L., US

[71] COVESTRO LLC, US

[22] 2021-06-30

[41] 2022-01-31

[30] US (16/944,269) 2020-07-31

[21] **3,123,804**  
[13] A1

[51] **Int.Cl. A61N 5/00 (2006.01)**

[25] EN

[54] **CERAMIC MODULE EMITTING FAR INFRARED RADIATION AND SPECIFIC LOW DOSE IONIZING RADIATION**

[54] **MODULE DE CERAMIQUE EMETTANT UN RAYONNEMENT D'INFRAROUGE LOINTAIN ET UNE FAIBLE DOSE SPECIFIEE DE RAYONNEMENT IONISANT**

[72] WEY, ALBERT CHIN-TANG, US

[71] WEY, ALBERT CHIN-TANG, US

[22] 2021-07-06

[41] 2022-01-30

[30] US (16/943,973) 2020-07-30

[21] **3,123,927**  
[13] A1

[51] **Int.Cl. B23K 9/32 (2006.01)**

[25] EN

[54] **INTEGRATED COMPRESSED AIR COOLING FOR WELDING SYSTEMS**

[54] **REFROIDISSEMENT INTEGRE A AIR COMPRI ME POUR DES SYSTEMES DE SOUDAGE**

[72] ANDERS, ADAM E., US

[72] MORTENSEN, DANIEL J., US

[72] ROSERA, CALEB M., US

[71] ILLINOIS TOOL WORKS INC., US

[22] 2021-07-07

[41] 2022-01-31

[30] US (63/059,732) 2020-07-31

[30] US (17/358,388) 2021-06-25

**Canadian Applications Open to Public Inspection  
January 30, 2022 to February 5, 2022**

[21] **3,124,048**  
[13] A1

[51] **Int.Cl. B25B 11/00 (2006.01) B44B 9/00 (2006.01) E04F 21/18 (2006.01)**  
[25] EN  
[54] **MOSAIC TILE PAVING DEVICE**  
[54] **DISPOSITIF DE PAVAGE DE CARREAUX MOSAIQUES**  
[72] ZHAN, HUI, CN  
[71] JINHUA WANFENG TOOLS FACTORY, CN  
[22] 2021-07-08  
[41] 2022-02-02  
[30] CN (202010847361.5) 2020-08-21  
[30] US (17/029,271) 2020-09-23

[21] **3,124,268**  
[13] A1

[51] **Int.Cl. F16B 39/02 (2006.01) F16C 35/06 (2006.01) F16C 41/00 (2006.01)**  
[25] EN  
[54] **ENDPLAY OR PRELOAD SETTABLE LOCK NUT**  
[54] **ECROU DE BLOCAGE AJUSTABLE POUR LE RATTRAPAGE DE JEU OU LE JEU AXIAL**  
[72] FISH, MICHAEL, US  
[71] TEMPER AXLE PRODUCTS CORPORATION, US  
[22] 2021-07-08  
[41] 2022-01-30  
[30] US (63/058,612) 2020-07-30

[21] **3,124,386**  
[13] A1

[51] **Int.Cl. B60P 7/02 (2006.01) B62D 33/04 (2006.01)**  
[25] EN  
[54] **RETRACTABLE HARD PANEL TONNEAU COVER**  
[54] **COUVRE-CAISSE A PANNEAU DUR RETRACTABLE**  
[72] FACCHINELLO, JEROME, US  
[72] CARTER, CHAD A., US  
[72] MOSINGO, ROBERT, US  
[71] TECTUM HOLDINGS, INC., US  
[22] 2021-07-13  
[41] 2022-01-30  
[30] US (63/058,854) 2020-07-30

[21] **3,124,483**  
[13] A1

[51] **Int.Cl. F16K 31/00 (2006.01) G05G 1/04 (2006.01)**  
[25] EN  
[54] **RUN SELECTOR APPARATUS AND RUN SELECTOR BIASING SYSTEM**  
[54] **APPAREIL DE SELECTEUR DE COURSE ET SYSTEME D'INCLINAISON DE SELECTEUR DE COURSE**  
[72] HARMON, ANDREW W., US  
[72] PIKESH, DERRYN, US  
[71] DEERE & COMPANY, US  
[22] 2021-07-13  
[41] 2022-01-30  
[30] US (16/943,191) 2020-07-30

[21] **3,124,503**  
[13] A1

[51] **Int.Cl. A61B 17/072 (2006.01) A61B 34/30 (2016.01) A61B 17/00 (2006.01) A61B 17/068 (2006.01) G08B 7/06 (2006.01)**  
[25] EN  
[54] **SENSING CURVED TIP FOR SURGICAL STAPLING INSTRUMENTS**  
[54] **POINTE COURBEE DE DETECTION POUR DES INSTRUMENTS D'AGRAFAGE CHIRURGICAUX**  
[72] DIAZ-CHIOSA, OLESEA, US  
[71] COVIDIEN LP, US  
[22] 2021-07-13  
[41] 2022-01-30  
[30] US (16/942,899) 2020-07-30

[21] **3,124,533**  
[13] A1

[51] **Int.Cl. E04G 11/50 (2006.01) E04G 11/36 (2006.01)**  
[25] EN  
[54] **MAIN BEAM STRUCTURE AND PROFILE FOR FORMWORK GRID SYSTEMS**  
[54] **STRUCTURE DE POUTRE PRINCIPALE POUR DES SYSTEMES DE GRILLES DE COFFRAGE**  
[72] BOND, BRADLEY D. A., US  
[71] BOND FORMWORK SYSTEMS, LLC, US  
[22] 2021-07-14  
[41] 2022-01-31  
[30] US (16/944,468) 2020-07-31

[21] **3,124,597**  
[13] A1

[51] **Int.Cl. B67C 9/00 (2006.01) B65D 47/06 (2006.01) B67C 3/30 (2006.01) B67C 11/00 (2006.01)**  
[25] EN  
[54] **DRAIN SPOUT FOR DRAINING MATERIAL FROM FIRST BARREL TO SECOND BARREL**  
[54] **BEC DE DRAIN POUR DRAINER DES MATERIAUX D'UN PREMIER BARIL A UN DEUXIEME BARIL**  
[72] ENGLISH, JARROD ROBIN, CA  
[71] ENGLISH, JARROD ROBIN, CA  
[22] 2021-07-14  
[41] 2022-01-30  
[30] US (63/058,875) 2020-07-30

[21] **3,124,618**  
[13] A1

[51] **Int.Cl. F03D 13/40 (2016.01) F03D 13/10 (2016.01) B66C 1/16 (2006.01) B66C 13/04 (2006.01)**  
[25] EN  
[54] **LIFTING DEVICE FOR A WIND TURBINE ROTOR BLADE**  
[54] **DISPOSITIF DE LEVAGE POUR UNE PALE DE ROTOR D'EOLIENNE**  
[72] NEUMANN, ULRICH WERNER, US  
[72] STIEBER, MOLLY CHRISTINE, US  
[72] PALMER, EMILY JACOB, US  
[72] CHACON, JOSEPH LAWRENCE, US  
[72] KAMARAJUGADDA, RAVI CHANDRA, US  
[71] GENERAL ELECTRIC COMPANY, US  
[22] 2021-07-14  
[41] 2022-01-30  
[30] US (16/943,430) 2020-07-30

**Demandes canadiennes mises à la disponibilité du public**  
**30 janvier 2022 au 5 février 2022**

[21] **3,124,743**  
[13] A1

[51] **Int.Cl. B60T 7/12 (2006.01) B60T 17/18 (2006.01)**  
 [25] EN  
 [54] **PARKING BRAKE APPARATUS FOR A VEHICLE**  
 [54] **APPAREIL DE FREIN DE STATIONNEMENT POUR UN VEHICULE**  
 [72] BARADE, GIRISH, US  
 [72] HUTCHINS, CHRISTOPHER H., US  
 [72] MENDIS, MEVILTAN, US  
 [72] WEED, THOMAS J., US  
 [71] BENDIX COMMERCIAL VEHICLE SYSTEMS LLC, US  
 [22] 2021-07-14  
 [41] 2022-01-31  
 [30] US (16/944,688) 2020-07-31

[21] **3,124,848**  
[13] A1

[51] **Int.Cl. A63B 61/00 (2006.01)**  
 [25] EN  
 [54] **RETRACTABLE AND DETACHABLY ENGAGEABLE SPORTS NET SYSTEM**  
 [54] **SYSTEME DE FILET DE SPORT POUVANT ETRE ATTACHE DE MANIERE DETACHABLE ET ETANT RETRACTABLE**  
 [72] SAPHIRE, JASON, US  
 [71] SAPHIRE HOSPITALITY, INC., US  
 [22] 2021-07-16  
 [41] 2022-02-05  
 [30] US (63/061,331) 2020-08-05  
 [30] US (17/188,804) 2021-03-01  
 [30] US (63/076,218) 2020-09-09

[21] **3,125,025**  
[13] A1

[51] **Int.Cl. B27L 7/00 (2006.01) B27L 7/06 (2006.01)**  
 [25] EN  
 [54] **LOG SPLITTER INCLUDING A PUSHER ASSEMBLY**  
 [54] **FENDEUSE DE BUCHES COMPRENANT UN ASSEMBLAGE DE POUSSEUR**  
 [72] SCHNORR, DANIEL, US  
 [72] KAMPS, DOUGLAS, US  
 [71] MULTITEK NORTH AMERICA, LLC, US  
 [22] 2021-07-16  
 [41] 2022-02-03  
 [30] US (16/983,039) 2020-08-03

[21] **3,125,066**  
[13] A1

[51] **Int.Cl. B23K 9/12 (2006.01) B23K 9/133 (2006.01)**  
 [25] EN  
 [54] **ADAPTABLE USER INTERFACE FOR WELDING WIRE FEEDERS**  
 [54] **INTERFACE UTILISATEUR AJUSTABLE POUR UNE TETE DE SOUDAGE**  
 [72] MORTENSEN, DANIEL J., US  
 [72] UITENBROEK, CONNOR D., US  
 [72] SCHMITZ, ADAM R., US  
 [71] ILLINOIS TOOL WORKS INC., US  
 [22] 2021-07-19  
 [41] 2022-01-31  
 [30] US (63/059,717) 2020-07-31  
 [30] US (17/372,846) 2021-07-12

[21] **3,125,113**  
[13] A1

[51] **Int.Cl. E01B 29/28 (2006.01) B23P 19/06 (2006.01)**  
 [25] EN  
 [54] **TRACK PROCESSING MACHINE, IN PARTICULAR IMPACT WRENCH MACHINE, AND PROCESS FOR TRACK PROCESSING BY MEANS OF A TRACK PROCESSING MACHINE**  
 [54] **MACHINE DE CONSTRUCTION DE VOIE, EN PARTICULIER UNE MACHINE A CLE A CHOCS, ET PROCEDE DE CONSTRUCTION DE VOIE AU MOYEN DE LA MACHINE DE CONSTRUCTION DE VOIE**  
 [72] KOCH, BERNHARD, DE  
 [72] DIEGUEZ, MARKUS FAFIAN, DE  
 [71] ROBEL BAHNBAUMASCHINEN GMBH, DE  
 [22] 2021-07-20  
 [41] 2022-02-04  
 [30] EP (PCT/EP2020/071928) 2020-08-04

[21] **3,125,161**  
[13] A1

[51] **Int.Cl. G02B 6/36 (2006.01) G01N 21/95 (2006.01) G02B 21/36 (2006.01) G02B 5/04 (2006.01)**  
 [25] EN  
 [54] **ADAPTER TIP AND MICROSCOPE SYSTEM FOR INSPECTION OF FIBER-OPTIC CONNECTOR ENDFACES**  
 [54] **POINTE D'ADAPTATION ET SYSTEME DE MICROSCOPE POUR L'INSPECTION DES FACES D'EXTREMITE DE CONNEXEURS DE FIBRES OPTIQUES**  
 [72] FILION, JEAN, CA  
 [72] COTE, OLIVIER, CA  
 [71] EXFO INC., CA  
 [22] 2021-07-20  
 [41] 2022-01-31  
 [30] US (63/059,209) 2020-07-31

[21] **3,125,167**  
[13] A1

[51] **Int.Cl. E04G 17/06 (2006.01)**  
 [25] EN  
 [54] **FORMWORK TIE**  
 [54] **ATTACHE DE COFFRAGE**  
 [72] SCHRAMM, UWE, DE  
 [72] SCHILLE, RICK, DE  
 [71] MEVA SCHALUNGS-SYSTEME GMBH, DE  
 [22] 2021-07-20  
 [41] 2022-02-04  
 [30] EP (20189416.9) 2020-08-04

[21] **3,125,396**  
[13] A1

[51] **Int.Cl. A45C 1/06 (2006.01)**  
 [25] EN  
 [54] **BIFOLD WALLETS WITH ELASTIC SLEEVE**  
 [54] **PORTEFEUILLES PLIES EN DEUX AVEC UN MANCHON ELASTIQUE**  
 [72] BAUER, COLBY S., US  
 [72] BOYES, DILLON M., US  
 [71] THREAD WALLETS LLC, US  
 [22] 2021-07-21  
 [41] 2022-02-03  
 [30] US (16/983,884) 2020-08-03

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[21] **3,125,412**  
[13] A1

[51] **Int.Cl. E04G 11/36 (2006.01) E04G 11/50 (2006.01)**  
[25] EN  
[54] **SECONDARY JOIST PROFILE FOR GRID SYSTEMS**  
[54] **PROFILLE DE SOLIVE SECONDAIRE POUR DES SYSTEMES DE GRILLE**  
[72] BOND, BRADLEY D.A., US  
[71] BOND FORMWORK SYSTEMS, LLC, US  
[22] 2021-07-21  
[41] 2022-01-31  
[30] US (16/944.473) 2020-07-31

[21] **3,125,457**  
[13] A1

[51] **Int.Cl. G01V 5/06 (2006.01)**  
[25] EN  
[54] **SHOCK ISOLATED GAMMA PROBE**  
[54] **SONDE A RAYONS GAMMA ISOLEE CONTRE LES CHOCS**  
[72] GOPALAN, MANOJ, US  
[71] RIME DOWNHOLE TECHNOLOGIES, LLC, US  
[22] 2021-07-21  
[41] 2022-01-31  
[30] US (16/945,308) 2020-07-31

[21] **3,125,473**  
[13] A1

[51] **Int.Cl. A47G 11/00 (2006.01) A47G 23/06 (2006.01)**  
[25] EN  
[54] **TABLECLOTH FOR TRAYS**  
[54] **NAPPE POUR PLATEAUX**  
[72] LIPORAZZI, FABIAN DARIO, AR  
[71] LIPORAZZI, FABIAN DARIO, AR  
[22] 2021-07-21  
[41] 2022-02-04  
[30] AR (M20200102213) 2020-08-04

[21] **3,125,650**  
[13] A1

[51] **Int.Cl. G06Q 10/10 (2012.01) H04L 12/16 (2006.01) H04N 7/15 (2006.01)**  
[25] EN  
[54] **NETWORK-BASED METHOD FOR ANNOTATION OF A PLURALITY OF PERSONS ON THE SAME ULTRA-HIGH-DEFINITION SCREEN**  
[54] **METHODE RESEAU POUR L'ANNOTATION DE PLUSIEURS PERSONNES SUR LE MEME ECRAN A ULTRA-HAUTE DEFINITION**  
[72] YIFU, WANG, CN  
[71] TIANJIN INSPIRATION & CREATIVITY SCI-TECH DEVELOPMENT INC., CN  
[71] SHANDONG GOLDENHUGE DATA SCI-TECH INC., CH  
[22] 2021-07-22  
[41] 2022-02-04  
[30] CN (202010773209.7) 2020-08-04

[21] **3,125,665**  
[13] A1

[51] **Int.Cl. B43K 1/12 (2006.01)**  
[25] EN  
[54] **NON-SMEAR NIB AND ASSOCIATED WRITING INSTRUMENTS**  
[54] **BEC DE PLUME SANS BAVURE ET INSTRUMENTS D'ECRITURE CONNEXES**  
[72] GNANADOSS, VASANTH ANDREW, US  
[72] CHOWDHURY, BROJOKISHORE, IN  
[72] MUNOZ, NATALY THIRY, US  
[71] SANFORD L.P., US  
[22] 2021-07-22  
[41] 2022-02-04  
[30] US (63/060,753) 2020-08-04

[21] **3,125,828**  
[13] A1

[51] **Int.Cl. E21B 43/25 (2006.01) E21B 43/26 (2006.01)**  
[25] EN  
[54] **NON-FLUID STIMULATION OF POROUS MEDIA**  
[54] **STIMULATION NON FLUIDE DE MATIERE POREUSE**  
[72] IONKINA, NATALYA, CA  
[71] IONKINA, NATALYA, CA  
[22] 2021-07-23  
[41] 2022-01-30  
[30] US (63/058,940) 2020-07-30

[21] **3,125,853**  
[13] A1

[51] **Int.Cl. F24C 7/08 (2006.01) F24C 1/00 (2006.01)**  
[25] EN  
[54] **CONVECTION OVEN**  
[54] **FOUR A CONVECTION**  
[72] STEPHENS, JASON M., US  
[72] KEEHAN, ROBERT, US  
[71] ILLINOIS TOOL WORKS INC., US  
[22] 2021-07-23  
[41] 2022-01-31  
[30] US (63/059,246) 2020-07-31  
[30] US (17/375,698) 2021-07-14

[21] **3,125,865**  
[13] A1

[51] **Int.Cl. B26B 17/00 (2006.01) A47J 43/28 (2006.01)**  
[25] EN  
[54] **CHOPPING APPARATUS FOR HOT PEPPERS**  
[54] **APPAREIL POUR HACHER DES PIMENTS FORTS**  
[72] SHARMA, PANKAJ KUMAR, CA  
[71] PRIMON INVESTMENTS LTD., CA  
[22] 2021-07-23  
[41] 2022-02-04  
[30] US (63060891) 2020-08-04

[21] **3,125,876**  
[13] A1

[51] **Int.Cl. A61B 17/34 (2006.01) A61B 17/00 (2006.01) A61M 25/06 (2006.01)**  
[25] EN  
[54] **SYSTEM OF MEDICAL DEVICES AND METHOD FOR PERICARDIAL PUNCTURE**  
[54] **SYSTEME D'APPAREILS MEDICAUX ET METHODE DE PERFORATION PERICARDIQUE**  
[72] MILLER, BROCK, CA  
[72] GRAVETT, MATTHEW, CA  
[72] FOK, KAI-LON, CA  
[71] BAYLIS MEDICAL COMPANY INC., CA  
[22] 2021-07-26  
[41] 2022-01-30  
[30] US (63/058,785) 2020-07-30

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[21] **3,125,878**  
[13] A1

[51] **Int.Cl. C08L 75/04 (2006.01) C08J 5/00 (2006.01) C08J 9/04 (2006.01)**  
 [25] EN  
 [54] **PROCESS AND COMPOSITION FOR THE PRODUCTION OF FLEXIBLE POLYURETHANE FOAM**  
 [54] **PROCEDE ET COMPOSITION POUR LA PRODUCTION D'UNE MOUSSE DE POLYURETHANE FLEXIBLE**  
 [72] BURDENIUC, JUAN JESUS, US  
 [72] BENDER, JARED DENIS, US  
 [72] PANITZSCH, TORSTEN, DE  
 [72] MUHLHAUS, FELIX, DE  
 [72] PAULE, JACOB, US  
 [72] EMMRICH-SMOLCZYK, EVA, DE  
 [71] EVONIK OPERATIONS GMBH, DE  
 [22] 2021-07-26  
 [41] 2022-01-30  
 [30] US (63/058,742) 2020-07-30

[21] **3,125,880**  
[13] A1

[51] **Int.Cl. G06Q 50/30 (2012.01) G06Q 10/10 (2012.01) G06Q 30/02 (2012.01)**  
 [25] EN  
 [54] **SYSTEMS AND METHODS AUTOMATING FOR MAPPING OF REPAIR PROCEDURES TO REPAIR INFORMATION**  
 [54] **SYSTEMES ET METHODES D'AUTOMATISATION POUR TRANSPOSER DES PROCEDURES DE REPARATION SUR DES RENSEIGNEMENTS DE REPARATION**  
 [72] BAIERL, SCOTT, US  
 [72] GULATI, ABHIJEET, US  
 [72] GASTINEAU, JERRY, US  
 [72] GENOVESE, PENNY, US  
 [72] GURNER, VICKI, US  
 [72] STRONG, JOHN, US  
 [72] GUPTA, SARIKA, US  
 [71] MITCHELL INTERNATIONAL, INC., US  
 [22] 2021-07-26  
 [41] 2022-01-30  
 [30] US (16/944,038) 2020-07-30

[21] **3,125,997**  
[13] A1

[51] **Int.Cl. F16B 25/00 (2006.01) F16B 5/02 (2006.01) F16B 43/00 (2006.01)**  
 [25] EN  
 [54] **SYSTEMS, DEVICES AND METHODS FOR SECURING NON-LOAD BEARING WALLS**  
 [54] **SYSTEMES, DISPOSITIFS ET METHODES POUR FIXER DES MURS NON PORTEURS**  
 [72] BRIGHAM, GUEARY ANDREW, US  
 [72] PARK, JEREMY SCOTT, US  
 [72] HALE, TROY, US  
 [72] TILLINGHAST, ADAM, US  
 [71] SIMPSON STRONG-TIE COMPANY, US  
 [22] 2021-07-21  
 [41] 2022-02-03  
 [30] US (63/060,223) 2020-08-03  
 [30] US (17/369,137) 2021-07-07

[21] **3,126,015**  
[13] A1

[51] **Int.Cl. B29C 45/76 (2006.01) B29C 45/17 (2006.01)**  
 [25] EN  
 [54] **INJECTION MOLDING MACHINE**  
 [54] **MACHINE DE MOULAGE PAR INJECTION**  
 [72] TAKANOHASHI, RYUICHI, JP  
 [71] SUMITOMO HEAVY INDUSTRIES, LTD., JP  
 [22] 2021-07-23  
 [41] 2022-01-31  
 [30] JP (2020-130985) 2020-07-31

[21] **3,126,107**  
[13] A1

[51] **Int.Cl. A47C 27/14 (2006.01) A47C 31/12 (2006.01) B68G 5/02 (2006.01)**  
 [25] EN  
 [54] **FOAM CORE FOR A MATTRESS AND MATTRESS**  
 [54] **NOYAU EN MOUSSE POUR MATELAS, ET MATELAS**  
 [72] KARDEH, MAJID, DE  
 [72] YI, JEONG-HUN, DE  
 [71] EMMA SLEEP GMBH, DE  
 [22] 2021-07-27  
 [41] 2022-01-30  
 [30] DE (10 2020 120 186.9) 2020-07-30

[21] **3,126,109**  
[13] A1

[51] **Int.Cl. A01N 65/20 (2009.01) A01N 65/08 (2009.01) A01N 65/42 (2009.01) A01N 25/30 (2006.01) A01P 1/00 (2006.01) A01P 3/00 (2006.01)**  
 [25] EN  
 [54] **BROAD SPECTRUM ORGANIC FUNGICIDE & BACTERICIDE**  
 [54] **FONGICIDE ET BACTERICIDE ORGANIQUES A SPECTRE LARGE**  
 [72] SANTOSH KUMAR, ALBERT, IN  
 [71] ECOLUTION.AG LLC, US  
 [22] 2021-07-27  
 [41] 2022-01-31  
 [30] CA (3,088,670) 2020-07-31

[21] **3,126,112**  
[13] A1

[51] **Int.Cl. F28G 15/06 (2006.01) F28G 1/16 (2006.01) F28G 3/16 (2006.01) F28G 15/02 (2006.01) F28G 15/08 (2006.01)**  
 [25] EN  
 [54] **ROTARY TOOL WITH SMART INDEXING**  
 [54] **OUTIL ROTATIF AVEC INDEXAGE INTELLIGENT**  
 [72] GROMES, TERRY D., SR., US  
 [72] GROMES, TERRY D., JR., US  
 [72] GRIFFIN, KRISTEN E., US  
 [72] SHOCKEY, JON M., US  
 [72] EAST, GORDON W., US  
 [72] JACKSON, WILLIAM C., US  
 [71] TERYDON, INC., US  
 [22] 2021-07-26  
 [41] 2022-01-30  
 [30] US (16/942,945) 2020-07-30  
 [30] US (16/943,032) 2020-07-30

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[21] **3,126,114**  
[13] A1

[51] **Int.Cl. F41A 9/71 (2006.01) F41A 9/65 (2006.01)**  
[25] EN  
[54] **CAPACITY LIMITING ASSEMBLY FOR MAGAZINES, MAGAZINES HAVING LIMITED CAPACITY, AND RELATED METHODS**  
[54] **ASSEMBLAGE DE LIMITATION DE CAPACITE POUR MAGASINS A MUNITIONS, MAGASINS A MUNITIONS AYANT UNE CAPACITE LIMITEE ET METHODES CONNEXES**  
[72] BINDER, JARED, US  
[72] WELSH, JOSHUA, US  
[72] LUTTON, WILLIAM, US  
[71] LANCER SYSTEMS LP, US  
[22] 2021-07-27  
[41] 2022-01-31  
[30] US (63/059,586) 2020-07-31

[21] **3,126,120**  
[13] A1

[51] **Int.Cl. B32B 27/12 (2006.01) A61B 42/10 (2016.01) A41D 31/24 (2019.01) A41D 19/015 (2006.01)**  
[25] EN  
[54] **NEEDLE-RESISTANT GLOVE AND MAT**  
[54] **GANT ET TAPIS RESISTANT AUX AIGUILLES**  
[72] HADDADI AVVAL, MOHAMMAD, IR  
[71] HADDADI AVVAL, MOHAMMAD, IR  
[22] 2021-07-27  
[41] 2022-01-30  
[30] US (63/058,576) 2020-07-30

[21] **3,126,207**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2012.01) G06Q 50/30 (2012.01) G01S 11/00 (2006.01)**  
[25] EN  
[54] **BEACON-BASED TRUCK SUPPLY CHAIN COORDINATING SYSTEM**  
[54] **SYSTEME DE COORDINATION DE LA CHAINE D'APPROVISIONNEMENT DE CAMIONS A BASE DE BALISE**  
[72] PIOSIK, ROB, NL  
[71] COMMAND ALKON INCORPORATED, US  
[22] 2021-07-27  
[41] 2022-01-30  
[30] US (63/058,781) 2020-07-30

[21] **3,126,229**  
[13] A1

[51] **Int.Cl. H04B 7/0456 (2017.01) H04B 1/04 (2006.01)**  
[25] EN  
[54] **CONTROL NODE WITH AN OCTAGONAL VECTOR CONSTELLATION FOR AN ARRAY ANTENNA**  
[54] **NOEUD DE COMMANDE AYANT UNE CONSTELLATION DE VECTEURS OCTOGONALE POUR UNE ANTENNE RESEAU**  
[72] ADAM, THIERRY, FR  
[72] ROCHETTE, STEPHANE, FR  
[72] THEROND, BENJAMIN, FR  
[71] THALES, FR  
[22] 2021-07-28  
[41] 2022-01-30  
[30] FR (2008056) 2020-07-30

[21] **3,126,249**  
[13] A1

[51] **Int.Cl. G01D 21/00 (2006.01) G06Q 50/06 (2012.01)**  
[25] EN  
[54] **SYSTEM FOR PROVIDING QUANTITATIVE ENERGY EFFICIENCY METRICS**  
[54] **SYSTEME POUR FOURNIR DES INDICATEURS QUANTITATIFS D'EFFICACITE ENERGETIQUE**  
[72] VAN BUSKIRK, ROBERT, US  
[72] BUSBY, RICHARD, US  
[72] KURWIG, MATTHIAS, US  
[71] ENERVEE CORPORATION, US  
[22] 2021-07-29  
[41] 2022-01-31  
[30] US (63/059,418) 2020-07-31

[21] **3,126,360**  
[13] A1

[51] **Int.Cl. H04N 7/15 (2006.01) B64F 5/60 (2017.01)**  
[25] EN  
[54] **REMOTE TEST WITNESSING**  
[54] **TEMOIN D'ESSAI A DISTANCE**  
[72] WARBURTON, GARY, CA  
[71] GOODRICH CORPORATION, US  
[22] 2021-07-27  
[41] 2022-02-03  
[30] US (63/060,539) 2020-08-03  
[30] US (17/066,175) 2020-10-08

[21] **3,126,366**  
[13] A1

[51] **Int.Cl. A01C 7/08 (2006.01) A01B 63/24 (2006.01) A01C 5/06 (2006.01)**  
[25] EN  
[54] **ROW UNIT MOUNTING SYSTEM**  
[54] **SYSTEME DE MONTAGE DE RAYONNEUR**  
[72] MARO, RANDALL A., US  
[71] DEERE & COMPANY, US  
[22] 2021-07-28  
[41] 2022-01-30  
[30] US (63/058,646) 2020-07-30  
[30] US (17/305,186) 2021-07-01

[21] **3,126,420**  
[13] A1

[51] **Int.Cl. H04W 74/02 (2009.01) H04W 4/06 (2009.01) H04W 74/08 (2009.01)**  
[25] EN  
[54] **MANAGING MULTI-MODE COMMUNICATIONS BETWEEN NODES IN A NETWORK**  
[54] **GESTION DE COMMUNICATIONS MULTIMODES ENTRE LES NOEUDS DANS UN RESEAU**  
[72] MAALLEM, KHALID, US  
[72] KHALED, YACINE, US  
[72] BARTIER, JEROME, US  
[71] ITRON, INC., US  
[22] 2021-07-28  
[41] 2022-02-04  
[30] US (16/985,138) 2020-08-04

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[21] **3,126,475**  
[13] A1

[51] **Int.Cl. B62B 5/00 (2006.01) A61G 7/08 (2006.01) B66F 7/26 (2006.01)**

[25] EN

[54] **REMOVABLE ELECTRIC PROPULSION SYSTEM FOR A WHEELED OBJECT - SIMULTANEOUS AND COMBINED GRIPPING AND LIFTING OF THE WHEELS IN THE LONGITUDINAL DIRECTION**

[54] **SYSTEME DE PROPULSION ELECTRIQUE AMOVIBLE POUR UN OBJET ROULANT - PREHENSION ET LEVAGE DES ROUES SIMULTANES ET COMBINES DANS LA DIRECTION LONGITUDINALE**

[72] VENTURI, STEPHANE, FR  
[72] LECOINTE, BERTRAND, FR  
[71] IFP ENERGIES NOUVELLES, FR  
[22] 2021-07-30  
[41] 2022-02-04  
[30] FR (2008261) 2020-08-04

[21] **3,126,480**  
[13] A1

[51] **Int.Cl. F24T 50/00 (2018.01) E21B 7/00 (2006.01) E21B 43/30 (2006.01) F01K 13/00 (2006.01) F03G 4/00 (2006.01)**

[25] EN

[54] **SYSTEM AND PROCESS FOR PRODUCING CLEAN ENERGY FROM HYDROCARBON RESERVOIRS**

[54] **SYSTEME ET PROCEDE DE PRODUCTION D'ENERGIE PROPRE A PARTIR DE RESERVOIRS D'HYDROCARBURES**

[72] AIKMAN, MICHAEL JOHN LUNDIN, CA  
[71] TRINDADE RESERVOIR SERVICES INC., CA  
[22] 2021-07-30  
[41] 2022-01-31  
[30] US (63/059,605) 2020-07-31  
[30] CA (3,088,665) 2020-07-31  
[30] US (63/118,511) 2020-11-25  
[30] CA (3,100,593) 2020-11-25

[21] **3,126,485**  
[13] A1

[51] **Int.Cl. A43C 15/04 (2006.01)**

[25] EN

[54] **HEEL TRACTION DEVICE**

[54] **DISPOSITIF D'ADHERENCE DE TALON**

[72] DENTE, CLAUDIO, CA  
[71] DENTEC SAFETY SPECIALISTS INC., CA  
[22] 2021-07-30  
[41] 2022-01-31  
[30] CA (3,088,637) 2020-07-31

[21] **3,126,489**  
[13] A1

[51] **Int.Cl. B62B 1/12 (2006.01) B25H 1/00 (2006.01) B25H 1/04 (2006.01) B25H 1/16 (2006.01)**

[25] EN

[54] **WORKBENCH-HAND TRUCK ASSEMBLY**

[54] **ASSEMBLAGE D'ETABLI-CHARIOT MANUEL**

[72] GROVES, JEFFREY, US  
[72] KNIGHT, TYLER H., US  
[72] HUGHETT, STEPHEN A., US  
[71] TECHTRONIC CORDLESS GP, US  
[22] 2021-07-30  
[41] 2022-01-31  
[30] US (63/059,255) 2020-07-31

[21] **3,126,496**  
[13] A1

[51] **Int.Cl. H02J 13/00 (2006.01) B60L 50/10 (2019.01) B23K 9/10 (2006.01) B23K 20/26 (2006.01) F02B 63/04 (2006.01) F15B 21/00 (2006.01) H02K 7/18 (2006.01)**

[25] EN

[54] **ENGINE-DRIVEN POWER SYSTEMS HAVING LOAD MANAGEMENT PRIORITIZATION**

[54] **BLOCS D'ALIMENTATION A MOTEUR PRESENTANT UNE FONCTION D'ETABLISSEMENT DES PRIORITES DE GESTION DES CHARGES**

[72] BAERENWALD, LOGAN THOMAS, US  
[72] RENNER, ROSS NEAL, US  
[72] JOYCE, RICHARD C., US  
[72] MADSEN, MICHAEL D., US  
[71] ILLINOIS TOOL WORKS INC., US  
[22] 2021-07-30  
[41] 2022-01-31  
[30] US (63/059,614) 2020-07-31  
[30] US (17/387,559) 2021-07-28

[21] **3,126,504**  
[13] A1

[51] **Int.Cl. A41G 5/00 (2006.01) A45D 8/24 (2006.01)**

[25] EN

[54] **HAIR EXTENSION WORK PANEL**

[54] **PANNEAU DE TRAVAIL DE RALLONGE DE CHEVEUX**

[72] KAPOGIANNIS, MARY, CA  
[71] KAPOGIANNIS, MARY, CA  
[22] 2021-07-30  
[41] 2022-01-30  
[30] US (63/059,116) 2020-07-30

[21] **3,126,523**  
[13] A1

[51] **Int.Cl. A23C 20/00 (2006.01) A23C 20/02 (2021.01) A23C 19/076 (2006.01)**

[25] FR

[54] **FROMAGE A LA CREME**

[54] **CREAM CHEESE**

[72] DURAND, FABIEN, FR  
[72] PADEL, VIRGINIE, FR  
[72] CIBRARIO, ALICE, FR  
[71] SAVENCIA SA, FR  
[22] 2021-07-30  
[41] 2022-01-31  
[30] FR (FR 2008200) 2020-07-31

[21] **3,126,525**  
[13] A1

[51] **Int.Cl. B21J 15/02 (2006.01) B21J 15/10 (2006.01) B21J 15/38 (2006.01)**

[25] EN

[54] **METHOD FOR PLACING AND ANCHORING CONNECTING ELEMENTS INTO A FLAT MATERIAL OR COMPONENTS OR WORKPIECES MADE THEREFROM, CONNECTING ELEMENT AS WELL AS PLACING TOOL**

[54] **METHODE POUR PLACER ET FIXER DES ELEMENTS CONNECTEURS DANS UN MATERIAU PLAT OU DES COMPOSANTES OU DES PIECES A USINER FAITES DE CE MATERIAU, ELEMENT CONNECTEUR ET OUTIL DE POSITIONNEMENT**

[72] SCHMIDT, HEIKO, DE  
[71] SCHMIDT, HEIKO, DE  
[22] 2021-07-30  
[41] 2022-02-04  
[30] DE (10 2020 120 507.4) 2020-08-04

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[21] **3,126,528**  
[13] A1

[51] **Int.Cl. E06C 7/06 (2006.01) E06C 1/12 (2006.01) E06C 7/04 (2006.01)**

[25] EN

[54] **CLIMBING PRODUCT HAVING AN EXTENDABLE SECTION LOCK ASSEMBLY, AND METHODS FOR USING AND PRODUCING A CLIMBING PRODUCT**

[54] **PRODUIT POUR GRIMPER AYANT UN ASSEMBLAGE DE VERROU DE SECTION EXTENSIBLE ET METHODES D'UTILISATION ET DE FABRICATION D'UN PRODUIT POUR GRIMPER**

[72] LENTINE, TEK, US  
[72] PARKER, THOMAS W., US  
[72] POZGAY, DAVID S., US  
[72] MILLER, JACKSON W., US  
[72] ANTHONY, PHILIP M., III, US  
[72] WOLFS, BRYAN E., US  
[71] WERNER CO., US  
[22] 2021-07-28  
[41] 2022-01-30  
[30] US (63/058,805) 2020-07-30  
[30] US (63/140,599) 2021-01-22

[21] **3,126,529**  
[13] A1

[51] **Int.Cl. E06C 1/12 (2006.01) E06C 7/00 (2006.01) E06C 7/06 (2006.01)**

[25] EN

[54] **CLIMBING PRODUCT HAVING AN EXTENDABLE SECTION LOCK ASSEMBLY, AND METHODS FOR USING AND PRODUCING A CLIMBING PRODUCT**

[54] **PRODUIT POUR GRIMPER AYANT UN ASSEMBLAGE DE VERROU DE SECTION EXTENSIBLE ET METHODES D'UTILISATION ET DE FABRICATION D'UN PRODUIT POUR GRIMPER**

[72] LENTINE, TEK, US  
[72] PARKER, THOMAS W., US  
[72] POZGAY, DAVID S., US  
[72] MILLER, JACKSON W., US  
[72] ANTHONY, PHILIP M., III, US  
[72] WOLFS, BRYAN E., US  
[71] WERNER CO., US  
[22] 2021-07-28  
[41] 2022-01-30  
[30] US (63/058,805) 2020-07-30  
[30] US (63/140,599) 2021-01-22

[21] **3,126,530**  
[13] A1

[51] **Int.Cl. E06C 7/06 (2006.01) E06C 1/12 (2006.01) E06C 7/04 (2006.01)**

[25] EN

[54] **CLIMBING PRODUCT HAVING AN EXTENDABLE SECTION LOCK ASSEMBLY, AND METHODS FOR USING AND PRODUCING A CLIMBING PRODUCT**

[54] **PRODUIT POUR GRIMPER AYANT UN ASSEMBLAGE DE VERROU DE SECTION EXTENSIBLE ET METHODES D'UTILISATION ET DE FABRICATION D'UN PRODUIT POUR GRIMPER**

[72] LENTINE, TEK, US  
[72] PARKER, THOMAS W., US  
[72] POZGAY, DAVID S., US  
[72] MILLER, JACKSON W., US  
[72] ANTHONY, PHILIP M., III, US  
[72] WOLFS, BRYAN E., US  
[71] WERNER CO., US  
[22] 2021-07-28  
[41] 2022-01-30  
[30] US (63/058,805) 2020-07-30  
[30] US (63/140,599) 2021-01-22

[21] **3,126,531**  
[13] A1

[51] **Int.Cl. E06C 7/06 (2006.01) E06C 1/12 (2006.01) E06C 1/30 (2006.01) E06C 1/383 (2006.01) E06C 7/02 (2006.01)**

[25] EN

[54] **CLIMBING PRODUCT HAVING AN EXTENDABLE SECTION LOCK ASSEMBLY, AND METHODS FOR USING AND PRODUCING A CLIMBING PRODUCT**

[54] **PRODUIT POUR GRIMPER AYANT UN ASSEMBLAGE DE VERROU DE SECTION EXTENSIBLE ET METHODES D'UTILISATION ET DE FABRICATION D'UN PRODUIT POUR GRIMPER**

[72] LENTINE, TEK, US  
[72] PARKER, THOMAS W., US  
[72] ANTHONY, PHILIP M., US  
[72] ROTE, SCOTT J., US  
[72] MILLER, JACKSON W., US  
[71] WERNER CO., US  
[22] 2021-07-28  
[41] 2022-01-30  
[30] US (63/058,805) 2020-07-30  
[30] US (63/140,599) 2021-01-22

[21] **3,126,532**  
[13] A1

[51] **Int.Cl. A01F 15/14 (2006.01)**

[25] EN

[54] **BALING PRESS WITH ROPE KNOTTER**

[54] **PRESSE A EMBALLER ET NOUEUR**

[72] HOGERVORST, WOUTER HENDRIK, NL  
[71] BOLLEGRAAF PATENTS AND BRANDS B.V., NL  
[22] 2021-07-29  
[41] 2022-01-30  
[30] EP (20188676.9) 2020-07-30

[21] **3,126,537**  
[13] A1

[51] **Int.Cl. F21S 10/04 (2006.01)**

[25] EN

[54] **FLAME SIMULATING ASSEMBLY FOR SIMULATED FIREPLACES INCLUDING A REFLECTING LIGHT SYSTEM**

[54] **ENSEMBLE DE SIMULATION DE FLAMME POUR UN FAUX FOYER, Y COMPRIS UN SYSTEME DE REFLEXION DE LA LUMIERE**

[72] LASSEN, WILLARD, US  
[72] JONES, PAUL, US  
[71] LIVING STYLE (B.V.I.) LIMITED, GB  
[22] 2021-07-29  
[41] 2022-01-31  
[30] US (16/944317) 2020-07-31

[21] **3,126,555**  
[13] A1

[51] **Int.Cl. G06Q 10/04 (2012.01) G06Q 10/08 (2012.01) G06Q 50/28 (2012.01) G06Q 50/30 (2012.01)**

[25] EN

[54] **OPTIMIZATION METHOD, DEVICE, COMPUTER EQUIPMENT AND STORAGE MEDIUM OF LOGISTICS TRANSPORTATION NETWORK**

[54] LIU, FENG, CN  
[72] CAO, HUI, CN  
[72] QIAN, XIAOYU, CN  
[72] WANG, XIA, CN  
[71] 10353744 CANADA LTD., CA  
[22] 2021-07-30  
[41] 2022-01-31  
[30] CN (2020107590486) 2020-07-31

**Demandes canadiennes mises à la disponibilité du public**  
**30 janvier 2022 au 5 février 2022**

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[21] **3,126,556**  
[13] A1

[51] **Int.Cl. A23L 9/20 (2016.01) A23C 11/10 (2021.01) A23C 13/12 (2006.01)**

[25] FR  
[54] **CREAM**  
[54] **CREME**  
[72] DURAND, FABIEN, FR  
[72] PADEL, VIRGINIE, FR  
[72] CIBRARIO, ALICE, FR  
[71] SAVENCIA SA, FR  
[22] 2021-07-30  
[41] 2022-01-31  
[30] FR (FR2008200) 2020-07-31

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[21] **3,126,558**  
[13] A1

[51] **Int.Cl. A23C 20/00 (2006.01) A23L 19/00 (2016.01) A23L 25/00 (2016.01) A23C 19/00 (2006.01) A23C 20/02 (2021.01)**

[25] FR  
[54] **FERMENTED SOFT CHEESE**  
[54] **PATE MOLLE FERMENTEE**  
[72] DURAND, FABIEN, FR  
[72] PADEL, VIRGINIE, FR  
[72] CIBRARIO, ALICE, FR  
[71] SAVENCIA SA, FR  
[22] 2021-07-30  
[41] 2022-01-31  
[30] FR (FR2008199) 2020-07-31

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[21] **3,126,564**  
[13] A1

[51] **Int.Cl. E03D 1/34 (2006.01) E03D 1/30 (2006.01)**

[25] EN  
[54] **TOILET FLAPPER REPLACEMENT KIT AND ASSEMBLY**  
[54] **TROUSSE ET ENSEMBLE DE REMPLACEMENT DE CLAPET DE TOILETTE**  
[72] GUTHRIE, KEVIN J., US  
[72] DEAN, MICHAEL A., US  
[71] LAVELLE INDUSTRIES, INC., US  
[22] 2021-07-30  
[41] 2022-02-04  
[30] US (63/060,742) 2020-08-04

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[21] **3,126,568**  
[13] A1

[51] **Int.Cl. H04W 74/08 (2009.01) H04W 16/28 (2009.01) H04W 72/00 (2009.01)**

[25] EN  
[54] **CHANNEL ACCESS FOR WIRELESS COMMUNICATION**  
[54] **ACCES DE CANAL POUR COMMUNICATION SANS FIL**  
[72] PARK, JONGHYUN, US  
[72] DINAN, ESMAEL HEJAZI, US  
[72] JEON, HYOUNGSUK, US  
[72] ZHOU, HUA, US  
[72] YI, YUNJUNG, US  
[72] CIRIK, ALI CAGATAY, US  
[71] COMCAST CABLE COMMUNICATIONS, LLC, US  
[22] 2021-07-30  
[41] 2022-01-31  
[30] US (63/059,598) 2020-07-31

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[21] **3,126,571**  
[13] A1

[51] **Int.Cl. B65B 13/02 (2006.01) B21F 15/00 (2006.01) E04C 5/16 (2006.01) E04G 21/12 (2006.01)**

[25] EN  
[54] **BINDING MACHINE**  
[54] **MACHINE A RELIER**  
[72] MORIMURA, KOUICHIROU, JP  
[72] YOSHIDA, YUSUKE, JP  
[72] ITO, TAKAHIRO, JP  
[72] ISHIGURO, HIROKI, JP  
[71] MAX CO., LTD., JP  
[22] 2021-07-30  
[41] 2022-01-31  
[30] JP (2020-131159) 2020-07-31  
[30] JP (2021-069933) 2021-04-16

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[21] **3,126,576**  
[13] A1

[51] **Int.Cl. E21B 33/03 (2006.01) E21B 33/04 (2006.01)**

[25] EN  
[54] **DOUBLE GRIP RETENTION FOR WELLBORE INSTALLATIONS**  
[54] **DISPOSITIF DE RETENUE A DOUBLE PREHENSION POUR DES INSTALLATIONS DE TROU DE FORAGE**  
[72] GONZALEZ, JUAN CARLOS, US  
[72] SHIRLEY, BRANDON BLAKE, US  
[71] SCHLUMBERGER CANADA LIMITED, CA  
[22] 2021-07-30  
[41] 2022-01-31  
[30] US (62/706087) 2020-07-31

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[21] **3,126,577**  
[13] A1

[51] **Int.Cl. F01P 1/06 (2006.01) F01P 11/06 (2006.01) F02B 63/00 (2006.01) F02B 63/04 (2006.01) F16M 3/00 (2006.01)**

[25] EN  
[54] **POWER SYSTEMS AND ENCLOSURES HAVING IMPROVED COOLING AIR FLOW**  
[54] **BLOCS D'ALIMENTATION ET ENCEINTES AYANT UN DEBIT D'AIR DE REFROIDISSEMENT AMELIORE**  
[72] NELSON, JONATHAN, US  
[71] ILLINOIS TOOL WORKS INC., US  
[22] 2021-07-31  
[41] 2022-01-31  
[30] US (63/059,653) 2020-07-31  
[30] US (17/346,866) 2021-06-14

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[21] **3,126,579**  
[13] A1

[51] **Int.Cl. E21B 33/04 (2006.01) E21B 19/00 (2006.01) E21B 33/068 (2006.01)**

[25] EN  
[54] **SNUB FRIENDLY WELLHEAD HANGER**  
[54] **SUPPORT DE TETE DE Puits ADAPTE AU CURAGE**  
[72] SHIRLEY, BRANDON BLAKE, US  
[72] GONZALEZ, JUAN CARLOS, US  
[71] SCHLUMBERGER CANADA LIMITED, CA  
[22] 2021-07-30  
[41] 2022-01-31  
[30] US (62/706,086) 2020-07-31

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[21] **3,126,582**  
[13] A1

[51] **Int.Cl. B65B 13/02 (2006.01) B21F 7/00 (2006.01) B65B 13/28 (2006.01) E04G 21/12 (2006.01)**

[25] EN  
[54] **BINDING MACHINE**  
[54] **MACHINE A RELIER**  
[72] MORIMURA, KOUICHIROU, JP  
[72] YOSHIDA, YUSUKE, JP  
[71] MAX CO., LTD., JP  
[22] 2021-07-29  
[41] 2022-01-31  
[30] JP (2020-131158) 2020-07-31

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**Canadian Applications Open to Public Inspection  
January 30, 2022 to February 5, 2022**

[21] **3,126,585**  
[13] A1

[51] **Int.Cl. H04N 21/234 (2011.01) H04N 21/242 (2011.01) H04N 19/40 (2014.01)**

[25] EN

[54] **VIDEO CONTENT PROCESSING SYSTEMS AND METHODS**

[54] **SYSTEMES ET METHODES DE TRAITEMENT VIDEO**

[72] GILADI, ALEXANDER, US

[71] COMCAST CABLE COMMUNICATIONS, LLC, US

[22] 2021-08-02

[41] 2022-02-03

[30] US (63/060,585) 2020-08-03

[21] **3,126,587**  
[13] A1

[51] **Int.Cl. E02D 19/04 (2006.01)**

[25] EN

[54] **DEPLOYABLE COFFERDAM WEB-SUPPORTING FRAME ASSEMBLY FOR A COFFERDAM SYSTEM, COFFERDAM SYSTEM COMPRISING THE SAME AND CORRESPONDING METHOD FOR DELIMITING AN ENCLOSURE WITHIN A BODY OF WATER**

[54] **ASSEMBLAGE DE CADRE DE SUPPORT DE TOILE DEPLOYABLE POUR UN BATARDEAU, SYSTEME DE BATARDEAU COMPRENANT L'ASSEMBLAGE ET METHODE CORRESPONDANTE POUR DELIMITER UNE ENCEINTE DANS UN PLAN D'EAU**

[72] PLANTE, LOUIS-PHILIPPE, CA

[72] RIVEST AUGER, NICOLAS, CA

[71] AQUAPERMA INDUSTRIES INC., CA

[22] 2021-08-02

[41] 2022-02-04

[30] US (63/060,755) 2020-08-04

[21] **3,126,588**  
[13] A1

[51] **Int.Cl. A23C 20/00 (2006.01) A23L 19/00 (2016.01) A23L 25/00 (2016.01) A23C 20/02 (2021.01)**

[25] FR

[54] **SOLID SLICEABLE SOLIDE TRANCHABLE**

[72] DURAND, FABIEN, FR

[72] PADEL, VIRGINIE, FR

[72] CIBRARIO, ALICE, FR

[71] SAVENCIA SA, FR

[22] 2021-08-02

[41] 2022-01-31

[30] FR (2008200) 2020-07-31

[30] EP (EP21188673.4) 2021-07-30

[21] **3,126,589**  
[13] A1

[51] **Int.Cl. A61L 2/10 (2006.01)**

[25] EN

[54] **AUTOMATED MOBILE ROBOT WITH UVC LIGHTS FOR DISINFECTING A FACILITY**

[54] **ROBOT MOBILE AUTOMATISE AVEC LUMIERES A ULTRAVIOLET C POUR LA DESINFECTION D'UNE INSTALLATION**

[72] DREFFS, DAVID, US

[72] DOW, ROBERT, US

[71] BOTLEY LLC, US

[22] 2021-08-02

[41] 2022-01-31

[30] CA (3.091.069) 2020-08-25

[30] US (63/059.834) 2020-07-31

[21] **3,126,592**  
[13] A1

[51] **Int.Cl. G01B 11/245 (2006.01) G01B 11/25 (2006.01)**

[25] FR

[54] **METHODE ET SYSTEME DE PROFILOMETRIE PAR ILLUMINATION HAUTE VITESSE A BANDE LIMITEE AVEC DEUX OBJECTIFS**

[54] **METHOD AND SYSTEM FOR HIGH-SPEED DUAL-VIEW BAND-LIMITED ILLUMINATION PROFILOMETRY**

[72] LIANG, JINYANG, CA

[72] JIANG, CHENG, CA

[72] KILCULLEN, PATRICK, CA

[71] INSTITUT DE LA RECHERCHE SCIENTIFIQUE, CA

[22] 2021-08-02

[41] 2022-02-03

[30] US (63/060,630) 2020-08-03

[21] **3,126,593**  
[13] A1

[51] **Int.Cl. G02C 3/02 (2006.01) G02B 7/00 (2021.01) G02B 23/12 (2006.01)**

[25] EN

[54] **MAGNETIC SWITCH ADAPTER FOR NIGHT VISION GOGGLES**

[54] **ADAPTATEUR DE COMMUTATEUR MAGNETIQUE POUR DES LUNETTES DE VISION NOCTURNE**

[72] PRENDERGAST, JONATHAN R., US

[72] SOTO, RONALD R., US

[71] NOROTOS, INC., US

[22] 2021-08-02

[41] 2022-02-05

[30] US (63/061,793) 2020-08-05

[30] US (63/061,795) 2020-08-06

[30] US (17/173,002) 2021-02-10

[21] **3,126,643**  
[13] A1

[51] **Int.Cl. B65D 43/02 (2006.01)**

[25] EN

[54] **LID FOR CONTAINER**

[54] **COUVERCLE POUR CONTENANT**

[72] LISS, HOWARD, CA

[72] LISS, MICHAEL, CA

[71] SULLY INNOVATIONS INC., CA

[22] 2021-08-03

[41] 2022-02-04

[30] US (63/061,079) 2020-08-04

[21] **3,126,647**  
[13] A1

[51] **Int.Cl. B28B 17/00 (2006.01) B28B 7/16 (2006.01) E04B 1/38 (2006.01) E04G 15/00 (2006.01)**

[25] EN

[54] **DEVICE AND METHOD FOR FORMING VOIDS IN CONCRETE**

[54] **DISPOSITIF ET METHODE POUR FORMER DES VIDES DANS LE BETON**

[72] ROSSART, RAELENE MARIE, US

[71] RAISE THE BAR DETAILING, US

[22] 2021-08-03

[41] 2022-02-04

[30] US (17/393,337) 2021-08-03

[30] US (63/214,565) 2021-06-24

[30] US (63/060,795) 2020-08-04

**Demandes canadiennes mises à la disponibilité du public  
30 janvier 2022 au 5 février 2022**

[21] **3,126,648**  
[13] A1

[51] **Int.Cl. G06Q 20/22 (2012.01) G06Q 20/40 (2012.01)**  
[25] EN  
[54] **HYBRID ELECTRONIC PAYMENT PROCESS FOR CHARGE ACCOUNT**  
[54] **TRAITEMENT DE PAIEMENT ELECTRONIQUE HYBRIDE POUR UN COMPTE D'ACHATS**  
[72] COX, ELIZABETH D., US  
[72] WOULFIN, ASHLEY, US  
[72] GAVIN, CLAYTON GREGORY, US  
[71] CGI FEDERAL INC., US  
[22] 2021-08-04  
[41] 2022-02-05  
[30] US (16/985,882) 2020-08-05

[21] **3,126,650**  
[13] A1

[51] **Int.Cl. G06N 20/00 (2019.01) G16H 50/20 (2018.01)**  
[25] EN  
[54] **METHODS AND APPARATUS FOR THE APPLICATION OF REINFORCEMENT LEARNING TO ANIMAL MEDICAL DIAGNOSTICS**  
[54] **PROCEDES ET APPAREIL POUR L'APPLICATION D'APPRENTISSAGE PAR RENFORCEMENT AUX DIAGNOSTICS MEDICAUX CHEZ LES ANIMAUX**  
[72] SHAW, NEIL GAVIN, US  
[72] KUYER, LIOR, US  
[71] SIGNALPET, LLC, US  
[22] 2021-08-04  
[41] 2022-02-04  
[30] US (16/985,106) 2020-08-04

[21] **3,126,656**  
[13] A1

[51] **Int.Cl. G06Q 10/00 (2012.01) G06Q 50/06 (2012.01) G06Q 50/30 (2012.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR HOLISTIC LOW CARBON INTENSITY FUEL PRODUCTION**  
[54] **SYSTEMES ET METHODES POUR UNE PRODUCTION DE CARBURANT HOLISTIQUE A FAIBLE INTENSITE DE CARBONE**  
[72] WHIKEHART, DAVID, US  
[72] HEROLD, GREGORY, US  
[71] MARATHON PETROLEUM COMPANY LP, US  
[22] 2021-08-04  
[41] 2022-02-04  
[30] US (63/061,162) 2020-08-04  
[30] US (63/066,912) 2020-08-18  
[30] US (63/198,626) 2020-10-30  
[30] US (63/113,186) 2020-11-12  
[30] US (17/392,588) 2021-08-03  
[30] US (17/392,567) 2021-08-03  
[30] US (17/392,600) 2021-08-03  
[30] US (17/392,622) 2021-08-03

[21] **3,126,659**  
[13] A1

[51] **Int.Cl. E04G 3/28 (2006.01) E04G 1/18 (2006.01) E04G 3/00 (2006.01)**  
[25] EN  
[54] **HEIGHT ADJUSTABLE BUILDING MOUNTED PLATFORM ASSEMBLY**  
[54] **ASSEMBLAGE DE PLATEFORME A HAUTEUR AJUSTABLE MONTEE SUR UN BATIMENT**  
[72] DEPOT, GERMAIN, CA  
[71] ECHAFAUDAGES SECUR-IT INC., CA  
[22] 2021-08-04  
[41] 2022-02-04  
[30] US (63/061,031) 2020-08-04

[21] **3,126,663**  
[13] A1

[51] **Int.Cl. H04L 45/7453 (2022.01)**  
[25] EN  
[54] **FLOW TABLE PROGRAMMING USING FLOW MISS METADATA AND BURST ACTION ASSIST VIA CPU OFFLOAD**  
[54] **PROGRAMMATION DE TABLEAUX DE FLUX A L'AIDE DE METADONNEES DE MANQUEMENTS ET PAR L'ASSISTANCE D'UNE ACTION-RAFALE PAR LA DECHARGE DU CPU**  
[72] SUBRAHMANYA, SAMEER KITTUR, US  
[72] SAMPATH, VIJAY, US  
[72] KAMISSETTY, SARAT, US  
[72] RAMAN, PIRABHU, US  
[72] DODDAPANENI, KRISHNA, US  
[72] SIVARAMU, RAGHAVA KODIGENAHALLI, US  
[71] PENSANDO SYSTEMS INC., US  
[22] 2021-08-04  
[41] 2022-02-04  
[30] US (16/985054) 2020-08-04

[21] **3,126,664**  
[13] A1

[51] **Int.Cl. B23K 9/10 (2006.01) B23K 9/32 (2006.01)**  
[25] EN  
[54] **ENGINE-DRIVEN POWER SYSTEMS AND METHODS FOR AUTOMATIC ENGINE STARTING**  
[54] **SYSTEMES D'ALIMENTATION A MOTEUR ET METHODES DE DEMARRAGE AUTOMATIQUE DU MOTEUR**  
[72] JOCHMAN, NATHAN JOE, US  
[72] SCHNEIDER, JOSEPH C., US  
[71] ILLINOIS TOOL WORKS INC., US  
[22] 2021-08-04  
[41] 2022-02-05  
[30] US (16/985,703) 2020-08-05

**Canadian Applications Open to Public Inspection  
January 30, 2022 to February 5, 2022**

[21] **3,126,666**  
[13] A1

[51] **Int.Cl. H04L 45/02 (2022.01) H04L 49/253 (2022.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR REMOVING EXPIRED FLOW TABLE-ENTRIES USING AN EXTENDED PACKET PROCESSING PIPELINE**  
[54] **METHODES ET SYSTEMES POUR ELIMINER DES ENTREES DANS UN TABLEAU DE FLUX AU MOYEN D'UN PIPELINE DE TRAITEMENT DE PAQUETS ELARGI**  
[72] SUBRAHMANYA, SAMEER KITTUR, US  
[72] KOTA, MURTY, US  
[72] QUOC, TUYEN, US  
[72] NAGULAPALLI, HARINADH, US  
[71] PENSANDO SYSTEMS INC., US  
[22] 2021-08-04  
[41] 2022-02-04  
[30] US (16/985060) 2020-08-04

[21] **3,126,678**  
[13] A1

[51] **Int.Cl. C10L 1/02 (2006.01) C10L 1/182 (2006.01) C12M 1/00 (2006.01) C12P 7/06 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR HOLISTIC LOW CARBON INTENSITY FUEL AND ETHANOL PRODUCTION**  
[54] **SYSTEMES ET METHODES POUR UNE PRODUCTION HOLISTIQUE DE CARBURANT ET D'ETHANOL A FAIBLE INTENSITE DE CARBONE**  
[72] WHIKEHART, DAVID, US  
[71] MARATHON PETROLEUM COMPANY LP, US  
[22] 2021-08-04  
[41] 2022-02-04  
[30] US (63/061,162) 2020-08-04  
[30] US (63/066,912) 2020-08-18  
[30] US (63/198,626) 2020-10-30  
[30] US (63/113,186) 2020-11-12  
[30] US (17/392,567) 2021-08-03  
[30] US (17/392,588) 2021-08-03  
[30] US (17/392,600) 2021-08-03  
[30] US (17/392,622) 2021-08-03

[21] **3,126,682**  
[13] A1

[51] **Int.Cl. C01B 3/02 (2006.01) G05D 21/02 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR HOLISTIC LOW CARBON INTENSITY FUEL AND HYDROGEN PRODUCTION**  
[54] **SYSTEMES ET METHODES POUR UNE PRODUCTION HOLISTIQUE DE CARBURANT ET D'HYDROGENE A FAIBLE INTENSITE DE CARBONE**  
[72] WHIKEHART, DAVID, US  
[72] HEROLD, GREGORY, US  
[71] MARATHON PETROLEUM COMPANY LP, US  
[22] 2021-08-04  
[41] 2022-02-04  
[30] US (63/061,162) 2020-08-04  
[30] US (63/066,912) 2020-08-18  
[30] US (63/198,626) 2020-10-30  
[30] US (63/113,186) 2020-11-12  
[30] US (17/392,567) 2021-08-03  
[30] US (17/392,588) 2021-08-03  
[30] US (17/392,600) 2021-08-03  
[30] US (17/392,622) 2021-08-03

[21] **3,126,684**  
[13] A1

[51] **Int.Cl. G06Q 10/00 (2012.01) G06Q 50/30 (2012.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR HOLISTIC LOW CARBON INTENSITY FUEL PRODUCTION**  
[54] **SYSTEMES ET METHODES POUR UNE PRODUCTION DE CARBURANT HOLISTIQUE A FAIBLE INTENSITE DE CARBONE**  
[72] WHIKEHART, DAVID, US  
[72] HEROLD, GREGORY, US  
[71] MARATHON PETROLEUM COMPANY LP, US  
[22] 2021-08-04  
[41] 2022-02-04  
[30] US (63/061,162) 2020-08-04  
[30] US (63/066,912) 2020-08-18  
[30] US (63/198,626) 2020-10-30  
[30] US (63/113,186) 2020-11-12  
[30] US (17/392,567) 2021-08-03  
[30] US (17/392,588) 2021-08-03  
[30] US (17/392,600) 2021-08-03  
[30] US (17/392,622) 2021-08-03

[21] **3,126,785**  
[13] A1

[51] **Int.Cl. H04W 24/04 (2009.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR MANAGING MOBILE NETWORK CONGESTION**  
[54] **METHODE ET SYSTEME POUR GERER L'ENCOMBREMENT SUR UN RESEAU MOBILE**  
[72] SRIDHAR, KAMAKSHI, US  
[72] GUNNARSSON, LARS ANTON, TH  
[72] HAVANG, ALEXANDER, CA  
[71] SANDVINE CORPORATION, CA  
[22] 2021-08-05  
[41] 2022-02-05  
[30] US (63/061,253) 2020-08-05  
[30] EP (21189733.5) 2021-08-04

[21] **3,126,857**  
[13] A1

[51] **Int.Cl. H05B 47/115 (2020.01) F21K 9/00 (2016.01) B60Q 3/30 (2017.01) H05B 45/10 (2020.01) H05B 45/34 (2020.01) F21S 2/00 (2016.01) F21S 9/02 (2006.01) H02H 7/18 (2006.01) H02J 7/35 (2006.01) F21V 29/15 (2015.01) F21V 21/08 (2006.01)**  
[25] EN  
[54] **LIGHTING SYSTEM AND METHOD**  
[54] **SYSTEME ET METHODE D'ECLAIRAGE**  
[72] GRADY, DARYL, US  
[72] GRADY, SCOTT, US  
[71] SSR LIGHTING TECHNOLOGIES, LLC, US  
[22] 2021-08-05  
[41] 2022-02-05  
[30] US (63/061,178) 2020-08-05  
[30] US (17/395,383) 2021-08-05

**Demandes canadiennes mises à la disponibilité du public**  
**30 janvier 2022 au 5 février 2022**

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[21] **3,126,972**

[13] A1

[51] **Int.Cl. H05B 47/10 (2020.01) H05B 47/155 (2020.01) H05B 47/175 (2020.01) H05B 47/19 (2020.01) F21S 8/08 (2006.01) F21K 9/00 (2016.01)**

[25] EN

[54] **INDEPENDENTLY OPERABLE MULTI-PANEL MUNICIPAL LUMINAIRE**

[54] **APPAREIL D'ECLAIRAGE MUNICIPAL MULTIPANNEAU A EXPLOITATION INDEPENDANTE**

[72] STEGEMAN, JOHN T., US

[72] STEGEMAN, THEODORE J., US

[71] LABYRINTH TECHNOLOGIES, LLC, US

[22] 2021-08-05

[41] 2022-02-05

[30] US (16/985,991) 2020-08-05

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[21] **3,127,069**

[13] A1

[51] **Int.Cl. A61L 2/10 (2006.01)**

[25] EN

[54] **SYSTEM FOR NEUTRALIZING PATHOGENS ON TACTILE SURFACES**

[54] **SYSTEME POUR NEUTRALISER LES PATHOGENES SUR DES SURFACES TACTILES**

[72] MUNN, MAX, US

[71] STERILUMEN, INC., US

[22] 2021-08-03

[41] 2022-02-03

[30] US (16/983,412) 2020-08-03

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[21] **3,127,082**

[13] A1

[51] **Int.Cl. B65F 1/14 (2006.01)**

[25] EN

[54] **REPLACEMENT BOTTOM FOR CONTAINER**

[54] **FOND DE RECHANGE POUR UN CONTENANT**

[72] BOESCH, TIMOTHY, US

[72] BOESCH, TRAVIS, US

[71] TBI ENGINEERING AND DESIGN, LLC, US

[22] 2021-08-05

[41] 2022-02-05

[30] US (62/706,214) 2020-08-05

[30] US (17/359,995) 2021-06-28

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[21] **3,127,117**

[13] A1

[51] **Int.Cl. H04W 76/27 (2018.01) H04W 76/34 (2018.01)**

[25] EN

[54] **RESOURCE CONFIGURATION FOR NON-CONNECTED STATE**

[54] **CONFIGURATION DE RESSOURCE POUR UN ETAT NON CONNECTE**

[72] JEON, HYOUNGSUK, US

[72] DINAN, ESMAEL HEJAZI, US

[72] KIM, TAEHUN, US

[72] PARK, KYUNGMIN, US

[72] PARK, JONGHYUN, US

[72] CIRIK, ALI CAGATAY, US

[71] COMCAST CABLE

COMMUNICATIONS, LLC, US

[22] 2021-08-05

[41] 2022-02-05

[30] US (63/061,750) 2020-08-05

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[21] **3,127,208**

[13] A1

[51] **Int.Cl. A63B 71/06 (2006.01) G16Z 99/00 (2019.01) H04L 12/16 (2006.01)**

[25] EN

[54] **SYSTEM AND METHODS OF TRACKING GAME EVENTS**

[54] **SYSTEME ET METHODES DE SUIVI D'EVENEMENTS DE JEU**

[72] ADAMS, NEIL, CA

[71] ADAMS, NEIL, CA

[22] 2021-08-03

[41] 2022-02-04

[30] US (62/706,198) 2020-08-04

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# PCT Applications Entering the National Phase

## Demands PCT entrant en phase nationale

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[21] **3,098,740**  
[13] A1  
[51] **Int.Cl. E05F 15/695 (2015.01) B60J 1/17 (2006.01) B60R 16/023 (2006.01) H01H 13/70 (2006.01)**  
[25] EN  
[54] **POWER WINDOW SYNC SWITCH**  
[54] **INTERRUPTEUR DE SYNCHRONISATION DE GLACE A COMMANDE ELECTRIQUE**  
[72] BUCKLEY, RICHARD, CA  
[71] BUCKLEY, RICHARD, CA  
[85] 2020-11-05  
[86] 2020-07-30 (PCT/CA2020/000095)  
[87] (WO2021/022355)

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[21] **3,127,977**  
[13] A1  
[51] **Int.Cl. A61M 16/00 (2006.01) A01K 13/00 (2006.01) A61M 16/06 (2006.01) A61M 16/20 (2006.01)**  
[25] EN  
[54] **FLOW TRIGGERED GAS DELIVERY**  
[54] **DISTRIBUTION DE GAZ DECLENCHEE PAR ECOULEMENT**  
[72] METELITS, JOEL B., US  
[71] EFFORTLESS OXYGEN, LLC, US  
[85] 2021-08-12  
[86] 2021-08-04 (PCT/US2021/044473)  
[87] (3127977)  
[30] US (16/986,017) 2020-08-05  
[30] US (17/199,172) 2021-03-11  
[30] US (17/350,921) 2021-06-17  
[30] US (17/393,316) 2021-08-03

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[21] **3,129,281**  
[13] A1  
[51] **Int.Cl. F24F 1/029 (2019.01) F24F 1/0358 (2019.01)**  
[25] EN  
[54] **MOTOR SUPPORT AND DEHUMIDIFIER HAVING SAME**  
[54] **SUPPORT DE MOTEUR ET DESHUMIDIFICATEUR LE COMPORTANT**  
[72] SHEN, WENJUN, CN  
[72] XING, ZHIGANG, CN  
[72] LIU, YU, CN  
[72] LEI, ZHISHENG, CN  
[72] ZHANG, KANGWEN, CN  
[72] TANG, YUHANG, CN  
[72] DONG, PEILI, CN  
[72] YANG, CHENGLI, CN  
[71] GD MIDEA AIR-CONDITIONING EQUIPMENT CO., LTD., CN

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[85] 2021-08-27  
[86] 2020-12-21 (PCT/CN2020/137937)  
[87] (3129281)  
[30] CN (202021576813.2) 2020-07-31  
[30] CN (202021577158.2) 2020-07-31  
[30] CN (202022616572.6) 2020-11-12  
[30] CN (202011262680.6) 2020-11-12

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[21] **3,132,668**  
[13] A1  
[51] **Int.Cl. H02K 1/06 (2006.01) H02K 11/21 (2016.01) H02K 11/30 (2016.01)**  
[25] EN  
[54] **ELECTRIC MOTORS AND METHODS OF CONTROLLING THEREOF**  
[54]  
[72] BUSSIERES, NORMAND, CA  
[72] MARTEL, PATRICK, CA  
[72] PARE, MATHIEU, CA  
[71] 121352 CANADA INC., CA  
[71] BUSSIERES, NORMAND, CA  
[85] 2021-11-17  
[86] 2021-04-26 (PCT/CA2021/050568)  
[87] (3132668)  
[30] US (63/015,566) 2020-04-25

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[21] **3,137,429**  
[13] A1  
[51] **Int.Cl. H04L 12/16 (2006.01) G06F 9/455 (2018.01)**  
[25] EN  
[54] **DESKTOP AS A SERVICE SYSTEM**  
[54] **ORDINATEUR DE BUREAU COMME SYSTEME DE SERVICE**  
[72] GOLDMAN, ALAN, US  
[72] SABIN, MICHAEL J., US  
[72] SHAH, RADHESHAM, US  
[72] SINGLETON, LEO C., US  
[72] VALICHERLA, KIREETI A., US  
[71] CITRIX SYSTEMS, INC., US  
[85] 2021-11-03  
[86] 2020-08-01 (PCT/US2020/044675)  
[87] (3137429)

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[21] **3,139,317**  
[13] A1  
[51] **Int.Cl. B60B 27/00 (2006.01)**  
[25] EN  
[54] **WHEEL HUB, VEHICLE WITH AUXILIARY DRIVE, SAID VEHICLE COMPRISING THE WHEEL HUB, AND CLAMPING ASSEMBLY**  
[54] **MOYEU DE ROUE, VEHICULE A ENTRAINEMENT AUXILIAIRE COMPRENANT LE MOYEU DE ROUE ET ENSEMBLE D'AGRAFES**  
[72] PIELE, THEODOR, DE  
[72] SAMMULLER, HERBERT, DE  
[71] FAZUA GMBH, DE  
[85] 2021-11-23  
[86] 2020-05-28 (PCT/EP2020/064829)  
[87] (WO2020/245026)  
[30] DE (10 2019 115 401.4) 2019-06-06

## Demandes PCT entrant en phase nationale

[21] **3,139,372**  
[13] A1

[51] **Int.Cl. A61H 23/02 (2006.01)**  
[25] EN  
[54] **WEARABLE DEVICE**  
[54] **DISPOSITIF PORTABLE**  
[72] JUNG, SOO MIN, GB  
[71] CHARCO NEUROTECH LTD, GB  
[85] 2021-11-24  
[86] 2020-06-26 (PCT/IB2020/056091)  
[87] (WO2020/261225)  
[30] GB (1909176.8) 2019-06-26

[21] **3,139,374**  
[13] A1

[51] **Int.Cl. C07K 7/06 (2006.01) A61K 38/00 (2006.01) A61P 25/28 (2006.01) A61P 31/12 (2006.01) A61P 35/00 (2006.01) C07K 7/08 (2006.01)**  
[25] EN  
[54] **MODIFIED PEPTIDES AND ASSOCIATED METHODS OF USE**  
[54] **PEPTIDES MODIFIES ET PROCEDES D'UTILISATION ASSOCIES**  
[72] EMAMIAN, EFFAT S., US  
[71] ADVANCED TECHNOLOGIES FOR NOVEL THERAPEUTICS, LLC, US  
[85] 2021-11-24  
[86] 2020-06-03 (PCT/US2020/035907)  
[87] (WO2020/247485)  
[30] US (62/857,293) 2019-06-05

[21] **3,139,385**  
[13] A1

[51] **Int.Cl. G06Q 20/00 (2012.01) G06Q 20/40 (2012.01)**  
[25] EN  
[54] **ENHANCED DESCRIPTORS FOR ELECTRONIC PURCHASES**  
[54] **DESCRIPTEURS AMELIORES POUR ACHATS ELECTRONIQUES**  
[72] MARTIN-BALE, ALEXANDER, CA  
[72] ASSOULINE, DANIEL, CA  
[71] 10518590 CANADA INC. (LES SERVICES LASTCARD), CA  
[85] 2021-11-24  
[86] 2021-03-26 (PCT/CA2021/050396)  
[87] (WO2021/195748)  
[30] US (63/002,421) 2020-03-31

[21] **3,139,386**  
[13] A1

[51] **Int.Cl. H01L 39/12 (2006.01) H01M 10/0525 (2010.01) C01D 1/02 (2006.01) C01D 15/02 (2006.01)**  
[25] EN  
[54] **A ONE-ELECTRODE CELL AND SERIES OF TWO OR MORE CELLS AS A DEVICE**  
[54] **CELLULE A ELECTRODE UNIQUE ET SERIE D'AU MOINS DEUX CELLULES COMME DISPOSITIF**  
[72] SOUSA SOARES DE OLIVEIRA BRAGA, MARIA HELENA, PT  
[71] UNIVERSIDADE DO PORTO, PT  
[85] 2021-11-24  
[86] 2020-05-26 (PCT/IB2020/054973)  
[87] (WO2020/240412)  
[30] PT (115542) 2019-05-26

[21] **3,139,390**  
[13] A1

[51] **Int.Cl. B05B 11/00 (2006.01) B05B 15/30 (2018.01) B08B 3/08 (2006.01)**  
[25] EN  
[54] **CONCENTRATED CLEANING CAPSULE AND DISPENSER FOR DISPENSING CLEANING SOLUTION THEREFROM**  
[54] **CAPSULE DE NETTOYAGE CENTREE ET DISTRIBUTEUR POUR DISTRIBUER UNE SOLUTION DE NETTOYAGE A PARTIR DE CELLE-CI**  
[72] YUODOVIN, DAVID N., US  
[71] BUTLER'S BRAND, INC., US  
[85] 2021-11-24  
[86] 2019-08-29 (PCT/US2019/048766)  
[87] (WO2020/242512)  
[30] US (16/423,526) 2019-05-28

[21] **3,139,401**  
[13] A1

[51] **Int.Cl. F01D 25/26 (2006.01)**  
[25] FR  
[54] **TURBOJET ENGINE FAN CASING**  
[54] **CARTER DE SOUFFLANTE DE TURBOREACTEUR**  
[72] GLEMAREC, GUILLAUME, FR  
[72] GARNAUD, QUENTIN MATTHIAS EMMANUEL, FR  
[72] DAUTREPPE, FREDERIC, FR  
[71] SAFRAN AIRCRAFT ENGINES, FR  
[85] 2021-11-24  
[86] 2020-05-27 (PCT/EP2020/064762)  
[87] (WO2020/249399)  
[30] FR (FR1906245) 2019-06-12

[21] **3,139,414**  
[13] A1

[51] **Int.Cl. G01N 33/68 (2006.01) C07K 1/13 (2006.01) C07K 16/00 (2006.01) G01N 33/58 (2006.01)**  
[25] EN  
[54] **PROXIMITY-BASED LABELING SYSTEMS AND APPLICATIONS THEREOF**  
[54] **SYSTEMES DE MARQUAGE BASES SUR LA PROXIMITE ET APPLICATIONS ASSOCIEES**  
[72] MACMILLAN, DAVID W.C., US  
[72] GERI, JACOB, US  
[72] WANG, TAO, US  
[72] OAKLEY, JAMES, US  
[72] REYES-ROBLES, TAMARA, US  
[72] OSLUND, ROB C., US  
[72] FADEYI, OLUGBEMINIYI O., US  
[72] PARKER, DANN LEROY, US  
[72] RODRIGUEZ-RIVERA, FRANCES PAOLA, US  
[72] MCCARVER, STEFAN, US  
[71] THE TRUSTEES OF PRINCETON UNIVERSITY, US  
[71] MRL CAMBRIDGE ESC, US  
[85] 2021-11-24  
[86] 2020-06-05 (PCT/US2020/036285)  
[87] (WO2020/247725)  
[30] US (62/858,539) 2019-06-07  
[30] US (62/982,576) 2020-02-27

[21] **3,139,415**  
[13] A1

[51] **Int.Cl. A61K 35/74 (2015.01) A61K 35/741 (2015.01) A61K 35/37 (2015.01)**  
[25] EN  
[54] **METHOD FOR GUT MUCOSA PREPARATION TO ENHANCE MICROBIAL ENGRAFTMENT**  
[54] **PROCEDE DE PREPARATION DE LA MUQUEUSE INTESTINALE POUR AMELIORER LA GREFFE MICROBIENNE**  
[72] MILIS, ANTONY, AU  
[72] BORODY, THOMAS JULIUS, AU  
[71] MILIS, ANTONY, AU  
[71] BORODY, THOMAS JULIUS, AU  
[85] 2021-11-24  
[86] 2020-07-13 (PCT/AU2020/050724)  
[87] (WO2021/003535)  
[30] US (62/873,032) 2019-07-11

## PCT Applications Entering the National Phase

[21] **3,139,431**  
[13] A1

[51] **Int.Cl. B05B 12/00 (2018.01) B05B 15/00 (2018.01)**  
[25] EN  
[54] **NOZZLE AIMING DEVICE**  
[54] **DISPOSITIF DE VISEE DE BUSE**  
[72] RYCZEK, CHAD L., US  
[71] TYCO FIRE PRODUCTS LP, US  
[85] 2021-11-24  
[86] 2020-06-03 (PCT/IB2020/055242)  
[87] (WO2020/245744)  
[30] US (62/857,566) 2019-06-05

[21] **3,139,440**  
[13] A1

[51] **Int.Cl. C02F 1/32 (2006.01) C02F 1/36 (2006.01) C02F 1/78 (2006.01)**  
[25] EN  
[54] **PFAS TREATMENT SCHEME USING SEPARATION AND ELECTROCHEMICAL ELIMINATION**  
[54] **SCHEMA DE TRAITEMENT DE PFAS UTILISANT UNE SEPARATION ET UNE ELIMINATION ELECTROCHIMIQUE**  
[72] CHEN, YANG, US  
[72] DUKES, SIMON P., US  
[72] MALLMANN, THOMAS K., US  
[72] DU, WENXIN, US  
[72] HADJIKYRIACOU, SAVVAS E., US  
[72] JEREMIASSE, ADRIAAN, NL  
[71] EVOQUA WATER TECHNOLOGIES, LLC, US  
[85] 2021-11-24  
[86] 2020-01-08 (PCT/US2020/012648)  
[87] (WO2020/247029)  
[30] US (62/858,401) 2019-06-07

[21] **3,139,447**  
[13] A1

[51] **Int.Cl. G01N 33/00 (2006.01) A01B 79/00 (2006.01) A01G 13/00 (2006.01) G05B 15/02 (2006.01)**  
[25] EN  
[54] **AUTOMATED PLANT MONITORING SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES DE SURVEILLANCE AUTOMATISEE DE PLANTES**  
[72] GELTNER, IDDO, IL  
[71] ARUGGA A.I FARMING LTD, IL  
[85] 2021-11-24  
[86] 2020-06-30 (PCT/IL2020/050729)  
[87] (WO2021/005589)  
[30] US (62/870,885) 2019-07-05

[21] **3,139,453**  
[13] A1

[51] **Int.Cl. H04N 19/513 (2014.01)**  
[25] EN  
[54] **ENCODING AND DECODING METHOD, APPARATUS, AND DEVICE**  
[54] **METHODE, APPAREIL ET DISPOSITIF DE CODAGE ET DE DECODAGE**  
[72] CHEN, FANGDONG, CN  
[71] HANGZHOU HIKVISION DIGITAL TECHNOLOGY CO., LTD., CN  
[85] 2021-11-24  
[86] 2020-06-17 (PCT/CN2020/096649)  
[87] (WO2020/259372)  
[30] CN (201910551169.9) 2019-06-24

[21] **3,139,465**  
[13] A1

[51] **Int.Cl. G06F 3/16 (2006.01)**  
[25] EN  
[54] **VOICE COMMUNICATION SYSTEM WITHIN A MIXED-REALITY ENVIRONMENT**  
[54] **SYSTEME DE COMMUNICATION VOCALE DANS UN ENVIRONNEMENT DE REALITE MIXTE**  
[72] LOBERG, BARRIE A., CA  
[72] BLODGETT, ROBERT, US  
[71] DIRTT ENVIRONMENTAL SOLUTIONS LTD., CA  
[85] 2021-11-24  
[86] 2020-06-18 (PCT/US2020/038433)  
[87] (WO2020/257453)  
[30] US (62/864,324) 2019-06-20

[21] **3,139,466**  
[13] A1

[51] **Int.Cl. H04N 19/577 (2014.01) H04N 19/176 (2014.01)**  
[25] EN  
[54] **ENCODING AND DECODING METHOD AND APPARATUS, AND DEVICE THEREFOR**  
[54] **PROCEDE ET APPAREIL DE CODAGE ET DE DECODAGE, ET DISPOSITIF ASSOCIE**  
[72] CHEN, FANGDONG, CN  
[71] HANGZHOU HIKVISION DIGITAL TECHNOLOGY CO., LTD., CN  
[85] 2021-11-24  
[86] 2020-06-17 (PCT/CN2020/096600)  
[87] (WO2020/253730)  
[30] CN (201910544562.5) 2019-06-21

[21] **3,139,467**  
[13] A1

[51] **Int.Cl. G06T 7/73 (2017.01)**  
[25] EN  
[54] **USING SPATIAL FILTER TO REDUCE BUNDLE ADJUSTMENT BLOCK SIZE**  
[54] **UTILISATION D'UN FILTRE SPATIAL POUR REDUIRE LA TAILLE D'UN BLOC DE REGLAGE DE FAISCEAU**  
[72] NILOSEK, DAVID R., US  
[72] CAUZ-BRISEBOIS, VINCENT, US  
[72] SALVAGGIO, PHILLIP, US  
[71] PICTOMETRY INTERNATIONAL CORP., US  
[85] 2021-11-24  
[86] 2020-06-08 (PCT/US2020/036671)  
[87] (WO2020/247938)  
[30] US (62/858,728) 2019-06-07

[21] **3,139,468**  
[13] A1

[51] **Int.Cl. A61M 15/00 (2006.01) A61M 11/00 (2006.01) A61M 16/00 (2006.01)**  
[25] EN  
[54] **COMPACT SPACER FOR METERED DOSE INHALER**  
[54] **DISPOSITIF D'ESPACEMENT POUR UN INHALATEUR-DOSEUR**  
[72] BAEK, SIMON, US  
[72] BAEK, CINDY, US  
[72] MARCH, ANDREW, US  
[71] BLUE OCEAN GROUP, LLC, US  
[71] BAEK, SIMON, US  
[71] BAEK, CINDY, US  
[71] MARCH, ANDREW, US  
[85] 2021-11-24  
[86] 2020-05-23 (PCT/US2020/034428)  
[87] (WO2020/243024)  
[30] US (62/852,792) 2019-05-24

## Demandes PCT entrant en phase nationale

[21] **3,139,469**  
[13] A1

[51] **Int.Cl. C07K 14/47 (2006.01) C12N 15/113 (2010.01) C12N 15/85 (2006.01)**

[25] EN

[54] **MODELING TDP-43 PROTEINOPATHY**

[54] **MODELISATION DE LA PROTEINOPATHIE A TDP-43**

[72] SHARMA-KANNING, AARTI, US

[72] FRENDEWEY, DAVID, US

[72] ZAMBROWICZ, BRIAN, US

[71] REGENERON PHARMACEUTICALS, INC., US

[85] 2021-11-24

[86] 2020-06-26 (PCT/US2020/039877)

[87] (WO2020/264339)

[30] US (62/867,785) 2019-06-27

[21] **3,139,470**  
[13] A1

[51] **Int.Cl. A23L 33/175 (2016.01) A61K 31/198 (2006.01) A61K 31/405 (2006.01) A61P 11/06 (2006.01) A61P 27/02 (2006.01)**

[25] EN

[54] **COMPOSITION FOR PREVENTING OR TREATING ASTHMA, RHINITIS OR CONJUNCTIVITIS, COMPRISING N-ACYL AMINO ACID AS ACTIVE INGREDIENT**

[54] **COMPOSITION PERMETTANT LA PREVENTION OU LE TRAITEMENT DE L'ASTHME, DE LA RHINITE OU DE LA CONJONCTIVITE, COMPRENANT UN ACIDE N-ACYLAMINE EN TANT QUE PRINCIPE ACTIF**

[72] HAN, MYUNG-KWAN, KR

[72] LEE, KWANGHO, KR

[71] STEMDR INC., KR

[85] 2021-11-24

[86] 2020-05-21 (PCT/KR2020/006651)

[87] (WO2020/242133)

[30] KR (10-2019-0060932) 2019-05-24

[30] KR (10-2020-0060667) 2020-05-21

[21] **3,139,471**  
[13] A1

[51] **Int.Cl. A61B 8/00 (2006.01) A61B 5/00 (2006.01) A61B 8/08 (2006.01)**

[25] EN

[54] **AUXILIARY ELECTROCARDIOGRAM (ECG) ASSEMBLIES AND CLINICAL DATA ACQUISITION SYSTEMS INCLUDING AUXILIARY ECG ASSEMBLIES**

[54] **ENSEMBLES D'ELECTROCARDIOGRAMMES (ECG) AUXILIAIRES ET SYSTEMES D'ACQUISITION DE DONNEES CLINIQUES COMPRENANT DES ENSEMBLES ECG AUXILIAIRES**

[72] PAGOULATOS, NIKOLAOS, US

[72] NELSON, DAVID, US

[72] NIEMINEN, GREG, US

[72] BLAIVAS, MICHAEL, US

[72] BRUNKE, SHELBY, US

[72] DOHERTY, TERRY, US

[72] BROAD, RON, US

[72] PETERMANN, JEFF, US

[71] ECHONOUS, INC., US

[85] 2021-11-24

[86] 2020-05-29 (PCT/US2020/035398)

[87] (WO2020/243622)

[30] US (62/854,931) 2019-05-30

[21] **3,139,472**  
[13] A1

[51] **Int.Cl. B65B 25/02 (2006.01) B31B 70/00 (2017.01) A23B 7/148 (2006.01) B65D 65/38 (2006.01) B65D 81/20 (2006.01) B65D 85/34 (2006.01) B65D 85/50 (2006.01)**

[25] EN

[54] **PACKAGE FOR PRESERVING RESPIRING PRODUCE AND METHOD**

[54] **EMBALLAGE POUR LA CONSERVATION DE PRODUITS RESPIRANTS ET PROCEDE ASSOCIE**

[72] GROENEWEG, BASTIAAN RINKE ANTONY, NL

[72] VAN DE LOO, PAULUS JOSEPHUS BENEDICTUS MARIA, NL

[71] PERFOTEC B.V., NL

[85] 2021-11-24

[86] 2020-06-12 (PCT/NL2020/050376)

[87] (WO2020/251358)

[30] NL (2023294) 2019-06-12

[30] NL (2024761) 2020-01-27

[21] **3,139,473**  
[13] A1

[51] **Int.Cl. H04N 21/8547 (2011.01) H04N 21/81 (2011.01) H04N 21/8405 (2011.01)**

[25] EN

[54] **SYSTEM AND METHOD OF SYNCHRONIZING VIDEO AND AUDIO CLIPS WITH AUDIO DATA**

[54] **SYSTEME ET PROCEDE DE SYNCHRONISATION DE CLIPS VIDEO ET AUDIO AVEC DES DONNEES AUDIO**

[72] TAKADA, YOUSUKE, CA

[72] AWASHIMA, KENROU, CA

[72] NII, YASUNORI, CA

[71] GRASS VALLEY CANADA, CA

[85] 2021-11-24

[86] 2020-05-22 (PCT/CA2020/050697)

[87] (WO2020/237355)

[30] US (62/852,649) 2019-05-24

[30] US (16/878,356) 2020-05-19

[21] **3,139,486**  
[13] A1

[51] **Int.Cl. G06V 20/10 (2022.01) G06T 7/33 (2017.01) G06T 7/70 (2017.01) G06V 10/40 (2022.01) G06V 10/70 (2022.01) G06V 10/82 (2022.01) G06N 3/02 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR AUTOMATED DETECTION OF CHANGES IN EXTENT OF STRUCTURES USING IMAGERY**

[54] **SYSTEMES ET PROCEDES DE DETECTION AUTOMATISEE DE CHANGEMENTS D'ETENDUE DE STRUCTURES A L'AIDE D'IMAGERIE**

[72] NG, STEPHEN, US

[72] NILOSEK, DAVID R., US

[72] SALVAGGIO, PHILLIP, US

[72] STRONG, SHADRIAN, US

[71] PICTOMETRY INTERNATIONAL CORP., US

[85] 2021-11-24

[86] 2020-06-03 (PCT/US2020/035945)

[87] (WO2020/247513)

[30] US (62/858,656) 2019-06-07

## PCT Applications Entering the National Phase

[21] **3,139,543**  
[13] A1

[51] **Int.Cl. G06F 8/10 (2018.01) G06F 8/20 (2018.01)**

[25] EN

[54] **PROCESS AND SYSTEM FOR AUTOMATIC GENERATION OF FUNCTIONAL ARCHITECTURE DOCUMENTS AND SOFTWARE DESIGN AND ANALYSIS SPECIFICATION DOCUMENTS FROM NATURAL LANGUAGE**

[54] **PROCEDE ET SYSTEME DE GENERATION AUTOMATIQUE DE DOCUMENTS D'ARCHITECTURE FONCTIONNELLE ET DE DOCUMENTS DE SPECIFICATION DE CONCEPTION ET D'ANALYSE DE LOGICIEL A PARTIR DE LANGAGE ATURE**

[72] HUEBRA, NADIA ANALIA, CO

[71] LEXICA S.A.S., CO

[85] 2021-11-25

[86] 2020-05-28 (PCT/IB2020/055096)

[87] (WO2020/240482)

[30] US (16/424,400) 2019-05-28

[21] **3,139,579**  
[13] A1

[51] **Int.Cl. B67D 1/08 (2006.01) B67D 1/00 (2006.01) B67D 1/04 (2006.01) B67D 1/12 (2006.01)**

[25] EN

[54] **PRESSURE CONTROL DEVICE FOR A BEVERAGE CONTAINER**

[54] **DISPOSITIF DE COMMANDE DE PRESSION POUR UN RECIPIENT DE BOISSON**

[72] WOLTERS, WOLTER, NL

[72] PRONK, RUDOLF MARIA, NL

[72] SILLINCE, MARK ERICH, GB

[71] HEINEKEN SUPPLY CHAIN B.V., NL

[85] 2021-11-25

[86] 2020-06-04 (PCT/NL2020/050362)

[87] (WO2020/246884)

[30] US (62/856,955) 2019-06-04

[30] NL (2023833) 2019-09-13

[21] **3,139,582**  
[13] A1

[51] **Int.Cl. A61M 5/00 (2006.01) A61K 9/00 (2006.01) A61M 31/00 (2006.01)**

[25] EN

[54] **DEVICES AND METHODS FOR ADMINISTERING A THERAPEUTIC PREPARATION**

[54] **DISPOSITIFS ET PROCEDES POUR L'ADMINISTRATION D'UNE PREPARATION THERAPEUTIQUE**

[72] IMRAN, MIR A., US

[72] CHANG, ARTHUR HSU CHEN, US

[71] INCUBE LABS, LLC, US

[85] 2021-11-25

[86] 2020-05-28 (PCT/US2020/034883)

[87] (WO2020/243275)

[30] US (62/854,101) 2019-05-29

[21] **3,139,585**  
[13] A1

[51] **Int.Cl. A61F 2/02 (2006.01) A61L 27/16 (2006.01) A61L 27/34 (2006.01) A61L 27/38 (2006.01) A61L 27/50 (2006.01)**

[25] EN

[54] **A BIOCOMPATIBLE MEMBRANE COMPOSITE**

[54] **COMPOSITE A MEMBRANE BIOCOMPATIBLE**

[72] GUNZEL, EDWARD, US

[72] MARTINSON, LAURA, US

[72] RITROVATO, SCOTT A., US

[72] RUSCH, GREG, US

[72] SCOTT, MICHAEL, US

[72] ZAMBOTTI, LAUREN R., US

[72] ZHANG, QIANG (JOHN), US

[72] FOLK, CHRISTOPHER, US

[72] MCGREEVY, CRAIG, US

[72] KAKKASSERY, JOSEPH, US

[71] W. L. GORE & ASSOCIATES, INC., US

[71] VIACYTE, INC, US

[85] 2021-11-25

[86] 2020-05-30 (PCT/US2020/035450)

[87] (WO2020/243666)

[30] US (62/855,707) 2019-05-31

[21] **3,139,590**  
[13] A1

[51] **Int.Cl. A61F 2/02 (2006.01) A61L 27/16 (2006.01) A61L 27/34 (2006.01) A61L 27/38 (2006.01) A61L 27/50 (2006.01)**

[25] EN

[54] **A BIOCOMPATIBLE MEMBRANE COMPOSITE**

[54] **COMPOSITE A MEMBRANE BIOCOMPATIBLE**

[72] BRUHN, TIMOTHY M., US

[72] D'AMOUR, KEVIN, US

[72] FOLK, CHRISTOPHER, US

[72] MCGREEVY, CRAIG, US

[72] MARTINSON, LAURA, US

[72] RITROVATO, SCOTT A., US

[72] RUSCH, GREG, US

[72] SCOTT, MICHAEL, US

[72] ZAMBOTTI, LAUREN R., US

[72] ZHANG, QIANG (JOHN), US

[72] KAKKASSERY, JOSEPH, US

[71] W. L. GORE & ASSOCIATES, INC., US

[71] VIACYTE, INC., US

[85] 2021-11-25

[86] 2020-05-30 (PCT/US2020/035449)

[87] (WO2020/243665)

[30] US (62/855,540) 2019-05-31

[30] US (62/897,636) 2019-09-09

[21] **3,139,591**  
[13] A1

[51] **Int.Cl. B01D 69/02 (2006.01) B01D 69/12 (2006.01) B01D 71/36 (2006.01)**

[25] EN

[54] **A BIOCOMPATIBLE MEMBRANE COMPOSITE**

[54] **COMPOSITE A MEMBRANE BIOCOMPATIBLE**

[72] BRUHN, TIMOTHY M., US

[72] D'AMOUR, KEVIN, US

[72] FOLK, CHRISTOPHER, US

[72] KROON, EVERT, US

[72] MARTINSON, LAURA, US

[72] MCGREEVY, CRAIG, US

[72] RITROVATO, SCOTT A., US

[72] RUSCH, GREG, US

[72] SCOTT, MICHAEL, US

[72] ZAMBOTTI, LAUREN R., US

[72] ZHANG, QIANG (JOHN), US

[72] KAKKASSERY, JOSEPH, US

[71] W. L. GORE & ASSOCIATES, INC., US

[71] VIACYTE, INC, US

[85] 2021-11-25

[86] 2020-05-30 (PCT/US2020/035447)

[87] (WO2020/243663)

[30] US (62/855,481) 2019-05-31

## Demandes PCT entrant en phase nationale

[21] **3,139,596**  
[13] A1

[51] **Int.Cl. B67D 1/04 (2006.01) B65D 83/14 (2006.01) B67D 1/12 (2006.01)**

[25] EN

[54] **PRESSURE REGULATING SYSTEM FOR A BEVERAGE CONTAINER AND BEVERAGE CONTAINER PROVIDED THEREWITH**

[54] **SYSTEME DE REGULATION DE PRESSION POUR RECIPIENT A BOISSON ET RECIPIENT A BOISSON LE COMPRENANT**

[72] VLASVELD, DANIEL PETRUS NICOLAAS, NL

[72] DE GROOT, ALLARD, NL

[71] HEINEKEN SUPPLY CHAIN B.V., NL

[85] 2021-11-25

[86] 2020-07-23 (PCT/NL2020/050483)

[87] (WO2021/015620)

[30] NL (2023563) 2019-07-24

[21] **3,139,600**  
[13] A1

[51] **Int.Cl. G01F 13/00 (2006.01) B67D 1/08 (2006.01) B67D 1/12 (2006.01) G01F 1/56 (2006.01)**

[25] EN

[54] **FLOW DETECTION CIRCUIT**

[54] **CIRCUIT DE DETECTION D'ECOULEMENT**

[72] GRIFFIOEN, EDWIN JOHANNES CORNELIS, NL

[72] DRONKERT, JOHANNES ADRIAAN, NL

[71] HEINEKEN SUPPLY CHAIN B.V., NL

[85] 2021-11-25

[86] 2020-06-08 (PCT/NL2020/050371)

[87] (WO2020/246892)

[30] NL (PCT/NL2019/050345) 2019-06-06

[21] **3,139,601**  
[13] A1

[51] **Int.Cl. G06F 16/21 (2019.01) G06F 16/2458 (2019.01)**

[25] EN

[54] **METHOD FOR CONSOLIDATING DYNAMIC KNOWLEDGE ORGANIZATION SYSTEMS**

[54] **PROCEDE DE CONSOLIDATION DE SYSTEMES D'ORGANISATION DE CONNAISSANCES DYNAMIQUES**

[72] DA SILVEIRA, MARCOS, BE

[72] DOMINGOS CARDOSO, SILVIO, LU

[72] PRUSKI, CEDRIC, FR

[71] LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY (LIST), LU

[85] 2021-11-25

[86] 2020-05-28 (PCT/EP2020/064934)

[87] (WO2020/239965)

[30] LU (LU101238) 2019-05-31

[21] **3,139,603**  
[13] A1

[51] **Int.Cl. G01N 23/223 (2006.01) G01N 1/40 (2006.01) G01N 33/18 (2006.01)**

[25] EN

[54] **PORTABLE ASSESSMENT KIT AND METHOD FOR MEASURING METAL CONTENT OF AQUEOUS SOLUTION**

[54] **KIT D'EVALUATION PORTABLE ET PROCEDE DE MESURE DE LA TENEUR EN METAL D'UNE SOLUTION AQUEUSE**

[72] NISSINEN, TUOMO, FI

[72] TIHONEN, TOMMI, FI

[72] RIIKONEN, JOAKIM, FI

[72] LEHTO, VESA-PEKKA, FI

[72] SAVOLAHTI, PEKKA, FI

[71] 3AWATER OY, FI

[85] 2021-11-25

[86] 2020-07-13 (PCT/EP2020/069789)

[87] (WO2021/013612)

[30] FI (20195649) 2019-07-23

[21] **3,139,605**  
[13] A1

[51] **Int.Cl. A61K 8/92 (2006.01) A61K 8/34 (2006.01) A61K 8/44 (2006.01) A61K 8/49 (2006.01) A61K 8/64 (2006.01) A61Q 5/06 (2006.01)**

[25] FR

[54] **NOVEL HAIR DYEING COMPOSITION**

[54] **NOUVELLE COMPOSITION POUR LA COLORATION DES CHEVEUX**

[72] VISCOGLIOSI, SEBASTIEN FREDERIC, FR

[72] GARCIA, ISABEL, FR

[71] DI VISCO, FR

[85] 2021-11-25

[86] 2020-06-05 (PCT/FR2020/050958)

[87] (WO2020/245546)

[30] FR (19/06053) 2019-06-07

[21] **3,139,607**  
[13] A1

[51] **Int.Cl. A61B 17/06 (2006.01) A61B 17/34 (2006.01) A61L 31/10 (2006.01) A61L 31/16 (2006.01)**

[25] EN

[54] **IMPLANTATION NEEDLE FOR INSERTING A SUBCUTANEOUSLY INSERTABLE ELEMENT INTO A BODY TISSUE**

[54] **AIGUILLE D'IMPLANTATION POUR INSERER UN ELEMENT INSERABLE PAR VOIE SUBCUTANEE DANS UN TISSU CORPOREL**

[72] KUEBLER, SEBASTIAN, DE

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

[85] 2021-11-25

[86] 2020-07-01 (PCT/EP2020/068448)

[87] (WO2021/001394)

[30] EP (19184490.1) 2019-07-04

## PCT Applications Entering the National Phase

[21] **3,139,610**  
[13] A1

[51] **Int.Cl. C07H 21/00 (2006.01) B01D 15/36 (2006.01) C07H 21/02 (2006.01) C07H 21/04 (2006.01)**

[25] EN

[54] **PROCESS FOR THE DEPROTECTION OF OLIGONUCLEOTIDES**

[54] **PROCEDE DE DEPROTECTION D'OLIGONUCLEOTIDES**

[72] CHOI, YONG RAG, KR  
[72] KANG, YOUNGGOO, KR  
[72] KIM, SUNG WON, KR  
[72] JUNG, KYEONG EUN, KR  
[72] SCHMIDT, PASCAL, CH  
[71] F. HOFFMANN-LA ROCHE AG, CH  
[85] 2021-11-25  
[86] 2020-07-06 (PCT/EP2020/068922)  
[87] (WO2021/004977)  
[30] EP (19185225.0) 2019-07-09

[21] **3,139,618**  
[13] A1

[51] **Int.Cl. D21D 1/00 (2006.01) D21D 1/30 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR PROCESSING WOOD FIBERS**

[54] **APPAREIL ET PROCEDE POUR LE TRAITEMENT DE FIBRES DE BOIS**

[72] ANDERSON, DWIGHT EDWARD, US  
[71] INTERNATIONAL PAPER COMPANY, US  
[85] 2021-11-25  
[86] 2019-10-16 (PCT/US2019/056504)  
[87] (WO2020/263296)  
[30] US (16/456,154) 2019-06-28

[21] **3,139,620**  
[13] A1

[51] **Int.Cl. C21B 13/14 (2006.01)**

[25] EN

[54] **DIRECT REDUCTION PROCESS UTILIZING HYDROGEN**

[54] **PROCESSUS DE REDUCTION DIRECTE UTILISANT DE L'HYDROGENE**

[72] ASTORIA, TODD MICHAEL, US  
[72] HUGHES, GREGORY DAREL, US  
[72] CINTRON, ENRIQUE JOSE, US  
[72] BARSTOW-COX, KEITH MARSHALL, US  
[71] MIDREX TECHNOLOGIES, INC., US  
[85] 2021-11-25  
[86] 2020-06-02 (PCT/US2020/035635)  
[87] (WO2020/247328)  
[30] US (62/857,843) 2019-06-06

[21] **3,139,621**  
[13] A1

[51] **Int.Cl. A47L 11/40 (2006.01) A47L 9/00 (2006.01) A47L 11/24 (2006.01) A47L 11/28 (2006.01)**

[25] EN

[54] **REMOVABLE COVER FOR A ROBOTIC CLEANING DEVICE**

[54] **COUVERCLE AMOVIBLE POUR DISPOSITIF DE NETTOYAGE ROBOTISE**

[72] MANIFF, JONATHAN, US  
[72] MANIFF, FRANCESCA, US  
[71] MANIFF CREATIONS, LLC, US  
[85] 2021-11-25  
[86] 2020-05-27 (PCT/US2020/034743)  
[87] (WO2020/243197)  
[30] US (62/853,949) 2019-05-29  
[30] US (16/794,027) 2020-02-18

[21] **3,139,626**  
[13] A1

[51] **Int.Cl. A01H 3/00 (2006.01) A23K 10/18 (2016.01) C12N 15/11 (2006.01) C12N 15/74 (2006.01)**

[25] EN

[54] **DEVICES, SYSTEM, AND METHODS FOR TRACKING PRODUCTS USING BIOLOGICAL BARCODES AND GENETICALLY MODIFIED ORGANISMS CONTAINING THE SAME**

[54] **DISPOSITIFS, SYSTEME ET PROCEDES DE SUIVI DE PRODUITS A L'AIDE DE CODES-BARRES BIOLOGIQUES ET ORGANISMES GENETIQUEMENT MODIFIES LES CONTENANT**

[72] BHUYAN, VISHAAL, US  
[72] MORALES, EDUARDO, US  
[72] JORGENSEN, ELLEN, US  
[72] SABIO, GERMAN, US  
[72] MARKASEVIC, ARJETA, US  
[72] DWORAKOWSKI, NOAH, US  
[71] AANIKA BIOSCIENCES, INC., US  
[85] 2021-11-25  
[86] 2020-06-01 (PCT/US2020/035619)  
[87] (WO2020/243730)  
[30] US (62/854,363) 2019-05-30  
[30] US (62/854,366) 2019-05-30  
[30] US (62/972,367) 2020-02-10  
[30] US (62/970,920) 2020-02-06

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[21] **3,139,628**  
[13] A1

[51] **Int.Cl. A61C 17/20 (2006.01)**

[25] EN

[54] **ACOUSTIC WAVE TYPE ELECTRIC CLEANING CARE APPLICANCE AND PRESSURE ALARM DEVICE FOR SAME**

[54] **OUTIL ELECTRIQUE DE NETTOYAGE ET DE SOINS A ONDES ACOUSTIQUES ET DISPOSITIF D'ALERTE DE PRESSION POUR UN TEL OUTIL**

[72] DAI, XIAO GUO, CN  
[72] XU, ZHENWU, CN  
[71] SHANGHAI SHIFT ELECTRICS CO., LTD., CN  
[85] 2021-11-25  
[86] 2020-04-08 (PCT/CN2020/083634)  
[87] (WO2020/238421)  
[30] CN (201910457281.6) 2019-05-29

## Demandes PCT entrant en phase nationale

[21] **3,139,677**  
[13] A1

[51] **Int.Cl. G02B 23/18 (2006.01) A45F 3/14 (2006.01)**  
[25] EN  
[54] **RECONFIGURABLE CASES FOR PORTABLE HAND-HELD DEVICES AND METHODS**  
[54] **BOITIERS RECONFIGURABLES POUR DISPOSITIFS A MAIN PORTATIFS ET PROCEDES**  
[72] BURNS, BRENDAN V., US  
[71] KUIU, LLC, US  
[85] 2021-11-25  
[86] 2020-07-15 (PCT/US2020/042072)  
[87] (WO2021/011613)  
[30] US (62/874,286) 2019-07-15

[21] **3,139,680**  
[13] A1

[51] **Int.Cl. A42B 3/30 (2006.01) G10K 11/172 (2006.01)**  
[25] EN  
[54] **HARD HAT COMMUNICATION SYSTEM**  
[54] **SYSTEME DE COMMUNICATION EN CASQUE DE SECURITE**  
[72] MEDEIROS, PHILLIP, CA  
[72] BOND, JAMAAL, CA  
[71] EVITAVONNI CONSTRUCTION GROUP INC., CA  
[85] 2021-11-26  
[86] 2020-05-26 (PCT/CA2020/050717)  
[87] (WO2020/237370)  
[30] US (62/853,085) 2019-05-27

[21] **3,139,683**  
[13] A1

[51] **Int.Cl. B23Q 5/40 (2006.01) B23Q 11/04 (2006.01) B23Q 15/12 (2006.01) B23Q 15/16 (2006.01) B23Q 17/09 (2006.01) B24B 49/16 (2006.01) F16H 25/20 (2006.01) G05B 19/23 (2006.01)**  
[25] FR  
[54] **MULTIAXIAL MACHINING CENTRE WITH CONTROLLED-PRESSURE CONNECTION MECHANISM**  
[54] **CENTRE D'USINAGE MULTI-AXIAL AVEC MECANISME DE LIAISON A PRESSION PILOTEE**  
[72] CALAS, ROBERT, FR  
[71] THIBAUT, FR  
[85] 2021-11-26  
[86] 2020-06-18 (PCT/FR2020/051061)  
[87] (WO2020/254768)  
[30] FR (FR1906733) 2019-06-21

[21] **3,139,688**  
[13] A1

[51] **Int.Cl. A61K 47/69 (2017.01) A61K 49/00 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **EXTRACELLULAR VESICLES TO DELIVER THERAPEUTIC OR DIAGNOSTIC DRUGS**  
[54] **VESICULES EXTRACELLULAIRES POUR ADMINISTRER DES MEDICAMENTS THERAPEUTIQUES OU DIAGNOSTIQUES**  
[72] CIANA, PAOLO, IT  
[72] VILLA, ALESSANDRO MARIA, IT  
[72] MAGGI, ADRIANA, IT  
[72] GAROFALO, MARIANGELA, IT  
[72] MAZZAFERRO, VINCENZO, IT  
[71] UNIVERSITA' DEGLI STUDI DI MILANO, IT  
[71] FONDAZIONE IRCCS ISTITUTO NAZIONALE DEI TUMORI, IT  
[85] 2021-11-26  
[86] 2020-05-29 (PCT/IB2020/055113)  
[87] (WO2020/240494)  
[30] IT (102019000007785) 2019-05-31

[21] **3,139,694**  
[13] A1

[51] **Int.Cl. A61B 17/34 (2006.01)**  
[25] EN  
[54] **SYSTEMS, METHODS, AND DEVICES FOR INSTRUMENT GUIDANCE**  
[54] **SYSTEMES, PROCEDES ET DISPOSITIFS POUR GUIDAGE D'INSTRUMENT**  
[72] MULLER, LUCAS, US  
[72] WANG, CASSIDY, US  
[72] MANDAVIA, DEV, US  
[71] ETHOS MEDICAL, INC., US  
[85] 2021-11-26  
[86] 2020-06-26 (PCT/US2020/039938)  
[87] (WO2020/264383)  
[30] US (62/866,950) 2019-06-26  
[30] US (16/810,569) 2020-03-05  
[30] US (16/816,363) 2020-03-12

[21] **3,139,709**  
[13] A1

[51] **Int.Cl. G01G 19/18 (2006.01) B60P 1/48 (2006.01) B66C 13/16 (2006.01) B66C 23/36 (2006.01) B66C 23/90 (2006.01) G01G 3/14 (2006.01) G01G 19/12 (2006.01) G01L 1/22 (2006.01) G12B 9/02 (2006.01) B66C 1/40 (2006.01)**  
[25] EN  
[54] **SUSPENDABLE SCALE FOR WEIGHING A BUNDLE AND ARRANGEMENT FOR HOISTING A BUNDLE**  
[54] **BALANCE SUSPENDUE POUR PESER UN PAQUET ET AGENCEMENT POUR LEVER UN PAQUET**  
[72] HALONEN, MARKO, FI  
[72] HEIKKILA, TANELI, FI  
[72] KAURALA, ARTO, FI  
[72] KIVI, ALEKSI, FI  
[72] KOHIO, TONI, FI  
[72] KORHONEN, JARI, FI  
[72] KUMARA, VESA, FI  
[72] LAUKKANEN, JANNE, FI  
[72] LEIVO, JAMI, FI  
[72] NIVALAINEN, ERKKI, FI  
[72] OHTONEN, JUKKA, FI  
[72] SUUTARI, JOUNI, FI  
[72] VAISANEN, HEIKKI, FI  
[72] VAYRYNEN, MIKA, FI  
[71] PONSSE OYJ, FI  
[85] 2021-11-26  
[86] 2020-05-29 (PCT/FI2020/050362)  
[87] (WO2020/240093)  
[30] FI (20195450) 2019-05-29

[21] **3,139,710**  
[13] A1

[51] **Int.Cl. A61F 2/68 (2006.01) A61F 2/50 (2006.01) A61F 2/60 (2006.01)**  
[25] EN  
[54] **METHOD FOR CONTROLLING AN ARTIFICIAL KNEE JOINT**  
[54] **PROCEDE DE COMMANDE D'UNE ARTICULATION ARTIFICIELLE DU GENOU**  
[72] SEIFERT, DIRK, AT  
[71] OTTO BOCK HEALTHCARE PRODUCTS GMBH, AT  
[85] 2021-11-26  
[86] 2020-06-04 (PCT/EP2020/065465)  
[87] (WO2020/245261)  
[30] DE (10 2019 115 098.1) 2019-06-05

## PCT Applications Entering the National Phase

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[21] **3,139,711**  
[13] A1

[51] **Int.Cl. A63B 60/14 (2015.01) A63B 60/06 (2015.01) A63B 49/08 (2015.01) A63B 53/14 (2015.01) B25G 1/10 (2006.01) B29C 41/08 (2006.01)**

[25] EN

[54] **SPORTING APPARATUS AND INDUSTRIAL PRODUCTS**

[54] **APPAREIL DE SPORT ET PRODUITS INDUSTRIELS**

[72] MCCUAIG, RONALD, GB

[71] MCCUAIG, RONALD, GB

[85] 2021-11-26

[86] 2020-06-08 (PCT/GB2020/051388)

[87] (WO2020/245614)

[30] GB (1908164.5) 2019-06-07

[30] GB (1912598.8) 2019-09-02

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[21] **3,139,712**  
[13] A1

[51] **Int.Cl. B65D 51/24 (2006.01) B65D 39/00 (2006.01) B65D 41/28 (2006.01) B65D 45/20 (2006.01) C12G 1/08 (2006.01)**

[25] EN

[54] **BOTTLE CLOSURE ASSEMBLY FOR EFFICIENT PRODUCTION OF SPARKLING WINE**

[54] **ENSEMBLE DE FERMETURE DE BOUTEILLE POUR LA PRODUCTION EFFICACE DE VIN MOUSSEUX**

[72] BRUNNER PLENGE, PAULA ROSAMOND, CA

[71] BRUNNER PLENGE, PAULA ROSAMOND, CA

[85] 2021-11-26

[86] 2020-04-15 (PCT/EP2020/060555)

[87] (WO2020/239316)

[30] GB (1907625.6) 2019-05-30

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[21] **3,139,714**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01) A61K 47/69 (2017.01) C07K 16/28 (2006.01)**

[25] EN

[54] **THERAPEUTIC CONSTRUCTS FOR CO-DELIVERY OF MITOTIC KINASE INHIBITOR AND IMMUNE CHECKPOINT INHIBITOR**

[54] **CONSTRUCTIONS THERAPEUTIQUES POUR LA CO-ADMINISTRATION D'UN INHIBITEUR DE LA KINASE MITOTIQUE ET D'UN INHIBITEUR DES POINTS DE CONTROLE IMMUNITAIRE**

[72] YANTASEE, WASSANA, US

[72] REDA, MOATAZ, US

[72] NGAMCHERDTRAKUL, WORAPOL, US

[72] HOANG, NGOC HA, US

[71] OREGON HEALTH & SCIENCE UNIVERSITY, US

[71] PDX PHARMACEUTICALS, INC., US

[85] 2021-11-26

[86] 2020-07-13 (PCT/US2020/041852)

[87] (WO2021/011501)

[30] US (62/873,770) 2019-07-12

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[21] **3,139,722**  
[13] A1

[51] **Int.Cl. A61K 39/39 (2006.01) A61K 47/68 (2017.01) A61K 47/69 (2017.01) C07K 16/28 (2006.01)**

[25] EN

[54] **IMMUNOTHERAPEUTIC CONSTRUCTS AND METHODS OF THEIR USE**

[54] **CONSTRUCTIONS IMMUNOTHERAPEUTIQUES ET LEURS PROCEDES D'UTILISATION**

[72] YANTASEE, WASSANA, US

[72] NGAMCHERDTRAKUL, WORAPOL, US

[72] LUND, AMANDA, US

[72] REDA, MOATAZ, US

[71] OREGON HEALTH & SCIENCE UNIVERSITY, US

[71] PDX PHARMACEUTICALS, INC., US

[85] 2021-11-26

[86] 2020-07-13 (PCT/US2020/041844)

[87] (WO2021/011496)

[30] US (62/873,762) 2019-07-12

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[21] **3,139,727**  
[13] A1

[51] **Int.Cl. B66B 7/10 (2006.01)**

[25] EN

[54] **ENERGY-SAVING ELEVATOR**

[54] **ASCENSEUR A ECONOMIE D'ENERGIE**

[72] TABATABAEISEYFI, SEYEDALIALNAGHI, IR

[71] TABATABAEISEYFI, SEYEDALIALNAGHI, IR

[85] 2021-11-26

[86] 2021-01-28 (PCT/IB2021/050670)

[87] (WO2021/152499)

[30] US (62/966,564) 2020-01-28

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[21] **3,139,728**  
[13] A1

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

[25] EN

[54] **ACTIVE AND PASSIVE HUMIDIFICATION DEVICE FOR MOUNTING IN A PATIENT VENTILATION CIRCUIT**

[54] **DISPOSITIF D'HUMIDIFICATION ACTIF ET PASSIF DESTINE A ETRE MONTE DANS UN CIRCUIT DE VENTILATION DE PATIENT**

[72] FARRELL, RONALD MARTIN, IE

[72] CAREY, PAURIC, IE

[72] HENNESSY, HARRY, IE

[71] SEDANA MEDICAL LIMITED, IE

[85] 2021-11-26

[86] 2020-05-29 (PCT/EP2020/065077)

[87] (WO2020/240019)

[30] EP (19177739.0) 2019-05-31

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[21] **3,139,730**  
[13] A1

[51] **Int.Cl. C03B 5/235 (2006.01) C03B 5/182 (2006.01)**

[25] EN

[54] **MULTI-CHAMBER SUBMERGED COMBUSTION MELTER AND SYSTEM**

[54] **COMPARTIMENT DE FUSION A COMBUSTION IMMERGEE A CHAMBRES MULTIPLES ET SYSTEME**

[72] RASHLEY, SHANE T., US

[72] WANG, ZHONGMING, US

[71] OWENS-BROCKWAY GLASS CONTAINER INC., US

[85] 2021-11-26

[86] 2020-07-06 (PCT/US2020/040853)

[87] (WO2021/007140)

[30] US (16/509,128) 2019-07-11

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## Demandes PCT entrant en phase nationale

<p style="text-align: center;">[21] <b>3,139,731</b> [13] A1</p> <p>[51] <b>Int.Cl. A61K 9/52 (2006.01) A61K 35/744 (2015.01) A61K 9/60 (2006.01) A61K 9/62 (2006.01) A61K 9/64 (2006.01) A61K 9/66 (2006.01) A61K 31/192 (2006.01) A61K 47/24 (2006.01) A61K 47/36 (2006.01) A61K 47/42 (2017.01) A61K 47/44 (2017.01)</b></p> <p>[25] EN</p> <p>[54] <b>DELAYED DISINTEGRATION-TYPE CAPSULE AND METHOD FOR PRODUCING SAME</b></p> <p>[54] <b>CAPSULE DE TYPE A DESINTEGRATION RETARDEE ET PROCEDE POUR LA PRODUIRE</b></p> <p>[72] NISHIKAWA, TAKEHIRO, JP</p> <p>[72] ISHII, KATSUTOSHI, JP</p> <p>[72] TAKAHASHI, KAZUMA, JP</p> <p>[71] MORISHITA JINTAN CO., LTD., JP</p> <p>[85] 2021-11-26</p> <p>[86] 2020-06-12 (PCT/JP2020/023290)</p> <p>[87] (WO2020/251039)</p> <p>[30] JP (2019-111280) 2019-06-14</p>	<p style="text-align: center;">[21] <b>3,139,733</b> [13] A1</p> <p>[51] <b>Int.Cl. G01N 33/543 (2006.01) B82Y 5/00 (2011.01) A61B 5/00 (2006.01) G01N 33/533 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>HIGH-BRIGHTNESS NANODOT FLUOROPHORES BY COVALENT FUNCTIONALIZATION</b></p> <p>[54] <b>FLUOROPHORES A NANOPPOINTS A HAUTE LUMINOSITE OBTENUS PAR FONCTIONNALISATION COVALENTE</b></p> <p>[72] YAP, YOKE KHIN, US</p> <p>[72] HUEI, CHEE, US</p> <p>[71] MICHIGAN TECHNOLOGICAL UNIVERSITY, US</p> <p>[85] 2021-11-26</p> <p>[86] 2020-06-01 (PCT/US2020/035568)</p> <p>[87] (WO2021/002987)</p> <p>[30] US (62/855,121) 2019-05-31</p>	<p style="text-align: center;">[21] <b>3,139,743</b> [13] A1</p> <p>[51] <b>Int.Cl. B66F 9/10 (2006.01) B66F 9/12 (2006.01) B66F 9/14 (2006.01) B66F 9/16 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>MATERIALS HANDLING VEHICLE HAVING TILTING FORK CARRIAGE ASSEMBLY WITH TELESCOPIC FORKS</b></p> <p>[54] <b>VEHICULE DE MANUTENTION DE MATERIAUX COMPORTANT UN ENSEMBLE CHARIOT A FOURCHES BASCULANTES AVEC FOURCHES TELESCOPIQUES</b></p> <p>[72] DIERINGER, MARK STUART, US</p> <p>[72] LEE, GEOFFREY DONALD, US</p> <p>[72] STAHL, ADAM RICHARD, US</p> <p>[72] SCHAEFFER, TIMOTHY MARTIN, US</p> <p>[71] CROWN EQUIPMENT CORPORATION, US</p> <p>[85] 2021-11-26</p> <p>[86] 2020-05-28 (PCT/US2020/034775)</p> <p>[87] (WO2020/243214)</p> <p>[30] US (62/854,498) 2019-05-30</p>
<p style="text-align: center;">[21] <b>3,139,732</b> [13] A1</p> <p>[51] <b>Int.Cl. A61B 10/00 (2006.01) B01L 1/00 (2006.01) B01L 3/00 (2006.01) G01N 1/00 (2006.01) G01N 33/50 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>BIOPSY CARRIER</b></p> <p>[54] <b>SUPPORT DE BIOPSIE</b></p> <p>[72] WELTI, ASTRID, CH</p> <p>[72] HOLENSTEIN, CLAUDE, CH</p> <p>[72] RONFARD, VINCENT, CH</p> <p>[72] DITTRICH, ANNA-LENA, CH</p> <p>[72] FREI, RETO, CH</p> <p>[72] WULLSCHLEGER, CHRISTIAN, CH</p> <p>[72] WOLLMANN, SEBASTIAN, CH</p> <p>[71] CUTISS AG, CH</p> <p>[85] 2021-11-26</p> <p>[86] 2020-06-03 (PCT/IL2020/050614)</p> <p>[87] (WO2020/245818)</p> <p>[30] US (62/856,853) 2019-06-04</p>	<p style="text-align: center;">[21] <b>3,139,738</b> [13] A1</p> <p>[51] <b>Int.Cl. A61F 2/16 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>VISCOELASTIC SOFT TIP PLUNGER</b></p> <p>[54] <b>PISTON DE POINTE SOUPLE VISCOELASTIQUE</b></p> <p>[72] ZIELKE, MARK, US</p> <p>[71] ALCON INC., CH</p> <p>[85] 2021-11-26</p> <p>[86] 2020-06-18 (PCT/IB2020/055753)</p> <p>[87] (WO2021/009582)</p> <p>[30] US (62/873,224) 2019-07-12</p>	<p style="text-align: center;">[21] <b>3,139,744</b> [13] A1</p> <p>[51] <b>Int.Cl. F24C 7/08 (2006.01) F24C 11/00 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>ELEVATED COUNTERTOP COOKING APPARATUS, SYNCHRONIZED MULTI-BAY COOKING APPARATUS, AND METHOD FOR SYNCHRONIZED MULTI-BAY COOKING</b></p> <p>[54] <b>APPAREIL DE CUISSON DE PLAN DE TRAVAIL SURELEVE, APPAREIL DE CUISSON A COMPARTIMENTS MULTIPLES SYNCHRONISES ET PROCEDE DE CUISSON A COMPARTIMENTS MULTIPLES SYNCHRONISES</b></p> <p>[72] IANTORNO, SALVATORE ALBANO, CA</p> <p>[72] LOUDON, JONATHAN, CA</p> <p>[72] MACDONALD, JASON, CA</p> <p>[72] RICHARDSON, JULIAN, CA</p> <p>[71] ENNOVATE INC., CA</p> <p>[85] 2021-11-26</p> <p>[86] 2021-03-31 (PCT/CA2021/050435)</p> <p>[87] (WO2021/195774)</p> <p>[30] US (16/835,676) 2020-03-31</p> <p>[30] US (63/199,232) 2020-12-15</p>
<p style="text-align: center;">[21] <b>3,139,740</b> [13] A1</p> <p>[51] <b>Int.Cl. B23Q 1/70 (2006.01) B23B 47/34 (2006.01) B23Q 1/34 (2006.01) B23Q 5/28 (2006.01) B23Q 5/32 (2006.01)</b></p> <p>[25] FR</p> <p>[54] <b>SPINDLE WITH PIEZOELECTRIC ACTUATORS</b></p> <p>[54] <b>BROCHE A ACTIONNEURS PIEZOELECTRIQUES</b></p> <p>[72] LAPORTE, SYLVAIN, FR</p> <p>[71] MITIS, FR</p> <p>[85] 2021-11-26</p> <p>[86] 2020-04-17 (PCT/EP2020/060815)</p> <p>[87] (WO2020/249288)</p> <p>[30] FR (1906380) 2019-06-14</p>	<p style="text-align: center;">[21] <b>3,139,743</b> [13] A1</p> <p>[51] <b>Int.Cl. B66F 9/10 (2006.01) B66F 9/12 (2006.01) B66F 9/14 (2006.01) B66F 9/16 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>MATERIALS HANDLING VEHICLE HAVING TILTING FORK CARRIAGE ASSEMBLY WITH TELESCOPIC FORKS</b></p> <p>[54] <b>VEHICULE DE MANUTENTION DE MATERIAUX COMPORTANT UN ENSEMBLE CHARIOT A FOURCHES BASCULANTES AVEC FOURCHES TELESCOPIQUES</b></p> <p>[72] DIERINGER, MARK STUART, US</p> <p>[72] LEE, GEOFFREY DONALD, US</p> <p>[72] STAHL, ADAM RICHARD, US</p> <p>[72] SCHAEFFER, TIMOTHY MARTIN, US</p> <p>[71] CROWN EQUIPMENT CORPORATION, US</p> <p>[85] 2021-11-26</p> <p>[86] 2020-05-28 (PCT/US2020/034775)</p> <p>[87] (WO2020/243214)</p> <p>[30] US (62/854,498) 2019-05-30</p>	

## PCT Applications Entering the National Phase

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[21] **3,139,747**  
[13] A1

[51] **Int.Cl. G06F 21/64 (2013.01) G06F 21/57 (2013.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR CERTIFYING INTEGRITY OF DATA ASSETS**  
[54] **SYSTEME ET PROCEDE DE CERTIFICATION D'INTEGRITE D'ACTIFS DE DONNEES**  
[72] JADLA, MARWEN, CA  
[72] LE BOUTHILLIER, JEAN, CA  
[72] PERICO, LUCA, CA  
[71] QOHASH INC., CA  
[85] 2021-11-26  
[86] 2020-05-26 (PCT/CA2020/050711)  
[87] (WO2020/243818)  
[30] US (62/856,821) 2019-06-04

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[21] **3,139,748**  
[13] A1

[51] **Int.Cl. A61K 31/4458 (2006.01) A61K 9/08 (2006.01) A61K 31/445 (2006.01) A61K 47/02 (2006.01) A61K 47/40 (2006.01)**  
[25] EN  
[54] **ANTIARRHYTHMIC FORMULATION**  
[54] **FORMULATION ANTIARYTHMIQUE**  
[72] HURREY, MICHAEL LAIRD, US  
[72] BELARDINELLI, LUIZ, US  
[72] MADHAVAPEDDI, PRASHANTI, US  
[72] SCHULER, CARLOS, US  
[71] INCARDA THERAPEUTICS, INC., US  
[85] 2021-11-26  
[86] 2020-07-30 (PCT/US2020/044291)  
[87] (WO2021/022058)  
[30] US (62/881,689) 2019-08-01  
[30] US (16/901,909) 2020-06-15  
[30] US (16/901,941) 2020-06-15

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[21] **3,139,750**  
[13] A1

[51] **Int.Cl. A61K 38/21 (2006.01) A61K 31/4164 (2006.01) A61P 1/00 (2006.01) A61P 1/16 (2006.01) A61P 3/00 (2006.01) A61P 9/00 (2006.01) A61P 31/00 (2006.01) A61P 31/20 (2006.01)**  
[25] EN  
[54] **IMPROVED TREATMENT USING EYP001**  
[54] **TRAITEMENT AMELIORE UTILISANT EYP001**  
[72] VONDERSCHER, JACKY, FR  
[72] ROY, ELISE, CH  
[72] DARTEIL, RAPHAEL, FR  
[72] SCALFARO, PIETRO, CH  
[71] ENYO PHARMA, FR  
[85] 2021-11-26  
[86] 2020-07-17 (PCT/EP2020/070239)  
[87] (WO2021/009331)  
[30] EP (19186947.8) 2019-07-18

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[21] **3,139,752**  
[13] A1

[51] **Int.Cl. B09B 3/40 (2022.01) B09C 1/06 (2006.01)**  
[25] EN  
[54] **THERMAL REMEDIATION SYSTEM AND PROCESS**  
[54] **SYSTEME ET PROCEDE DE REMEDIATION THERMIQUE**  
[72] FACEY, RODERICK MICHAEL, CA  
[72] BOZAK, WADE RALPH (DECEASED), CA  
[71] AGES THERMAL PROCESSING CORPORATION, CA  
[85] 2021-11-26  
[86] 2020-05-29 (PCT/CA2020/050744)  
[87] (WO2020/237393)  
[30] US (62/853,901) 2019-05-29  
[30] US (62/880,003) 2019-07-29

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[21] **3,139,755**  
[13] A1

[51] **Int.Cl. A61K 8/02 (2006.01) A61K 8/19 (2006.01) A61Q 19/00 (2006.01)**  
[25] EN  
[54] **DRY COSMETIC AND/OR SKIN CARE COMPOSITION**  
[54] **COMPOSITION SECHE COSMETIQUE ET/OU DE SOIN DE LA PEAU**  
[72] SHARMA, LALIT, CH  
[72] BUDDE, TANJA, CH  
[72] LANDER, STEFAN, CH  
[71] OMYA DEVELOPMENT AG, CH  
[85] 2021-11-26  
[86] 2020-07-03 (PCT/EP2020/068838)  
[87] (WO2021/004942)  
[30] EP (19185003.1) 2019-07-08

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[21] **3,139,756**  
[13] A1

[51] **Int.Cl. F03D 7/02 (2006.01)**  
[25] EN  
[54] **FEEDFORWARD CONTROL METHOD AND APPARATUS FOR WIND TURBINE GENERATOR SET, AND CONTROL SYSTEM**  
[54] **PROCEDE ET APPAREIL DE COMMANDE PREDICTIVE POUR ENSEMBLE GENERATEUR EOLIEN, ET SYSTEME DE COMMANDE**  
[72] BIAN, FENGJIAO, CN  
[72] LIU, LEI, CN  
[72] JIANG, MINGYUAN, CN  
[72] YAO, SHIGANG, CN  
[71] BEIJING GOLDWIND SCIENCE & CREATION WINDPOWER EQUIPMENT CO., LTD., CN  
[85] 2021-11-26  
[86] 2019-12-24 (PCT/CN2019/127920)  
[87] (WO2020/238182)  
[30] CN (201910462953.2) 2019-05-30

## Demandes PCT entrant en phase nationale

[21] **3,139,760**  
[13] A1

[51] **Int.Cl. E05D 15/24 (2006.01) E05F 15/668 (2015.01) E05F 15/67 (2015.01)**

[25] EN

[54] **DOOR OPERATOR SYSTEM**

[54] **SYSTEME DE COMMANDE DE PORTE**

[72] ABRAHAMSSON, MAGNUS, SE

[72] KJESSLER, JOHAN, SE

[72] MYHRMAN, PETTER, SE

[71] ASSA ABLOY ENTRANCE SYSTEMS AB, SE

[85] 2021-11-26

[86] 2020-05-12 (PCT/EP2020/063122)

[87] (WO2020/234034)

[30] SE (1930168-8) 2019-05-22

[21] **3,139,761**  
[13] A1

[51] **Int.Cl. H02S 40/34 (2014.01) H01L 31/042 (2014.01)**

[25] EN

[54] **ELECTRICAL MODULE JUNCTION BOX TRANSFER DEVICE (E-JBTD) SYSTEM HAVING ELECTRICAL ENERGY INTERNAL AND EXTERNAL CONNECTIONS**

[54] **SYSTEME DE DISPOSITIF DE TRANSFERT DE BOITE DE JONCTION DE MODULE ELECTRIQUE (E-JBTD) AYANT DES CONNEXIONS INTERNES ET EXTERNES D'ENERGIE ELECTRIQUE**

[72] CONKLIN, JOHN A., US

[72] SARGENT, PATRICK T., US

[71] SOLARWINDOW TECHNOLOGIES, INC., US

[85] 2021-11-26

[86] 2020-05-28 (PCT/US2020/034874)

[87] (WO2020/243267)

[30] US (62/854,276) 2019-05-29

[30] US (16/885,807) 2020-05-28

[21] **3,139,763**  
[13] A1

[51] **Int.Cl. D02G 3/04 (2006.01) D03D 1/00 (2006.01) D03D 11/00 (2006.01) D03D 15/00 (2021.01) D04B 1/14 (2006.01)**

[25] EN

[54] **FABRICS HAVING IMPROVED MOISTURE TRANSPORT PROPERTIES**

[54] **TISSUS AYANT DES PROPRIETES DE TRANSPORT D'HUMIDITE AMELIOREES**

[72] LAU, CHUN KEE, HK

[71] SKILLED GLOBAL INVESTMENTS LIMITED, VG

[85] 2021-11-26

[86] 2020-05-26 (PCT/AU2020/050523)

[87] (WO2020/237301)

[30] AU (2019901800) 2019-05-27

[21] **3,139,765**  
[13] A1

[51] **Int.Cl. G01J 5/20 (2006.01) G01J 5/58 (2022.01) G01J 5/48 (2006.01)**

[25] FR

[54] **LOW THERMAL CAPACITY MICRO-BOLOMETER AND ASSOCIATED MANUFACTURING METHOD**

[54] **MICRO-BOLOMETRE A FAIBLE CAPACITE THERMIQUE ET PROCEDE DE FABRICATION ASSOCIE**

[72] BOUDOU, NICOLAS, FR

[72] CORTIAL, SEBASTIEN, FR

[71] LYNRED, FR

[85] 2021-11-26

[86] 2020-05-11 (PCT/FR2020/050763)

[87] (WO2021/009421)

[30] FR (FR1907993) 2019-07-16

[21] **3,139,766**  
[13] A1

[51] **Int.Cl. F04D 29/44 (2006.01) F04D 29/40 (2006.01) F04D 29/42 (2006.01)**

[25] EN

[54] **VOLUTE ASSEMBLY AND INDUCED DRAUGHT FAN USING SAME**

[54] **ENSEMBLE VOLUTE ET VENTILATEUR A TIRAGE INDUIT L'UTILISANT**

[72] LIN, YANHU, CN

[72] ZHANG, MIAO, CN

[72] LEI, WEI, CN

[71] ZHONGSHAN BROAD-OCEAN MOTOR CO., LTD., CN

[85] 2021-11-26

[86] 2019-11-21 (PCT/CN2019/119818)

[87] (WO2021/072901)

[30] CN (201921738810.1) 2019-10-17

[21] **3,139,767**  
[13] A1

[51] **Int.Cl. C12Q 1/04 (2006.01) C12N 1/20 (2006.01) C12Q 1/02 (2006.01)**

[25] EN

[54] **METABOLOMIC CHARACTERIZATION OF MICROORGANISMS**

[54] **CARACTERISATION METABOLOMIQUE DE MICROORGANISMES**

[72] LEWIS, IAN ANDREW, CA

[72] RYDZAK, THOMAS, CA

[71] LEWIS, IAN ANDREW, CA

[71] RYDZAK, THOMAS, CA

[85] 2021-11-26

[86] 2019-09-20 (PCT/CA2019/051351)

[87] (WO2020/237346)

[30] US (62/855,568) 2019-05-31

## PCT Applications Entering the National Phase

[21] **3,139,768**  
[13] A1

[51] **Int.Cl. A61B 17/04 (2006.01) A61B 90/00 (2016.01) A61B 17/00 (2006.01) A61B 17/06 (2006.01) A61F 2/24 (2006.01) A61L 17/00 (2006.01)**

[25] EN

[54] **CONTINUOUS TETHERED TISSUE ANCHOR AND ASSOCIATED SYSTEMS AND METHODS**

[54] **ANCRAGE TISSULAIRE ATTACHE EN CONTINU ET SYSTEMES ET PROCEDES ASSOCIES**

[72] HAARER, JOSHUA C., US

[71] W. L. GORE & ASSOCIATES, INC., US

[85] 2021-11-26

[86] 2020-05-08 (PCT/US2020/032054)

[87] (WO2020/256853)

[30] US (62/862,519) 2019-06-17

[30] US (62/965,610) 2020-01-24

[21] **3,139,770**  
[13] A1

[51] **Int.Cl. A61K 35/747 (2015.01) A61P 1/00 (2006.01) A61P 25/00 (2006.01) A61P 25/02 (2006.01) A61P 25/22 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **LACTOBACILLUS COMPOSITIONS AND USES THEREOF**

[54] **COMPOSITIONS A BASE DE LACTOBACILLUS ET LEURS UTILISATIONS**

[72] HILLMAN, MAGNUS, SE

[72] AHRNE, SIV, SE

[72] ONNING, GUNILLA, SE

[71] PROBI AB, SE

[85] 2021-11-26

[86] 2020-06-05 (PCT/EP2020/065620)

[87] (WO2020/245350)

[30] GB (1908154.6) 2019-06-07

[21] **3,139,772**  
[13] A1

[51] **Int.Cl. C07D 317/72 (2006.01) A61K 31/357 (2006.01) A61P 3/00 (2006.01)**

[25] EN

[54] **NOVEL CRYSTAL FORM OF 3-(4-(BENZYLOXY)PHENYL)HEX-4-INOIC ACID DERIVATIVE**

[54] **NOUVELLE FORME CRISTALLINE D'UN DERIVE D'ACIDE 3-(4-(BENZYLOXY)PHENYL)HEX-4-INOIQUE**

[72] HWANG, JEONG UN, KR

[72] KIM, JIN WOONG, KR

[72] LEE, KYU HWAN, KR

[72] KIM, EUN YOUNG, KR

[72] CHOI, SU KYOUNG, KR

[71] HYUNDAI PHARM CO., LTD., KR

[85] 2021-11-26

[86] 2020-05-29 (PCT/KR2020/007018)

[87] (WO2020/242252)

[30] KR (10-2019-0064586) 2019-05-31

[21] **3,139,769**  
[13] A1

[51] **Int.Cl. C07D 403/04 (2006.01) C07D 471/04 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **NITROGEN-CONTAINING HETEROCYCLIC DERIVATIVE REGULATOR, PREPARATION METHOD THEREFOR AND APPLICATION THEREOF**

[54] **REGULATEUR DERIVE HETEROCYCLIQUE CONTENANT DE L'AZOTE, SON PROCEDE DE PREPARATION ET SON APPLICATION**

[72] LIU, SHIQIANG, CN

[72] WANG, YONGSHENG, CN

[72] YUAN, YIDA, CN

[72] CEN, CHENG, CN

[72] BAO, RUDI, CN

[71] SHANGHAI HANSOH BIOMEDICAL CO., LTD., CN

[71] JIANGSU HANSOH PHARMACEUTICAL GROUP CO., LTD., CN

[85] 2021-11-26

[86] 2020-05-29 (PCT/CN2020/093285)

[87] (WO2020/239077)

[30] CN (201910457161.6) 2019-05-29

[30] CN (201910918582.4) 2019-09-26

[30] CN (201911018909.9) 2019-10-24

[30] CN (201911090171.7) 2019-11-08

[30] CN (201911382159.3) 2019-12-27

[30] CN (202010451270.X) 2020-05-25

[21] **3,139,771**  
[13] A1

[51] **Int.Cl. A61K 31/135 (2006.01) A61P 25/00 (2006.01) A61P 29/00 (2006.01) A61P 37/02 (2006.01)**

[25] EN

[54] **METHODS, COMPOSITIONS AND DEVICES FOR TREATING NEUROINFLAMMATORY CONDITIONS**

[54] **PROCEDES, COMPOSITIONS ET DISPOSITIFS POUR TRAITER DES ETATS NEUROINFLAMMATOIRES**

[72] EVANS, SUSAN FLORENCE, AU

[71] ALYRA BIOTECH PTY LTD, AU

[85] 2021-11-26

[86] 2020-05-29 (PCT/AU2020/050551)

[87] (WO2020/237325)

[30] AU (2019901883) 2019-05-31

[21] **3,139,844**  
[13] A1

[51] **Int.Cl. F28D 1/047 (2006.01) F22B 1/00 (2006.01) F22B 15/00 (2006.01) F28D 1/02 (2006.01) F28D 7/08 (2006.01) F28D 20/00 (2006.01)**

[25] EN

[54] **HEAT EXCHANGER WITH PIPE BUNDLE**

[54] **ECHANGEUR THERMIQUE A FAISCEAU DE TUYAUX**

[72] THOMSEN, PETER, DK

[72] CHRISTENSEN, IVAN BO, DK

[72] PELLE, JENS TAGGART, DK

[72] SORENSEN, KELD, DK

[72] BUNDGAARD, SVANTE, DK

[71] AALBORG CSP A/S, DK

[85] 2021-11-29

[86] 2020-06-15 (PCT/DK2020/050170)

[87] (WO2020/253924)

[30] DK (PA201970376) 2019-06-17

## Demandes PCT entrant en phase nationale

[21] <b>3,139,864</b> [13] A1	[21] <b>3,139,888</b> [13] A1	[21] <b>3,139,930</b> [13] A1
[51] <b>Int.Cl. B65G 67/02 (2006.01) B25J 5/00 (2006.01) B25J 11/00 (2006.01) B65G 41/00 (2006.01) B65G 47/91 (2006.01)</b>	[51] <b>Int.Cl. E01D 11/04 (2006.01) E04H 12/20 (2006.01) F41H 5/04 (2006.01) F41H 5/06 (2006.01) F42D 5/045 (2006.01) E04H 9/06 (2006.01)</b>	[51] <b>Int.Cl. A61K 31/5383 (2006.01) A61P 1/12 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>AUTOMATED UNLOADING AND LOADING ROBOT SYSTEM WITH TELESCOPING MAST AND Z-AXIS CONTROL</b>	[54] <b>AN ARMOURY ELEMENT FOR THE PROTECTION OF A STRUCTURAL MATERIAL AND/OR LOAD-CARRYING ELEMENT</b>	[54] <b>METHODS OF TREATING BILE ACID DIARRHEA</b>
[54] <b>SYSTEME ROBOTISE DE DECHARGEMENT ET DE CHARGEMENT AUTOMATIQUE AVEC MAT TELESCOPIQUE ET COMMANDE D'AXE Z</b>	[54] <b>ELEMENT DE BLINDAGE POUR LA PROTECTION D'UN MATERIAU STRUCTURAL ET/OU D'UN ELEMENT PORTEUR DE CHARGE</b>	[54] <b>PROCEDES DE TRAITEMENT DE LA DIARRHEE A L'ACIDE BILIAIRE</b>
[72] ZOGHZOGHY, JOE G., US	[72] ANNAN, RACHID, CH	[72] VERKMAN, ALAN S., US
[72] GRIGSBY, CHASE CHRISTIAN, US	[71] VSL INTERNATIONAL AG, CH	[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US
[72] PLAUCHE, AARON JAMES, US	[85] 2021-11-29	[85] 2021-11-29
[72] PREWITT, KENDALL, US	[86] 2019-06-11 (PCT/EP2019/065228)	[86] 2020-06-08 (PCT/US2020/036683)
[71] BASTIAN SOLUTIONS, LLC, US	[87] (WO2020/249193)	[87] (WO2020/251906)
[85] 2021-11-29		[30] US (62/860,539) 2019-06-12
[86] 2020-05-29 (PCT/US2020/070092)		
[87] (WO2020/243749)		
[30] US (62/855,142) 2019-05-31		
	[21] <b>3,139,913</b> [13] A1	[21] <b>3,139,934</b> [13] A1
	[51] <b>Int.Cl. G01N 33/38 (2006.01) C03C 1/00 (2006.01) C03C 17/00 (2006.01)</b>	[51] <b>Int.Cl. B05B 1/28 (2006.01) B05B 12/18 (2018.01) B05B 14/30 (2018.01) B05B 7/16 (2006.01) B05B 7/24 (2006.01) B05B 12/08 (2006.01)</b>
	[25] EN	[25] EN
	[54] <b>PERIOD-CODED CONTAINERS WITH A TRACEABLE MATERIAL COMPOSITION</b>	[54] <b>SYSTEM AND METHOD FOR COATING A SURFACE</b>
	[54] <b>CONTENANTS A CODAGE DE PERIODE AVEC UNE COMPOSITION DE MATERIAU TRACABLE</b>	[54] <b>SYSTEME ET PROCEDE DE REVETEMENT D'UNE SURFACE</b>
	[72] FLORIOT, PHILIPPE, FR	[72] GEUTJENS, RUBEN, NL
	[71] OWENS-BROCKWAY GLASS CONTAINER INC., US	[71] QLAYERS HOLDING B.V., NL
	[85] 2021-11-29	[85] 2021-11-29
	[86] 2020-05-21 (PCT/US2020/034031)	[86] 2020-05-27 (PCT/EP2020/064633)
	[87] (WO2020/242889)	[87] (WO2020/239798)
	[30] US (16/426,887) 2019-05-30	[30] NL (2023223) 2019-05-28
		[30] NL (2023224) 2019-05-28
[21] <b>3,139,886</b> [13] A1		
[51] <b>Int.Cl. A01K 5/02 (2006.01) A23K 50/30 (2016.01) A23K 50/75 (2016.01)</b>		
[25] EN		
[54] <b>SYSTEM AND METHOD OF FORMULATING AN ANIMAL FEED COMPOSITION</b>		
[54] <b>SYSTEME ET PROCEDE DE FORMULATION D'UNE COMPOSITION D'ALIMENT POUR ANIMAUX</b>		
[72] JAWORSKI, NEIL, NL		
[72] SMITS, COENRAAD HENRICUS MARIA, NL		
[72] BUSINK, RONALD, NL		
[71] NUTRECO IP ASSETS B.V., NL		
[85] 2021-11-29		
[86] 2020-05-29 (PCT/EP2020/065070)		
[87] (WO2020/240014)		
[30] US (62/853,891) 2019-05-29		
[30] EP (19181503.4) 2019-06-20		

## PCT Applications Entering the National Phase

[21] **3,139,937**  
[13] A1

[51] **Int.Cl. G02B 6/44 (2006.01) G02B 6/38 (2006.01)**  
[25] EN  
[54] **MULTIPOINTS AND OTHER DEVICES HAVING OPTICAL CONNECTION PORTS WITH SLIDING ACTUATORS AND METHODS OF MAKING THE SAME**  
[54] **MULTIPOINTS ET AUTRES DISPOSITIFS AYANT PORTS DE CONNEXION OPTIQUES AVEC ACTIONNEURS COULISSANTS ET PROCEDES DE FABRICATION ASSOCIES**  
[72] DANNOUX, THIERRY LUC ALAIN, FR  
[72] ROSSON, JOEL CHRISTOPHER, US  
[72] SCOTTA, FELICE, FR  
[71] CORNING RESEARCH & DEVELOPMENT CORPORATION, US  
[85] 2021-11-29  
[86] 2020-05-20 (PCT/US2020/033704)  
[87] (WO2020/242847)  
[30] US (62/855,295) 2019-05-31

[21] **3,139,942**  
[13] A1

[51] **Int.Cl. A61K 31/675 (2006.01) A61K 31/7056 (2006.01) A61K 38/12 (2006.01) A61K 38/14 (2006.01) A61K 45/06 (2006.01) A61P 31/04 (2006.01)**  
[25] EN  
[54] **AFABICIN FOR USE FOR TREATING BACTERIAL INFECTIONS INVOLVING BIOFILM**  
[54] **AFABICINE POUR UTILISATION DANS LE TRAITEMENT D'INFECTIONS BACTERIENNES IMPLIQUANT UN BIOFILM**  
[72] NOWAKOWSKA, JUSTYNA, CH  
[72] VUAGNIAUX, GREGOIRE, CH  
[71] DEBIOPHARM INTERNATIONAL S.A., CH  
[85] 2021-11-29  
[86] 2020-06-12 (PCT/EP2020/066305)  
[87] (WO2020/249731)  
[30] EP (19180281.8) 2019-06-14

[21] **3,139,958**  
[13] A1

[51] **Int.Cl. B62H 1/14 (2006.01) B62J 43/00 (2020.01) B62J 43/10 (2020.01) A63C 5/00 (2006.01) B62M 27/02 (2006.01)**  
[25] EN  
[54] **SNOW SCOOTER**  
[54] **TROTINETTE A NEIGE**  
[72] KAUPPINEN, PASI, FI  
[71] ELYLY OY, FI  
[85] 2021-11-29  
[86] 2020-05-28 (PCT/FI2020/050359)  
[87] (WO2020/240090)  
[30] FI (U20190065) 2019-05-28

[21] **3,139,963**  
[13] A1

[51] **Int.Cl. G16H 20/60 (2018.01)**  
[25] EN  
[54] **SYSTEM AND METHODS FOR MONITORING AND CUSTOMIZING CONSUMPTION OF HERBS**  
[54] **SYSTEME ET PROCEDES DE SURVEILLANCE ET DE PERSONNALISATION DE CONSOMMATION D'HERBES**  
[72] COHEN, AVIEL, IL  
[71] GRAMSS CANNABIS LTD, IL  
[85] 2021-11-29  
[86] 2020-09-03 (PCT/IL2020/050964)  
[87] (WO2021/044424)  
[30] US (62/895,020) 2019-09-03

[21] **3,139,965**  
[13] A1

[51] **Int.Cl. C12N 5/0783 (2010.01) C12M 1/36 (2006.01) C12M 3/00 (2006.01)**  
[25] EN  
[54] **AUTOMATED T CELL CULTURE**  
[54] **CULTURE DE LYMPHOCYTES T AUTOMATISEE**  
[72] AIFUWA, IVIE, US  
[72] BEAUCHESNE, PASCAL, US  
[72] KHUU-DUONG, KIEN, US  
[72] LEUBA, KOHANA, US  
[71] JUNO THERAPEUTICS, INC., US  
[85] 2021-11-29  
[86] 2020-06-05 (PCT/US2020/036442)  
[87] (WO2020/247832)  
[30] US (62/858,736) 2019-06-07

[21] **3,139,968**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01)**  
[25] EN  
[54] **ANTI-CD137L ANTIBODIES AND METHODS OF USING SAME**  
[54] **ANTICORPS ANTI-CD137L ET LEURS PROCEDES D'UTILISATION**  
[72] LUO, PETER PEIZHI, CN  
[72] DU, FANGYONG, CN  
[72] LIU, GUIZHONG, CN  
[71] ADAGENE PTE. LTD., SG  
[85] 2021-11-29  
[86] 2020-06-04 (PCT/CN2020/094371)  
[87] (WO2020/244574)  
[30] CN (PCT/CN2019/090091) 2019-06-05

[21] **3,139,977**  
[13] A1

[51] **Int.Cl. C07D 207/27 (2006.01) C07D 211/76 (2006.01) C07D 227/087 (2006.01) C07D 261/18 (2006.01)**  
[25] EN  
[54] **PEPTIDOMIMETICS FOR THE TREATMENT OF CORONAVIRUS AND PICORNAVIRUS INFECTIONS**  
[54] **PEPTIDOMIMETIQUES POUR LE TRAITEMENT D'INFECTIONS PAR CORONAVIRUS ET PICORNAVIRUS**  
[72] SCHINAZI, RAYMOND F., US  
[72] ZANDI, KEIVAN, US  
[72] AMBLARD, FRANCK, US  
[71] EMORY UNIVERSITY, US  
[85] 2021-11-29  
[86] 2020-06-04 (PCT/US2020/036171)  
[87] (WO2020/247665)  
[30] US (62/857,674) 2019-06-05

## Demandes PCT entrant en phase nationale

[21] **3,139,982**  
[13] A1

[51] **Int.Cl. G01N 27/87 (2006.01) F16L 55/26 (2006.01)**  
[25] EN  
[54] **SINGLE POINT CONTACT TRIAXIAL SENSOR HEAD FOR AN INLINE INSPECTION TOOL**  
[54] **TETE DE CAPTEUR TRIAXIAL A UN SEUL POINT DE CONTACT POUR UN OUTIL D'INSPECTION EN LIGNE**  
[72] MENDENHALL, TODD R., US  
[72] OWEN, BLAKE, US  
[72] MAYNARD, ED, US  
[71] TDW DELAWARE, INC., US  
[85] 2021-11-29  
[86] 2020-06-03 (PCT/US2020/035834)  
[87] (WO2020/247436)  
[30] US (62/856,202) 2019-06-03

[21] **3,139,984**  
[13] A1

[51] **Int.Cl. E03F 5/22 (2006.01)**  
[25] EN  
[54] **A LIFT STATION MAINTENANCE DEVICE**  
[54] **DISPOSITIF DE MAINTENANCE DE STATION DE LEVAGE**  
[72] DUPERON, TERRY, US  
[72] DILL, STEVEN, US  
[71] DUPERON, TERRY, US  
[71] DILL, STEVEN, US  
[85] 2021-11-29  
[86] 2020-06-17 (PCT/US2020/038032)  
[87] (WO2020/247963)  
[30] US (16/430,624) 2019-06-04

[21] **3,139,985**  
[13] A1

[51] **Int.Cl. B62M 27/02 (2006.01) B62D 11/04 (2006.01)**  
[25] EN  
[54] **A MOTORIZED SNOW OR ICE VEHICLE**  
[54] **VEHICULE POUR NEIGE OU GLACE MOTORISE**  
[72] IGNATYEV, SERGEY, AT  
[72] SHCHTETININ, VLADIMIR, RU  
[71] IGNATYEV, SERGEY, AT  
[85] 2021-11-29  
[86] 2019-06-07 (PCT/EP2019/065019)  
[87] (WO2019/238579)  
[30] AT (A 60083/2018) 2018-06-10

[21] **3,139,986**  
[13] A1

[51] **Int.Cl. A61K 39/002 (2006.01)**  
[25] EN  
[54] **HVAC AUTHENTICATION SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE D'AUTHENTIFICATION DE CVC**  
[72] DOGRA, ADWAY, US  
[72] FLORES, ROBERTO, US  
[71] GOODMAN MANUFACTURING COMPANY, L.P., US  
[85] 2021-11-29  
[86] 2020-05-30 (PCT/US2020/035475)  
[87] (WO2020/243681)  
[30] US (62/855,787) 2019-05-31

[21] **3,139,987**  
[13] A1

[51] **Int.Cl. G06F 3/048 (2013.01) G06T 15/20 (2011.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR PROCESSING IMAGES TO PERFORM AUTOMATIC ALIGNMENT OF ELECTRONIC IMAGES**  
[54] **PROCEDES ET SYSTEMES DE TRAITEMENT D'IMAGES POUR EFFECTUER UN ALIGNEMENT AUTOMATIQUE D'IMAGES ELECTRONIQUES**  
[72] LEE, JAE MIN, US  
[71] BLUEBEAM, INC., US  
[85] 2021-11-29  
[86] 2020-06-05 (PCT/US2020/036378)  
[87] (WO2020/247788)  
[30] US (62/858,155) 2019-06-06

[21] **3,139,990**  
[13] A1

[51] **Int.Cl. B60R 9/058 (2006.01) B60R 9/048 (2006.01) E04H 15/58 (2006.01)**  
[25] EN  
[54] **A ROOF RACK COUPLER**  
[54] **DISPOSITIF D'ACCOUPLMENT DE GALERIE DE TOIT**  
[72] HOLZ, BILL, AU  
[71] HOLZ INDUSTRIES PTY LTD, AU  
[85] 2021-11-29  
[86] 2020-06-04 (PCT/AU2020/050565)  
[87] (WO2020/243780)  
[30] AU (2019901926) 2019-06-04

[21] **3,140,447**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01) A61P 35/02 (2006.01)**  
[25] EN  
[54] **T-CELL DEPLETING THERAPIES**  
[54] **THERAPIES PAR DEPLETION DE LYMPHOCYTES T**  
[72] BOITANO, ANTHONY, US  
[72] COOKE, MICHAEL, US  
[72] MCDONOUGH, SEAN, US  
[72] PROCTOR, JENNIFER LYNN, US  
[71] MAGENTA THERAPEUTICS, INC., US  
[85] 2021-12-02  
[86] 2020-06-05 (PCT/US2020/036494)  
[87] (WO2020/247872)  
[30] US (62/857,744) 2019-06-05

[21] **3,142,709**  
[13] A1

[51] **Int.Cl. A61K 38/08 (2019.01) A61P 15/14 (2006.01)**  
[25] EN  
[54] **INTRANASAL ADMINISTRATION OF MEROTOCIN FOR IMPROVING LACTATION**  
[54] **ADMINISTRATION INTRANASALE DE MEROTOCINE POUR AMELIORER LA LACTATION**  
[72] ARBIT, DEBORAH, US  
[72] ARCE SAEZ, JOAN-CARLES, US  
[71] FERRING B.V., NL  
[85] 2021-12-06  
[86] 2020-11-03 (PCT/EP2020/080831)  
[87] (WO2021/089554)  
[30] US (62/930427) 2019-11-04  
[30] DK (PA 2020 00349) 2020-03-18

## PCT Applications Entering the National Phase

[21] <b>3,144,796</b> [13] A1	[21] <b>3,145,900</b> [13] A1	[21] <b>3,145,906</b> [13] A1
[25] EN [54] <b>AUTOMATED WORKFLOWS FROM MEDIA ASSET DIFFERENTIALS</b> [54] <b>FLUX DE TRAVAIL AUTOMATISES EN FONCTION DES DIFFERENTIELS DE BIENS DE CONTENU MEDIA</b> [72] WANG, YADONG, US [72] WU, CHIH-WEI, US [72] TACKE, KYLE, US [72] RAO, SHILPA, US [72] SEKH, BONEY, US [72] SWAN, ANDREW, US [72] SENAPATI, RAJA, US [71] NETFLIX, INC., US [85] 2022-01-05 [86] 2021-07-19 (PCT/US2021/242174) [87] (3144796) [30] US (63/054,132) 2020-07-20 [30] US (17/245,252) 2021-04-30	[51] <b>Int.Cl. A61L 9/01 (2006.01) A61L 9/14 (2006.01)</b> [25] EN [54] <b>FRESHENING COMPOSITIONS AND METHODS OF ATOMIZING FRESHENING COMPOSITIONS WITH A THERMALLY-ACTUATED MICROFLUIDIC CARTRIDGE</b> [54] <b>COMPOSITIONS RAFRAICHISSANTES ET METHODES DE PULVERISATION DE COMPOSITIONS RAFRAICHISSANTES AVEC UNE CARTOUCHE MICROFLUIDIQUE ACTIONNEE THERMIQUEMENT</b> [72] NWACHUKWU, CHISOMAGA UGOCHI, US [72] HOLLINGSHEAD, JUDITH ANN, US [72] BUHRLAGE, ANDREW JOSEPH, US [72] LIU, ZAIYOU, US [71] THE PROCTOR & GAMBLE COMPANY, US [85] 2022-01-04 [86] 2020-07-15 (PCT/US2020/070270) [87] (WO2021/011958) [30] US (62/875,107) 2019-07-17	[51] <b>Int.Cl. G06Q 10/06 (2012.01) G06Q 10/10 (2012.01) G06F 15/00 (2006.01) G09B 7/02 (2006.01)</b> [25] EN [54] <b>MATCHING CANDIDATES TO ORGANIZATION POSITION</b> [54] <b>MISE EN CORRESPONDANCE ENTRE DES CANDIDATS ET UN POSTE EN ENTREPRISE</b> [72] MONDORE, SCOTT, US [72] DOUTHITT, SHANE, US [72] BETTS, MATT, US [72] SPELL, HANNAH, US [71] STRATEGIC MANAGEMENT DECISIONS, LLC, US [85] 2022-01-04 [86] 2020-07-01 (PCT/US2020/040555) [87] (WO2021/003302) [30] US (62/869,355) 2019-07-01
[21] <b>3,145,347</b> [13] A1	[21] <b>3,145,903</b> [13] A1	[21] <b>3,145,908</b> [13] A1
[51] <b>Int.Cl. C07K 16/46 (2006.01) C07K 16/28 (2006.01) C12N 15/13 (2006.01)</b> [25] EN [54] <b>CANINIZED ANTIBODIES TO HUMAN AND CANINE CTLA-4</b> [54] <b>ANTICORPS CANINISES DIRIGES CONTRE CTLA-4 HUMAINE ET CANINE</b> [72] MORSEY, MOHAMAD, US [72] ZHANG, YUANZHENG, US [72] TARPEY, IAN, GB [71] INTERVET INTERNATIONAL B.V., NL [85] 2021-12-24 [86] 2020-07-15 (PCT/EP2020/069924) [87] (WO2021/009188) [30] US (62/874,287) 2019-07-15	[51] <b>Int.Cl. B01L 3/00 (2006.01)</b> [25] EN [54] <b>CHEMISTRY/INSTRUMENT PARAMETER COLOR MAINTENANCE</b> [54] <b>PRESERVATION DES COULEURS DE PARAMETRE DE COMPOSITION CHIMIQUE/INSTRUMENT</b> [72] TSCHAMPL, MICHAEL JONATHAN, US [72] MICHALSKI, PETER, US [72] HOPKINS, REECE W., US [72] NORDAHL, FREDERIK, DE [71] HACH COMPANY, US [85] 2022-01-04 [86] 2020-08-19 (PCT/US2020/046930) [87] (WO2021/034897) [30] US (62/888,820) 2019-08-19	[51] <b>Int.Cl. A61K 31/519 (2006.01) A61K 47/55 (2017.01) A61K 31/437 (2006.01) A61P 11/00 (2006.01) A61P 35/00 (2006.01)</b> [25] EN [54] <b>COMPOUNDS AND METHODS FOR THE TREATMENT AND PREVENTION OF FIBROTIC DISEASE STATES AND CANCER</b> [54] <b>COMPOSES ET METHODES POUR LE TRAITEMENT ET LA PREVENTION D'ETATS DE MALADIE FIBROTIQUE ET DE CANCER</b> [72] LOW, PHILIP STEWART, US [72] ZHANG, FENGHUA, US [72] NAPOLEON, JOHN VICTOR, US [71] PURDUE RESEARCH FOUNDATION, US [85] 2022-01-04 [86] 2020-07-08 (PCT/US2020/041120) [87] (WO2021/007277) [30] US (62/871,686) 2019-07-08 [30] US (62/872,146) 2019-07-09

## Demandes PCT entrant en phase nationale

[21] **3,145,910**  
[13] A1

[51] **Int.Cl. C12M 1/36 (2006.01) G16H 40/63 (2018.01) G16H 40/67 (2018.01)**

[25] EN

[54] **PROCESS CONTROL SYSTEMS FOR AUTOMATED CELL ENGINEERING SYSTEMS**

[54] **SYSTEMES DE COMMANDE DE PROCESSUS POUR SYSTEMES D'INGENIERIE CELLULAIRE AUTOMATISES**

[72] ABRAHAM, EYTAN, US  
[72] DENSHAM, PHIL, US  
[72] DANIELS, RAELYN, US  
[72] TRAINOR, NUALA, US  
[72] GRANT, IAN, US  
[72] SMITH, TIM, US  
[71] LONZA WALKERSVILLE, INC., US  
[71] OCTANE BIOTECH INC., CA  
[85] 2022-01-04  
[86] 2020-07-14 (PCT/US2020/041952)  
[87] (WO2021/011547)  
[30] US (62/874,119) 2019-07-15

[21] **3,145,966**  
[13] A1

[51] **Int.Cl. H01M 10/056 (2010.01) H01M 10/0525 (2010.01) H01M 10/0565 (2010.01)**

[25] FR

[54] **SOLID POLYMER ELECTROLYTE COMPRISING A POLYALKENE CARBONATE**

[54] **ELECTROLYTE POLYMERE SOLIDE COMPRENANT UN CARBONATE DE POLYALCENE**

[72] Ayme-Perrot, David, FR  
[72] Dolle, Mickael, CA  
[72] Lepage, David, CA  
[72] Prebe, Arnaud, CA  
[71] TotalEnergies SE, FR  
[71] Université de Montréal, CA  
[85] 2022-01-05  
[86] 2020-07-17 (PCT/EP2020/070336)  
[87] (WO2021/013741)  
[30] EP (19305958.1) 2019-07-19

[21] **3,145,969**  
[13] A1

[51] **Int.Cl. C22B 1/00 (2006.01) C22B 3/02 (2006.01) C22B 7/00 (2006.01)**

[25] EN

[54] **A METHOD FOR RECYCLING LITHIUM BATTERIES**

[54] **PROCEDE DE RECYCLAGE DE BATTERIES AU LITHIUM**

[72] HANISCH, CHRISTIAN, DE  
[72] ELWERT, TOBIAS, DE  
[72] BRUCKNER, LISA, DE  
[71] DUESENFELD GMBH, DE  
[85] 2022-01-05  
[86] 2019-07-26 (PCT/EP2019/070286)  
[87] (WO2021/018372)

[21] **3,145,971**  
[13] A1

[51] **Int.Cl. B60R 3/00 (2006.01) E04G 21/32 (2006.01)**

[25] EN

[54] **ARRANGEMENT**

[54] **AGENCEMENT**

[72] LIETONEN, JANI, FI  
[72] LAIHONEN, ESKO, FI  
[71] SANDVIK MINING AND CONSTRUCTION OY, FI  
[85] 2022-01-05  
[86] 2019-08-19 (PCT/EP2019/072132)  
[87] (WO2021/032276)

[21] **3,145,975**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2012.01) G06Q 10/08 (2012.01) G06Q 50/04 (2012.01)**

[25] EN

[54] **ARCHIVING SYSTEM AND METHOD FOR ARCHIVING ELECTRONIC DATA**

[54] **SYSTEME D'ARCHIVAGE ET PROCEDE POUR ARCHIVER DES DONNEES ELECTRONIQUES**

[72] NOWAK, MIRKO, DE  
[72] NOWAK, REINHARD, DE  
[71] GLATT GMBH, DE  
[85] 2022-01-05  
[86] 2020-06-18 (PCT/EP2020/066906)  
[87] (WO2021/004744)  
[30] DE (10 2019 210 085.6) 2019-07-09

[21] **3,145,978**  
[13] A1

[51] **Int.Cl. G06F 13/42 (2006.01)**

[25] EN

[54] **METHOD AND DATA NETWORK FOR COMMUNICATING DATA CONTENT, IN PARTICULAR IN AN ELEVATOR SYSTEM**

[54] **PROCEDE ET RESEAU DE DONNEES POUR COMMUNIQUER DES CONTENUS DE DONNEES, EN PARTICULIER DANS UNE INSTALLATION D'ASCENSEUR**

[72] HOSEMANN, AXEL, CH  
[72] KRUMMENACHER, ANDRE, CH  
[71] INVENTIO AG, CH  
[85] 2022-01-05  
[86] 2020-06-30 (PCT/EP2020/068379)  
[87] (WO2021/004835)  
[30] EP (19185769.7) 2019-07-11

[21] **3,146,014**  
[13] A1

[51] **Int.Cl. G06Q 20/00 (2012.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR AGING, DISABILITY AND PALLIATIVE (ADP) CARE UTILITY SAVINGS AND EXCHANGE**

[54] **SYSTEMES ET PROCEDES D'ECONOMIES ET D'ECHANGE DE SERVICES DE SOINS AUX PERSONNES AGEES, INVALIDES OU EN SITUATION PALLIATIVE**

[72] GU, JIAO Z., US  
[72] REYNOLDS, STEVEN, US  
[72] BHATT, CHIAG, US  
[71] FEI.COM, INC. D/B/A FEI SYSTEMS, US  
[85] 2022-01-05  
[86] 2019-05-14 (PCT/US2019/032314)  
[87] (WO2020/013914)  
[30] US (62/695,012) 2018-07-07

## PCT Applications Entering the National Phase

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[21] **3,146,018**  
[13] A1

[51] **Int.Cl. G06Q 20/32 (2012.01) G06Q 20/34 (2012.01) G07F 7/08 (2006.01) G07F 7/10 (2006.01) G07F 7/12 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD ENABLING MOBILE NEAR-FIELD COMMUNICATION TO UPDATE DISPLAY ON A PAYMENT CARD**

[54] **SYSTEME ET PROCEDE PERMETTANT UNE COMMUNICATION MOBILE EN CHAMP PROCHE AFIN DE METTRE A JOUR UN AFFICHAGE SUR UNE CARTE DE PAIEMENT**

[72] RULE, JEFFREY, US  
[72] HART, COLIN, US  
[72] OSBORN, KEVIN, US  
[72] ILINCIC, RAJKO, US  
[71] CAPITAL ONE SERVICES, LLC, US  
[85] 2022-01-05  
[86] 2020-06-30 (PCT/US2020/040212)  
[87] (WO2021/007063)  
[30] US (16/506,973) 2019-07-09

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[21] **3,146,022**  
[13] A1

[51] **Int.Cl. G06T 3/60 (2006.01)**

[25] EN

[54] **INPUT POLARITY OF COMPUTING DEVICE**

[54] **POLARITE D'ENTREE D'UN DISPOSITIF INFORMATIQUE**

[72] SOLOMON, MARK, US  
[72] SCHOLLER, JEROME, US  
[71] TANGIBLE PLAY, INC., US  
[85] 2022-01-05  
[86] 2020-07-07 (PCT/US2020/041051)  
[87] (WO2021/007238)  
[30] US (62/871,195) 2019-07-07  
[30] US (16/880,875) 2020-05-21

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[21] **3,146,027**  
[13] A1

[51] **Int.Cl. A47B 3/087 (2006.01) A47B 3/08 (2006.01)**

[25] EN

[54] **TWO-STAGE LOCK ASSEMBLY**

[54] **ENSEMBLE DE VERROUILLAGE A DEUX ETAGES**

[72] NYE, CURTIS S., US  
[71] LIFETIME PRODUCTS, INC., US  
[85] 2022-01-05  
[86] 2020-07-09 (PCT/US2020/041414)  
[87] (WO2021/007438)  
[30] US (62/872,240) 2019-07-09  
[30] US (16/923,924) 2020-07-08

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[21] **3,146,035**  
[13] A1

[51] **Int.Cl. G06F 8/74 (2018.01) G06F 8/75 (2018.01) G06F 16/178 (2019.01) G06F 11/36 (2006.01)**

[25] EN

[54] **SOURCE IDENTIFYING FORENSICS SYSTEM, DEVICE, AND METHOD FOR MULTIMEDIA FILES**

[54] **SYSTEME, DISPOSITIF ET PROCEDE MEDICO-LEGAL D'IDENTIFICATION DE SOURCE POUR DES FICHIERS MULTIMEDIA**

[72] FISCHER, DANIEL JOHN, US  
[72] LYONS, BERTRAM C., US  
[71] AUDIO VISUAL PRESERVATION SOLUTIONS, INC., US  
[85] 2022-01-05  
[86] 2020-08-10 (PCT/US2020/045612)  
[87] (WO2021/030264)  
[30] US (62/885,472) 2019-08-12

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[21] **3,146,039**  
[13] A1

[51] **Int.Cl. G02B 27/01 (2006.01) G02B 27/00 (2006.01) G02B 27/02 (2006.01) G02B 27/04 (2006.01)**

[25] EN

[54] **HEADS-UP DISPLAY APPARATUS FOR USE DURING A SMOKE EMERGENCY**

[54] **APPAREIL D'AFFICHAGE TETE HAUTE DESTINE A ETRE UTILISE PENDANT UNE URGENCE DE FUMEE**

[72] WERJEFELT, CHRISTIAN, US  
[72] WERJEFELT, ALEXANDER, US  
[71] WERJEFELT, CHRISTIAN, US  
[71] WERJEFELT, ALEXANDER, US  
[85] 2022-01-05  
[86] 2020-07-08 (PCT/US2020/041099)  
[87] (WO2021/007267)  
[30] US (62/872,523) 2019-07-10  
[30] US (62/883,183) 2019-08-06

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[21] **3,146,060**  
[13] A1

[51] **Int.Cl. G16H 50/20 (2018.01) A61B 5/145 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR DETERMINING GLUCOSE CHANGE IN A SUBJECT**

[54] **PROCEDE ET SYSTEME DE DETERMINATION D'UNE VARIATION DE LA GLYCEMIE CHEZ UN SUJET**

[72] EL FATHI, ANAS, CA  
[72] HAIDAR, AHMAD, CA  
[71] ELI LILLY AND COMPANY, US  
[85] 2022-01-05  
[86] 2020-07-09 (PCT/IB2020/056467)  
[87] (WO2021/005552)  
[30] US (62/871,931) 2019-07-09

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[21] **3,146,064**  
[13] A1

[51] **Int.Cl. A61K 31/137 (2006.01) A61K 31/4402 (2006.01)**

[25] EN

[54] **LONG-ACTING FORMULATIONS AND VEHICLES**

[54] **FORMULATIONS A ACTION PROLONGEE ET VEHICULES**

[72] AUTIO, SUSAN, US  
[72] BRANHAM, KEITH EDWARD, US  
[72] FILICE, JAMES A., US  
[72] GIBSON, JOHN W., US  
[72] LEONARD, JOHN J., US  
[72] MARIANO, JAMES, US  
[72] MORO, WHITNEY, US  
[72] SEKAR, MICHAEL, US  
[72] SNYDER, CHELSEA ALEXANDRA, US  
[72] STRICKLEY, ROBERT G., US  
[72] SUBRAMANIAN, RAJU, US  
[72] THEEUWES, FELIX, US  
[72] TIJERINA, MONICA, US  
[72] WRIGHT, JEREMY C., US  
[72] YUM, SU IL, US  
[72] XU, FAYE, US  
[71] DURECT CORPORATION, US  
[85] 2022-01-05  
[86] 2020-07-17 (PCT/US2020/042605)  
[87] (WO2021/011896)  
[30] US (62/875,795) 2019-07-18

## Demandes PCT entrant en phase nationale

[21] **3,146,065**  
[13] A1

[51] **Int.Cl. H01S 3/067 (2006.01)**  
[25] EN  
[54] **FIBER AMPLIFIER SYSTEM RESISTANT TO NONLINEAR SPECTRAL BROADENING AND DECOHERENCE**  
[54] **SYSTEME AMPLIFICATEUR A FIBRE RESISTANT A L'ELARGISSEMENT SPECTRAL NON LINEAIRE ET A LA DECOHERENCE**  
[72] GOODNO, GREGORY D., US  
[71] NORTHROP GRUMMAN SYSTEMS CORPORATION, US  
[85] 2022-01-05  
[86] 2020-08-13 (PCT/US2020/046126)  
[87] (WO2021/045880)  
[30] US (16/560,078) 2019-09-04

[21] **3,146,080**  
[13] A1

[51] **Int.Cl. G01N 17/00 (2006.01) G01N 17/02 (2006.01) G01N 17/04 (2006.01)**  
[25] EN  
[54] **PORTABLE ARTICULATING ULTRASONIC INSPECTION**  
[54] **INSPECTION ULTRASONORE ARTICULEE PORTATIVE**  
[72] KOCUREK, CHRISTOPHER GEORGE, US  
[71] CONOCOPHILLIPS COMPANY, US  
[85] 2022-01-05  
[86] 2020-08-05 (PCT/US2020/045025)  
[87] (WO2021/026246)  
[30] US (62/882,871) 2019-08-05  
[30] US (16/985,873) 2020-08-05

[21] **3,146,085**  
[13] A1

[51] **Int.Cl. A01N 43/90 (2006.01) A01P 5/00 (2006.01)**  
[25] EN  
[54] **IMIDAZOTHIAZOLE COMPOUNDS AND METHODS FOR TREATING PLANT NEMATODE INFECTIONS**  
[54] **COMPOSES ET PROCEDES D'IMIDAZOTHIAZOLE POUR LE TRAITEMENT D'INFECTIONS PROVOQUEES PAR DES NEMATODES CHEZ UNE PLANTE**  
[72] BURNS, ANDREW, CA  
[72] ROY, PETER, CA  
[71] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA  
[85] 2022-01-04  
[86] 2020-07-08 (PCT/CA2020/050946)  
[87] (WO2021/003571)  
[30] GB (1909771.6) 2019-07-08

[21] **3,146,086**  
[13] A1

[51] **Int.Cl. A61K 9/70 (2006.01)**  
[25] EN  
[54] **TRANSDERMAL THERAPEUTIC SYSTEM COMPRISING AN ACTIVE AGENT-CONTAINING LAYER COMPRISING AN ACRYLIC POLYMER AND A SKIN CONTACT LAYER COMPRISING A SILICONE GEL ADHESIVE**  
[54] **SYSTEME THERAPEUTIQUE TRANSDERMIQUE CONTENANT UNE COUCHE CONTENANT UN AGENT ACTIF CONTENANT UN POLYMERE ACRYLIQUE ET UNE COUCHE DE CONTACT AVEC LA PEAU CONTENANT UN ADHESIF A BASE DE GEL DE SILICONE**  
[72] EMGENBROICH, MARCO, DE  
[72] KLAFFENBACH, PETER, DE  
[72] REUM, NICO, DE  
[72] WAUER, GABRIEL, DE  
[72] MOHR, PATRICK, DE  
[72] SCHLUTER, ANNA, DE  
[72] WOLF, HANS-WERNER, DE  
[71] LTS LOHMANN THERAPIE-SYSTEME AG, DE  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/EP2020/069271)  
[87] (WO2021/005118)  
[30] EP (19185347.2) 2019-07-09

[21] **3,146,089**  
[13] A1

[51] **Int.Cl. A21D 15/00 (2006.01) A21D 13/41 (2017.01) A21D 13/42 (2017.01) A21D 13/43 (2017.01) A21D 13/44 (2017.01) A21D 13/45 (2017.01) A21D 13/80 (2017.01) A21D 2/24 (2006.01) A21D 10/00 (2006.01) A23L 3/3526 (2006.01)**  
[25] EN  
[54] **NATAMYCIN IN A BAKED PRODUCT**  
[54] **NATAMYCINE DANS UN PRODUIT DE BOULANGERIE ET PATISseries**  
[72] VAN PEIJ-VISSER, JUDITH CORINE, NL  
[72] VAN DEN BERG, DIRK, NL  
[72] DE HAAN, BEN RUDOLF, NL  
[71] DSM IP ASSETS B.V., NL  
[85] 2022-01-06  
[86] 2020-07-23 (PCT/EP2020/070816)  
[87] (WO2021/013936)  
[30] EP (19188340.4) 2019-07-25

[21] **3,146,090**  
[13] A1

[51] **Int.Cl. A01N 43/42 (2006.01) C07D 205/04 (2006.01) C07D 221/20 (2006.01) C07D 225/02 (2006.01) C07D 401/14 (2006.01) C07D 413/02 (2006.01)**  
[25] EN  
[54] **HERBICIDAL COMPOUNDS**  
[54] **COMPOSES HERBICIDES**  
[72] HENNESSY, ALAN JOSEPH, GB  
[72] JONES, ELIZABETH PEARL, GB  
[72] DALE, SUZANNA JANE, GB  
[72] GREGORY, ALEXANDER WILLIAM, GB  
[72] HOULSBY, IAN THOMAS TINMOUTH, GB  
[72] BHONOA, YUNAS, GB  
[72] COMAS-BARCELO, JULIA, GB  
[71] SYNGENTA CROP PROTECTION AG, CH  
[85] 2022-01-06  
[86] 2020-07-15 (PCT/EP2020/070007)  
[87] (WO2021/009232)  
[30] GB (1910168.2) 2019-07-16

## PCT Applications Entering the National Phase

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[21] **3,146,091**  
[13] A1

[51] **Int.Cl. E04F 13/08 (2006.01) E04F 13/14 (2006.01)**  
[25] EN  
[54] **PREFABRICATED FRAMES FOR MASONRY SLIPS**  
[54] **CADRES PREFABRIQUES POUR LANGUETTES DE MACONNERIE**  
[72] FREEMAN, MATTHEW, GB  
[71] ACS FACADES HOLDINGS LIMITED, GB  
[85] 2022-01-06  
[86] 2020-07-13 (PCT/EP2020/069802)  
[87] (WO2021/005245)  
[30] GB (1909988.6) 2019-07-11  
[30] GB (1919159.2) 2019-12-23  
[30] GB (2008847.2) 2020-06-11

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[21] **3,146,095**  
[13] A1

[51] **Int.Cl. A61K 38/08 (2019.01) A61K 49/00 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) G01N 33/58 (2006.01)**  
[25] EN  
[54] **A UROKINASE PLASMINOGEN ACTIVATOR RECEPTOR-TARGETING PEPTIDE**  
[54] **PEPTIDE CIBLANT LE RECEPTEUR DE L'ACTIVATEUR DU PLASMINOGENE DE TYPE UROKINASE**  
[72] KJAER, ANDREAS, DK  
[72] JUHL, KARINA, DK  
[72] KURBEGOVIC, SOREL, DK  
[72] PLOUG, MICHAEL, DK  
[72] JORGEN JENSEN, KNUD, DK  
[72] KILDEGAARD SORENSEN, KASPER, DK  
[72] CHRISTENSEN, ANDERS, DK  
[72] ALBRECHTSEN, MORTEN, DK  
[71] RIGSHOSPITALET, DK  
[71] UNIVERSITY OF COPENHAGEN, DK  
[71] FLUOGUIDE A/S, DK  
[85] 2022-01-06  
[86] 2020-07-15 (PCT/EP2020/070014)  
[87] (WO2021/009237)  
[30] SE (1950898-5) 2019-07-16

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[21] **3,146,100**  
[13] A1

[51] **Int.Cl. B02C 4/02 (2006.01) B02C 4/32 (2006.01)**  
[25] EN  
[54] **ROLLER MILL WITH A SYNCHRONISING DEVICE**  
[54] **BROYEUR A CYLINDRES DOTE D'UN DISPOSITIF DE SYNCHRONISATION**  
[72] GUERRERO PALMA, PEDRO, DE  
[72] PETERS, ALEXANDER, DE  
[71] THYSSENKRUPP INDUSTRIAL SOLUTIONS AG, DE  
[71] THYSSENKRUPP AG, DE  
[85] 2022-01-06  
[86] 2020-07-31 (PCT/EP2020/071623)  
[87] (WO2021/023643)  
[30] BE (2019/5509) 2019-08-07  
[30] DE (10 2019 211 851.8) 2019-08-07

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[21] **3,146,105**  
[13] A1

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 40/40 (2020.01) A24F 40/50 (2020.01) A24F 40/20 (2020.01) A24F 40/60 (2020.01)**  
[25] EN  
[54] **AEROSOL GENERATION DEVICE**  
[54] **DISPOSITIF DE GENERATION D'AEROSOL**  
[72] HUPKES, ERNST, NL  
[71] JT INTERNATIONAL SA, CH  
[85] 2022-01-06  
[86] 2020-08-07 (PCT/EP2020/072307)  
[87] (WO2021/023880)  
[30] EP (19190860.7) 2019-08-08

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[21] **3,146,110**  
[13] A1

[51] **Int.Cl. B63B 32/51 (2020.01)**  
[25] EN  
[54] **VOLUME ELEMENT, IN PARTICULAR A DEVICE FOR WATER SPORTS**  
[54] **ELEMENT DE VOLUME, EN PARTICULIER APPAREIL DE SPORT AQUATIQUE**  
[72] KLARE, STEFAN, DE  
[71] KLARE, STEFAN, DE  
[85] 2022-01-06  
[86] 2020-07-02 (PCT/EP2020/068716)  
[87] (WO2021/004901)  
[30] DE (10 2019 118 436.3) 2019-07-08

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[21] **3,146,126**  
[13] A1

[51] **Int.Cl. G06K 19/06 (2006.01) G06Q 20/06 (2012.01) G06Q 20/36 (2012.01) G06Q 20/38 (2012.01) G06K 7/14 (2006.01) H04L 9/08 (2006.01) H04L 9/32 (2006.01)**  
[25] EN  
[54] **MULTI-ADDRESS POPULATION BASED ON SINGLE ADDRESS**  
[54] **POPULATION MULTI-ADRESSE BASEE SUR UNE ADRESSE UNIQUE**  
[72] LEE, BOBBY CHRISTOPHER, US  
[71] BALLET GLOBAL INC., US  
[85] 2022-01-05  
[86] 2020-07-03 (PCT/US2020/040822)  
[87] (WO2021/007128)  
[30] US (62/870,866) 2019-07-05  
[30] US (16/568,185) 2019-09-11

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[21] **3,146,128**  
[13] A1

[51] **Int.Cl. A61K 8/64 (2006.01) A61K 8/60 (2006.01) A61K 38/48 (2006.01) C07K 1/14 (2006.01) C07K 14/46 (2006.01) C12N 5/10 (2006.01) C12N 15/85 (2006.01) C12P 21/02 (2006.01)**  
[25] EN  
[54] **WOUND DEBRIDEMENT SYSTEMS**  
[54] **SYSTEMES DE DEBRIDEMENT DE PLAIES**  
[72] ROBERTSON, ADAM, NO  
[72] LUND, HENRIK, NO  
[71] REGENICS AS, NO  
[71] ROBERTSON, ADAM, NO  
[71] LUND, HENRIK, NO  
[85] 2022-01-05  
[86] 2020-07-06 (PCT/US2020/040865)  
[87] (WO2021/007147)  
[30] US (62/870,956) 2019-07-05

## Demandes PCT entrant en phase nationale

[21] <b>3,146,129</b> [13] A1	[21] <b>3,146,130</b> [13] A1	[21] <b>3,146,134</b> [13] A1
[51] <b>Int.Cl. A61K 31/444 (2006.01) A61P 25/06 (2006.01) C07D 401/06 (2006.01)</b>	[51] <b>Int.Cl. A61K 31/451 (2006.01) A61K 31/4523 (2006.01) A61K 31/4535 (2006.01) C07D 211/08 (2006.01) C07D 471/04 (2006.01) C07D 487/04 (2006.01)</b>	[51] <b>Int.Cl. A63F 13/27 (2014.01) A63F 13/285 (2014.01) A63F 13/47 (2014.01) A63F 13/48 (2014.01) A63F 13/533 (2014.01) A63F 13/67 (2014.01) A63F 13/79 (2014.01) A63F 13/843 (2014.01) A63F 13/847 (2014.01) A63F 13/88 (2014.01) A63F 13/92 (2014.01) A63G 7/00 (2006.01) A63G 31/00 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>PROCESSES AND INTERMEDIATE FOR THE LARGE-SCALE PREPARATION OF 2,4,6-TRIFLUORO-N-[6-(1-METHYL-PIPERIDINE-4-CARBONYL)-PYRIDIN-2-YL]-BENZAMIDE HEMISUCCINATE, AND PREPARATION OF 2,4,6 - TRIFLUORO-N-[6-(1-METHYL-PIPERIDINE-4-CARBONYL)-PYRIDIN-2-YL]-BENZAMIDE ACETATE</b>	[54] <b>FORMULATIONS OF RBP4 INHIBITORS AND METHODS OF USE</b>	[54] <b>DYNAMIC QUEST-BASED NARRATIVE FOR AMUSEMENT PARK</b>
[54] <b>PROCEDES ET INTERMEDIAIRE DE PREPARATION A GRANDE ECHELLE D'HEMISUCCINATE DE 2,4,6-TRIFLUORO-N-[6-(1-METHYL-PIPERIDINE-4-CARBONYL)-PYRIDINE-2-YL]-BENZAMIDE, ET PREPARATION D'ACETA TE DE 2,4,6-TRIFLUORO-N-[6-(1-METHYL-PIPERIDINE-4-CARBONYL)-PYRIDINE-2-YL]-BENZAMIDE</b>	[54] <b>FORMULATIONS D'INHIBITEURS DE RBP4 ET PROCEDES D'UTILISATION</b>	[54] <b>NARRATION BASEE SUR UNE QUETE DYNAMIQUE POUR PARC D'ATTRACTIONS</b>
[72] ABURUB, AKTHAM, US	[72] LIN, YU-HSIN, TOM, US	[72] LINGUANTI, NICHOLAS ANTHONY, US
[72] COATES, DAVID ANDREW, US	[72] WANG, CHENG-CHI, IRENE, US	[72] SPENCER, RICHARD MICHAEL, US
[72] FRANK, SCOTT ALAN, US	[71] BELITE BIO, LLC, US	[72] MANNARINO, THOMAS JOHN, US
[72] KERR, MARK STEVEN, US	[85] 2022-01-05	[71] UNIVERSAL CITY STUDIOS LLC, US
[72] ROTHHAAR, ROGER RYAN, US	[86] 2020-07-06 (PCT/US2020/040919)	[85] 2022-01-05
[72] VAID, RADHE KRISHAN, US	[87] (WO2021/007172)	[86] 2020-07-07 (PCT/US2020/041001)
[71] ELI LILLY AND COMPANY, US	[30] US (62/871,622) 2019-07-08	[87] (WO2021/011231)
[85] 2022-01-05		[30] US (62/874,369) 2019-07-15
[86] 2020-07-06 (PCT/US2020/040881)		[30] US (16/661,743) 2019-10-23
[87] (WO2021/007155)		
[30] US (62/871,965) 2019-07-09		
	[21] <b>3,146,131</b> [13] A1	[21] <b>3,146,136</b> [13] A1
	[51] <b>Int.Cl. H05K 3/12 (2006.01) H05K 3/00 (2006.01) H05K 3/06 (2006.01) H05K 13/00 (2006.01)</b>	[51] <b>Int.Cl. B65D 3/04 (2006.01) B65D 3/22 (2006.01) B65D 25/16 (2006.01) B65D 51/16 (2006.01) B65D 77/20 (2006.01) B65D 77/22 (2006.01) B65D 79/00 (2006.01)</b>
	[25] EN	[25] EN
	[54] <b>SURFACE-COMPLEMENTARY DIELECTRIC MASK FOR ADDITIVE MANUFACTURED ELECTRONICS, METHODS OF FABRICATION AND USES THEREOF</b>	[54] <b>CONTAINER CONSTRUCTION WITH FLEXIBLE LINER AND ONE-WAY VALVE</b>
	[54] <b>MASQUE DIELECTRIQUE COMPLEMENTAIRE DE SURFACE POUR COMPOSANTS ELECTRONIQUES PAR FABRICATION ADDITIVE, PROCEDES DE FABRICATION ET UTILISATIONS DE CELUI-CI</b>	[54] <b>CONSTRUCTION DE CONTENANT A REVETEMENT SOUPLE ET SOUPAPE UNIDIRECTIONNELLE</b>
	[72] IANCOVICI, AVIRAM, IL	[72] DIXON, SABRINA V., US
	[72] GOLDSTEIN, OMER, IL	[72] CARPENTER, LAWRENCE ROBERT, US
	[71] NANO-DIMENSION TECHNOLOGIES, LTD., IL	[71] SONOCO DEVELOPMENT, INC., US
	[85] 2022-01-05	[85] 2022-01-05
	[86] 2020-07-06 (PCT/US2020/040924)	[86] 2020-07-07 (PCT/US2020/041002)
	[87] (WO2021/007174)	[87] (WO2021/007205)
	[30] US (62/870,922) 2019-07-05	[30] US (62/871,431) 2019-07-08

## PCT Applications Entering the National Phase

[21] **3,146,139**  
[13] A1

[51] **Int.Cl. G05D 16/10 (2006.01)**  
[25] EN  
[54] **PRESSURE VALVE FOR A LIQUID**  
[54] **SOUPAPE DE PRESSION POUR UN LIQUIDE**

[72] VAN DER UPWICH, STIJN, NL  
[71] HAGEPE INTERNATIONAL B.V., NL  
[71] CENERGIST LIMITED, GB  
[85] 2022-01-05  
[86] 2020-07-10 (PCT/NL2020/050457)  
[87] (WO2021/010827)  
[30] NL (2023492) 2019-07-12

[21] **3,146,152**  
[13] A1

[51] **Int.Cl. C08L 5/04 (2006.01) B33Y 70/00 (2020.01) C08J 3/24 (2006.01) C08J 5/06 (2006.01) C08L 1/02 (2006.01)**

[25] EN  
[54] **NATURAL COMPOSITION COMPRISING ALGINATE AND CELLULOSE NANOFIBERS ORIGINATING FROM BROWN SEAWEED**

[54] **COMPOSITION NATURELLE COMPRENANT DE L'ALGINATE ET DES NANOFIBRES DE CELLULOSE EMANANT D'ALGUES BRUNES**

[72] BERGLUND, LINN, SE  
[72] OKSMAN, KRISTIINA, SE  
[71] BERGLUND, LINN, SE  
[71] OKSMAN, KRISTIINA, SE  
[85] 2021-12-06  
[86] 2020-06-05 (PCT/EP2020/065585)  
[87] (WO2020/245331)  
[30] SE (1950674-0) 2019-06-05

[21] **3,146,153**  
[13] A1

[51] **Int.Cl. A61K 9/06 (2006.01) A61K 6/00 (2020.01) A61P 19/00 (2006.01)**

[25] EN  
[54] **HYDROGEL DRUG DELIVERY COMPOSITION**

[54] **COMPOSITION D'ADMINISTRATION DE MEDICAMENT A BASE D'HYDROGEL**

[72] WANG, DONG, US  
[72] ALMOSHARI, YOSIF, US  
[72] REN, RONGGUO, US  
[71] BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA, US

[85] 2021-10-18  
[86] 2020-04-20 (PCT/CN2020/085549)  
[87] (WO2020/211859)  
[30] US (62/835,542) 2019-04-18

[21] **3,146,154**  
[13] A1

[51] **Int.Cl. A01N 43/22 (2006.01) A01N 43/40 (2006.01) A01N 43/56 (2006.01) A01N 47/06 (2006.01) A01N 47/38 (2006.01) A01N 47/40 (2006.01) A01N 51/00 (2006.01) A01N 53/00 (2006.01) A01N 63/00 (2020.01)**

[25] EN  
[54] **MIXTURES COMPRISING INDAZOLE PESTICIDES**

[54] **MELANGES COMPRENANT DES PESTICIDES D'INDAZOLE**

[72] ZHANG, WENMING, US  
[71] FMC CORPORATION, US  
[85] 2022-01-05  
[86] 2020-07-10 (PCT/US2020/041668)  
[87] (WO2021/007545)  
[30] US (62/873,100) 2019-07-11  
[30] US (62/873,302) 2019-07-12

[21] **3,146,155**  
[13] A1

[51] **Int.Cl. H01M 8/04082 (2016.01) H01M 8/0606 (2016.01) H01M 8/0662 (2016.01) C01B 3/00 (2006.01) C01B 3/50 (2006.01)**

[25] EN  
[54] **HYDROGEN STORAGE MATERIAL**

[54] **MATIERE DE STOCKAGE D'HYDROGENE**

[72] BALDWIN, JEFFREY W., US  
[72] MORSE, JAMES R., US  
[72] ZUGELL, DAVID A., US  
[72] MATIS, BERNARD R., US  
[72] WILLAUER, HEATHER D., US  
[72] GANGEMI, NICHOLAS T., US  
[72] HOUSTON, BRIAN, US  
[71] THE GOVERNMENT OF THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY OF THE NAVY, US

[85] 2022-01-05  
[86] 2020-07-10 (PCT/US2020/041650)  
[87] (WO2021/007539)  
[30] US (62/872,274) 2019-07-10

[21] **3,146,156**  
[13] A1

[51] **Int.Cl. C07K 14/55 (2006.01) A61K 47/65 (2017.01) A61K 38/00 (2006.01) A61P 37/04 (2006.01) C12N 15/62 (2006.01)**

[25] EN  
[54] **IL-2 COMPOSITIONS AND METHODS OF USE THEREOF**

[54] **COMPOSITIONS D'IL-2 ET LEURS PROCEDES D'UTILISATION**

[72] LI, ZIJUAN, CN  
[71] PROVIVA THERAPEUTICS (HONG KONG) LIMITED, CN

[85] 2022-01-05  
[86] 2020-07-10 (PCT/US2020/041543)  
[87] (WO2021/011353)  
[30] US (62/873,399) 2019-07-12  
[30] US (62/908,782) 2019-10-01

## Demandes PCT entrant en phase nationale

[21] **3,146,157**  
[13] A1

[51] **Int.Cl. A61K 31/63 (2006.01) A61P 25/28 (2006.01) C07C 311/21 (2006.01) C07C 317/44 (2006.01) C07D 295/192 (2006.01)**

[25] EN

[54] **SULFONE COMPOUNDS AND PHARMACEUTICAL COMPOSITIONS THEREOF, AND THEIR THERAPEUTIC APPLICATIONS FOR THE TREATMENT OF NEURODEGENERATIVE DISEASES**

[54] **COMPOSES DE SULFONE ET LEURS COMPOSITIONS PHARMACEUTIQUES, ET LEURS APPLICATIONS THERAPEUTIQUES POUR LE TRAITEMENT DE MALADIES NEURODEGENERATIVES**

[72] DEWJI, NAZNEEN, US  
[72] RIDEOUT, DARRYL, US  
[72] ROSSE, GERARD, US  
[71] CURA THERAPEUTICS, LLC, US  
[85] 2022-01-05  
[86] 2020-07-10 (PCT/US2020/041507)  
[87] (WO2021/007478)  
[30] US (62/873,117) 2019-07-11

[21] **3,146,158**  
[13] A1

[51] **Int.Cl. E03C 1/02 (2006.01) F15D 1/02 (2006.01) F16K 15/06 (2006.01) G05D 7/01 (2006.01)**

[25] EN

[54] **FLUID FLOW REGULATOR**

[54] **REGULATEUR DE DEBIT DE FLUIDE**

[72] VAN DER UPWICH, STIJN, NL  
[71] HAGEPE INTERNATIONAL B.V., NL  
[71] CENERGIST LIMITED, GB  
[85] 2022-01-05  
[86] 2020-07-10 (PCT/NL2020/050458)  
[87] (WO2021/010828)  
[30] NL (2023495) 2019-07-12

[21] **3,146,159**  
[13] A1

[51] **Int.Cl. A61K 31/18 (2006.01) A61K 31/63 (2006.01) A61P 25/00 (2006.01) A61P 25/16 (2006.01) A61P 25/28 (2006.01) A61P 27/02 (2006.01)**

[25] EN

[54] **PHENYL COMPOUNDS AND PHARMACEUTICAL COMPOSITIONS THEREOF, AND THEIR THERAPEUTIC APPLICATIONS**

[54] **COMPOSES DE PHENYLE ET COMPOSITIONS PHARMACEUTIQUES ASSOCIEES, ET LEURS APPLICATIONS THERAPEUTIQUES**

[72] DEWJI, NAZNEEN, US  
[71] CURA THERAPEUTICS, LLC, US  
[85] 2022-01-05  
[86] 2020-07-10 (PCT/US2020/041497)  
[87] (WO2021/007474)  
[30] US (62/873,137) 2019-07-11

[21] **3,146,160**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/11 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DETECTING COGNITIVE DECLINE WITH MOBILE DEVICES**

[54] **SYSTEMES ET PROCEDES DE DETECTION DE DECLIN COGNITIF A L'AIDE DE DISPOSITIFS MOBILES**

[72] CHEN, RICHARD JIA CHUAN, US  
[72] FOSCHINI, LUCA, US  
[72] JANKOVIC, FILIP ALEKSANDAR, US  
[72] JUNG, HYUN JOON, US  
[72] KOURTIS, LAMPROS, US  
[72] MALJKOVIC, VERA, US  
[72] MARINSEK, NICOLE LEE, US  
[72] PUGH, MELISSA ANNA MARIA, US  
[72] SHEN, JIE, US  
[72] SIGNORINI, ALESSIO, US  
[72] SONG, HAN HEE, US  
[72] SUNGA, MARC ORLANDO, US  
[72] TRISTER, ANDREW DANIEL, US  
[72] TSENG, BELLE, US  
[72] YAARI, ROY, US  
[71] ELI LILLY AND COMPANY, US  
[85] 2022-01-05  
[86] 2020-07-09 (PCT/US2020/041333)  
[87] (WO2021/007394)  
[30] GR (20190100293) 2019-07-10  
[30] US (62/875,623) 2019-07-18

[21] **3,146,161**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) C07K 14/47 (2006.01) C12N 15/02 (2006.01) C12N 15/07 (2006.01) C12N 15/09 (2006.01)**

[25] EN

[54] **MODIFIED CELLS AND RELATED METHODS**

[54] **CELLULES MODIFIEES ET PROCEDES ASSOCIES**

[72] MILLAY, DOUGLAS, US  
[72] MITANI, YASUYUKI, JP  
[71] CHILDREN'S HOSPITAL MEDICAL CENTER, US  
[85] 2022-01-05  
[86] 2020-07-09 (PCT/US2020/041309)  
[87] (WO2021/007383)  
[30] US (62/872,610) 2019-07-10

[21] **3,146,162**  
[13] A1

[51] **Int.Cl. G06F 21/00 (2013.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR SECURING DEVICES IN A COMPUTING ENVIRONMENT**

[54] **SYSTEMES ET PROCEDES POUR SECURISER DES DISPOSITIFS DANS UN ENVIRONNEMENT INFORMATIQUE**

[72] WRIGHT, CHASITY LATRICE, US  
[71] INFILTRON HOLDINGS, LLC, US  
[85] 2022-01-05  
[86] 2020-07-17 (PCT/US2020/042514)  
[87] (WO2021/011863)  
[30] US (62/875,242) 2019-07-17  
[30] US (16/931,215) 2020-07-16

## PCT Applications Entering the National Phase

[21] <b>3,146,163</b> [13] A1	[21] <b>3,146,164</b> [13] A1	[21] <b>3,146,167</b> [13] A1
[51] <b>Int.Cl. C07D 489/08 (2006.01) A61P 25/04 (2006.01) A61P 25/30 (2006.01)</b>	[51] <b>Int.Cl. B09C 1/06 (2006.01) B09C 1/08 (2006.01) F23G 7/14 (2006.01)</b>	[51] <b>Int.Cl. G06E 1/00 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>G-PROTEIN BIASED OPIOID RECEPTOR AGONIST/ANALGESICS WITH REDUCED ARRESTIN RECRUITMENT</b>	[54] <b>METHOD FOR MANIPULATING SMOLDERING COMBUSTION TO REMEDIATE POROUS MEDIA IMPACTED BY RECALCITRANT COMPOUNDS</b>	[54] <b>CROP YIELD FORECASTING MODELS</b>
[54] <b>AGONISTES/ANALGESIQUES AU RECEPTEUR OPIOIDE A POLARISATION DE PROTEINE G A RECRUTEMENT D'ARRESTINE REDUIT</b>	[54] <b>PROCEDE DE MANIPULATION DE COMBUSTION INTERNE POUR REMEDIER A DES MILIEUX POREUX IMPACTES PAR DES COMPOSES RECALCITRANTS</b>	[54] <b>MODELES DE PREVISION DE RENDEMENT DE RECOLTE</b>
[72] MAJUMDAR, SUSRUTA, US	[72] GRANT, GAVIN, CA	[72] MALIZIA, NICHOLAS, US
[72] KATRITCH, VSEVOLOD, US	[72] MAJOR, DAVID, CA	[72] XU, YING, US
[72] ROTH, BRYAN, US	[72] SCHOLES, GRANT, CA	[72] FRIEDL, MARK, US
[72] MCLAUGHLIN, JAY, US	[72] GERHARD, JASON, CA	[72] BECHTEL, JONATHON, US
[72] ZAIDI, SAHEEM, US	[71] GEOSYNTEC CONSULTANTS, INC., US	[71] INDIGO AG, INC., US
[71] UNIVERSITY OF HEALTH SCIENCES & PHARMACY IN ST. LOUIS, US	[85] 2022-01-05	[85] 2022-01-05
[71] UNIVERSITY OF SOUTHERN CALIFORNIA, US	[86] 2020-07-20 (PCT/US2020/042744)	[86] 2020-07-08 (PCT/US2020/041256)
[71] THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, US	[87] (WO2021/016170)	[87] (WO2021/007352)
[71] MEMORIAL SLOAN KETTERING CANCER CENTER, US	[30] US (62/878,136) 2019-07-24	[30] US (62/871,674) 2019-07-08
[71] UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INCORPORATED, US	[21] <b>3,146,165</b> [13] A1	[21] <b>3,146,168</b> [13] A1
[85] 2022-01-05	[51] <b>Int.Cl. A61K 31/4745 (2006.01) A61K 45/06 (2006.01) A61K 47/00 (2006.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01) C07D 491/22 (2006.01)</b>	[51] <b>Int.Cl. G16H 10/20 (2018.01) G16H 50/20 (2018.01) G16H 50/30 (2018.01) G16H 80/00 (2018.01)</b>
[86] 2020-07-08 (PCT/US2020/041274)	[25] EN	[25] EN
[87] (WO2021/007366)	[54] <b>NOVEL ANTICANCER DRUG FL118 FORMULATION IN COMBINATION WITH IMMUNOTHERAPY FOR TREATMENT OF HUMAN CANCER</b>	[54] <b>METHODS AND SYSTEMS FOR GENERATING A DIAGNOSIS VIA A DIGITAL HEALTH APPLICATION</b>
[30] US (62/871,578) 2019-07-08	[54] <b>NOUVELLE FORMULATION DE MEDICAMENT ANTICANCEREUX FL118 EN COMBINAISON AVEC UNE IMMUNOTHERAPIE POUR LE TRAITEMENT D'UN CANCER HUMAIN</b>	[54] <b>PROCEDES ET SYSTEMES DE GENERATION DE DIAGNOSTIC PAR LE BIAIS D'UNE APPLICATION DE SANTE NUMERIQUE</b>
	[72] MUTIS, TUNA, NL	[72] LEE, THOMAS, US
	[72] HOLTHOF, LISA, NL	[72] KIRAYOGLU, ALPHAN, US
	[72] LI, FENGZHI, US	[72] FABRY, ALEXANDER, US
	[72] LING, XIANG, US	[72] SHI, BRIAN, US
	[72] LIAO, JIANQUN, US	[71] GPS HEALTH LLC, US
	[71] CANGET BIOTEKPHARMA, US	[85] 2022-01-05
	[85] 2022-01-05	[86] 2020-07-23 (PCT/US2020/043227)
	[86] 2020-07-22 (PCT/US2020/043153)	[87] (WO2021/021549)
	[87] (WO2021/016401)	[30] US (62/878,979) 2019-07-26
	[30] US (62/876,835) 2019-07-22	

## Demandes PCT entrant en phase nationale

[21] **3,146,169**  
[13] A1

[51] **Int.Cl. G10L 19/008 (2013.01) G10L 19/16 (2013.01)**  
[25] EN  
[54] **ENCODING AND DECODING IVAS BITSTREAMS**  
[54] **CODAGE ET DECODAGE DE FLUX BINAIRES IVAS**  
[72] TYAGI, RISHABH, US  
[72] TORRES, JUAN FELIX, US  
[71] DOLBY LABORATORIES LICENSING CORPORATION, US  
[85] 2022-01-05  
[86] 2020-07-30 (PCT/US2020/044342)  
[87] (WO2021/022087)  
[30] US (62/881,541) 2019-08-01  
[30] US (62/927,894) 2019-10-30  
[30] US (63/037,721) 2020-06-11  
[30] US (63/057,666) 2020-07-28

[21] **3,146,170**  
[13] A1

[51] **Int.Cl. A61B 17/221 (2006.01) A61B 17/12 (2006.01) A61B 17/128 (2006.01) A61B 17/22 (2006.01) A61B 17/32 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR REMOVING HEART VALVE THERAPY**  
[54] **PROCEDE ET APPAREIL DE RETRAIT DE THERAPIE DE VALVULE CARDIAQUE**  
[72] SORAJJA, PAUL, US  
[72] COSTELLO, DAVID M., US  
[72] COYLE, DANIEL P., US  
[72] KABAROWSKI, KARL ALEXANDER, US  
[72] PETERSON, ALEX ALDEN, US  
[71] AMX CLIP MANAGEMENT, LLC, US  
[85] 2022-01-05  
[86] 2020-07-08 (PCT/US2020/041206)  
[87] (WO2021/007324)  
[30] US (62/872,139) 2019-07-09  
[30] US (62/977,021) 2020-02-14

[21] **3,146,171**  
[13] A1

[51] **Int.Cl. G01P 15/00 (2006.01) G06F 1/16 (2006.01) G06F 3/041 (2006.01) G06T 3/00 (2006.01) H04N 5/225 (2006.01)**  
[25] EN  
[54] **COMPUTING DEVICE**  
[54] **DISPOSITIF INFORMATIQUE**  
[72] SOLOMON, MARK, US  
[72] SCHOLLER, JEROME, US  
[71] TANGIBLE PLAY, INC., US  
[85] 2022-01-05  
[86] 2020-07-07 (PCT/US2020/041057)  
[87] (WO2021/007241)  
[30] US (62/871,195) 2019-07-07  
[30] US (16/869,413) 2020-05-07

[21] **3,146,172**  
[13] A1

[51] **Int.Cl. C01B 33/023 (2006.01) H01M 4/36 (2006.01)**  
[25] EN  
[54] **STRAIN TOLERANT PARTICLE STRUCTURES FOR HIGH ENERGY ANODE MATERIALS AND SYNTHESIS METHODS THEREOF**  
[54] **STRUCTURES DE PARTICULES TOLERANTES AUX CONTRAINTES POUR MATERIAUX D'ANODE A HAUTE ENERGIE ET PROCEDES DE SYNTHESE DE CELLES-CI**  
[72] HOLMAN, RICHARD K., US  
[72] NATION, LEAH, US  
[71] 6K INC., US  
[85] 2022-01-05  
[86] 2020-09-03 (PCT/US2020/049247)  
[87] (WO2021/046249)  
[30] US (62/897,071) 2019-09-06

[21] **3,146,173**  
[13] A1

[51] **Int.Cl. G02B 6/38 (2006.01)**  
[25] EN  
[54] **SAFETY FEMALE ADAPTER DEVICE FOR FIBER OPTIC CONNECTIONS**  
[54] **DISPOSITIF ADAPTATEUR FEMELLE DE SECURITE POUR CONNEXIONS DE FIBRES OPTIQUES**  
[72] VENTRELLA, ALFREDO, IT  
[72] PUGLIESE, GIOVANNI, IT  
[71] FAIT S.R.L., IT  
[85] 2022-01-05  
[86] 2020-07-10 (PCT/IT2020/050172)  
[87] (WO2021/009784)  
[30] IT (102019000011631) 2019-07-12

[21] **3,146,175**  
[13] A1

[51] **Int.Cl. B66F 5/04 (2006.01) B66F 3/30 (2006.01) B66F 3/36 (2006.01) B66F 3/38 (2006.01)**  
[25] EN  
[54] **TELESCOPING JACK FOR LIFTING LARGE CAPACITY TRUCKS**  
[54] **CRIC TELESCOPIQUE POUR SOULEVER DES CAMIONS DE GRANDE CAPACITE**  
[72] DESORMEAU, WAYNE, CA  
[72] WEAVER, JEFF, CA  
[72] MATHIEU, GUY, CA  
[71] NORDIC MINESTEEL TECHNOLOGIES INC., CA  
[85] 2022-01-06  
[86] 2019-10-01 (PCT/CA2019/000139)  
[87] (WO2021/007643)  
[30] US (16/510,946) 2019-07-14

[21] **3,146,177**  
[13] A1

[51] **Int.Cl. C04B 22/06 (2006.01)**  
[25] EN  
[54] **PREPARATION OF HYDROUS GRAPHENE OXIDE FOR USE AS A CONCRETE ADMIXTURE**  
[54] **PREPARATION D'OXYDE DE GRAPHENE HYDRATE DESTINEE A ETRE UTILISEE EN TANT QU'ADJUVANT DU BETON**  
[72] MASOTTI, MARK, CA  
[71] ALTER BIOTA INC., CA  
[85] 2022-01-06  
[86] 2020-07-06 (PCT/CA2020/050939)  
[87] (WO2021/003565)  
[30] US (62/871,355) 2019-07-08

## PCT Applications Entering the National Phase

[21] **3,146,178**  
[13] A1

[51] **Int.Cl. G02B 30/54 (2020.01) G06F 3/01 (2006.01) G09B 21/00 (2006.01)**

[25] EN

[54] **ELECTRONIC DISPLAY WITH DEFORMABLE SURFACE**

[54] **DISPOSITIF D'AFFICHAGE ELECTRONIQUE A SURFACE DEFORMABLE**

[72] SIMMONS, KYLE, US

[71] UNIVERSAL CITY STUDIOS LLC, US

[85] 2022-01-05

[86] 2020-07-07 (PCT/US2020/041014)

[87] (WO2021/011232)

[30] US (62/873,464) 2019-07-12

[30] US (16/546,008) 2019-08-20

[21] **3,146,179**  
[13] A1

[51] **Int.Cl. G06F 16/901 (2019.01) H04L 9/06 (2006.01) H04L 9/08 (2006.01) H04L 9/32 (2006.01)**

[25] EN

[54] **LEDGER VERIFIABLE-PRUNING SYSTEM**

[54] **SYSTEME D'ELAGAGE VERIFIABLE DE GRAND LIVRE**

[72] JOO, YOUNG HYUN, KR

[71] BLOOM TECHNOLOGY, INC., KR

[85] 2022-01-05

[86] 2020-07-21 (PCT/KR2020/009588)

[87] (WO2021/020794)

[30] KR (10-2019-0093684) 2019-08-01

[21] **3,146,180**  
[13] A1

[51] **Int.Cl. B65D 3/22 (2006.01) B65D 3/26 (2006.01) B65D 8/00 (2006.01) B65D 25/16 (2006.01)**

[25] EN

[54] **CONTAINER WITH REMOVABLE END**

[54] **RECIPIENT A EXTREMITE AMOVIBLE**

[72] CARPENTER, LAWRENCE ROBERT, US

[72] THOMAS, TONY L., US

[72] MILLER, PAUL E., US

[72] ZIEGENFELDER, KURT A., US

[71] SONOCO DEVELOPMENT, INC., US

[85] 2022-01-05

[86] 2020-07-07 (PCT/US2020/041004)

[87] (WO2021/007207)

[30] US (62/871,420) 2019-07-08

[21] **3,146,181**  
[13] A1

[51] **Int.Cl. A01F 29/00 (2006.01) A01F 29/12 (2006.01) B02C 23/02 (2006.01) B02C 23/08 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR PROCESSING BALED STRAW**

[54] **PROCEDE ET SYSTEME DE TRAITEMENT DE BOTTE DE PAILLE**

[72] BREWIN, ROY, CA

[71] BREWIN, ROY, CA

[85] 2022-01-06

[86] 2020-07-09 (PCT/CA2020/050947)

[87] (WO2021/003572)

[30] US (62/871,824) 2019-07-09

[21] **3,146,182**  
[13] A1

[51] **Int.Cl. E03C 1/02 (2006.01) F15D 1/02 (2006.01) F16K 15/06 (2006.01) G05D 7/01 (2006.01)**

[25] EN

[54] **CHECK VALVE**

[54] **CLAPET ANTI-RETOUR**

[72] VAN DER UPWICH, STIJN, NL

[71] HAGEPE INTERNATIONAL B.V., NL

[71] CENERGIST LIMITED, GB

[85] 2022-01-05

[86] 2020-07-10 (PCT/NL2020/050459)

[87] (WO2021/010829)

[30] NL (2023495) 2019-07-12

[30] NL (2024369) 2019-12-03

[21] **3,146,183**  
[13] A1

[51] **Int.Cl. A61B 17/64 (2006.01) A61B 17/56 (2006.01) A61B 17/60 (2006.01) A61B 17/62 (2006.01) A61B 17/66 (2006.01)**

[25] EN

[54] **STRUT ASSEMBLIES AND EXTERNAL FIXATION SYSTEMS**

[54] **ENSEMBLE ENTRETOISE ET SYSTEMES DE FIXATION EXTERNES**

[72] MULLANEY, MICHAEL W., US

[71] AMDT HOLDINGS, INC., US

[85] 2022-01-05

[86] 2020-07-14 (PCT/US2020/041922)

[87] (WO2021/011532)

[30] US (62/874,104) 2019-07-15

[21] **3,146,184**  
[13] A1

[51] **Int.Cl. A23C 1/08 (2006.01) A23C 1/00 (2006.01) A23C 3/00 (2006.01) A23C 3/04 (2006.01) A23C 9/15 (2006.01) A23C 9/18 (2006.01) A61K 9/19 (2006.01) A61K 9/22 (2006.01) A61K 9/52 (2006.01) A61K 35/20 (2006.01)**

[25] EN

[54] **COMPOSITIONS, PROCESSES OF PRODUCTION, STERILIZATION, AND HEALTH-PROMOTING USES OF LYOPHILIZED MILK**

[54] **COMPOSITIONS, PROCEDES DE PRODUCTION, STERILISATION ET UTILISATIONS BENEFIQUES POUR LA SANTE DE LAIT LYOPHILISE**

[72] SIKES, C. STEVEN, US

[71] AQUERO CANADA LTD., CA

[85] 2022-01-06

[86] 2020-07-09 (PCT/CA2020/050952)

[87] (WO2021/003575)

[30] US (62/872,056) 2019-07-09

[30] US (62/873,099) 2019-07-11

[21] **3,146,186**  
[13] A1

[51] **Int.Cl. E03C 1/02 (2006.01) F15D 1/02 (2006.01) G05D 7/01 (2006.01)**

[25] EN

[54] **DEVICE FOR LIMITING OR KEEPING CONSTANT A FLOWING QUANTITY OF LIQUID**

[54] **DISPOSITIF PERMETTANT DE LIMITER OU DE GARDER CONSTANTE UNE QUANTITE DE LIQUIDE EN ECOULEMENT**

[72] VAN DER UPWICH, STIJN, NL

[71] HAGEPE INTERNATIONAL B.V., NL

[71] CENERGIST LIMITED, GB

[85] 2022-01-05

[86] 2020-07-10 (PCT/NL2020/050460)

[87] (WO2021/010830)

[30] NL (2023494) 2019-07-12

## Demandes PCT entrant en phase nationale

[21] **3,146,187**  
[13] A1

[51] **Int.Cl. B65G 23/02 (2006.01) B65G 45/20 (2006.01) F16B 7/08 (2006.01) F16D 1/08 (2006.01)**

[25] EN

[54] **MULTI-PIECE CONVEYOR COMPONENT INCLUDING HYGIENIC CONNECTION**

[54] **COMPOSANT DE CONVOYEUR A PIECES MULTIPLES COMPRENANT UNE LIAISON HYGIENIQUE**

[72] DEGROOT, MICHAEL HENDRIK, US

[72] MOHAN, JAKE A., US

[72] MARSMAN, PAUL, US

[71] LAITRAM, L.L.C., US

[85] 2022-01-05

[86] 2020-07-15 (PCT/US2020/042074)

[87] (WO2021/016011)

[30] US (62/876,344) 2019-07-19

[21] **3,146,188**  
[13] A1

[51] **Int.Cl. G06F 15/76 (2006.01) G06F 16/27 (2019.01) G06F 13/20 (2006.01) G06F 13/42 (2006.01)**

[25] EN

[54] **BLOCKCHAIN MICROPROCESSOR AND METHOD**

[54] **MICROPROCESSEUR DE CHAINE DE BLOCS ET PROCEDE**

[72] STUART, ALEX, CA

[71] CARBON-BLOCK INC., CA

[85] 2022-01-06

[86] 2020-07-10 (PCT/CA2020/050961)

[87] (WO2021/003581)

[30] US (62/872,914) 2019-07-11

[21] **3,146,189**  
[13] A1

[51] **Int.Cl. C12C 11/00 (2006.01) C12C 12/00 (2006.01) C12C 12/04 (2006.01)**

[25] EN

[54] **PRODUCTION OF AN ALCOHOL-FREE BEVERAGE**

[54] **PRODUCTION D'UNE BOISSON SANS ALCOOL**

[72] KUIJPERS, NIELS GERARD ADRIAAN, NL

[71] HEINEKEN SUPPLY CHAIN B.V., NL

[85] 2022-01-05

[86] 2020-08-14 (PCT/NL2020/050514)

[87] (WO2021/034191)

[30] NL (2023654) 2019-08-16

[21] **3,146,192**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01) A61K 48/00 (2006.01) C12N 9/14 (2006.01) C12N 15/864 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR THE TREATMENT OF SANFILIPPO DISEASE AND OTHER DISORDERS**

[54] **COMPOSITIONS ET METHODES DE TRAITEMENT DE LA MALADIE DE SANFILIPPO ET D'AUTRES TROUBLES**

[72] PIGNET-AIACH, KAREN, FR

[72] HOCQUEMILLER, MICHAEL, FR

[72] DANOS, OLIVIER, FR

[71] LYSOGENE, FR

[85] 2022-01-05

[86] 2020-07-17 (PCT/US2020/042447)

[87] (WO2021/011841)

[30] US (62/875,809) 2019-07-18

[21] **3,146,193**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 19/02 (2006.01) C07K 16/40 (2006.01) C12N 9/20 (2006.01)**

[25] EN

[54] **NOVEL BSSL ANTIBODIES**

[54] **NOUVEAUX ANTICORPS BSSL**

[72] HERNELL, OLLE, SE

[72] LINDQUIST, SUSANNE, SE

[72] LUNDBERG, LENNART, SE

[72] PERSSON LOTSHOLM, HELENA, SE

[71] LIPUM AB, SE

[85] 2022-01-05

[86] 2020-07-10 (PCT/SE2020/050728)

[87] (WO2021/010888)

[30] SE (1950888-6) 2019-07-12

[21] **3,146,194**  
[13] A1

[51] **Int.Cl. A61K 8/06 (2006.01) A61K 8/19 (2006.01) A61K 8/26 (2006.01) A61K 8/37 (2006.01) A61K 8/41 (2006.01) A61K 8/86 (2006.01) A61K 8/97 (2017.01) A61Q 15/00 (2006.01)**

[25] EN

[54] **ANTIPERSPIRANT ACTIVE EMULSION**

[54] **EMULSION ACTIVE ANTI-TRANSPIRANTE**

[72] VOGT, MELANIE, DE

[72] OELRICHS, ILKA, DE

[71] BEIERSDORF AG, DE

[85] 2022-01-06

[86] 2019-09-04 (PCT/EP2019/073544)

[87] (WO2021/043394)

[21] **3,146,195**  
[13] A1

[51] **Int.Cl. A61K 31/343 (2006.01) A61P 9/06 (2006.01) C07D 307/80 (2006.01)**

[25] EN

[54] **CARDIAC THERAPEUTIC AGENT THERAPEUTIQUE CARDIAQUE**

[72] CHAN, CHUN YONG ERIC, SG

[72] KARKHANIS, ANEESH VIDYADHAR, SG

[72] VENKATESAN, GOPALAKRISHNAN, SG

[71] NATIONAL UNIVERSITY OF SINGAPORE, SG

[85] 2022-01-05

[86] 2020-07-08 (PCT/SG2020/050389)

[87] (WO2021/006817)

[30] GB (1909732.8) 2019-07-08

[30] GB (2001434.6) 2020-02-03

[21] **3,146,198**  
[13] A1

[51] **Int.Cl. A61J 3/00 (2006.01) A61J 3/10 (2006.01) A61K 9/20 (2006.01)**

[25] EN

[54] **TABLETING OF SPECIFIC POLYMER STABILIZERS**

[54] **FABRICATION DE COMPRIMES DE STABILISANTS POLYMERES SPECIFIQUES**

[72] GEOERG, YEAN YIK, DE

[72] GFROERER, THOMAS GEORG, CH

[72] RUCKDAESCHEL, HOLGER, DE

[72] SATHYANARAYANA, SHYAM SUNDAR, DE

[72] SEIDEMANN, LOTHAR, DE

[72] HERBST, HEINZ, CH

[71] BASF SE, DE

[85] 2022-01-06

[86] 2020-07-06 (PCT/EP2020/069016)

[87] (WO2021/005011)

[30] EP (19185298.7) 2019-07-09

## PCT Applications Entering the National Phase

[21] **3,146,199**  
[13] A1

[51] **Int.Cl. H02G 3/12 (2006.01) E04B 2/00 (2006.01) H02G 3/36 (2006.01)**  
[25] EN  
[54] **TELESCOPING BOX SUPPORT**  
[54] **SUPPORT DE BOITE TELESCOPIQUE**  
[72] WITHERBEE, MARTIN LEE, US  
[72] JOHNSON, JACOB LEE, US  
[71] EATON INTELLIGENT POWER LIMITED, IE  
[85] 2022-01-06  
[86] 2020-07-13 (PCT/EP2020/025331)  
[87] (WO2021/004660)  
[30] US (62/872,996) 2019-07-11  
[30] US (16/926,747) 2020-07-12

[21] **3,146,200**  
[13] A1

[51] **Int.Cl. G01G 19/387 (2006.01) G01G 15/00 (2006.01) G01G 19/393 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR WEIGHING PHARMACEUTICAL CONTAINERS NESTED IN A CARRIER**  
[54] **APPAREIL ET PROCEDE POUR PESER DES CONTENANTS PHARMACEUTIQUES LOGES DANS UN SUPPORT**  
[72] KRAUSS, ULRICH, DE  
[72] BUSCH, OLAF, DE  
[71] SYNTEGON TECHNOLOGY GMBH, DE  
[85] 2022-01-06  
[86] 2020-04-29 (PCT/EP2020/061921)  
[87] (WO2021/018428)  
[30] DE (10 2019 211 568.3) 2019-08-01

[21] **3,146,201**  
[13] A1

[51] **Int.Cl. B64C 1/14 (2006.01) B64D 25/08 (2006.01) F16B 21/20 (2006.01)**  
[25] FR  
[54] **EMERGENCY OPENING DEVICE OF AN AIRCRAFT DOOR HAVING A RETENTION WIRE**  
[54] **DISPOSITIF D'OUVERTURE D'URGENCE D'UNE PORTE D'AERONEF A FIL DE RETENUE**  
[72] DEVILLEZ, SEBASTIEN, FR  
[71] LATECOERE, FR  
[85] 2022-01-06  
[86] 2020-07-06 (PCT/EP2020/069041)  
[87] (WO2021/005021)  
[30] FR (FR1907576) 2019-07-08

[21] **3,146,202**  
[13] A1

[51] **Int.Cl. A61K 8/67 (2006.01) A61K 8/60 (2006.01) A61Q 19/08 (2006.01)**  
[25] EN  
[54] **TOPICAL COMPOSITIONS AND METHODS OF USING SAME AGAINST MITOCHONDRIAL FRAGMENTATION**  
[54] **COMPOSITIONS TOPIQUES ET LEURS PROCEDES D'UTILISATION CONTRE LA FRAGMENTATION MITOCHONDRIALE**  
[72] ROCHA, SHEILA ALVES, US  
[72] CHIANG, CHUNG-YI, US  
[72] ROSA, JOSE GUILLERMO, US  
[72] NIP, JOHN CHUN-SING, US  
[71] UNILEVER GLOBAL IP LIMITED, GB  
[85] 2022-01-06  
[86] 2020-06-23 (PCT/EP2020/067465)  
[87] (WO2021/008822)  
[30] EP (19186086.5) 2019-07-12

[21] **3,146,204**  
[13] A1

[51] **Int.Cl. A61K 8/34 (2006.01) A61K 8/44 (2006.01) A61Q 19/02 (2006.01)**  
[25] EN  
[54] **STABILIZATION OF RESORCINOL COMPOUNDS IN COSMETIC COMPOSITIONS**  
[54] **STABILISATION DE COMPOSES DE RESORCINOL DANS DES COMPOSITIONS COSMETIQUES**  
[72] ROSA, JOSE GUILLERMO, US  
[72] MOADDEL, TEANOOSH, US  
[71] UNILEVER GLOBAL IP LIMITED, GB  
[85] 2022-01-06  
[86] 2020-06-23 (PCT/EP2020/067468)  
[87] (WO2021/008823)  
[30] EP (19186082.4) 2019-07-12

[21] **3,146,205**  
[13] A1

[51] **Int.Cl. C07K 14/74 (2006.01) G01N 33/569 (2006.01) G01N 33/68 (2006.01)**  
[25] EN  
[54] **METHOD**  
[54] **PROCEDE**  
[72] JANSSON, LISELOTTE, GB  
[72] SCHURGERS, EVELIEN, GB  
[72] WRAITH, DAVID, GB  
[71] WORG PHARMACEUTICALS (HANGZHOU) CO., LTD., CN  
[85] 2022-01-06  
[86] 2020-07-07 (PCT/GB2020/051629)  
[87] (WO2021/005357)  
[30] GB (1909774.0) 2019-07-08

[21] **3,146,206**  
[13] A1

[51] **Int.Cl. B66D 3/14 (2006.01) B66D 5/14 (2006.01) B66D 5/34 (2006.01)**  
[25] EN  
[54] **LIFTING GEAR**  
[54] **APPAREIL DE LEVAGE**  
[72] STRUCK, DETLEF, DE  
[72] SCHNEEBECK, WOLFRAM, DE  
[71] COLUMBUS MCKINNON INDUSTRIAL PRODUCTS GMBH, DE  
[85] 2022-01-06  
[86] 2020-02-13 (PCT/DE2020/100101)  
[87] (WO2021/013286)  
[30] DE (10 2019 120 036.9) 2019-07-24

[21] **3,146,207**  
[13] A1

[51] **Int.Cl. A61F 5/02 (2006.01)**  
[25] EN  
[54] **ORTHOPEDIC DEVICE**  
[54] **APPAREIL ORTHOPEDIQUE**  
[72] KREUTEL, MEIKE, DE  
[72] MARQUARDT, CHARLOTTE, DE  
[72] BORNMANN, JONAS, DE  
[72] TUTTEMANN, MARKUS, DE  
[72] VOGEL, CARSTEN, DE  
[72] PARTH, TORSTEN, DE  
[72] SCHIRRMEISTER, BENJAMIN, DE  
[72] KLINKERT, PAULA, DE  
[72] MIZERA, OLIVER, DE  
[71] OTTOBOCK SE & CO. KGAA, DE  
[85] 2022-01-06  
[86] 2020-07-15 (PCT/EP2020/069984)  
[87] (WO2021/013650)  
[30] DE (10 2019 119 645.0) 2019-07-19

## Demandes PCT entrant en phase nationale

[21] **3,146,208**  
[13] A1

[51] **Int.Cl. C07K 16/00 (2006.01) A61P 35/00 (2006.01) C07K 16/18 (2006.01) C07K 16/28 (2006.01) C07K 16/46 (2006.01)**

[25] EN

[54] **MODIFIED FC-REGIONS TO ENHANCE FUNCTIONAL AFFINITY OF ANTIBODIES AND ANTIGEN BINDING FRAGMENTS THEREOF**

[54] **REGIONS FC MODIFIEES POUR AMELIORER L’AFFINITE FONCTIONNELLE D’ANTICORPS ET DE FRAGMENTS DE LIAISON A L’ANTIGENE DE CEUX-CI**

[72] DURRANT, LINDA GILLIAN, GB  
[72] VANKEMMELBEKE, MIREILLE, GB  
[71] SCANCEL LIMITED, GB  
[85] 2022-01-06  
[86] 2020-07-31 (PCT/EP2020/071724)  
[87] (WO2021/019094)  
[30] GB (1910900.8) 2019-07-31

[21] **3,146,210**  
[13] A1

[51] **Int.Cl. C07K 14/255 (2006.01) A61K 38/16 (2006.01) C12N 9/16 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **BACTERIOCINS FOR CONTROL OF SALMONELLA ENTERICA**

[54] **BACTERIOCINES POUR LA LUTTE CONTRE SALMONELLA ENTERICA**

[72] HAHN, SIMONE, DE  
[72] SCHNEIDER, TOBIAS, DE  
[72] STEPHAN, ANETT, DE  
[72] SCHULZ, STEVE, DE  
[72] GIRITCH, ANATOLI, DE  
[72] GLEBA, YURI, DE  
[71] NOMAD BIOSCIENCE GMBH, DE  
[85] 2022-01-06  
[86] 2020-09-21 (PCT/EP2020/076334)  
[87] (WO2021/053242)  
[30] US (16/577,484) 2019-09-20

[21] **3,146,212**  
[13] A1

[51] **Int.Cl. C12Q 1/6827 (2018.01) C12Q 1/6869 (2018.01)**

[25] EN

[54] **BISULFITE-FREE, WHOLE GENOME METHYLATION ANALYSIS**

[54] **ANALYSE DE METHYLATION DU GENOME ENTIER SANS BISULFITE**

[72] SONG, CHUNXIAO, GB  
[72] CHENG, JINGFEI, GB  
[72] SIEJKA-ZIELINSKA, PAULINA, GB  
[72] LIU, YIBIN, GB  
[71] LUDWIG INSTITUTE FOR CANCER RESEARCH LTD, CH  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/IB2020/056435)  
[87] (WO2021/005537)  
[30] US (62/871,444) 2019-07-08

[21] **3,146,215**  
[13] A1

[51] **Int.Cl. C08G 59/50 (2006.01) C08G 77/26 (2006.01) C08L 63/00 (2006.01) C08L 83/04 (2006.01) F16L 59/00 (2006.01)**

[25] EN

[54] **TWO COMPONENT (2K) COMPOSITION BASED ON MODIFIED EPOXY RESINS**

[54] **COMPOSITION A DEUX CONSTITUANTS (2K) A BASE DE RESINES EPOXY MODIFIEES**

[72] PATEL, MIHIRKUMAR, IN  
[72] KUTCHERLAPATI, SATYANARAYANA RAJU, IN  
[72] SHAH, JAYESH P, IN  
[72] TATHE, DIPAK, IN  
[71] HENKEL AG & CO. KGAA, DE  
[85] 2022-01-06  
[86] 2019-07-09 (PCT/EP2019/068353)  
[87] (WO2021/004624)

[21] **3,146,216**  
[13] A1

[51] **Int.Cl. G01F 25/00 (2022.01) G01F 1/84 (2006.01)**

[25] EN

[54] **METHOD OF DETERMINING TOTAL PROVE TIME**

[54] **PROCEDE DE DETERMINATION DU TEMPS D’ESSAI TOTAL**

[72] BUTTLER, MARC ALLAN, US  
[72] PATTEN, ANDREW TIMOTHY, US  
[72] DEACY, JAMES S., US  
[71] MICRO MOTION, INC., US  
[85] 2022-01-06  
[86] 2020-03-09 (PCT/US2020/021656)  
[87] (WO2021/006934)  
[30] US (PCT/US2019/040840) 2019-07-08

[21] **3,146,218**  
[13] A1

[51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/30 (2020.01) A24F 40/42 (2020.01) A24F 7/00 (2006.01) A24F 40/10 (2020.01) A24F 40/20 (2020.01)**

[25] EN

[54] **VAPOUR DELIVERY SYSTEMS**

[54] **SYSTEMES DE DISTRIBUTION DE VAPEUR**

[72] POTTER, MARK, GB  
[72] BALL, DANIEL, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/GB2020/051645)  
[87] (WO2021/005367)  
[30] GB (1909882.1) 2019-07-10

[21] **3,146,220**  
[13] A1

[51] **Int.Cl. C01B 32/194 (2017.01) C01B 32/21 (2017.01)**

[25] EN

[54] **DISPERSIONS**

[54] **DISPERSIONS**

[72] WEAVER, WILLIAM, GB  
[72] CHIKOSHA, LYNN, GB  
[72] PFLAUMER, J, GB  
[72] APPEYARD, S, GB  
[72] WEDDELL, R, GB  
[71] APPLIED GRAPHENE MATERIALS UK LIMITED, GB  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/GB2020/051646)  
[87] (WO2021/005368)  
[30] GB (1909803.7) 2019-07-09

## PCT Applications Entering the National Phase

[21] **3,146,221**  
[13] A1

[51] **Int.Cl. A61K 8/06 (2006.01) A61K 8/19 (2006.01) A61K 8/26 (2006.01) A61K 8/37 (2006.01) A61K 8/41 (2006.01) A61K 8/86 (2006.01) A61K 8/97 (2017.01) A61Q 15/00 (2006.01)**

[25] EN  
[54] **ANTIPERSPIRANT EMULSION**  
[54] **EMULSION ANTI-TRANSPIRANTE**  
[72] OELRICHS, ILKA, DE  
[72] PEREZ PULIDO, JUAN CARLOS, MX  
[72] ZAVALA RAYA, ANA KAREN, MX  
[72] RATSCHOW, CECILE, DE  
[71] BEIERSDORF AG, DE  
[85] 2022-01-06  
[86] 2019-09-04 (PCT/EP2019/073521)  
[87] (WO2021/043392)

[21] **3,146,222**  
[13] A1

[51] **Int.Cl. B64C 1/12 (2006.01) B64F 5/10 (2017.01) B64C 1/06 (2006.01)**

[25] EN  
[54] **FUSELAGE STRUCTURE OF AN AIRCRAFT AND METHOD FOR MANUFACTURING THE SAME**  
[54] **STRUCTURE DE FUSELAGE D'UN AERONEF ET SON PROCEDE DE FABRICATION**  
[72] LABORDUS, MAARTEN, NL  
[71] KOK & VAN ENGELEN COMPOSITE STRUCTURES B.V., NL  
[85] 2022-01-06  
[86] 2020-06-25 (PCT/NL2020/050419)  
[87] (WO2021/006725)  
[30] NL (2023459) 2019-07-08

[21] **3,146,223**  
[13] A1

[51] **Int.Cl. C01B 32/194 (2017.01) C01B 32/21 (2017.01)**

[25] EN  
[54] **DISPERSIONS**  
[54] **DISPERSIONS**  
[72] WEAVER, WILLIAM, GB  
[72] CHIKOSHA, LYNN, GB  
[72] PFLAUMER, J, GB  
[72] KARIMI, A, GB  
[72] WEDDELL, R, GB  
[71] APPLIED GRAPHENE MATERIALS UK LIMITED, GB  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/GB2020/051649)  
[87] (WO2021/005371)  
[30] GB (1909801.1) 2019-07-09

[21] **3,146,224**  
[13] A1

[51] **Int.Cl. A62C 37/40 (2006.01) A62C 37/08 (2006.01) A62C 37/10 (2006.01) A62C 37/38 (2006.01)**

[25] EN  
[54] **BATTERY OPERATED FIRE EXTINGUISHER**  
[54] **EXTINCTEUR D'INCENDIE ACTIONNE PAR BATTERIE**  
[72] BALDINO, MARK STEVEN, US  
[71] FIRE BOT INC., US  
[85] 2021-11-03  
[86] 2020-05-01 (PCT/US2020/030952)  
[87] (WO2020/227065)  
[30] US (62/842,756) 2019-05-03

[21] **3,146,225**  
[13] A1

[51] **Int.Cl. C12N 15/34 (2006.01) A61K 35/761 (2015.01) A61K 38/16 (2006.01) A61P 35/00 (2006.01) C07K 14/005 (2006.01) C12N 7/00 (2006.01) C12N 7/01 (2006.01) C12N 15/861 (2006.01)**

[25] EN  
[54] **ONCOLYTIC NON-HUMAN ADENOVIRUSES AND USES THEREOF**  
[54] **ADENOVIRUS NON HUMAINS ONCOLYTIQUES ET LEURS UTILISATIONS**  
[72] HOEBEN, ROB CORNELIS, NL  
[72] BOTS, SELAS, NL  
[72] KEMP, VERA, NL  
[71] ACADEMISCH ZIEKENHUIS LEIDEN (H.O.D.N. LUMC), NL  
[85] 2022-01-06  
[86] 2020-07-07 (PCT/NL2020/050443)  
[87] (WO2021/006730)  
[30] NL (2023464) 2019-07-09

[21] **3,146,227**  
[13] A1

[51] **Int.Cl. C12N 5/078 (2010.01) A61K 39/395 (2006.01) C07K 14/47 (2006.01) C07K 14/725 (2006.01) C07K 16/28 (2006.01) C07K 16/30 (2006.01)**

[25] EN  
[54] **MAGEA10 SPECIFIC T CELL RECEPTORS AND THEIR USE**  
[54] **RECEPTEURS DE LYMPHOCYTES T SPECIFIQUES DE MAGEA10 ET LEUR UTILISATION**  
[72] SOMMERMEYER, DANIEL, DE  
[72] ELLINGER, CHRISTIAN, DE  
[72] BRACHER, ALINE, DE  
[72] MUMMERT, CHRISTIANE, DE  
[72] PRASSMAYER, LAURA, DE  
[72] PUTZHAMMER, RAPHAELA, DE  
[72] SEMMELMANN, ALEXANDRA, DE  
[71] MEDIGENE IMMUNOTHERAPIES GMBH, DE  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/EP2020/069246)  
[87] (WO2021/005108)  
[30] EP (19185192.2) 2019-07-09

[21] **3,146,228**  
[13] A1

[51] **Int.Cl. E21B 29/00 (2006.01) F16L 1/028 (2006.01)**

[25] EN  
[54] **DEVICE AND METHOD FOR PROCESSING A CONDUIT**  
[54] **DISPOSITIF ET PROCEDE DE TRAITEMENT D'UNE CONDUITE**  
[72] VEENSTRA, FEITZE, NL  
[71] CALLIDUS CAPITAL B.V., NL  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/NL2020/050445)  
[87] (WO2021/006732)  
[30] NL (2023460) 2019-07-08

## Demandes PCT entrant en phase nationale

[21] **3,146,230**  
[13] A1

[51] **Int.Cl. H04N 9/74 (2006.01)**  
[25] EN  
[54] **HANDLING OF MULTIPLE PICTURE SIZE AND CONFORMANCE WINDOWS FOR REFERENCE PICTURE RESAMPLING IN VIDEO CODING**  
[54] **MANIPULATION DE MULTIPLES FENETRES DE CONFORMITE ET DE TAILLES D'IMAGES POUR UN REECHANTILLONNAGE D'IMAGE DE REFERENCE DANS UN VIDEOCODAGE**  
[72] CHEN, JIANLE, US  
[72] HENDRY, FNU, US  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2022-01-06  
[86] 2020-07-07 (PCT/US2020/041026)  
[87] (WO2020/215101)  
[30] US (62/871,493) 2019-07-08

[21] **3,146,233**  
[13] A1

[51] **Int.Cl. A61K 9/70 (2006.01)**  
[25] EN  
[54] **TRANSDERMAL THERAPEUTIC SYSTEM COMPRISING AN ACTIVE AGENT-CONTAINING LAYER COMPRISING A SILICONE-CONTAINING POLYMER AND A SKIN CONTACT LAYER COMPRISING A SILICONE GEL ADHESIVE**  
[54] **SYSTEME THERAPEUTIQUE TRANSDERMIQUE COMPRENANT UNE COUCHE CONTENANT UN PRINCIPE ACTIF COMPRENANT UN POLYMERE CONTENANT DE LA SILICONE ET UNE COUCHE DE CONTACT AVEC LA PEAU COMPRENANT UN ADHESIF A BASE DE GEL DE SILICONE**  
[72] EMGENBROICH, MARCO, DE  
[72] KLAFFENBACH, PETER, DE  
[72] REUM, NICO, DE  
[72] WAUER, GABRIEL, DE  
[72] MOHR, PATRICK, DE  
[72] SCHLUTER, ANNA, DE  
[72] WOLF, HANS-WERNER, DE  
[71] LTS LOHMANN THERAPIE-SYSTEME AG, DE  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/EP2020/069270)  
[87] (WO2021/005117)  
[30] EP (19185343.1) 2019-07-09

[21] **3,146,235**  
[13] A1

[51] **Int.Cl. A01G 2/00 (2018.01) A01G 2/10 (2018.01) A01G 3/00 (2006.01) A01H 4/00 (2006.01)**  
[25] EN  
[54] **DEVICE AND METHOD FOR PROPAGATING PLANTS**  
[54] **DISPOSITIF ET PROCEDE DE REPRODUCTION DE PLANTES**  
[72] VON RUNDSTEDT, STEPHAN, DE  
[72] VON RUNDSTEDT, FRIEDERIKE, DE  
[71] ROBOTEC PTC GMBH, DE  
[85] 2022-01-06  
[86] 2020-07-09 (PCT/EP2020/069422)  
[87] (WO2021/009010)  
[30] DE (10 2019 004 848.2) 2019-07-12

[21] **3,146,236**  
[13] A1

[51] **Int.Cl. A01N 63/20 (2020.01) A61K 35/74 (2015.01) A61P 33/06 (2006.01) C12N 1/20 (2006.01)**  
[25] EN  
[54] **REDUCING MALARIA TRANSMISSION**  
[54] **REDUCTION DE LA TRANSMISSION DU PALUDISME**  
[72] MENDOZA LOSANA, ALFONSO, ES  
[72] RODRIGUES, JANNETH, ES  
[71] GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED, GB  
[85] 2022-01-06  
[86] 2020-07-10 (PCT/EP2020/069569)  
[87] (WO2021/009050)  
[30] EP (19382593.2) 2019-07-12  
[30] EP (19382821.7) 2019-09-24

[21] **3,146,240**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61C 9/00 (2006.01) G06K 9/00 (2022.01) G06K 9/62 (2022.01)**  
[25] EN  
[54] **OBJECT DETECTION AND INSTANCE SEGMENTATION OF 3D POINT CLOUDS BASED ON DEEP LEARNING**  
[54] **DETECTION D'OBJET ET SEGMENTATION D'INSTANCE DE NUAGES DE POINTS 3D SUR LA BASE D'UN APPRENTISSAGE PROFOND**  
[72] GHAZVINIAN ZANJANI, FARHAD, NL  
[72] CHERICI, TEO, NL  
[72] CLAESSEN, FRANK THEODORUS CATHARINA, NL  
[71] PROMATON HOLDING B.V., NL  
[85] 2022-01-06  
[86] 2020-07-15 (PCT/EP2020/070046)  
[87] (WO2021/009258)  
[30] EP (19186357.0) 2019-07-15

[21] **3,146,243**  
[13] A1

[51] **Int.Cl. C07D 237/16 (2006.01) A01N 43/58 (2006.01) C07D 401/10 (2006.01) C07D 403/10 (2006.01) C07D 409/10 (2006.01) C07D 413/10 (2006.01) C07D 417/10 (2006.01)**  
[25] EN  
[54] **HERBICIDAL COMPOUNDS**  
[54] **COMPOSES HERBICIDES**  
[72] LING, KENNETH BRUCE, GB  
[72] SEDEN, PETER TIMOTHY, GB  
[72] MATHEWS, CHRISTOPHER JOHN, GB  
[72] SHANAHAN, STEPHEN EDWARD, GB  
[72] KITSIOU, CHRISTIANA, GB  
[72] FINNEY, JOHN, GB  
[71] SYNGENTA CROP PROTECTION AG, CH  
[85] 2022-01-06  
[86] 2020-07-17 (PCT/EP2020/070242)  
[87] (WO2021/009334)  
[30] GB (1910290.4) 2019-07-18

## PCT Applications Entering the National Phase

[21] **3,146,244**  
[13] A1

[51] **Int.Cl. A61K 8/34 (2006.01) A61K 8/33 (2006.01) A61Q 17/02 (2006.01) C07C 29/14 (2006.01) C07C 35/08 (2006.01)**

[25] FR

[54] **NEW METHOD FOR PREPARING AN INSECT REPELLENT AGENT**

[54] **NOUVEAU PROCEDE DE PREPARATION D'UN AGENT REPULSIF D'INSECTES**

[72] GRISON, CLAUDE, FR

[72] STANOVYCH, ANDRII, FR

[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR

[71] UNIVERSITE DE MONTPELLIER, FR

[85] 2022-01-06

[86] 2020-07-10 (PCT/EP2020/069568)

[87] (WO2021/005214)

[30] FR (FR1907753) 2019-07-10

[21] **3,146,246**  
[13] A1

[51] **Int.Cl. A01N 43/58 (2006.01) C07D 237/16 (2006.01) C07D 403/10 (2006.01) C07D 405/10 (2006.01) C07D 409/10 (2006.01) C07D 413/10 (2006.01) C07D 417/10 (2006.01)**

[25] EN

[54] **SUBSTITUTED PYRIDAZINONES AS HERBICIDES**

[54] **PYRIDAZINONES SUBSTITUEES UTILISEES COMME HERBICIDES**

[72] LING, KENNETH BRUCE, GB

[72] MATHEWS, CHRISTOPHER JOHN, GB

[72] SHANAHAN, STEPHEN EDWARD, GB

[72] KITSIOU, CHRISTIANA, GB

[72] SEDEN, PETER TIMOTHY, GB

[72] FINNEY, JOHN, GB

[72] DRUAIS-LEFEVRE, VALERIE, GB

[71] SYNGENTA CROP PROTECTION AG, CH

[85] 2022-01-06

[86] 2020-07-17 (PCT/EP2020/070243)

[87] (WO2021/009335)

[30] GB (1910291.2) 2019-07-18

[21] **3,146,247**  
[13] A1

[51] **Int.Cl. A61M 1/00 (2006.01) A61M 1/06 (2006.01)**

[25] EN

[54] **MOTOR-DRIVEN MEDICAL SUCTION PUMP**

[54] **SOMPE D'ASPIRATION MEDICALE MOTORISEE**

[72] WALTER, ANDREAS, CH

[72] MARBET, REGINA, CH

[71] MEDELA HOLDING AG, CH

[85] 2022-01-06

[86] 2020-07-23 (PCT/EP2020/070865)

[87] (WO2021/013959)

[30] EP (19188341.2) 2019-07-25

[21] **3,146,248**  
[13] A1

[51] **Int.Cl. A61P 35/00 (2006.01) A61P 35/02 (2006.01) C07K 14/525 (2006.01) C07K 14/705 (2006.01)**

[25] EN

[54] **HETERODIMERS AND METHODS OF USE THEREOF**

[54] **HETERODIMERES ET PROCEDES D'UTILISATION CORRESPONDANTS**

[72] TYKOCINSKI, MARK L., US

[72] TAMIR, AMI, IL

[72] BREMER, EDWIN, NL

[71] KAHR MEDICAL LTD., IL

[71] THOMAS JEFFERSON UNIVERSITY, US

[85] 2022-01-06

[86] 2020-07-08 (PCT/IL2020/050762)

[87] (WO2021/005599)

[30] US (62/872,741) 2019-07-11

[21] **3,146,251**  
[13] A1

[51] **Int.Cl. A61M 11/00 (2006.01) A61M 15/00 (2006.01)**

[25] EN

[54] **BUCCAL ADMINISTRATION OF AEROSOL**

[54] **ADMINISTRATION BUCCALE D'AEROSOL**

[72] TELFER, COLIN, IE

[72] POWER, PATRICK, IE

[71] STAMFORD DEVICES LIMITED, IE

[85] 2022-01-06

[86] 2020-07-23 (PCT/EP2020/070890)

[87] (WO2021/023522)

[30] EP (19189887.3) 2019-08-02

[21] **3,146,255**  
[13] A1

[51] **Int.Cl. B29C 44/22 (2006.01) B29C 44/56 (2006.01) E04B 2/88 (2006.01) E04B 2/96 (2006.01) C08J 9/00 (2006.01)**

[25] FR

[54] **FOAMED HOLLOW CHAMBER PROFILES**

[54] **PROFILES MOUSSES A CAVITES**

[72] MEESEN, SILVAIN, BE

[72] MAYERES, JEAN-PIERRE, BE

[71] NMC SA, BE

[85] 2022-01-06

[86] 2020-07-13 (PCT/EP2020/069753)

[87] (WO2021/009121)

[30] BE (2019/5472) 2019-07-18

[21] **3,146,258**  
[13] A1

[51] **Int.Cl. C40B 30/04 (2006.01) G01N 33/536 (2006.01) G01N 33/537 (2006.01) G01N 33/68 (2006.01) G01N 33/94 (2006.01)**

[25] EN

[54] **METHODS FOR USING MASS SPECTROSCOPY IN MULTIPLEX TARGET EVALUATIONS**

[54] **PROCEDES D'UTILISATION DE SPECTROSCOPIE DE MASSE DANS DES EVALUATIONS CIBLES MULTIPLEX**

[72] RAMNATH, MANILDUTH, FR

[72] FOUCHAQ, BENOIT, FR

[72] LAPARRE, JEROME, FR

[71] EUROFINS CEREP, FR

[85] 2022-01-06

[86] 2020-09-09 (PCT/EP2020/075250)

[87] (WO2021/048238)

[30] EP (19306104.1) 2019-09-13

[30] EP (19306110.8) 2019-09-16

## Demandes PCT entrant en phase nationale

[21] **3,146,260**  
[13] A1

[51] **Int.Cl. H04N 7/14 (2006.01)**  
[25] EN  
[54] **MULTI-DEVICE TELECONFERENCES**  
[54] **TELECONFERENCES MULTI-DISPOSITIF**  
[72] GORNY, TOMAS, US  
[72] MARTINOLI, JEAN-BAPTISTE, CA  
[72] CONRAD, TRACY, US  
[72] GORNY, LUKAS, US  
[71] NEXTIVA, INC., US  
[85] 2022-01-06  
[86] 2020-07-07 (PCT/US2020/041033)  
[87] (WO2021/007224)  
[30] US (62/871,507) 2019-07-08  
[30] US (16/857,583) 2020-04-24

[21] **3,146,261**  
[13] A1

[51] **Int.Cl. B22D 19/14 (2006.01)**  
[25] EN  
[54] **COMPOSITE WEAR PART**  
[54] **PIECE D'USURE COMPOSITE**  
[72] MARGUILLIER, DAVID, BE  
[72] CLERMONT, BENOIT, BE  
[72] TRAN, MICHEL, BE  
[71] MAGOTTEAUX INTERNATIONAL S.A., BE  
[85] 2022-01-06  
[86] 2021-01-19 (PCT/EP2021/051040)  
[87] (WO2021/160381)  
[30] BE (BE2020/5083) 2020-02-11

[21] **3,146,263**  
[13] A1

[51] **Int.Cl. A61K 31/47 (2006.01) A61K 31/506 (2006.01) A61K 31/52 (2006.01) A61K 31/5377 (2006.01) A61P 31/18 (2006.01)**  
[25] EN  
[54] **HIV PRE-EXPOSURE PROPHYLAXIS**  
[54] **PROPHYLAXIE PRE-EXPOSITION DU VIH**  
[72] GARCIA LERMA, JOSE GERARDO, US  
[72] MASSUD, IVANA MABEL, US  
[72] HENEINE, WALID M., US  
[71] THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES, US  
[85] 2022-01-06  
[86] 2020-01-27 (PCT/US2020/015147)  
[87] (WO2021/015818)  
[30] US (62/876,539) 2019-07-19

[21] **3,146,265**  
[13] A1

[51] **Int.Cl. E21B 33/12 (2006.01) E21B 33/127 (2006.01)**  
[25] EN  
[54] **RUNNING LINES THROUGH EXPANDABLE METAL SEALING ELEMENTS**  
[54] **PASSAGE DE LIGNES A TRAVERS DES ELEMENTS D'ETANCHEITE METALLIQUES EXPANSIBLES**  
[72] GRECI, STEPHEN MICHAEL, US  
[72] FRIPP, MICHAEL LINLEY, US  
[72] CUNNINGHAM, GREGORY SCOTT, US  
[72] ADKINS, DARRELL WAYNE, US  
[71] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2022-01-06  
[86] 2019-10-30 (PCT/US2019/058904)  
[87] (WO2021/086351)  
[30] US (16/667,678) 2019-10-29

[21] **3,146,267**  
[13] A1

[51] **Int.Cl. A61M 5/14 (2006.01) A61M 5/142 (2006.01) A61M 5/172 (2006.01) A61M 39/02 (2006.01)**  
[25] EN  
[54] **INFUSION SYSTEM**  
[54] **SYSTEME DE PERFUSION**  
[72] MEHTA, DHAIRYA KIRITKUMAR, US  
[72] ZHENG, LING, US  
[71] TAKEDA PHARMACEUTICAL COMPANY LIMITED, JP  
[85] 2022-01-06  
[86] 2020-07-07 (PCT/US2020/040991)  
[87] (WO2021/011227)  
[30] US (62/873,684) 2019-07-12

[21] **3,146,268**  
[13] A1

[51] **Int.Cl. H04B 7/06 (2006.01) H04W 72/04 (2009.01) H04B 7/08 (2006.01) H04W 24/10 (2009.01) H04W 76/15 (2018.01) H04W 76/19 (2018.01)**  
[25] EN  
[54] **GROUP-BASED SCELL BEAM FAILURE RECOVERY**  
[54] **REPRISE SUR DEFAILLANCE DE FAISCEAU DE CELLULES SECONDAIRES REPOSANT SUR UN GROUPE**  
[72] TRAN, XUAN TUONG, SG  
[72] HUANG, LEI, SG  
[72] KOH, TIEN MING BENJAMIN, SG  
[72] KANG, YANG, SG  
[72] SUZUKI, HIDETOSHI, JP  
[72] BHAMRI, ANKIT, DE  
[72] OGAWA, YOSHIHIKO, JP  
[71] PANASONIC INTELLECTUAL PROPERTY CORPORATION OF AMERICA, US  
[85] 2022-01-06  
[86] 2020-06-16 (PCT/SG2020/050337)  
[87] (WO2021/029824)  
[30] SG (10201907430S) 2019-08-13

[21] **3,146,269**  
[13] A1

[51] **Int.Cl. A23K 50/42 (2016.01) A23K 50/48 (2016.01)**  
[25] EN  
[54] **PET FOOD COMPOSITIONS**  
[54] **COMPOSITIONS ALIMENTAIRES POUR ANIMAUX DE COMPAGNIE**  
[72] BADRI, DAYAKAR, US  
[72] JEWELL, DENNIS, US  
[71] HILL'S PET NUTRITION, INC., US  
[85] 2022-01-06  
[86] 2019-07-09 (PCT/US2019/041036)  
[87] (WO2021/006885)

## PCT Applications Entering the National Phase

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[21] **3,146,274**  
[13] A1

[51] **Int.Cl. B01J 29/46 (2006.01) B01J 38/12 (2006.01) C10G 11/05 (2006.01)**  
[25] EN  
[54] **FLUIDIZED CRACKING PROCESS FOR INCREASING OLEFIN YIELD AND CATALYST COMPOSITION FOR SAME**  
[54] **PROCEDE DE CRAQUAGE FLUIDISE POUR AUGMENTER LE RENDEMENT EN OLEFINES ET COMPOSITION DE CATALYSEUR POUR CELUI-CI**  
[72] SINGH, UDAYSHANKAR, US  
[72] KUMAR, RANJIT, US  
[72] ZIEBARTH, MICHAEL SCOTT, US  
[72] CHENG, WU-CHENG, US  
[71] W.R. GRACE & CO.-CONN., US  
[85] 2022-01-06  
[86] 2020-07-06 (PCT/US2020/040885)  
[87] (WO2021/007156)  
[30] US (62/872,468) 2019-07-10

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[21] **3,146,275**  
[13] A1

[51] **Int.Cl. F24F 8/95 (2021.01) F24F 1/0328 (2019.01) F24F 8/108 (2021.01) A45D 29/00 (2006.01) B08B 15/04 (2006.01)**  
[25] EN  
[54] **DEVICE FOR PURIFYING AIR IN THE WORKSPACE OF A NAIL ARTIST**  
[54] **DISPOSITIF DE PURIFICATION DE L'AIR DANS UNE ZONE DE TRAVAIL DANS UN SALON D'ONGLERIE**  
[72] VLADIMIROV, PAVEL GENNADEVICH, RU  
[71] VLADIMIROV, PAVEL GENNADEVICH, RU  
[85] 2022-01-06  
[86] 2020-05-15 (PCT/RU2020/050097)  
[87] (WO2021/015646)  
[30] RU (2019123243) 2019-07-23

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[21] **3,146,277**  
[13] A1

[51] **Int.Cl. F21V 8/00 (2006.01) G02B 30/00 (2020.01) G02B 6/122 (2006.01) G02F 1/13357 (2006.01)**  
[25] EN  
[54] **MULTIVIEW BACKLIGHT, DISPLAY, AND METHOD HAVING A MULTIBEAM ELEMENT WITHIN A LIGHT GUIDE**  
[54] **DISPOSITIF DE RETROECLAIRAGE A VUES MULTIPLES, DISPOSITIF D'AFFICHAGE ET PROCEDE AYANT UN ELEMENT A FAISCEAUX MULTIPLES A L'INTERIEUR D'UN GUIDE DE LUMIERE**  
[72] FATTAL, DAVID A., US  
[72] MA, MING, US  
[71] LEIA INC., US  
[85] 2022-01-06  
[86] 2019-07-11 (PCT/US2019/041481)  
[87] (WO2021/006915)

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[21] **3,146,279**  
[13] A1

[51] **Int.Cl. A41D 19/00 (2006.01) A41D 31/04 (2019.01) A41D 31/02 (2019.01)**  
[25] EN  
[54] **ELASTOMERIC GLOVE AND METHOD OF FABRICATION**  
[54] **GANT ELASTOMERE ET SON PROCEDE DE FABRICATION**  
[72] BAGWELL, ALISON S., US  
[72] LOW, HIANG TUAN, MY  
[72] ZAKARIA, ZAMSARI BIN, MY  
[72] BERAHENG, SUMSURIYA, TH  
[72] MANIYAM, MURUGANATHAM, MY  
[72] GOVINDASAMY, BASKARAN, MY  
[71] KIMBERLY-CLARK WORLDWIDE, INC., US  
[85] 2022-01-06  
[86] 2019-07-18 (PCT/US2019/042348)  
[87] (WO2021/011004)

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[21] **3,146,280**  
[13] A1

[51] **Int.Cl. G02B 6/44 (2006.01)**  
[25] EN  
[54] **UNITUBE RIBBON BREAKOUT DERIVATION DE RUBAN D'UNITUBE**  
[72] BECKER, MATTHEW PATRICK, US  
[72] O'BOYLE, BRENDAN, US  
[71] PREFORMED LINE PRODUCTS CO., US  
[85] 2022-01-06  
[86] 2020-07-10 (PCT/US2020/041716)  
[87] (WO2021/007564)  
[30] US (62/872,358) 2019-07-10

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[21] **3,146,284**  
[13] A1

[51] **Int.Cl. C08J 5/04 (2006.01) B29C 70/14 (2006.01) B29C 70/50 (2006.01) B32B 5/12 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR FORMING SHORT-FIBER FILMS, COMPOSITES COMPRISING THERMOSETS, AND OTHER COMPOSITES**  
[54] **SYSTEMES ET PROCEDES DE FORMATION DE FILMS A FIBRES COURTES, COMPOSITES COMPRENANT DES MATIERES THERMODURCIES, ET AUTRES COMPOSITES**  
[72] SOHEILIAN, RASAM, US  
[72] GURIJALA, ANVESH, US  
[71] BOSTON MATERIALS, INC., US  
[85] 2022-01-06  
[86] 2020-07-09 (PCT/US2020/041306)  
[87] (WO2021/007381)  
[30] US (62/872,686) 2019-07-10  
[30] US (62/938,265) 2019-11-20

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## Demandes PCT entrant en phase nationale

[21] **3,146,288**  
[13] A1

[51] **Int.Cl. A61J 1/14 (2006.01) A61M 5/00 (2006.01) A61M 5/14 (2006.01) A61M 5/31 (2006.01) A61M 39/16 (2006.01) A61M 39/20 (2006.01)**

[25] EN

[54] **INTEGRATED DISINFECTION DEVICE**

[54] **DISPOSITIF DE DESINFECTION INTEGRE**

[72] SAN SOLO, SHOSHANA, US  
[72] EREKOVICANSKI, NICHOLAS, US  
[72] MARICI, PAUL P., US  
[72] TIMMERS, RICHARD, US  
[72] COJOCARIU, GHEORGHE, US  
[72] TONNIGES, BRADLEY, US  
[72] FITZ, STEVE, US  
[72] ANDERSON, GREGORY, US  
[72] BONCZYNSKI, GERALD LEON, US  
[72] GARRABRANT, SAMANTHA R., US  
[71] BECTON. DICKINSON AND COMPANY, US

[85] 2022-01-06  
[86] 2020-07-09 (PCT/US2020/041311)  
[87] (WO2021/011277)  
[30] US (62/873,451) 2019-07-12  
[30] US (62/883,448) 2019-08-06  
[30] US (16/923,414) 2020-07-08

[21] **3,146,294**  
[13] A1

[51] **Int.Cl. G06V 20/10 (2022.01) G06F 16/29 (2019.01) G01C 11/04 (2006.01) G01C 21/30 (2006.01)**

[25] EN

[54] **IDENTIFICATION AND VALIDATION OF ROADS USING AERIAL IMAGERY AND MOBILE LOCATION INFORMATION**

[54] **IDENTIFICATION ET VALIDATION DE ROUTES A L'AIDE D'UNE IMAGERIE AERIENNE ET D'INFORMATIONS DE GEOLOCALISATION**

[72] ADLER, JOSHUA, US  
[71] SOURCEWATER, INC., US

[85] 2022-01-06  
[86] 2020-07-08 (PCT/US2020/041146)  
[87] (WO2021/007291)  
[30] US (16/506,446) 2019-07-09  
[30] US (16/857,638) 2020-04-24

[21] **3,146,297**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) G06F 9/00 (2006.01) G06N 3/00 (2006.01)**

[25] EN

[54] **REAL-TIME NEURAL SPIKE DETECTION**

[54] **DETECTION D'IMPULSION NEURONALE EN TEMPS REEL**

[72] KOH, THONG-WEI, US  
[72] MEROLLA, PAUL A., US  
[72] PINTO, SONAL, US  
[72] SEO, DONGJIN, US  
[71] NEURALINK CORP., US

[85] 2022-01-06  
[86] 2020-07-09 (PCT/US2020/041372)  
[87] (WO2021/011296)  
[30] US (62/873,625) 2019-07-12

[21] **3,146,301**  
[13] A1

[51] **Int.Cl. G06Q 20/22 (2012.01) G06Q 30/02 (2012.01) G06Q 40/02 (2012.01)**

[25] EN

[54] **POST-PURCHASE CREDIT OFFER AND TENDER SWITCH**

[54] **COMMUTATEUR D'OFFRE DE CREDIT ET D'OFFRE POST-ACHAT**

[72] STORIALE, MICHAEL, US  
[72] HAMMOND, LISA, US  
[72] KIEVIT, WILLIAM, US  
[72] TERRY, TIFFANIE, US  
[72] HUDSON, CARTER, US  
[71] SYNCHRONY BANK, US

[85] 2022-01-06  
[86] 2020-07-08 (PCT/US2020/041177)  
[87] (WO2021/007309)  
[30] US (62/871,550) 2019-07-08

[21] **3,146,304**  
[13] A1

[51] **Int.Cl. A61M 5/32 (2006.01) A61M 25/06 (2006.01)**

[25] EN

[54] **CATHETER SYSTEM FACILITATING REDUCED DRAG FORCE**

[54] **SYSTEME DE CATHETER PERMETTANT UNE RESISTANCE REDUITE**

[72] SPATARO, JOSEPH, US  
[72] ISAACSON, S., RAY, US  
[72] YONG, ZHEE MIN JIMMY, SG  
[71] BECTON. DICKINSON AND COMPANY, US

[85] 2022-01-06  
[86] 2020-07-07 (PCT/US2020/041044)  
[87] (WO2021/007231)  
[30] US (62/873,088) 2019-07-11  
[30] US (16/921,494) 2020-07-06

[21] **3,146,309**  
[13] A1

[51] **Int.Cl. A61L 2/18 (2006.01) A61M 39/16 (2006.01) A61M 39/20 (2006.01)**

[25] EN

[54] **DISINFECTION SCRUB FOR MALE AND FEMALE LUER CONNECTORS**

[54] **DESINFECTION PAR BROSSAGE POUR RACCORDS LUER MALE ET FEMELLE**

[72] OKMAN, OYA, US  
[72] TIMMERS, RICHARD, US  
[72] COJOCARIU, GHEORGHE, US  
[71] BECTON. DICKINSON AND COMPANY, US

[85] 2022-01-06  
[86] 2020-07-09 (PCT/US2020/041312)  
[87] (WO2021/011278)  
[30] US (62/873,470) 2019-07-12  
[30] US (16/923,238) 2020-07-08

## PCT Applications Entering the National Phase

[21] <b>3,146,317</b> [13] A1	[21] <b>3,146,344</b> [13] A1	[21] <b>3,146,346</b> [13] A1
[51] <b>Int.Cl. B01J 31/02 (2006.01) C07C 211/02 (2006.01) C07C 211/09 (2006.01) C08G 18/18 (2006.01) C08G 18/20 (2006.01) C08G 18/28 (2006.01)</b>	[51] <b>Int.Cl. C07K 14/715 (2006.01) C12N 15/113 (2010.01) C07K 16/24 (2006.01) C07K 16/28 (2006.01)</b>	[51] <b>Int.Cl. A61K 31/40 (2006.01) A61P 35/00 (2006.01) A61P 35/04 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>ACID-BLOCKED PYRROLIDINE CATALYSTS FOR POLYURETHANE FOAM</b>	[54] <b>TREATMENT AND PREVENTION OF METABOLIC DISEASES</b>	[54] <b>6-(2,4-DICHLOROPHENYL)-5-[4-(3S)-1-(3-FLUOROPROPYL)PYRROLIDIN-3-YL]OXYPHENYL]-8,9-DIHYDRO-7H-BENZO[7]ANNULENE-2-CARBOXYLIC ACID FOR USE IN METASTATIC OR ADVANCED BREAST CANCER PATIENTS</b>
[54] <b>CATALYSEURS DE PYRROLIDINE BLOQUES PAR UN ACIDE POUR MOUSSE DE POLYURETHANE</b>	[54] <b>TRAITEMENT ET PREVENTION DE MALADIES METABOLIQUES</b>	[54] <b>ACIDE 6-(2,4-DICHLOROPHENYL)-5-[4-(3S)-1-(3-FLUOROPROPYL)PYRROLIDIN-3-YL]OXYPHENYL]-8,9-DIHYDRO-7H-BENZO[7]ANNULENE-2-CARBOXYLIQUE DESTINE A ETRE UTILISE CHEZ DES PATIENTS ATTEINTS D'UN CANCER DU SEIN METASTATIQUE OU AVANCE</b>
[72] PHAM, DIANNE, US	[72] COOK, STUART ALEXANDER, SG	[72] CARTOT-COTTON, SYLVAIN, FR
[72] MEREDITH, MATTHEW T., US	[72] SCHAEFER, SEBASTIAN, SG	[72] CELANOVIC, MARINA, US
[72] GRIGSBY, ROBERT A., US	[72] SINGH, BRIJESH KUMARS, SG	[72] COHEN, PATRICK, FR
[71] HUNTSMAN PETROCHEMICAL LLC, US	[72] WIDJAJA, ANISSA ANINDYA, SG	[72] PAUX, GAUTIER, US
[85] 2022-01-06	[71] SINGAPORE HEALTH SERVICES PTE. LTD., SG	[72] GOSSELIN, ALICE, FR
[86] 2020-07-14 (PCT/US2020/041897)	[71] NATIONAL UNIVERSITY OF SINGAPORE, SG	[72] ANNEHEIM-HERBELIN, SANDRINE, FR
[87] (WO2021/011521)	[85] 2021-10-28	[71] SANOFI, FR
[30] US (62/875,629) 2019-07-18	[86] 2020-05-01 (PCT/EP2020/062193)	[85] 2021-11-04
	[87] (WO2020/225147)	[86] 2020-05-07 (PCT/EP2020/062743)
	[30] GB (1906291.8) 2019-05-03	[87] (WO2020/225375)
	[30] GB (1906597.8) 2019-05-10	[30] EP (19305593.6) 2019-05-09
	[30] GB (2001013.8) 2020-01-24	[30] EP (19305679.3) 2019-05-28
	[30] GB (2001896.6) 2020-02-12	[30] US (62/945,311) 2019-12-09
	[30] GB (2002030.1) 2020-02-14	
[21] <b>3,146,343</b> [13] A1		
[51] <b>Int.Cl. C07D 487/04 (2006.01) A61K 31/519 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01)</b>		
[25] EN		
[54] <b>POLYMORPHS OF A KINASE INHIBITOR, PHARMACEUTICAL COMPOSITIONS CONTAINING SUCH A COMPOUND, PREPARATION METHODS, AND APPLICATIONS</b>		
[54] <b>POLYMORPHES D'UN INHIBITEUR DE KINASE, COMPOSITIONS PHARMACEUTIQUES CONTENANT UN TEL COMPOSE, PROCEDES DE PREPARATION ET UTILISATIONS</b>		
[72] WANG, XIAODONG, US		
[72] ZHANG, WEIHE, US		
[72] LIU, XIANGYONG, CN		
[72] HAN, CHANGLONG, CN		
[72] LI, ZONGQUAN, CN		
[71] MERYX, INC., US		
[71] THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, US		
[71] BETTA PHARMACEUTICALS CO., LTD., CN		
[85] 2021-10-01		
[86] 2020-04-01 (PCT/US2020/026167)		
[87] (WO2020/205967)		
[30] US (62/828,055) 2019-04-02		

## Demandes PCT entrant en phase nationale

[21] **3,146,347**  
[13] A1

[51] **Int.Cl. C08J 9/232 (2006.01) B29C 44/04 (2006.01) B29C 44/34 (2006.01) C08J 9/18 (2006.01) C08J 9/34 (2006.01)**

[25] EN

[54] **EXPANDED BEADS HAVING DENSITY AND/OR CELL MORPHOLOGY GRADIENTS, AND SINTERED FOAMS OBTAINED THEREFROM**

[54] **BILLES EXPANSEES PRESENTANT DES GRADIENTS DE DENSITE ET/OU DE MORPHOLOGIE CELLULAIRE, ET MOUSSES FRITTEES OBTENUES A PARTIR DE CELLES-CI**

[72] DI MAIO, ERNESTO, IT  
[72] ERRICHELLO, FABRIZIO, IT  
[72] CAMMARANO, ANIELLO, IT  
[72] NICOLAIS, LUIGI, IT  
[71] MATERIAS S.R.L., IT  
[85] 2022-01-06  
[86] 2020-07-22 (PCT/IB2020/056883)  
[87] (WO2021/014371)  
[30] IT (102019000012666) 2019-07-23

[21] **3,146,349**  
[13] A1

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

[25] EN

[54] **SYSTEMS AND METHODS FOR SEIZURE DETECTION BASED ON CHANGES IN ELECTROENCEPHALOGRAM (EEG) NON-LINEARITIES**

[54] **SYSTEMES ET PROCEDES DE DETECTION DE CRISE BASES SUR DES CHANGEMENTS DANS DES NON LINEARITES D'ELECTROENCEPHALOGRAM ME (EEG)**

[72] HECOX, KURT E., US  
[71] ADVANCED GLOBAL CLINICAL SOLUTIONS INC., US  
[85] 2022-01-06  
[86] 2020-03-27 (PCT/US2020/025136)  
[87] (WO2021/034351)  
[30] US (62/890,497) 2019-08-22

[21] **3,146,351**  
[13] A1

[51] **Int.Cl. C04B 28/14 (2006.01) C04B 24/04 (2006.01) C04B 24/24 (2006.01)**

[25] EN

[54] **PLASTICIZER DEDUSTING AGENTS FOR JOINT COMPOUNDS**

[54] **AGENTS DE DEPOUSSIERAGE PLASTIFIANTS POUR PATES A JOINT**

[72] DONOVAN, ALEXANDER J., US  
[72] KINCAID, TYLER, US  
[72] PELOT, DAVID, US  
[72] STEVENS, RICHARD B., US  
[72] NEGRI, ROBERT H., US  
[72] PUNATI, NAVEEN, US  
[71] UNITED STATES GYPSUM COMPANY, US  
[85] 2022-01-06  
[86] 2020-06-23 (PCT/US2020/039087)  
[87] (WO2021/015912)  
[30] US (62/876,302) 2019-07-19  
[30] US (16/812,827) 2020-03-09

[21] **3,146,352**  
[13] A1

[51] **Int.Cl. A61B 10/00 (2006.01) A61F 5/453 (2006.01) A61F 5/455 (2006.01) A61F 13/471 (2006.01) A61F 13/472 (2006.01)**

[25] EN

[54] **FLUID COLLECTION DEVICES INCLUDING AN OPENING HAVING AN INCREASED WIDTH, AND SYSTEMS AND METHODS OF USE**

[54] **DISPOSITIFS DE COLLECTE DE FLUIDE COMPRENANT UNE OUVERTURE AYANT UNE LARGEUR ACCRUE, ET SYSTEMES ET METHODES D'UTILISATION**

[72] JOHANNES, ASHLEY MARIE, US  
[72] SKELTON, SARAH, US  
[72] EVANS, MEGAN, US  
[71] PUREWICK CORPORATION, US  
[85] 2022-01-06  
[86] 2020-07-06 (PCT/US2020/040860)  
[87] (WO2021/007144)  
[30] US (62/871,830) 2019-07-09

[21] **3,146,353**  
[13] A1

[51] **Int.Cl. G01B 9/02003 (2022.01) G01B 9/02056 (2022.01)**

[25] EN

[54] **DISTANCE MEASUREMENT SYSTEM AND DISTANCE MEASUREMENT METHOD**

[54] **SYSTEME DE MESURE DE DISTANCE ET PROCEDE DE MESURE DE DISTANCE**

[72] HARIYAMA, TATSUO, JP  
[72] WATANABE, MASAHIRO, JP  
[72] TANIGUCHI, ATSUSHI, JP  
[72] MARUNO, KENJI, JP  
[71] HITACHI, LTD., JP  
[85] 2022-01-06  
[86] 2020-06-11 (PCT/JP2020/023001)  
[87] (WO2021/024614)  
[30] JP (2019-145889) 2019-08-08

[21] **3,146,354**  
[13] A1

[51] **Int.Cl. G06F 11/14 (2006.01) G06F 16/27 (2019.01) H04L 9/32 (2006.01)**

[25] EN

[54] **DAG-AWTC LEDGER SYSTEM USING BFT VERIFICATION CONSENSUS MECHANISM**

[54] **SYSTEME DE REGISTRE DAG-AWTC UTILISANT UN MECANISME DE CONSENSUS DE VERIFICATION BFT**

[72] JOO, YOUNG HYUN, KR  
[71] BLOOM TECHNOLOGY, INC., KR  
[85] 2022-01-06  
[86] 2020-07-21 (PCT/KR2020/009586)  
[87] (WO2021/020792)  
[30] KR (10-2019-0093679) 2019-08-01

[21] **3,146,355**  
[13] A1

[51] **Int.Cl. F16M 11/04 (2006.01) G03B 17/56 (2021.01) H04M 1/04 (2006.01)**

[25] EN

[54] **ELECTROADHESION DEVICE HOLDER**

[54] **SUPPORT DE DISPOSITIF A ELECTRO-ADHERENCE**

[72] KOCI, DENIS, US  
[71] SELFIE SNAPPER, INC., US  
[85] 2022-01-06  
[86] 2020-07-07 (PCT/US2020/041036)  
[87] (WO2021/007226)  
[30] US (62/871,160) 2019-07-07  
[30] US (62/956,054) 2019-12-31

## PCT Applications Entering the National Phase

[21] **3,146,357**  
[13] A1

[51] **Int.Cl. F21V 8/00 (2006.01)**  
[25] EN  
[54] **COLLIMATED BACKLIGHT, ELECTRONIC DISPLAY, AND METHOD EMPLOYING AN ABSORPTION COLLIMATOR**  
[54] **RETROECLAIRAGE COLLIMATE, DISPOSITIF D'AFFICHAGE ELECTRONIQUE ET PROCEDE UTILISANT UN COLLIMATEUR D'ABSORPTION**  
[72] FATTAL, DAVID A., US  
[72] MA, MING, US  
[71] LEIA INC., US  
[85] 2022-01-06  
[86] 2019-12-21 (PCT/US2019/068196)  
[87] (WO2021/021238)  
[30] US (62/881,917) 2019-08-01

[21] **3,146,358**  
[13] A1

[51] **Int.Cl. A61M 5/31 (2006.01) A61M 5/32 (2006.01) A61M 5/50 (2006.01)**  
[25] EN  
[54] **SYRINGE TIP CAP**  
[54] **CAPUCHON DE POINTE DE SERINGUE**  
[72] MAHMOODIAN, ROZA, US  
[72] MARICI, PAUL, US  
[72] EREKOVCANSKI, NICHOLAS, US  
[72] SAN SOLO, SHOSHANA, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/US2020/041097)  
[87] (WO2021/011244)  
[30] US (62/873,412) 2019-07-12

[21] **3,146,359**  
[13] A1

[51] **Int.Cl. A61B 18/14 (2006.01) A61B 18/00 (2006.01)**  
[25] EN  
[54] **ELECTROSURGICAL DEVICE WITH ILLUMINATION AND SMOKE EVACUATION FEATURES**  
[54] **DISPOSITIF ELECTROCHIRURGICAL AYANT DES MOYENS D'ECLAIRAGE ET D'EVACUATION DE FUMEE**  
[72] FREY, LAURA CONSTANCE, IE  
[72] AN TUILE, CONOR MAC, IE  
[72] MCFARLAND, SCOTT, IE  
[72] SHERIDAN, PAUL, IE  
[72] BURKE, MICHEAL, IE  
[71] STRYKER EUROPEAN OPERATIONS LIMITED, IE  
[85] 2021-12-16  
[86] 2020-11-12 (PCT/IB2020/000946)  
[87] (WO2021/094829)  
[30] US (62/934,512) 2019-11-12  
[30] US (62/976,744) 2020-02-14

[21] **3,146,360**  
[13] A1

[51] **Int.Cl. H04W 4/80 (2018.01) H04W 84/18 (2009.01) H04W 76/15 (2018.01)**  
[25] EN  
[54] **MULTIPLE-CHANNEL WIRELESS NETWORK SYSTEM**  
[54] **SYSTEME DE RESEAU SANS FIL MULTICANAL**  
[72] DABBS, JAMES M., US  
[72] CLAISE, BRIAN, US  
[71] CRITICAL RESPONSE SYSTEMS, INC., US  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/US2020/041150)  
[87] (WO2021/007292)  
[30] US (62/871,448) 2019-07-08

[21] **3,146,361**  
[13] A1

[51] **Int.Cl. B25B 5/02 (2006.01) B25B 5/06 (2006.01) B25B 5/10 (2006.01) B25B 5/16 (2006.01)**  
[25] EN  
[54] **LOCKING ASSEMBLY**  
[54] **ENSEMBLE DE VERROUILLAGE**  
[72] ANGOTT, RYAN J., US  
[72] ANGOTT, PAUL G., US  
[72] LATCHA, MICHAEL A., US  
[71] TECHLOK SOLUTIONS, LLC, US  
[85] 2022-01-06  
[86] 2020-07-09 (PCT/US2020/041374)  
[87] (WO2021/007415)  
[30] US (62/871,764) 2019-07-09  
[30] US (16/924,448) 2020-07-09

[21] **3,146,362**  
[13] A1

[51] **Int.Cl. A01N 63/00 (2020.01) C05F 5/00 (2006.01)**  
[25] EN  
[54] **MICROBIAL COMPOSITIONS**  
[54] **COMPOSITIONS MICROBIENNES**  
[72] FRODYMA, MICHAEL E., US  
[71] NEWLEAF SYMBIOTICS, INC., US  
[85] 2022-01-06  
[86] 2020-07-10 (PCT/US2020/041604)  
[87] (WO2021/007516)  
[30] US (62/873,079) 2019-07-11

[21] **3,146,363**  
[13] A1

[51] **Int.Cl. A61K 39/02 (2006.01) A61K 35/66 (2015.01) A61K 35/74 (2015.01)**  
[25] EN  
[54] **LIVE BIOTHERAPEUTIC COMPOSITIONS AND METHODS**  
[54] **COMPOSITIONS BIOTHERAPEUTIQUES VIVANTES ET PROCEDES**  
[72] STARZL, TIMOTHY W., US  
[72] STARZL, RAVI S. V., US  
[71] BIOPLX, INC., US  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/US2020/041237)  
[87] (WO2021/007341)  
[30] US (62/871,527) 2019-07-08

## Demandes PCT entrant en phase nationale

[21] **3,146,364**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01) C12N 15/09 (2006.01) C12N 15/63 (2006.01) C12N 15/79 (2006.01) C12N 15/85 (2006.01)**

[25] EN

[54] **ONE-STEP GENE THERAPY FOR DUCHENNE MUSCULAR DYSTROPHY VIA GENE REPLACEMENT AND ANTI-INFLAMMATION**

[54] **THERAPIE GENIQUE EN UNE ETAPE POUR DYSTROPHIE MUSCULAIRE DE DUCHENNE PAR REMPLACEMENT DE GENE ET ANTI-INFLAMMATION**

[72] WANG, BING, US

[72] FU, FREDDIE, US

[71] UNIVERSITY OF PITTSBURGH-OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION, US

[85] 2021-07-29

[86] 2020-02-03 (PCT/US2020/016410)

[87] (WO2020/160542)

[30] US (62/800,484) 2019-02-02

[21] **3,146,365**  
[13] A1

[51] **Int.Cl. A61K 31/4162 (2006.01) A61P 35/00 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **ESTROGEN RECEPTOR-MODULATING COMPOUNDS**

[54] **COMPOSES MODULANT LES RECEPTEURS DES OESTROGENES**

[72] MILLER, CHRIS P., US

[71] RADIUS PHARMACEUTICALS, INC., US

[85] 2022-01-06

[86] 2020-07-21 (PCT/US2020/042903)

[87] (WO2021/016254)

[30] US (62/876,963) 2019-07-22

[21] **3,146,366**  
[13] A1

[51] **Int.Cl. G06F 1/00 (2006.01) G06Q 20/02 (2012.01) G06F 21/00 (2013.01) G06K 19/07 (2006.01) G06K 19/073 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR BIOMETRIC PROTOCOL STANDARDS**

[54] **SYSTEME ET PROCEDE POUR STANDARDS DE PROTOCOLES BIOMETRIQUES**

[72] CALLAHAN, JOHN RAYMOND, US

[72] OTHMAN, ASEM, US

[71] VERIDIUM IP LIMITED, GB

[85] 2022-01-06

[86] 2020-07-22 (PCT/US2020/043001)

[87] (WO2021/016311)

[30] US (16/520,191) 2019-07-23

[21] **3,146,367**  
[13] A1

[51] **Int.Cl. G07C 5/08 (2006.01) B60R 1/00 (2022.01) G06K 9/00 (2022.01) G07C 5/00 (2006.01) G08G 1/16 (2006.01)**

[25] EN

[54] **INFORMATION-ENHANCED OFF-VEHICLE EVENT IDENTIFICATION**

[54] **IDENTIFICATION D'EVENEMENT HORS VEHICULE AMELIOREE PAR DES INFORMATIONS**

[72] KUEHNLE, ANDREAS U., US

[72] TOKMAN, ANDRE, US

[72] MUNCY, MARK, US

[71] BENDIX COMMERCIAL VEHICLE SYSTEMS, LLC, US

[85] 2022-01-06

[86] 2020-07-29 (PCT/US2020/043967)

[87] (WO2021/021865)

[30] US (16/526,820) 2019-07-30

[21] **3,146,368**  
[13] A1

[51] **Int.Cl. C09K 5/04 (2006.01)**

[25] EN

[54] **REFRIGERANT COMPOSITIONS COMPRISING HFC-32, CF3I, AND CO2**

[54] **COMPOSITIONS DE FLUIDES FRIGORIGENES COMPRENANT DU HFC-32, DU CF3I ET DU CO2**

[72] HUGHES, JOSHUA, US

[72] MINOR, BARBARA HAVILAND, US

[71] THE CHEMOURS COMPANY FC, LLC, US

[85] 2022-01-06

[86] 2020-08-21 (PCT/US2020/047293)

[87] (WO2021/041167)

[30] US (62/891,104) 2019-08-23

[21] **3,146,369**  
[13] A1

[51] **Int.Cl. A61K 47/69 (2017.01) A61K 9/127 (2006.01) A61K 9/51 (2006.01) A61K 38/18 (2006.01) A61K 48/00 (2006.01) C12N 15/88 (2006.01)**

[25] EN

[54] **IMPROVED MRNA-LOADED LIPID NANOPARTICLES AND PROCESSES OF MAKING THE SAME**

[54] **NANOPARTICULES LIPIDIQUES CHARGEES D'ARN MESSAGER AMELIOREES ET LEURS PROCEDES DE FABRICATION**

[72] KARVE, SHRIRANG, US

[72] SARODE, ASHISH, US

[72] DEROSA, FRANK, US

[71] TRANSLATE BIO, INC., US

[85] 2022-01-06

[86] 2020-07-08 (PCT/US2020/041122)

[87] (WO2021/007278)

[30] US (62/871,513) 2019-07-08

## PCT Applications Entering the National Phase

[21] **3,146,370**  
[13] A1

[51] **Int.Cl. E21B 43/1185 (2006.01) F42D 1/045 (2006.01)**  
[25] EN  
[54] **PERFORATING GUN WITH DETONATION MODULE**  
[54] **PISTOLET DE PERFORATION A MODULE DE DETONATION**  
[72] LAGRANGE, TIMOTHY E., CA  
[72] GARTZ, JEFFREY, CA  
[72] WOOD, JEFFREY D., US  
[71] OWEN OIL TOOLS LP, US  
[85] 2022-01-06  
[86] 2020-08-21 (PCT/US2020/047406)  
[87] (WO2021/035143)  
[30] US (62/889,872) 2019-08-21

[21] **3,146,371**  
[13] A1

[51] **Int.Cl. G09B 23/28 (2006.01) A61H 31/00 (2006.01) G09B 5/02 (2006.01) G09B 23/24 (2006.01) G09B 23/30 (2006.01) G09B 23/32 (2006.01)**  
[25] EN  
[54] **RATE MONITOR FOR PORTABLE MEDICAL TRAINING DEVICE**  
[54] **MONITEUR DE DEBIT POUR DISPOSITIF D'ENTRAINEMENT MEDICAL PORTABLE**  
[72] CHARLTON, CHRISTOPHER M., US  
[72] COOK, MARK E., US  
[72] LINT, TIMOTHY E., US  
[71] PRESTAN PRODUCTS LLC, US  
[85] 2022-01-06  
[86] 2020-09-27 (PCT/US2020/052983)  
[87] (WO2021/062344)  
[30] US (62/907,184) 2019-09-27

[21] **3,146,372**  
[13] A1

[51] **Int.Cl. C07K 16/10 (2006.01) A61P 31/18 (2006.01)**  
[25] EN  
[54] **ANTI-HIV VACCINE ANTIBODIES WITH REDUCED POLYREACTIVITY**  
[54] **ANTICORPS VACCINAUX ANTI-VIH A POLYREACTIVITE REDUITE**  
[72] SIEVERS, STUART A., US  
[72] KEEFFE, JENNIFER, US  
[72] NUSSENZWEIG, MICHEL C., US  
[72] BJORKMAN, PAMELA J., US  
[71] CALIFORNIA INSTITUTE OF TECHNOLOGY, US  
[71] THE ROCKEFELLER UNIVERSITY, US  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/US2020/041138)  
[87] (WO2021/007285)  
[30] US (62/871,393) 2019-07-08

[21] **3,146,373**  
[13] A1

[51] **Int.Cl. G06Q 50/18 (2012.01)**  
[25] EN  
[54] **A SYSTEM FOR SERVING LEGAL DOCUMENTS FOR INITIATING LEGAL PROCEEDINGS**  
[54] **SYSTEME DE DESSERTTE DE DOCUMENTS JURIDIQUES EN VUE DE LANCER DES PROCEDURES JURIDIQUES**  
[72] DU PLOOY, JAN JOHANNES ABRAHAM, ZA  
[71] ABC2 WEALTH & INVESTMENTS (PTY) LTD, ZA  
[85] 2022-01-06  
[86] 2020-07-08 (PCT/ZA2020/050037)  
[87] (WO2021/007601)  
[30] ZA (2019/04449) 2019-07-08  
[30] ZA (2019/08336) 2019-12-13  
[30] ZA (2020/02700) 2020-05-13

[21] **3,146,374**  
[13] A1

[51] **Int.Cl. B32B 5/08 (2006.01) B29C 70/14 (2006.01) B29C 70/50 (2006.01) B32B 15/14 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR CARBON FIBER-METAL AND OTHER COMPOSITES**  
[54] **COMPOSITIONS ET PROCEDES POUR COMPOSITES DU TYPE METAL-FIBRE DE CARBONE ET D'AUTRES COMPOSITES**  
[72] GURIJALA, ANVESH, US  
[72] ERB, RANDALL MORGAN, US  
[72] SOHEILIAN, RASAM, US  
[71] BOSTON MATERIALS, INC., US  
[85] 2022-01-06  
[86] 2020-07-09 (PCT/US2020/041322)  
[87] (WO2021/007389)  
[30] US (62/872,686) 2019-07-10  
[30] US (62/938,265) 2019-11-20

[21] **3,146,375**  
[13] A1

[51] **Int.Cl. C07D 471/04 (2006.01) A61K 31/506 (2006.01) A61K 31/5377 (2006.01) A61K 31/551 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **DERIVATIVES OF 4-(IMIDAZO[L,2-A]PYRIDIN-3-YL)-N-(PYRIDINYL)PYRIMIDIN-2-AMINE AS THERAPEUTIC AGENTS**  
[54] **DERIVES DE 4-(IMIDAZO [L, 2-A] PYRIDINE-3-YL)-N-(PYRIDINYL) PYRIMIDINE-2-AMINE EN TANT QU'AGENTS THERAPEUTIQUES**  
[72] WANG, SHUDONG, AU  
[72] YU, MINGFENG, AU  
[72] LONG, YI, AU  
[71] AUCENTRA THERAPEUTICS PTY LTD, AU  
[85] 2022-01-07  
[86] 2020-07-10 (PCT/AU2020/000065)  
[87] (WO2021/003517)  
[30] AU (2019902448) 2019-07-10

## Demandes PCT entrant en phase nationale

[21] <b>3,146,376</b> [13] A1	[21] <b>3,146,379</b> [13] A1	[21] <b>3,146,381</b> [13] A1
[51] <b>Int.Cl. A61K 8/67 (2006.01) A61K 8/46 (2006.01) A61K 8/60 (2006.01) A61Q 19/08 (2006.01)</b>	[51] <b>Int.Cl. A61K 47/68 (2017.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01)</b>	[51] <b>Int.Cl. C07K 16/46 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C12N 15/09 (2006.01) G01N 33/00 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>BIOENERGETIC COMBINATIONS AND METHODS OF USING SAME</b>	[54] <b>ANTIGEN-BINDING PROTEIN CONSTRUCTS AND USES THEREOF</b>	[54] <b>TETRAVALENT SYMMETRIC BISPECIFIC ANTIBODIES</b>
[54] <b>COMBINAISONS BIOENERGETIQUES ET LEURS PROCEDES D'UTILISATION</b>	[54] <b>CONSTRUCTIONS DE PROTEINE DE LIAISON A L'ANTIGENE ET UTILISATIONS DE CELLES-CI</b>	[54] <b>ANTICORPS BISPECIFIQUE SYMETRIQUE TETRAVALENT</b>
[72] ROCHA, SHEILA ALVES, US	[72] NICHOLS, ALEXANDER J., US	[72] ZHANG, JING, CN
[72] CHIANG, CHUNG-YI, US	[72] FISKE, BRIAN P., US	[72] FANG, LIJUAN, CN
[72] ROSA, JOSE GUILLERMO, US	[72] GERA, NIMISH, US	[72] YAN, YONGXIANG, CN
[72] NIP, JOHN CHUN-SING, US	[71] MYTHIC THERAPEUTICS, INC., US	[72] ZENG, LIANG, CN
[71] UNILEVER GLOBAL IP LIMITED, GB	[85] 2022-01-06	[72] ZHOU, PENGFEI, CN
[85] 2022-01-07	[86] 2020-07-08 (PCT/US2020/041268)	[71] WUHAN YZY BIOPHARMA CO., LTD., CN
[86] 2020-06-23 (PCT/EP2020/067469)	[87] (WO2021/007361)	[85] 2022-01-07
[87] (WO2021/008824)	[30] US (62/871,466) 2019-07-08	[86] 2019-07-11 (PCT/CN2019/095603)
[30] EP (19186091.5) 2019-07-12	[30] US (62/902,220) 2019-09-18	[87] (WO2021/003739)
[30] US (62/932,864) 2019-11-08		
[21] <b>3,146,377</b> [13] A1	[21] <b>3,146,380</b> [13] A1	[21] <b>3,146,382</b> [13] A1
[51] <b>Int.Cl. G01R 27/16 (2006.01)</b>	[51] <b>Int.Cl. C07C 303/44 (2006.01)</b>	[51] <b>Int.Cl. A61F 13/15 (2006.01) A61F 15/00 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>SYSTEM AND METHOD FOR DETERMINING THE IMPEDANCE PROPERTIES OF A LOAD USING LOAD ANALYSIS SIGNALS</b>	[54] <b>METHOD FOR REDUCING THE CONCENTRATION OF SO3 IN A REACTION MIXTURE COMPRISING METHANE SULFONIC ACID AND SO3</b>	[54] <b>DISPENSER FOR MENSTRUAL PRODUCTS AND CORRESPONDING REFILLS</b>
[54] <b>SYSTEME ET PROCEDE DE DETERMINATION DES PROPRIETES D'IMPEDANCE D'UNE CHARGE A L'AIDE DE SIGNAUX D'ANALYSE DE CHARGE</b>	[54] <b>PROCEDE DE REDUCTION DE LA CONCENTRATION DE SO3 DANS UN MELANGE REACTIONNEL COMPRENANT DE L'ACIDE METHANE SULFONIQUE SO3</b>	[54] <b>DISTRIBUTEUR DE PRODUITS MENSTRUELS ET RECHARGES CORRESPONDANTES</b>
[72] ELSAHWI, ESSAM SAMIR, CA	[72] OTT, TIMO, DE	[72] LE NOANE, GAEL, FR
[71] ELSAHWI, ESSAM SAMIR, CA	[71] BASF SE, DE	[71] EURL MARGUERITE & CIE, FR
[85] 2022-01-07	[85] 2022-01-07	[85] 2022-01-07
[86] 2020-07-10 (PCT/CA2020/050956)	[86] 2020-07-02 (PCT/EP2020/068707)	[86] 2020-07-02 (PCT/EP2020/068740)
[87] (WO2021/003577)	[87] (WO2021/004897)	[87] (WO2021/008891)
[30] US (62/872,739) 2019-07-11	[30] EP (19185468.6) 2019-07-10	[30] FR (FR1908024) 2019-07-16
		[30] FR (FR1909191) 2019-08-13

## PCT Applications Entering the National Phase

[21] **3,146,384**  
[13] A1

[51] **Int.Cl. A61K 9/16 (2006.01) A61K 9/20 (2006.01) A61K 9/48 (2006.01) A61K 31/506 (2006.01) A61P 35/00 (2006.01)**

[25] EN  
[54] **PHARMACEUTICAL PREPARATION**  
[54] **PREPARATION PHARMACEUTIQUE**

[72] SCHOCH, CORINNA, DE  
[72] RIEHL, MARKUS, DE  
[72] HOOFF, GERO, DE  
[72] KLEMM, MARKUS, DE  
[72] SCHMIDT, CARSTEN, DE  
[72] WEIGANDT, MARKUS, DE  
[71] MERCK PATENT GMBH, DE  
[85] 2022-01-07  
[86] 2020-07-08 (PCT/EP2020/069165)  
[87] (WO2021/005077)  
[30] EP (19185500.6) 2019-07-10

[21] **3,146,385**  
[13] A1

[51] **Int.Cl. A61K 47/64 (2017.01) A61K 47/68 (2017.01) A61P 35/00 (2006.01) C07K 14/00 (2006.01)**

[25] EN  
[54] **PEPTIDE CONJUGATES OF MICROTUBULE-TARGETING AGENTS AS THERAPEUTICS**  
[54] **CONJUGUES PEPTIDIQUES D'AGENTS DE CIBLAGE DE MICROTUBULES EN TANT QU'AGENTS THERAPEUTIQUES**

[72] MARSHALL, DANIEL RICHARD, US  
[72] CSENGERY, JOHANNA MARIE, US  
[72] MAGUIRE, ROBERT JOHN, US  
[72] VOLKMANN, ROBERT A., US  
[71] CYBREXA 3, INC., US  
[85] 2022-01-06  
[86] 2020-07-09 (PCT/US2020/041348)  
[87] (WO2021/007402)  
[30] US (62/872,638) 2019-07-10  
[30] US (63/041,324) 2020-06-19

[21] **3,146,386**  
[13] A1

[51] **Int.Cl. A61K 9/107 (2006.01) A61K 9/48 (2006.01) A61K 31/00 (2006.01) A61K 47/10 (2017.01) A61K 47/14 (2017.01) A61K 47/22 (2006.01) A61K 47/44 (2017.01)**

[25] EN  
[54] **PHARMACEUTICAL COMPOSITION COMPRISING A TETRAHYDROPIRAZOLOPYRIMIDINONE COMPOUND**  
[54] **COMPOSITION PHARMACEUTIQUE COMPRENANT UN COMPOSE DE TETRAHYDROPIRAZOLOPYRIMIDINONE**

[72] AMBUEHL, MICHAEL, CH  
[72] FOURNIER, ELVIRE, CH  
[72] FRAICHARD, AMANDINE, CH  
[72] FROIDEVAUX, SYLVIE, FR  
[72] GEISELER, OLIVER, CH  
[72] HERRMANN, CHARLYSE, CH  
[72] HUBLER, FRANCIS, CH  
[72] MURPHY, MARK, CH  
[72] RENNEBERG, DORTE, CH  
[72] STAMM, SIMON, CH  
[72] VON RAUMER, MARKUS, CH  
[71] IDORSIA PHARMACEUTICALS LTD, CH  
[85] 2022-01-07  
[86] 2020-07-08 (PCT/EP2020/069230)  
[87] (WO2021/005101)  
[30] EP (PCT/EP2019/068419) 2019-07-09

[21] **3,146,387**  
[13] A1

[51] **Int.Cl. C12N 15/11 (2006.01) C12N 15/113 (2010.01) C12N 15/12 (2006.01) C12N 15/63 (2006.01) C12N 15/67 (2006.01)**

[25] EN  
[54] **FUNCTIONAL NUCLEIC ACID MOLECULES UPREGULATING THE TRANSLATION OF A FRATAXIN MRNA**  
[54] **MOLECULES D'ACIDE NUCLEIQUE FONCTIONNELLES REGULANT A LA HAUSSE LA TRADUCTION D'UN ARNM DE FRATAXINE**

[72] GUSTINCICH, STEFANO, IT  
[72] ZUCHELLI, SILVIA (DECEASED), XX  
[72] BON, CARLOTTA, IT  
[71] SCUOLA INTERNAZIONALE SUPERIORE DI STUDI AVANZATI - SISSA, IT  
[85] 2022-01-07  
[86] 2020-07-10 (PCT/EP2020/069519)  
[87] (WO2021/005203)  
[30] IT (IT102019000011490) 2019-07-11

[21] **3,146,388**  
[13] A1

[51] **Int.Cl. A61B 90/00 (2016.01) A61B 90/50 (2016.01)**

[25] EN  
[54] **AUGMENTED REALITY ASSISTED JOINT ARTHROPLASTY**  
[54] **ARTHROPLASTIE ARTICULAIRE ASSISTEE PAR REALITEE AUGMENTEE**

[72] SLAGMOLLEN, PIETER, BE  
[72] PLESSERS, KATRIEN, BE  
[72] JONKERGOUW, FILIP, BE  
[72] ASSCHE, ANNELEEN VAN, BE  
[72] MARIEN, ROSALIEN, BE  
[72] GAJJAR, DURVA, BE  
[72] DELA RUELLE, CHLOE, BE  
[72] DAEMEN, NELE, BE  
[72] WIRIX-SPEETJENS, ROEL, BE  
[72] HEYDE, BRECHT, BE  
[72] WILLEKENS, SANNE, BE  
[72] GEEBELEN, BEN, BE  
[71] MATERIALISE N.V., BE  
[85] 2022-01-06  
[86] 2020-07-09 (PCT/US2020/041381)  
[87] (WO2021/007418)  
[30] US (62/871,832) 2019-07-09  
[30] US (62/872,117) 2019-07-09

## Demandes PCT entrant en phase nationale

[21] **3,146,389**  
[13] A1

[51] **Int.Cl. F21V 9/02 (2018.01) A61K 31/00 (2006.01) A61Q 17/04 (2006.01) G01V 3/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR TESTING THE EFFECTS OF ULTRAVIOLET AND VISIBLE LIGHT ON SKIN**

[54] **SYSTEME ET PROCEDE DE TEST DES EFFETS DE LA LUMIERE ULTRAVIOLETTE ET VISIBLE SUR LA PEAU**

[72] KOHLI, INDERMEET, US

[72] HAMZAVI, ILTEFAT H., US

[72] LIM, HENRY W., US

[72] MILLER, ANGELA, US

[72] MOHAMMAD, TASNEEM, US

[72] NICHOLSON, CYNTHIA, US

[72] CHAOWATTANAPANIT, SUTEERAPORN, TH

[71] HENRY FORD HEALTH SYSTEM, US

[85] 2022-01-06

[86] 2020-07-09 (PCT/US2020/041389)

[87] (WO2021/007420)

[30] US (62/871,897) 2019-07-09

[21] **3,146,390**  
[13] A1

[51] **Int.Cl. C07K 7/56 (2006.01) A61P 1/00 (2006.01) C07K 7/00 (2006.01) C07K 7/02 (2006.01) C07K 7/08 (2006.01) C07K 14/54 (2006.01) C12N 15/11 (2006.01)**

[25] EN

[54] **PEPTIDE INHIBITORS OF INTERLEUKIN-23 RECEPTOR AND THEIR USE TO TREAT INFLAMMATORY DISEASES**

[54] **INHIBITEURS PEPTIDIQUES DU RECEPTEUR DE L'INTERLEUKINE-23 ET LEUR UTILISATION POUR TRAITER DES MALADIES INFLAMMATOIRES**

[72] BHANDARI, ASHOK, US

[72] FREDERICK, BRIAN TROY, US

[72] SULLIVAN, DAVID CLIFFORD, US

[71] PROTAGONIST THERAPEUTICS, INC., US

[85] 2022-01-06

[86] 2020-07-09 (PCT/US2020/041409)

[87] (WO2021/007433)

[30] US (62/872,477) 2019-07-10

[21] **3,146,391**  
[13] A1

[51] **Int.Cl. H04N 19/105 (2014.01)**

[25] EN

[54] **SAMPLE IDENTIFICATION FOR INTRA BLOCK COPY IN VIDEO CODING**

[54] **IDENTIFICATION D'ECHANTILLON POUR COPIE DE INTRA-BLOC EN CODAGE VIDEO**

[72] XU, JIZHENG, US

[72] ZHANG, LI, US

[72] ZHANG, KAI, US

[72] LIU, HONGBIN, CN

[72] WANG, YUE, CN

[71] BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD., CN

[71] BYTEDANCE INC., US

[85] 2022-01-07

[86] 2020-07-09 (PCT/CN2020/100992)

[87] (WO2021/004495)

[30] CN (PCT/CN2019/095504) 2019-07-10

[21] **3,146,394**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C12N 15/13 (2006.01) C12N 15/62 (2006.01) G01N 33/574 (2006.01)**

[25] EN

[54] **ANTI-BCMA ANTIBODY, ANTIGEN-BINDING FRAGMENT THEREOF AND MEDICAL USE THEREOF**

[54] **ANTICORPS ANTI-BCMA, FRAGMENT DE LIAISON A L'ANTIGENE DE CELUI-CI ET UTILISATION MEDICALE ASSOCIEE**

[72] HUA, HAIQING, CN

[72] BAO, RUDI, CN

[71] SHANGHAI HANSOH BIOMEDICAL CO., LTD., CN

[71] JIANGSU HANSOH PHARMACEUTICAL GROUP CO., LTD., CN

[85] 2022-01-07

[86] 2020-07-29 (PCT/CN2020/105408)

[87] (WO2021/018168)

[30] CN (201910695597.9) 2019-07-30

[21] **3,146,395**  
[13] A1

[51] **Int.Cl. A01N 43/42 (2006.01) A01P 13/02 (2006.01) C07D 221/20 (2006.01) C07D 401/06 (2006.01) C07D 401/10 (2006.01) C07D 401/12 (2006.01) C07D 413/06 (2006.01) C07D 417/06 (2006.01)**

[25] EN

[54] **HERBICIDAL CYCLOHEXANEDIONE DERIVATIVES**

[54] **DERIVES DE CYCLOHEXANEDIONE HERBICIDES**

[72] HENNESSY, ALAN JOSEPH, GB

[72] JONES, ELIZABETH PEARL, GB

[72] DALE, SUZANNA JANE, GB

[72] GREGORY, ALEXANDER WILLIAM, GB

[72] HOULSBY, IAN THOMAS TINMOUTH, GB

[72] BHONOAH, YUNAS, GB

[72] COMAS-BARCELO, JULIA, GB

[72] ELVES, PHILIP MICHAEL, GB

[71] SYNGENTA CROP PROTECTION AG, CH

[85] 2022-01-07

[86] 2020-07-10 (PCT/EP2020/069564)

[87] (WO2021/009048)

[30] GB (1910040.3) 2019-07-12

[21] **3,146,396**  
[13] A1

[51] **Int.Cl. A61K 8/87 (2006.01) A61Q 19/00 (2006.01) C08G 18/72 (2006.01)**

[25] EN

[54] **POLYURETHANE GELS**

[54] **GELS DE POLYURETHANE**

[72] ISAACMAN, MICHAEL J., US

[72] ISAACMAN, STEVEN, US

[72] MAHON, ANDREW B., US

[71] NANOMETICS LLC (D.B.A. PHD BIOSCIENCES), US

[85] 2022-01-06

[86] 2020-07-10 (PCT/US2020/041540)

[87] (WO2021/007489)

[30] US (62/872,588) 2019-07-10

[30] US (62/872,592) 2019-07-10

[30] US (63/018,859) 2020-05-01

## PCT Applications Entering the National Phase

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[21] **3,146,397**  
[13] A1

[51] **Int.Cl. E04B 1/58 (2006.01)**  
[25] EN  
[54] **COUPLING DEVICE FOR MODULAR CONSTRUCTION OF STRUCTURES OR OBJECTS**  
[54] **DISPOSITIF D'ACCOUPLLEMENT POUR LA CONSTRUCTION MODULAIRE DE BATIMENTS OU D'OBJETS**  
[72] PACARADA, ELVIR, DE  
[71] PACARADA, ELVIR, DE  
[71] PACARADA, ERNEST, DE  
[85] 2022-01-07  
[86] 2020-06-22 (PCT/DE2020/200051)  
[87] (WO2021/004590)  
[30] DE (10 2019 210 175.5) 2019-07-10

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[21] **3,146,398**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2012.01)**  
[25] EN  
[54] **METHOD OF REUSING A REUSABLE TRANSPORT PACKAGING AND A SERVICE POINT AND SYSTEM THEREFOR**  
[54] **PROCEDE DE REUTILISATION D'UN EMBALLAGE DE TRANSPORT REUTILISABLE ET UN POINT DE SERVICE ET SYSTEME ASSOCIE**  
[72] KACZMAREK, ALLAN, DK  
[71] PERO SOLUTIONS APS, DK  
[85] 2022-01-07  
[86] 2020-07-07 (PCT/DK2020/050203)  
[87] (WO2021/004593)  
[30] DK (PA 2019 70454) 2019-07-10

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[21] **3,146,399**  
[13] A1

[51] **Int.Cl. A61F 13/539 (2006.01) A61F 13/15 (2006.01)**  
[25] EN  
[54] **TACKIFIER-FREE HOT MELT ADHESIVE COMPOSITIONS SUITABLE FOR USE IN A DISPOSABLE HYGIENE ARTICLE**  
[54] **COMPOSITIONS ADHESIVES THERMOFUSIBLES SANS AGENT COLLANT APPROPRIEES POUR ETRE UTILISEES DANS UN ARTICLE D'HYGIENE JETABLE**  
[72] SECRIST, KIMBERLY E., US  
[72] GRAY, STEVEN D., US  
[72] HUSSEIN, NAJI, FR  
[71] BOSTIK, INC., US  
[71] BOSTIK, S.A., FR  
[85] 2022-01-06  
[86] 2020-07-10 (PCT/US2020/041640)  
[87] (WO2021/011390)  
[30] US (62/873,259) 2019-07-12

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[21] **3,146,401**  
[13] A1

[51] **Int.Cl. C09K 3/10 (2006.01) B32B 3/26 (2006.01) B32B 7/06 (2019.01) B32B 27/32 (2006.01) B65D 43/02 (2006.01) B65D 51/20 (2006.01) B65D 77/20 (2006.01)**  
[25] EN  
[54] **COMPOSITE MATERIAL FOR THE PRODUCTION OF SEALING FOILS AND SEALING FOILS MADE THEREFROM**  
[54] **MATERIAU COMPOSITE CONCU POUR PRODUIRE DES FLANS ET FLANS PRODUITS A PARTIR DE CE MATERIAU COMPOSITE**  
[72] WEGENBERGER, ALFRED, AT  
[72] KORNFELD, MARTIN, AT  
[72] SCHEDL, ADOLF, AT  
[72] STEINER, MATTHIAS, AT  
[71] CONSTANTIA TEICH GMBH, AT  
[85] 2022-01-07  
[86] 2020-05-07 (PCT/EP2020/062735)  
[87] (WO2021/008752)  
[30] EP (19186564.1) 2019-07-16

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[21] **3,146,403**  
[13] A1

[51] **Int.Cl. E01F 13/12 (2006.01)**  
[25] EN  
[54] **VEHICLE BARRIER WITH TRANSFER FORCE DEPLOYMENT**  
[54] **BARRIERE DE VEHICULE AVEC DEPLOIEMENT DE FORCE DE TRANSFERT**  
[72] MCKENNA, GILL W., US  
[72] VOCCIO, JOHN P., US  
[72] ROTHSCHILD, PETER J., US  
[71] VIKEN DETECTION CORPORATION, US  
[85] 2022-01-06  
[86] 2020-07-10 (PCT/US2020/041723)  
[87] (WO2021/007567)  
[30] US (62/872,562) 2019-07-10

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[21] **3,146,404**  
[13] A1

[51] **Int.Cl. C08F 6/10 (2006.01) C08F 2/06 (2006.01) C08F 10/00 (2006.01)**  
[25] EN  
[54] **POLYMERIZATION PROCESS**  
[54] **PROCEDE DE POLYMERISATION**  
[72] AL-HAJ ALI, MOHAMMAD, FI  
[72] SATTAR, MUBASHAR, FI  
[72] AJELLAL, NOUREDDINE, FI  
[72] SLEIJSTER, HENRY, NL  
[72] WEBER, CHARLOTTA, SE  
[71] BOREALIS AG, AT  
[85] 2022-01-07  
[86] 2020-05-18 (PCT/EP2020/063795)  
[87] (WO2021/004684)  
[30] EP (19185004.9) 2019-07-08

## Demandes PCT entrant en phase nationale

[21] <b>3,146,406</b> [13] A1	[21] <b>3,146,408</b> [13] A1	[21] <b>3,146,409</b> [13] A1
[51] <b>Int.Cl. A61K 31/4178 (2006.01) A61K 31/4192 (2006.01) A61K 31/4985 (2006.01) A61P 35/00 (2006.01) C07D 403/06 (2006.01) C07D 403/14 (2006.01) C07D 487/04 (2006.01)</b>	[51] <b>Int.Cl. B01J 20/30 (2006.01) B01D 53/04 (2006.01) B01D 53/047 (2006.01) B01D 53/44 (2006.01) B01D 53/62 (2006.01) B01J 20/28 (2006.01)</b>	[51] <b>Int.Cl. A61K 39/187 (2006.01) A61P 31/20 (2006.01) C12N 7/00 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>INHIBITORS OF INDOLEAMINE 2,3-DIOXYGENASE AND/OR TRYPTOPHAN 2,3-DIOXYGENASE</b>	[54] <b>METHOD OF MANUFACTURING HIGH PACKING COMPOSITE ADSORBENT BED, ADSORBER INCLUDING THE SAME, AND ADSORPTION BASED GAS SEPARATION USING THE ADSORBER</b>	[54] <b>METHODS FOR GROWING AFRICAN SWINE FEVER VIRUS IN FETAL PORCINE LUNG ALVEOLAR MACROPHAGE CELLS</b>
[54] <b>INHIBITEURS DE L'INDOLEAMINE 2,3-DIOXYGENASE ET/OU DE LA TRYPTOPHANE 2,3-DIOXYGENASE</b>	[54] <b>PROCEDE DE FABRICATION D'UN LIT ADSORBANT COMPOSITE A HAUTE DENSITE, ADSORBEUR COMPRENANT CELUI-CI, ET SEPARATION DE GAZ BASEE SUR L'ADSORPTION UTILISANT L'ADSORBANT</b>	[54] <b>PROCEDES DE CULTURE DU VIRUS DE LA PESTE PORCINE AFRICAINE DANS DES CELLULES DE MACROPHAGES ALVEOLAIRES PULMONAIRES PORCINS</b>
[72] BOSS, CHRISTOPH, CH	[72] COIGNET, PHILIPPE A., US	[72] ZUCKERMANN, FEDERICO A., US
[72] CREN, SYLVAIN, CH	[72] KRATZER, DEAN W., US	[72] DIXON, LINDA KATHLEEN, GB
[72] KIMMERLIN, THIERRY, CH	[72] PRUVOT, ANTOINE, US	[72] PORTUGAL, MARIA RAQUEL SEICA, GB
[72] LOTZ-JENNE, CARINA, CH	[72] BRANDANI, FEDERICO, FR	[72] GOATLEY, LYNNETTE CLAIRE, GB
[72] POTHIER, JULIEN, CH	[72] METZ, MATTHEW, US	[71] APTIMMUNE BIOLOGICS, INC., US
[72] TIDTEN-LUKSCH, NAOMI, CH	[72] RENO, ELISE, FR	[71] THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS, US
[71] IDORSIA PHARMACEUTICALS LTD, CH	[71] L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, FR	[85] 2022-01-06
[85] 2022-01-07	[71] AIR LIQUIDE ADVANCED TECHNOLOGIES U.S. LLC, US	[86] 2020-07-13 (PCT/US2020/041762)
[86] 2020-07-10 (PCT/EP2020/069609)	[85] 2022-01-06	[87] (WO2021/007572)
[87] (WO2021/005222)	[86] 2020-07-11 (PCT/US2020/041733)	[30] US (62/873,075) 2019-07-11
[30] EP (19185840.6) 2019-07-11	[87] (WO2021/011430)	[30] US (62/952,889) 2019-12-23
	[30] US (62/873,284) 2019-07-12	
	[30] US (62/873,289) 2019-07-12	
	[30] US (62/873,280) 2019-07-12	
		[21] <b>3,146,410</b> [13] A1
		[51] <b>Int.Cl. A61K 35/747 (2015.01) A61K 31/198 (2006.01) A61K 36/9066 (2006.01) A61P 25/22 (2006.01) A61P 25/24 (2006.01)</b>
		[25] FR
		[54] <b>COMPOSITION FOR THE TREATMENT OF EMOTIONAL DISORDERS</b>
		[54] <b>COMPOSITION POUR LE TRAITEMENT DES TROUBLES DES EMOTIONS</b>
		[72] MOUSSET, PIERRE-YVES, FR
		[72] BERACOCHEA, DANIEL, FR
		[72] LAFAY, SOPHIE, FR
		[71] MOUSSET, PIERRE-YVES, FR
		[85] 2022-01-07
		[86] 2020-07-09 (PCT/FR2020/051231)
		[87] (WO2021/005310)
		[30] FR (FR1907747) 2019-07-10

## PCT Applications Entering the National Phase

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[21] **3,146,412**  
[13] A1

[51] **Int.Cl. F01D 5/18 (2006.01)**  
[25] FR  
[54] **TURBOMACHINE MOVING BLADE WITH COOLING CIRCUIT HAVING A DOUBLE ROW OF DISCHARGE SLOTS**

[54] **AUBE MOBILE DE TURBOMACHINE A CIRCUIT DE REFROIDISSEMENT AYANT UNE DOUBLE RANGEE DE FENTES D'EVACUATION**

[72] ENEAU, PATRICE, FR  
[72] SLUSARZ, MICHEL, FR  
[71] SAFRAN AIRCRAFT ENGINES, FR  
[85] 2022-01-07  
[86] 2020-07-22 (PCT/FR2020/051338)  
[87] (WO2021/019156)  
[30] FR (FR1908655) 2019-07-30

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[21] **3,146,414**  
[13] A1

[51] **Int.Cl. G01S 17/50 (2006.01) G01S 17/931 (2020.01) G01S 17/08 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR SIDELOBE SUPPRESSION IN PHASE ENCODED DOPPLER LIDAR**

[54] **PROCEDE ET SYSTEME DE SUPPRESSION DE LOBE LATERAL DANS UN LIDAR A EFFET DOPPLER CODE EN PHASE**

[72] BARBER, ZEB WILLIAM, US  
[72] CROUCH, STEPHEN C., US  
[72] KADLEC, EMIL A., US  
[71] BLACKMORE SENSORS & ANALYTICS, LLC, US  
[85] 2022-01-06  
[86] 2020-07-14 (PCT/US2020/041991)  
[87] (WO2021/055085)  
[30] US (62/874,351) 2019-07-15

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[21] **3,146,415**  
[13] A1

[51] **Int.Cl. B65D 71/42 (2006.01)**  
[25] EN  
[54] **LAMINATED ARTICLE CARRIER AND BLANK THEREFOR**

[54] **PORTE-ARTICLE STRATIFIE ET EBAUCHE ASSOCIEE**

[72] WALLING, BRADFORD J., US  
[72] ZACHERLE, MATTHEW E., US  
[71] WESTROCK PACKAGING SYSTEMS, LLC, US  
[85] 2022-01-07  
[86] 2020-05-22 (PCT/US2020/034191)  
[87] (WO2021/006963)  
[30] US (62/871,333) 2019-07-08

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[21] **3,146,416**  
[13] A1

[51] **Int.Cl. G06F 9/30 (2018.01) G06F 9/38 (2018.01) G06F 17/16 (2006.01) G06N 3/02 (2006.01)**  
[25] EN  
[54] **SENSOR-BASED HARDWARE ACCELERATOR INCLUDING A SCALAR-PROCESSING UNIT**

[54] **ACCELERATEUR MATERIEL BASE SUR UN TENSEUR COMPRENANT UNE UNITE DE TRAITEMENT SCALAIRE**

[72] REINHARDT, STEVEN KARL, US  
[72] MAYER, JOSEPH ANTHONY, II, US  
[72] ZHANG, DAN, US  
[71] MICROSOFT TECHNOLOGY LICENSING, LLC, US  
[85] 2022-01-07  
[86] 2020-06-10 (PCT/US2020/036873)  
[87] (WO2021/025767)  
[30] US (16/533,237) 2019-08-06

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[21] **3,146,417**  
[13] A1

[51] **Int.Cl. A47B 23/04 (2006.01) F16M 11/04 (2006.01) F16M 11/18 (2006.01)**  
[25] EN  
[54] **DISPLAY MOUNTING SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE DE MONTAGE DE DISPOSITIF D'AFFICHAGE**

[72] JANECHKEK, MATTHEW J., US  
[72] BLOMSTROM, JOHN KENNETH, US  
[72] APOLLONI, MICHAEL ANTHONY, US  
[72] WAITE, JOHN, US  
[72] LINDBLAD, SHAUN CHRISTOPHER, US  
[72] WALLS, PETER LEE LAFLEUR, US  
[72] PRINCE, DAVID JAMES, US  
[72] ASAMARAI, SAEB SALIH, US  
[71] ERGOTRON, INC., US  
[85] 2022-01-07  
[86] 2020-06-10 (PCT/US2020/037006)  
[87] (WO2021/006987)  
[30] US (62/872,574) 2019-07-10

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[21] **3,146,418**  
[13] A1

[51] **Int.Cl. A61M 5/31 (2006.01) A61B 90/11 (2016.01) A61B 17/00 (2006.01) A61B 17/34 (2006.01) A61M 5/315 (2006.01)**  
[25] EN  
[54] **DEVICE FOR ARTERIAL PUNCTURE ASSISTANCE**

[54] **DISPOSITIF D'ASSISTANCE A LA PONTION ARTERIELLE**

[72] DECKLER, ELIZABETH, US  
[72] PALACIOS, RICARDO, US  
[71] UNIVERSITY OF MIAMI, US  
[85] 2022-01-06  
[86] 2020-07-15 (PCT/US2020/042181)  
[87] (WO2021/011687)  
[30] US (62/874,825) 2019-07-16  
[30] US (62/934,248) 2019-11-12

## Demandes PCT entrant en phase nationale

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[21] **3,146,419**  
[13] A1

[51] **Int.Cl. A01B 61/04 (2006.01) A01B 59/00 (2006.01) A01B 61/02 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR MONITORING THE OPERATIONAL STATUS OF TOOLS OF AN AGRICULTURAL IMPLEMENT**

[54] **SYSTEME ET PROCEDE DE SURVEILLANCE DE L'ETAT OPERATIONNEL D'OUTILS D'UNE MACHINE AGRICOLE**

[72] HARMON, JOSHUA DAVID, US

[72] FOSTER, CHRISTOPHER A., US

[71] CNH INDUSTRIAL AMERICA LLC, US

[85] 2022-01-07

[86] 2020-06-10 (PCT/US2020/037007)

[87] (WO2020/252028)

[30] US (16/442,154) 2019-06-14

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[21] **3,146,420**  
[13] A1

[51] **Int.Cl. F16J 15/3236 (2016.01) F16J 15/3204 (2016.01) F16J 15/3232 (2016.01) F16J 15/3284 (2016.01) F16J 15/06 (2006.01) F16J 15/32 (2016.01)**

[25] EN

[54] **NOVEL HIGH-PRESSURE SEALING RING WITH CUSTOM-SHAPED PROFILE**

[54] **NOUVELLE BAGUE D'ETANCHEITE HAUTE PRESSION A PROFIL DE FORME PERSONNALISEE**

[72] FULLER, NADIYA, US

[71] SPM OIL & GAS INC., US

[85] 2022-01-06

[86] 2020-07-15 (PCT/US2020/042191)

[87] (WO2021/016021)

[30] US (62/876,023) 2019-07-19

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[21] **3,146,421**  
[13] A1

[51] **Int.Cl. G07D 7/00 (2016.01) G07D 7/0043 (2016.01) H04L 9/32 (2006.01)**

[25] EN

[54] **VIRTUAL AUTHENTICATION DETECTION**

[54] **DETECTION D'AUTHENTIFICATION VIRTUELLE**

[72] LEVINE, ERIC, US

[72] KIRKHAM, STEPHEN, US

[71] BERBIX INC., US

[85] 2022-01-07

[86] 2020-06-16 (PCT/US2020/037887)

[87] (WO2021/007000)

[30] US (62/872,163) 2019-07-09

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[21] **3,146,424**  
[13] A1

[51] **Int.Cl. A61J 1/20 (2006.01)**

[25] EN

[54] **MEDICAL DEVICE, MEDICAL DEVICE ASSEMBLY INCLUDING THE SAME, AND METHOD OF RECONSTITUTION OF A PHARMACEUTICAL COMPOSITION**

[54] **DISPOSITIF MEDICAL, ENSEMBLE DISPOSITIF MEDICAL LE COMPRENANT, ET PROCEDE DE RECONSTITUTION D'UNE COMPOSITION PHARMACEUTIQUE**

[72] POOLA, RAJESH, IN

[72] VENKATACHALAPATHY, AMBICAI, IN

[71] BECTON, DICKINSON AND COMPANY, US

[85] 2021-12-29

[86] 2020-07-02 (PCT/IB2020/056266)

[87] (WO2021/001786)

[30] EP (19184249.1) 2019-07-03

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[21] **3,146,425**  
[13] A1

[25] EN

[54] **LEADERBOARD SYSTEMS AND METHODS FOR EXERCISE EQUIPMENT**

[54] **SYSTEMES ET PROCEDES DE TABLEAU DE CLASSEMENT POUR EQUIPEMENT D'EXERCICE**

[72] JAIC, KEERTHAN, US

[72] PATEL, JAY, US

[72] SCHNEIDER, MASHA, US

[72] ZANKEVICH, ALEXEY, US

[71] PELOTON INTERACTIVE, INC., US

[85] 2022-01-06

[86] 2020-07-15 (PCT/US2020/042206)

[87] (WO2021/021447)

[30] US (62/881,337) 2019-07-31

[30] US (62/954,353) 2019-12-27

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[21] **3,146,426**  
[13] A1

[51] **Int.Cl. A61K 39/29 (2006.01) A61K 38/00 (2006.01) A61K 39/00 (2006.01)**

[25] EN

[54] **CHIMERIC ANTIGENS FOR TREATING VIRAL INFECTION**

[54] **ANTIGENES CHIMERIQUES POUR LE TRAITEMENT D'UNE INFECTION VIRALE**

[72] SHI, YUENIAN, US

[72] RAJAN, GEORGE, CA

[72] MA, ALLAN, CA

[71] AKSHAYA BIO INC., CA

[85] 2022-01-07

[86] 2020-06-30 (PCT/US2020/040272)

[87] (WO2021/007070)

[30] US (62/871,891) 2019-07-09

## PCT Applications Entering the National Phase

[21] **3,146,428**  
[13] A1

[51] **Int.Cl. H04B 17/12 (2015.01) H04B 7/0413 (2017.01) H04B 7/06 (2006.01) H04L 5/00 (2006.01) H04L 5/14 (2006.01) H04L 25/02 (2006.01)**

[25] EN

[54] **TIME-DIVISION DUPLEX MULTIPLE-INPUT MULTIPLE-OUTPUT CALIBRATION**

[54] **ETALONNAGE A ENTREES MULTIPLES ET SORTIES MULTIPLES EN DUPLEX A REPARTITION DANS LE TEMPS**

[72] CHEN, JINGHU, US

[72] ZHAO, WANLUN, US

[72] KADOUS, TAMER ADEL, US

[72] BLACK, PETER JOHN, US

[72] FAN, MICHAEL MINGXI, US

[71] XCOM LABS, INC., US

[85] 2022-01-07

[86] 2020-07-01 (PCT/US2020/040534)

[87] (WO2021/011198)

[30] US (16/510,802) 2019-07-12

[21] **3,146,429**  
[13] A1

[51] **Int.Cl. B82Y 10/00 (2011.01) B82Y 20/00 (2011.01) B82Y 40/00 (2011.01) B01J 13/00 (2006.01) G01N 21/00 (2006.01) G01N 21/65 (2006.01)**

[25] EN

[54] **METHOD FOR MANUFACTURING SURFACE ENHANCED RAMAN SPECTROSCOPY TAGS**

[54] **PROCEDE DE FABRICATION D'ETIQUETTES DE SPECTROSCOPIE RAMAN EXALTEE DE SURFACE**

[72] PIOTTI, MARCELO EDUARDO, US

[72] SCHEFFLER, RAYMOND H., US

[72] KOWALSKI, MARK, US

[71] SICPA HOLDING SA, CH

[85] 2022-01-07

[86] 2020-07-13 (PCT/EP2020/069684)

[87] (WO2021/009090)

[30] US (62/874,158) 2019-07-15

[30] EP (19192040.4) 2019-08-16

[30] EP (20163879.8) 2020-03-18

[21] **3,146,430**  
[13] A1

[51] **Int.Cl. A01N 47/20 (2006.01) A01N 47/30 (2006.01) C07D 307/34 (2006.01)**

[25] EN

[54] **MOLECULES HAVING CERTAIN PESTICIDAL UTILITIES, AND INTERMEDIATES, COMPOSITIONS, AND PROCESSES RELATED THERETO**

[54] **MOLECULES PRESENTANT CERTAINES UTILITES PESTICIDES, ET INTERMEDIAIRES, COMPOSITIONS ET PROCEDES ASSOCIES**

[72] GIAMPIETRO, NATALIE C., US

[72] DEMETER, DAVID A., US

[72] DIAGNE, ABDALLAH BACHIR, US

[72] ESGUERRA, KENNETH VIRGEL N., US

[72] HEEMSTRA, RONALD J., US

[72] SCHULDT, RYAN AARON, US

[72] BARTON, THOMAS J., US

[72] HORTY, LINDSEY G., US

[72] SPARKS, THOMAS C., US

[72] WATSON, GERALD B., US

[71] CORTEVA AGRISCIENCE LLC, US

[85] 2022-01-06

[86] 2020-07-16 (PCT/US2020/042237)

[87] (WO2021/011722)

[30] US (62/875,079) 2019-07-17

[21] **3,146,431**  
[13] A1

[51] **Int.Cl. A61B 6/03 (2006.01) A61B 5/00 (2006.01) A61N 5/10 (2006.01)**

[25] EN

[54] **MULTI-TARGET TREATMENT PLANNING AND DELIVERY AND VIRTUAL LOCALIZATION FOR RADIATION THERAPY**

[54] **PLANIFICATION ET ADMINISTRATION DE TRAITEMENT ET LOCALISATION VIRTUELLE MULTI-CIBLES POUR RADIOTHERAPIE**

[72] VORONENKO, YEVGEN, US

[72] PAL, DEBASHISH, US

[72] LARKIN, DAVID QUENTIN, US

[72] ZDASIUK, GEORGE, US

[72] JANARDHANAN, JAYAKRISHNAN, US

[72] OWENS, MICHAEL KIRK, US

[72] OLCOTT, PETER DEMETRI, US

[71] REFLEXION MEDICAL, INC., US

[85] 2022-01-07

[86] 2020-07-02 (PCT/US2020/040774)

[87] (WO2021/011207)

[30] US (62/873,742) 2019-07-12

## Demandes PCT entrant en phase nationale

[21] **3,146,432**  
[13] A1

[51] **Int.Cl. C09K 11/02 (2006.01) A01G 9/20 (2006.01) A01G 9/24 (2006.01) C03C 17/25 (2006.01) C09D 5/22 (2006.01) C09K 11/59 (2006.01) C09K 11/64 (2006.01) G02B 5/20 (2006.01)**

[25] EN

[54] **A DISPERSION COMPRISING EU2+ DOPED INORGANIC LUMINESCENT NANOPARTICLES FOR GREENHOUSE APPLICATIONS AND SHEET STRUCTURES AND COATINGS FOR GREENHOUSES COMPRISING SUCH NANOPARTICLES**

[54] **DISPERSION COMPRENANT DES NANOPARTICULES LUMINESCENTES INORGANIQUES DOPEES PAR EU2+ POUR APPLICATIONS DE SERRE ET STRUCTURES DE FEUILLES ET REVETEMENTS POUR SERRES COMPRENANT LESDITES NANOPARTICULES**

[72] VAN OVERBEEK, SADIQ, NL  
[72] KAO, CHUNG-CHE, NL  
[72] HSU, CHAO-CHUN, NL  
[72] PEETERS, SICCO HENRICUS GODEFRIDUS, NL  
[72] JUNG, ANA, NL  
[71] PHYSEE GROUP B.V., NL  
[85] 2022-01-07  
[86] 2020-07-13 (PCT/EP2020/069807)  
[87] (WO2021/009145)  
[30] NL (2023498) 2019-07-12

[21] **3,146,433**  
[13] A1

[51] **Int.Cl. A61K 35/28 (2015.01) C12N 5/0775 (2010.01) A61K 35/545 (2015.01)**

[25] EN

[54] **PREPARATIONS COMPRISING MESENCHYMAL STEM CELLS AND CANNABINOIDS AND METHODS OF THEIR USE**

[54] **PREPARATIONS COMPRENANT DES CELLULES SOUCHES MESENCHYMATEUSES AINSI QUE DES CANNABINOIDES ET LEURS PROCEDES D'UTILISATION**

[72] PETTINE, KENNETH ALLEN, US  
[72] MOSELEY, TIMOTHY ALEXANDER, US  
[71] DIRECT BIOLOGICS LLC, US  
[85] 2022-01-06  
[86] 2020-07-20 (PCT/US2020/042762)  
[87] (WO2021/011935)  
[30] US (62/875,889) 2019-07-18  
[30] US (62/951,905) 2019-12-20

[21] **3,146,434**  
[13] A1

[51] **Int.Cl. C12N 5/02 (2006.01) C12N 5/07 (2010.01) C12N 5/071 (2010.01) C12N 5/0783 (2010.01) C07K 14/775 (2006.01) C12N 5/00 (2006.01) C12N 5/10 (2006.01) C12N 5/12 (2006.01) C12N 13/00 (2006.01) C12N 15/87 (2006.01) C12P 21/02 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR ENHANCING CELL CULTURE**

[54] **COMPOSITIONS ET PROCEDES POUR AMELIORER LA CULTURE CELLULAIRE**

[72] MANSOUR, SARYA, US  
[72] KERN, JOANNA, US  
[72] PIERCE, ANSON, US  
[72] LIN, PEI-YI, US  
[71] LIFE TECHNOLOGIES CORPORATION, US  
[85] 2022-01-07  
[86] 2020-07-06 (PCT/US2020/040916)  
[87] (WO2021/007170)  
[30] US (62/871,409) 2019-07-08

[21] **3,146,436**  
[13] A1

[51] **Int.Cl. C12Q 1/6883 (2018.01)**

[25] EN

[54] **EXTRACELLULAR VESICLES CONTAINING MIR-142-3P TO TREAT FIBROSING DISEASES**

[54] **VESICULES EXTRACELLULAIRES CONTENANT MIR-142-3P POUR TRAITER DES MALADIES FIBROSANTES**

[72] GUIOT, JULIEN, BE  
[72] STRUMAN, INGRID, BE  
[72] NJOCK, MAKON-SEBASTIEN, BE  
[71] UNIVERSITE DE LIEGE, BE  
[71] CENTRE HOSPITALIER UNIVERSITAIRE DE LIEGE, BE  
[85] 2022-01-07  
[86] 2020-07-16 (PCT/EP2020/070215)  
[87] (WO2021/009317)  
[30] EP (19186566.6) 2019-07-16

[21] **3,146,437**  
[13] A1

[51] **Int.Cl. C12M 1/00 (2006.01) C02F 3/00 (2006.01) C02F 3/28 (2006.01) C02F 11/00 (2006.01) C02F 11/04 (2006.01) C12M 1/26 (2006.01) C12M 1/36 (2006.01) C12N 1/00 (2006.01) C12N 11/00 (2006.01) C12P 5/02 (2006.01)**

[25] EN

[54] **CULTURE SYSTEMS AND METHODS OF USING SAME**

[54] **SYSTEMES DE CULTURE ET LEURS PROCEDES D'UTILISATION**

[72] HILLIARD, MATTHEW V., US  
[72] HE, QINGHUA, US  
[72] WANG, JIN, US  
[71] AUBURN UNIVERSITY, US  
[85] 2022-01-06  
[86] 2020-07-21 (PCT/US2020/042891)  
[87] (WO2021/016245)  
[30] US (62/877,126) 2019-07-22  
[30] US (63/047,114) 2020-07-01

## PCT Applications Entering the National Phase

[21] **3,146,438**  
[13] A1

[51] **Int.Cl. G06Q 99/00 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR ANOMOLY DETECTION IN DENTAL INSURANCE CLAIM SUBMISSIONS**  
[54] **PROCEDES ET SYSTEMES DE DETECTION D'ANOMALIES DANS DES SOUMISSIONS DE DECLARATIONS DE SINISTRE DENTAIRE**  
[72] BROOKS, MARK, US  
[72] MCMILLAN, SEAN, US  
[72] ROCK, DAVID, US  
[72] SCHLOSSER, STEVEN, US  
[72] EI, DAVID, US  
[71] NOVODYNAMICS, INC., US  
[85] 2022-01-07  
[86] 2020-07-06 (PCT/US2020/040930)  
[87] (WO2021/007179)  
[30] US (62/871,584) 2019-07-08  
[30] US (16/905,739) 2020-06-18

[21] **3,146,439**  
[13] A1

[51] **Int.Cl. A61K 31/407 (2006.01) A61K 31/438 (2006.01) A61K 31/444 (2006.01) A61K 31/497 (2006.01) A61P 11/00 (2006.01) A61P 29/00 (2006.01) C07D 401/14 (2006.01) C07D 471/10 (2006.01) C07D 487/04 (2006.01) C07D 487/10 (2006.01)**  
[25] EN  
[54] **1-(6-(METHOXY)PYRIDAZIN-3-YL)CYCLOPROPANE-1-CARBOXAMIDE DERIVATIVES AS AUTOTAXIN (ATX) MODULATORS FOR THE TREATMENT OF INFLAMMATORY AIRWAY DISEASES**  
[54] **DERIVES DE 1-(6-(METHOXY)PYRIDAZIN-3-YL)CYCLOPROPANE-1-CARBOXAMIDE SERVANT DE MODULATEURS DE L'AUTOTAXINE (ATX) POUR LE TRAITEMENT DE MALADIES INFLAMMATOIRES DES VOIES RESPIRATOIR ES**  
[72] KUTTRUFF, CHRISTIAN ANDREAS, DE  
[72] BRETSCHNEIDER, TOM, DE  
[72] GODBOUT, CEDRICKX, DE  
[72] KOOLMAN, HANNES FIEPKO, DE  
[72] MARTYRES, DOMNIC, DE  
[72] ROTH, GERALD JUERGEN, DE  
[71] BOEHRINGER INGELHEIM INTERNATIONAL GMBH, DE  
[85] 2022-01-07  
[86] 2020-07-21 (PCT/EP2020/070552)  
[87] (WO2021/013832)  
[30] EP (19187614.3) 2019-07-22

[21] **3,146,440**  
[13] A1

[51] **Int.Cl. C08L 95/00 (2006.01) C08L 97/00 (2006.01)**  
[25] EN  
[54] **ADHESION PROMOTERS COMPRISING OLIGOMERIC SILANES AND METHODS OF USING THE SAME**  
[54] **PROMOTEURS D'ADHESION COMPRENANT DES SILANES OLIGOMERES ET LEURS PROCEDES D'UTILISATION**  
[72] BAKEIS, STEVEN MICHAEL, US  
[72] WOODWORTH, BENJAMIN, US  
[72] GORMAN, WILLIAM B., US  
[72] KRIECH, ANTHONY J., US  
[71] HERITAGE RESEARCH GROUP, LLC, US  
[85] 2022-01-07  
[86] 2020-07-07 (PCT/US2020/040959)  
[87] (WO2021/007191)  
[30] US (62/871,261) 2019-07-08

[21] **3,146,441**  
[13] A1

[51] **Int.Cl. G07C 13/00 (2006.01) G06Q 10/06 (2012.01) G06F 21/62 (2013.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR MEASURING PRE-VOTE OUTCOMES**  
[54] **SYSTEMES ET PROCEDES DESTINES A MESURER DES ISSUES DE VOTES ANTICIPES**  
[72] BRAND, RICHARD, US  
[71] BRAND, RICHARD, US  
[85] 2022-01-07  
[86] 2020-07-07 (PCT/US2020/040996)  
[87] (WO2021/011230)  
[30] US (62/873,474) 2019-07-12

## Demandes PCT entrant en phase nationale

[21] **3,146,443**  
[13] A1

[51] **Int.Cl. B65D 71/42 (2006.01)**  
[25] EN  
[54] **ARTICLE CARRIER AND BLANK THERFOR**  
[54] **SUPPORT D'ARTICLE ET EBAUCHE ASSOCIEE**  
[72] WALLING, BRADFORD J., US  
[72] ZACHERLE, MATTHEW E., US  
[71] WESTROCK PACKAGING SYSTEMS, LLC, US  
[85] 2022-01-07  
[86] 2020-07-07 (PCT/US2020/041003)  
[87] (WO2021/007206)  
[30] US (62/871,407) 2019-07-08  
[30] US (62/885,445) 2019-08-12  
[30] US (62/885,990) 2019-08-13

[21] **3,146,445**  
[13] A1

[51] **Int.Cl. A01N 49/00 (2006.01) A01N 31/06 (2006.01) A01N 35/02 (2006.01) A01P 17/00 (2006.01)**  
[25] FR  
[54] **MOSQUITO REPELLENT COMPOSITION AND METHOD FOR THE PREPARATION THEREOF**  
[54] **COMPOSITION REPULSIVE DE MOUSTIQUE ET PROCEDE DE PREPARATION**  
[72] GRISON, CLAUDE, FR  
[72] STANOVYCH, ANDRII, FR  
[71] UNIVERSITE DE MONTPELLIER, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[85] 2022-01-06  
[86] 2020-07-10 (PCT/EP2020/069523)  
[87] (WO2021/005204)  
[30] FR (FR1907765) 2019-07-10

[21] **3,146,446**  
[13] A1

[51] **Int.Cl. B64C 1/14 (2006.01)**  
[25] FR  
[54] **LIGHTWEIGHT AIRCRAFT WINDOW WITH LOW DRAG**  
[54] **HUBLOT D'AVION ALLEGE A FAIBLE TRAINEE**  
[72] ROUBY, MICHEL, FR  
[72] SAUVESTY, JEAN-CHARLES, FR  
[72] SIMON, SEBASTIEN, FR  
[71] SAINT-GOBAIN GLASS FRANCE, FR  
[85] 2022-01-07  
[86] 2020-07-01 (PCT/EP2020/068542)  
[87] (WO2021/018503)  
[30] FR (FR1908521) 2019-07-26

[21] **3,146,448**  
[13] A1

[51] **Int.Cl. C03B 33/037 (2006.01) G05B 19/4093 (2006.01)**  
[25] FR  
[54] **METHOD AND SYSTEM FOR GENERATING A CUTTING PLAN FOR A COMPLEX GLASS PRODUCT**  
[54] **PROCEDE ET SYSTEME DE GENERATION D'UN PLAN DE DECOUPE D'UN PRODUIT VERRIER COMPLEXE**  
[72] VAN LANDEGHEM, MAXIME, FR  
[71] SAINT-GOBAIN GLASS FRANCE, FR  
[85] 2022-01-07  
[86] 2020-07-08 (PCT/EP2020/069263)  
[87] (WO2021/018534)  
[30] FR (FR1908551) 2019-07-26

[21] **3,146,451**  
[13] A1

[51] **Int.Cl. B64C 25/10 (2006.01) B64C 25/60 (2006.01) B64C 25/50 (2006.01)**  
[25] FR  
[54] **LANDING GEAR WITH REINFORCING WEB**  
[54] **ATTERRISEUR AVEC VOILE DE RENFORT**  
[72] DAULNY, ALEXANDRE, FR  
[72] BLANPAIN, THIERRY, FR  
[72] NGUYEN, NICOLAS, FR  
[72] COURTOIS DE LOURMEL, YVES, FR  
[71] SAFRAN LANDING SYSTEMS, FR  
[85] 2022-01-07  
[86] 2020-07-10 (PCT/EP2020/069618)  
[87] (WO2021/009065)  
[30] FR (FR1907847) 2019-07-12

[21] **3,146,452**  
[13] A1

[51] **Int.Cl. H01Q 1/08 (2006.01) H01Q 1/24 (2006.01) H01Q 1/36 (2006.01) H01Q 9/32 (2006.01)**  
[25] EN  
[54] **PORTABLE COMMUNICATION DEVICE AND ANTENNA DEVICE WITH REMOVEABLE MATCHING CIRCUIT**  
[54] **DISPOSITIF DE COMMUNICATION PORTABLE ET DISPOSITIF D'ANTENNE AVEC CIRCUIT D'ADAPTATION AMOVIBLE**  
[72] JAN, PETER CHRISTOPHER, MY  
[72] NG, LEE HUANG, MY  
[72] OON, ALEXANDER, MY  
[72] KOH, MING YEH, MY  
[72] SUBRAMANIAM, MOHEINVARMAN, MY  
[71] MOTOROLA SOLUTIONS, INC., US  
[85] 2022-01-05  
[86] 2020-07-15 (PCT/US2020/042048)  
[87] (WO2021/011601)  
[30] US (16/515,595) 2019-07-18

[21] **3,146,479**  
[13] A1

[51] **Int.Cl. G01D 18/00 (2006.01) G06F 21/62 (2013.01) G06F 21/64 (2013.01) H04L 9/06 (2006.01) H04L 9/32 (2006.01) G06F 40/117 (2020.01) G06F 40/14 (2020.01)**  
[25] EN  
[54] **CERTIFICATION OF A MEASUREMENT RESULT OF A MEASURING DEVICE**  
[54] **CERTIFICATION D'UN RESULTAT DE MESURE D'UN DISPOSITIF DE MESURE**  
[72] AUTIOSALO, JUUSO, FI  
[72] KUOSMANEN, PETRI, FI  
[72] MUSTAPAA, TUUKKA, FI  
[72] NIKANDER, PEKKA, FI  
[71] AALTO UNIVERSITY FOUNDATION SR, FI  
[85] 2021-11-05  
[86] 2020-05-08 (PCT/FI2020/050312)  
[87] (WO2020/225488)  
[30] FI (20197073) 2019-05-09

## PCT Applications Entering the National Phase

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[21] **3,146,480**  
[13] A1

[51] **Int.Cl. C12C 12/00 (2006.01) C12C 12/02 (2006.01) C12G 3/00 (2019.01)**

[25] EN

[54] **SWEET TASTING STARCH-DERIVED BEVERAGE**

[54] **BOISSON DERIVEE D'AMIDON A GOUT SUCRE**

[72] OFODU, IKECHUKWU VICTOR, NL

[72] BEKKERS, AUGUSTINUS CORNELIUS ALDEGONDE PETRUS ALBERT, NL

[71] HEINEKEN SUPPLY CHAIN B.V., NL

[85] 2022-01-07

[86] 2020-07-23 (PCT/EP2020/070847)

[87] (WO2021/013952)

[30] EP (19187830.5) 2019-07-23

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[21] **3,146,481**  
[13] A1

[51] **Int.Cl. A61K 47/54 (2017.01) A61K 47/55 (2017.01) A61K 47/59 (2017.01) A61K 47/64 (2017.01) A61K 31/7034 (2006.01)**

[25] EN

[54] **SAPONIN DERIVATIVES WITH IMPROVED THERAPEUTIC WINDOW**

[54] **DERIVES DE SAPONINE A FENETRE THERAPEUTIQUE AMELIOREE**

[72] POSTEL, RUBEN, NL

[72] HERMANS, GUY, BE

[72] FUCHS, HENDRIK, DE

[71] SAPREME TECHNOLOGIES B.V., NL

[71] CHARITE - UNIVERSITATSMEDIZIN BERLIN, DE

[85] 2022-01-07

[86] 2020-07-24 (PCT/EP2020/071045)

[87] (WO2021/014019)

[30] NL (2023568) 2019-07-25

[30] EP (PCT/EP2019/084210) 2019-12-09

[30] EP (PCT/EP2019/084290) 2019-12-09

[30] EP (PCT/EP2019/084292) 2019-12-09

[30] NL (2025904) 2020-06-24

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[21] **3,146,482**  
[13] A1

[51] **Int.Cl. B08B 3/04 (2006.01) B08B 9/02 (2006.01) B08B 9/027 (2006.01)**

[25] EN

[54] **SYSTEM FOR UNBLOCKING OR CLEANING DUCTS BY MEANS OF A CONTROLLED LOCAL REACTION**

[54] **SYSTEME DE DESOBSTRUCTION OU DE NETTOYAGE DE CONDUITS AU MOYEN D'UNE REACTION LOCALE COMMANDEE**

[72] LISBOA SANTOS, HUGO FRANCISCO, BR

[72] SOUZA DE ANDRADE, GIOVANNI, BR

[72] HERNALSTEENS, CEDRIC, BR

[72] SALVI DOS REIS, NEY ROBINSON, BR

[72] DONADEL BASSO, EDUARDO, BR

[72] GOJA FERREIRA, ANDRE MANOEL, BR

[72] PERONDI, EDUARDO ANDRE, BR

[72] BRUSCATO SCHMIDT, ALVARO, BR

[72] DISCONZI WILDNER, FABIANO, BR

[72] COMPARSI LARANJA, RAFAEL ANTONIO, BR

[72] BECKER, TIAGO, BR

[72] ROSALES LUZ, JOSE LEANDRO, BR

[72] GONCALVES DORNELES, EDER, BR

[72] BARBOSA CASTRO, BRUNO, BR

[71] PETROLEO BRASILEIRO S.A. - PETROBRAS, BR

[71] UNIVERSIDADE FEDERAL DO RIO GRANDE DO SUL - UFRGS, BR

[85] 2021-12-15

[86] 2020-06-08 (PCT/BR2020/050203)

[87] (WO2020/252547)

[30] BR (BR 10 2019 012853 4) 2019-06-19

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[21] **3,146,483**  
[13] A1

[51] **Int.Cl. C07K 19/00 (2006.01) A61K 35/17 (2015.01) A61K 39/00 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) C07K 14/705 (2006.01) C07K 14/725 (2006.01) C07K 16/28 (2006.01) C12N 5/10 (2006.01) C12N 15/12 (2006.01) C12N 15/62 (2006.01) C12N 15/85 (2006.01)**

[25] EN

[54] **CAR-CD123 VECTOR AND USES THEREOF**

[54] **VECTEUR CAR-CD123 ET SES UTILISATIONS**

[72] QUINTARELLI, CONCETTA, IT

[72] DE ANGELIS, BIAGIO, IT

[72] LOCATELLI, FRANCO, IT

[71] OSPEDALE PEDIATRICO BAMBINO GESU', IT

[85] 2022-01-07

[86] 2020-07-24 (PCT/EP2020/071053)

[87] (WO2021/014022)

[30] EP (19188360.2) 2019-07-25

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[21] **3,146,484**  
[13] A1

[51] **Int.Cl. A61K 31/7084 (2006.01) A61P 37/04 (2006.01)**

[25] EN

[54] **NEW USE OF CYCLIC DINUCLEOTIDES**

[54] **NOUVELLE UTILISATION DE DINUCLEOTIDES CYCLIQUES**

[72] GUZMAN, CARLOS A., DE

[72] LIRUSSI, DARIO, DE

[72] EBENSEN, THOMAS, DE

[72] WEISSMANN, SEBASTIAN, DE

[71] HELMHOLTZ-ZENTRUM FUR INFektionsFORSCHUNG GMBH, DE

[85] 2022-01-07

[86] 2020-08-28 (PCT/EP2020/074046)

[87] (WO2021/038022)

[30] EP (19193982.6) 2019-08-28

## Demandes PCT entrant en phase nationale

[21] **3,146,485**  
[13] A1

[51] **Int.Cl. A61M 11/04 (2006.01) A61M 15/06 (2006.01)**  
[25] EN  
[54] **VAPOUR DELIVERY SYSTEMS**  
[54] **SYSTEMES DE DISTRIBUTION DE VAPEUR**  
[72] POTTER, MARK, GB  
[72] BALL, DANIEL, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2022-01-07  
[86] 2020-07-08 (PCT/GB2020/051643)  
[87] (WO2021/005366)  
[30] GB (1909881.3) 2019-07-10

[21] **3,146,486**  
[13] A1

[51] **Int.Cl. E05F 15/57 (2015.01) E06B 9/68 (2006.01)**  
[25] EN  
[54] **HYDRAULIC DOOR DRIVE FOR A LIFTING DOOR, LIFTING DOOR COMPRISING THE HYDRAULIC DOOR DRIVE, AND METHOD FOR OPERATING THE HYDRAULIC DOOR DRIVE**  
[54] **ENTRAINEMENT HYDRAULIQUE DE PORTE RELEVABLE ET PORTE RELEVABLE PRESENTANT L'ENTRAINEMENT HYDRAULIQUE AINSI QUE PROCEDE DE FONCTIONNEMENT DE L'ENTRAINEMENT HYDRAULIQUE DE PORTE**  
[72] MOCNIK, BORUT, SI  
[72] LJOKI, ALEN, SI  
[72] MAZEJ, ANDREJ, SI  
[71] EFAFLEX INZENIRING D.O.O. LJUBLJANA, SI  
[85] 2022-01-07  
[86] 2020-11-03 (PCT/EP2020/080762)  
[87] (WO2021/094129)  
[30] DE (10 2019 130 425.3) 2019-11-12

[21] **3,146,489**  
[13] A1

[51] **Int.Cl. C08G 81/00 (2006.01) B65D 65/46 (2006.01) C08G 81/02 (2006.01) C08J 3/24 (2006.01) C08L 101/16 (2006.01)**  
[25] EN  
[54] **METHOD FOR FORMING A BIODEGRADABLE OR RECYCLABLE HYBRID MATERIAL COMPOSITION**  
[54] **PROCEDE DE FORMATION D'UNE COMPOSITION DE MATERIAU HYBRIDE BIODEGRADABLE OU RECYCLABLE**  
[72] LEIVO, JARKKO, FI  
[72] HADZIC, ADMIR, FI  
[72] MARIN, TUIRE, FI  
[72] KUMMALA, HELI, FI  
[71] BRIGHTPLUS OY, FI  
[85] 2022-01-07  
[86] 2020-07-06 (PCT/FI2020/050482)  
[87] (WO2021/005267)  
[30] EP (19185388.6) 2019-07-10

[21] **3,146,490**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01) A61K 31/7084 (2006.01) A61P 35/00 (2006.01) C07H 21/00 (2006.01)**  
[25] EN  
[54] **ADMINISTRATION OF STING AGONIST AND CHECKPOINT INHIBITORS**  
[54] **ADMINISTRATION D'UN AGONISTE DE STING ET D'INHIBITEURS DE POINTS DE CONTROLE**  
[72] LIGHTCAP, ERIC SCOTT, US  
[72] SATO, YOSUKE, JP  
[71] TAKEDA PHARMACEUTICAL COMPANY LIMITED, JP  
[85] 2022-01-07  
[86] 2020-07-09 (PCT/IB2020/056440)  
[87] (WO2021/005541)  
[30] US (62/872,039) 2019-07-09  
[30] US (62/944,650) 2019-12-06  
[30] US (62/994,911) 2020-03-26

[21] **3,146,491**  
[13] A1

[51] **Int.Cl. A61B 6/00 (2006.01) A61B 6/02 (2006.01)**  
[25] EN  
[54] **A METHOD OF OBTAINING X-RAY IMAGES**  
[54] **PROCEDE D'OBTENTION D'IMAGES PAR RAYONS X**  
[72] WELLS, STEVE, GB  
[72] TRAVISH, GIL, GB  
[72] EVANS, MARK, GB  
[72] SCHMIEDEHAUSEN, KRISTIN, GB  
[71] ADAPTIX LTD, GB  
[85] 2022-01-07  
[86] 2020-06-19 (PCT/GB2020/051483)  
[87] (WO2021/009476)  
[30] GB (1910038.7) 2019-07-12

[21] **3,146,492**  
[13] A1

[51] **Int.Cl. C09D 7/61 (2018.01) C01B 32/182 (2017.01) C01B 32/194 (2017.01) C01B 32/20 (2017.01) C01B 32/21 (2017.01) C09D 7/80 (2018.01) C09D 201/00 (2006.01)**  
[25] EN  
[54] **WATERBORNE COATINGS**  
[54] **RENETEMENTS A BASE D'EAU**  
[72] WEAVER, WILLIAM, GB  
[72] CHIKOSHA, LYNN, GB  
[72] BELL, A, GB  
[72] SHARP, M, GB  
[71] APPLIED GRAPHENE MATERIALS UK LIMITED, GB  
[85] 2022-01-07  
[86] 2020-07-08 (PCT/GB2020/051648)  
[87] (WO2021/005370)  
[30] GB (1909802.9) 2019-07-09

[21] **3,146,493**  
[13] A1

[51] **Int.Cl. A24F 40/42 (2020.01) A24F 40/30 (2020.01) A24F 40/10 (2020.01) A24F 40/20 (2020.01)**  
[25] EN  
[54] **VAPOUR DELIVERY SYSTEMS**  
[54] **SYSTEMES DE DISTRIBUTION DE VAPEUR**  
[72] POTTER, MARK, GB  
[72] BALL, DANIEL, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2022-01-07  
[86] 2020-07-08 (PCT/GB2020/051642)  
[87] (WO2021/005365)  
[30] GB (1909883.9) 2019-07-10

## PCT Applications Entering the National Phase

[21] **3,146,495**  
[13] A1

[51] **Int.Cl. F16H 25/12 (2006.01) A61G 5/02 (2006.01) B62M 1/00 (2010.01) F16H 19/02 (2006.01)**

[25] EN

[54] **HELICAL DRIVE MECHANISM AND HANDLE MECHANISM FOR WHEELCHAIR WITH HELICAL DRIVE**

[54] **MECANISME D'ENTRAINEMENT HELICOIDAL ET MECANISME DE POIGNEE POUR FAUTEUIL ROULANT A ENTRAINEMENT HELICOIDAL**

[72] ZEVIAR, ZALE, CA

[72] MILLEN, BEN, CA

[71] Z-ONE AND ONLY TECHNOLOGY INC., CA

[85] 2022-01-07

[86] 2020-07-10 (PCT/IB2020/000573)

[87] (WO2021/009560)

[30] US (62/873,734) 2019-07-12

[30] US (62/965,051) 2020-01-23

[21] **3,146,497**  
[13] A1

[51] **Int.Cl. A61K 31/7088 (2006.01) A61K 31/7105 (2006.01) A61K 31/711 (2006.01) A61K 38/46 (2006.01) A61K 48/00 (2006.01) A61P 27/02 (2006.01) A61P 27/06 (2006.01) C12N 15/12 (2006.01) C12N 15/55 (2006.01) C12N 15/63 (2006.01)**

[25] EN

[54] **THERAPEUTIC AGENT FOR DISEASE CAUSED BY DOMINANT MUTANT GENE**

[54] **AGENT THERAPEUTIQUE POUR UNE MALADIE PROVOQUEE PAR UN GENE MUTE DOMINANT**

[72] TAKAHASHI, MASAYO, JP

[72] ONISHI, AKISHI, JP

[72] TSUNEKAWA, YUJI, JP

[71] RIKEN, JP

[85] 2022-01-07

[86] 2020-07-10 (PCT/JP2020/026956)

[87] (WO2021/010303)

[30] JP (2019-130199) 2019-07-12

[21] **3,146,498**  
[13] A1

[51] **Int.Cl. B60C 23/04 (2006.01)**

[25] EN

[54] **A TIRE**

[54] **PNEU**

[72] SOINI, TEEMU, FI

[72] RAISANEN, JANI, FI

[72] ANTIKAINEN, ATTE, FI

[72] OJALA, JARI, FI

[71] NOKIAN RENKAAT OYJ, FI

[85] 2021-09-23

[86] 2020-03-09 (PCT/EP2020/056156)

[87] (WO2020/200660)

[30] EP (19397508.3) 2019-03-29

[21] **3,146,499**  
[13] A1

[51] **Int.Cl. B65D 77/06 (2006.01)**

[25] EN

[54] **BOXES, BLANKS, AND SYSTEMS FOR BAG-IN-BOX DISPENSED PRODUCTS**

[54] **CAISSES, DECOUPES ET SYSTEMES POUR PRODUITS DISTRIBUES PAR CAISSE-OUTRE**

[72] BULLS, CARL ANTHONY, JR., US

[71] GEORGIA-PACIFIC CORRUGATED LLC, US

[85] 2022-01-07

[86] 2020-06-19 (PCT/IB2020/055803)

[87] (WO2021/028734)

[30] US (62/886,087) 2019-08-13

[21] **3,146,501**  
[13] A1

[51] **Int.Cl. A61K 31/427 (2006.01) A61K 31/661 (2006.01) A61P 31/04 (2006.01) A61P 43/00 (2006.01)**

[25] EN

[54] **NOVEL THERAPEUTIC AGENT FOR PROTOTHECA DISEASE**

[54] **NOUVEL AGENT THERAPEUTIQUE CONTRE UNE MALADIE CAUSEE PAR PROTOTHECA**

[72] KANO, RUI, JP

[72] OGAWA, OSAMU, JP

[71] SEREN PHARMACEUTICALS INC., JP

[71] NIHON UNIVERSITY, JP

[85] 2022-01-07

[86] 2020-07-09 (PCT/JP2020/026904)

[87] (WO2021/006317)

[30] JP (2019-128864) 2019-07-11

[21] **3,146,502**  
[13] A1

[51] **Int.Cl. C25B 13/02 (2006.01) C25B 9/60 (2021.01) F16J 15/10 (2006.01) F16J 15/12 (2006.01)**

[25] EN

[54] **GASKET FOR ELECTROLYSIS VESSELS, AND ELECTROLYSIS VESSEL USING SAME**

[54] **JOINT D'ETANCHEITE POUR CUVES D'ELECTROLYSE ET CUVE D'ELECTROLYSE L'UTILISANT**

[72] MANABE, AKIYOSHI, JP

[71] DE NORA PERMELEC LTD, JP

[85] 2022-01-07

[86] 2020-07-17 (PCT/JP2020/027827)

[87] (WO2021/015120)

[30] JP (2019-133634) 2019-07-19

[21] **3,146,503**  
[13] A1

[51] **Int.Cl. B65D 5/46 (2006.01) B65D 77/06 (2006.01)**

[25] EN

[54] **TELESCOPING BOXES, BLANKS, AND SYSTEMS FOR POUR-STYLE BAG-IN-BOX DISPENSED PRODUCTS**

[54] **BOITES TELESCOPIQUES, EBAUCHES ET SYSTEMES POUR DES PRODUITS DISTRIBUES A VERSER DE TYPE CAISSE-OUTRE**

[72] BULLS, JR., CARL ANTHONY, US

[71] GEORGIA-PACIFIC CORRUGATED LLC, US

[85] 2022-01-07

[86] 2020-06-19 (PCT/IB2020/055818)

[87] (WO2021/028735)

[30] US (62/886,084) 2019-08-13

[21] **3,146,504**  
[13] A1

[51] **Int.Cl. H01M 10/48 (2006.01) H02J 7/00 (2006.01)**

[25] EN

[54] **STATE OUTPUT SYSTEM**

[54] **SYSTEME DE SORTIE D'ETAT**

[72] MUNAKATA, ICHIRO, JP

[72] SHOJI, HIDEKI, JP

[71] TOYO SYSTEM CO., LTD., JP

[85] 2022-01-07

[86] 2020-12-03 (PCT/JP2020/045128)

[87] (WO2021/124914)

[30] JP (2019-227626) 2019-12-17

## Demandes PCT entrant en phase nationale

[21] **3,146,505**  
[13] A1

[51] **Int.Cl. H03F 1/30 (2006.01) H04B 1/48 (2006.01) H03F 3/193 (2006.01)**

[25] EN

[54] **CIRCUIT FOR DOWNLINK/UPLINK OPERATIONAL MODE SWITCHING IN A TDD WIRELESS COMMUNICATION SYSTEM**

[54] **CIRCUIT POUR COMMUTATION DE MODE DE FONCTIONNEMENT DE LIAISON DESCENDANTE/LIAISON MONTANTE DANS UN SYSTEME DE COMMUNICATION SANS FIL TDD**

[72] DURANTE, DAVIDE, IT  
[72] NOTARGIACOMO, MASSIMO, IT  
[71] TEKO TELECOM S.R.L., IT

[85] 2022-01-07  
[86] 2020-07-09 (PCT/IB2020/056472)  
[87] (WO2021/005555)  
[30] IT (102019000011475) 2019-07-11

[21] **3,146,506**  
[13] A1

[51] **Int.Cl. G06F 9/455 (2018.01) G06F 9/54 (2006.01)**

[25] EN

[54] **COMPUTING ARCHITECTURE FOR VEHICLE HARDWARE AND FEATURE VIRTUALIZATION**

[54] **ARCHITECTURE INFORMATIQUE POUR MATERIEL DE VEHICULE ET VIRTUALISATION DE CARACTERISTIQUE**

[72] DELAHAIS, FREDERIC, FR  
[72] SIMON, JEAN-FRANCOIS, FR  
[72] RAYER, THOMAS, FR  
[72] DE MOORTEL, JAN, BE  
[71] IRIDER, FR

[85] 2022-01-07  
[86] 2020-07-10 (PCT/IB2020/056526)  
[87] (WO2021/005576)  
[30] US (62/872,626) 2019-07-10

[21] **3,146,507**  
[13] A1

[51] **Int.Cl. G01B 21/26 (2006.01) B60S 9/00 (2006.01) G01B 11/275 (2006.01)**

[25] EN

[54] **VEHICLE ALIGNMENT AND SENSOR CALIBRATION SYSTEM**

[54] **ALIGNEMENT DE VEHICULE ET SYSTEME D'ETALONNAGE DE CAPTEUR**

[72] DEBOER, DAVID M., US  
[72] DESMET, BRECHT, BE  
[72] JEFFERIES, RYAN M., US  
[72] LAWRENCE, JON D., US  
[72] PIRMEZ, THIJS, BE  
[72] VAN DE WALLE, WARD, BE  
[72] VANNESTE, FREDRIEK, BE  
[72] WAHLSTROM, BEN, US  
[72] NELSON, NICHOLAS R., US

[71] BPG SALES AND TECHNOLOGY INVESTMENTS, LLC, US

[85] 2022-01-07  
[86] 2020-07-11 (PCT/IB2020/056533)  
[87] (WO2021/005578)  
[30] US (62/872,908) 2019-07-11  
[30] US (63/040,083) 2020-06-17

[21] **3,146,508**  
[13] A1

[51] **Int.Cl. G10L 15/32 (2013.01) G06F 3/16 (2006.01) G10L 15/10 (2006.01) G10L 15/22 (2006.01)**

[25] EN

[54] **VOICE ANALYSIS SYSTEM**

[54] **SYSTEME D'ANALYSE VOCALE**

[72] SEKINE, KIYOSHI, JP

[71] INTERACTIVE SOLUTIONS CORP., JP

[85] 2022-01-07  
[86] 2020-12-15 (PCT/JP2020/046827)  
[87] (WO2021/215045)  
[30] JP (2020-077794) 2020-04-24

[21] **3,146,510**  
[13] A1

[51] **Int.Cl. C07D 491/22 (2006.01) A61K 31/4745 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **CAMPTOTHECIN DERIVATIVES WITH A DISULFIDE MOIETY AND A PIPERAZINE MOIETY**

[54] **DERIVES DE CAMPTOTHECINE AYANT UNE FRACTION DISULFURE ET UNE FRACTION PIPERAZINE**

[72] PATEL, JITEN RANCHHODHBHAI, IN  
[72] PATEL, GOPALKUMAR CHIMANLAL, IN  
[72] GORE, OMKAR PRAKASH, IN  
[72] SENGUPTA, PRABAL, IN  
[72] CHITTURI, TRINADHA RAO, IN

[71] SUN PHARMA ADVANCED RESEARCH COMPANY LTD., IN

[85] 2022-01-07  
[86] 2020-07-13 (PCT/IB2020/056580)  
[87] (WO2021/005583)  
[30] IN (201921027783) 2019-07-11

[21] **3,146,511**  
[13] A1

[51] **Int.Cl. A61B 3/10 (2006.01) A61B 3/107 (2006.01) A61B 3/113 (2006.01) A61B 3/14 (2006.01)**

[25] EN

[54] **PATIENT-INDUCED TRIGGER OF A MEASUREMENT FOR OPHTHALMIC DIAGNOSTIC DEVICES**

[54] **DECLENCHEMENT INDUIT PAR UN PATIENT D'UNE MESURE POUR DISPOSITIFS DE DIAGNOSTIC OPHTHALMIQUE**

[72] BIRKNER, SASCHA, DE  
[72] GRUNDIG, MARTIN, DE  
[72] ZIEGER, PETER, DE

[71] ALCON INC., CH

[85] 2022-01-07  
[86] 2020-09-18 (PCT/IB2020/058691)  
[87] (WO2021/059096)  
[30] US (62/906,755) 2019-09-27

## PCT Applications Entering the National Phase

[21] **3,146,512**  
[13] A1

[51] **Int.Cl. A61B 3/10 (2006.01) A61B 3/113 (2006.01) A61B 3/14 (2006.01)**

[25] EN

[54] **INSTANT EYE GAZE CALIBRATION SYSTEMS AND METHODS**

[54] **SYSTEMES ET PROCEDES D'ETALONNAGE DE REGARD INSTANTANE**

[72] GRUNDIG, MARTIN, DE

[71] ALCON INC., CH

[85] 2022-01-07

[86] 2020-09-18 (PCT/IB2020/058733)

[87] (WO2021/059103)

[30] US (62/906,756) 2019-09-27

[21] **3,146,513**  
[13] A1

[51] **Int.Cl. C08F 255/02 (2006.01) C08L 51/06 (2006.01) G01N 23/223 (2006.01)**

[25] EN

[54] **TRACEABLE COMPOSITE POLYMERS AND PREPARATION METHODS THEREOF FOR PROVIDING TRANSPARENCY IN PRODUCTION VALUE CHAINS**

[54] **POLYMERES COMPOSITES TRACABLES ET LEURS PROCEDES DE PREPARATION POUR FOURNIR UNE TRANSPARENCE DANS DES CHAINES DE VALEUR DE PRODUCTION**

[72] NAHUM, TEHILA, IL

[72] FIRSTENBERG, MICHAL, IL

[72] SADE, HAGIT, IL

[72] TAL, NATALY, IL

[72] ALON, HAGGAI, IL

[72] YORAN, NADAV, IL

[71] SECURITY MATTERS LTD., IL

[85] 2022-01-07

[86] 2020-07-15 (PCT/IL2020/050793)

[87] (WO2021/009757)

[30] US (62/874,141) 2019-07-15

[21] **3,146,514**  
[13] A1

[51] **Int.Cl. E04H 5/02 (2006.01) F25J 1/00 (2006.01) C10G 99/00 (2006.01)**

[25] EN

[54] **PLANT FACILITY MANUFACTURING METHOD**

[54] **PROCEDE DE FABRICATION D'INSTALLATION D'USINE**

[72] KISHIMOTO, HIROSHI, JP

[72] TSUTSUI, TAKUYA, JP

[72] MIKAMI, MAKOTO, JP

[72] KOITO, HIROYUKI, JP

[71] JGC CORPORATION, JP

[85] 2022-01-07

[86] 2019-08-14 (PCT/JP2019/031988)

[87] (WO2021/029051)

[21] **3,146,516**  
[13] A1

[51] **Int.Cl. B29C 64/118 (2017.01) B29C 64/209 (2017.01)**

[25] EN

[54] **SHORT-LENGTH AND EFFICIENT LIQUID COOLED DISPENSER**

[54] **DISTRIBUTEUR REFROIDI PAR LIQUIDE A COURTE LONGUEUR ET EFFICACE**

[72] BALLAL, AKSHAY, IN

[72] KANAGARAJ, DHINESH, IN

[71] FABHEADS AUTOMATION PRIVATE LIMITED, IN

[85] 2022-01-07

[86] 2021-03-10 (PCT/IN2021/050228)

[87] (WO2021/199061)

[30] IN (202041014588) 2020-04-01

[21] **3,146,517**  
[13] A1

[51] **Int.Cl. G10L 21/034 (2013.01) G10L 21/0208 (2013.01) G10L 21/0216 (2013.01) G10L 21/0272 (2013.01) G10L 21/0364 (2013.01) G10L 15/18 (2013.01) H04R 3/00 (2006.01)**

[25] EN

[54] **SPEECH-TRACKING LISTENING DEVICE**

[54] **DISPOSITIF D'ECOUTE A SUIVI DE LA PAROLE**

[72] HERTZBERG, YEHONATAN, IL

[72] ZONIS, YANIV, IL

[72] BERLIN, STANISLAV, IL

[72] GOREN, ORI, IL

[71] NUANCE HEARING LTD., IL

[85] 2022-01-07

[86] 2020-07-21 (PCT/IB2020/056826)

[87] (WO2021/014344)

[30] US (62/876,691) 2019-07-21

[21] **3,146,518**  
[13] A1

[51] **Int.Cl. B29C 64/118 (2017.01) B29C 64/209 (2017.01)**

[25] EN

[54] **SHORT-LENGTH AND EFFICIENT LIQUID COOLED DISPENSER METHOD**

[54] **PROCEDE DE DISTRIBUTION REFROIDI PAR LIQUIDE DE COURTE LONGUEUR ET EFFICACE**

[72] BALLAL, AKSHAY, IN

[72] KANAGARAJ, DHINESH, IN

[71] FABHEADS AUTOMATION PRIVATE LIMITED, IN

[85] 2022-01-07

[86] 2021-03-10 (PCT/IN2021/050229)

[87] (WO2021/199062)

[30] IN (202041014618) 2020-04-01

[21] **3,146,519**  
[13] A1

[51] **Int.Cl. A01B 79/02 (2006.01) G06Q 50/02 (2012.01) A01G 22/00 (2018.01) A01B 76/00 (2006.01) A01C 21/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR CROP MONITORING AND MANAGEMENT**

[54] **SYSTEME ET PROCEDE DE SURVEILLANCE ET DE GESTION DE CULTURE**

[72] ZUR, EHUD, IL

[71] MERHAV AGRO LTD., IL

[85] 2022-01-06

[86] 2020-09-10 (PCT/IL2020/050987)

[87] (WO2021/048848)

[30] US (62/898,727) 2019-09-11

## Demandes PCT entrant en phase nationale

[21] **3,146,520**  
[13] A1

[51] **Int.Cl. C12N 15/32 (2006.01) C12N 15/113 (2010.01) A01H 5/00 (2018.01) C07K 14/325 (2006.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **SYNTHETIC NUCLEOTIDE SEQUENCES ENCODING INSECTICIDAL CRYSTAL PROTEIN AND USES THEREOF**

[54] **SEQUENCES NUCLEOTIDIQUES SYNTHETIQUES CODANT POUR UNE PROTEINE CRISTALLINE INSECTICIDE ET LEURS UTILISATIONS**

[72] PARIHAR, DWARKESH SINGH, IN  
[72] VERMA, PARESH, IN  
[71] DCM SHRIRAM LIMITED, IN  
[85] 2022-01-07  
[86] 2020-07-28 (PCT/IN2020/050660)  
[87] (WO2021/019565)  
[30] IN (201911030820) 2019-07-30

[21] **3,146,522**  
[13] A1

[51] **Int.Cl. B44C 5/06 (2006.01) A41D 27/08 (2006.01) A44C 25/00 (2006.01) B32B 9/02 (2006.01) B32B 9/04 (2006.01) B32B 27/40 (2006.01) G09B 23/38 (2006.01)**

[25] EN

[54] **VEGETABLE COMPONENTS, DEHYDRATED, SEALED AND WATERPROOFED, APPLIED FOR DECORATIVE PURPOSE ON GARMENTS, OBJECTS AND FURNISHING COMPONENTS AND ITS METHOD OF IMPLEMENTATION/MANUFACTURING PROCEDURES**

[54] **COMPOSANT VEGETAL, DESHYDRATE, SCHELLE ET IMPERMEABILISE, APPLIQUE A DES FINS DECORATIVES SUR DES VETEMENTS, DES OBJETS ET DES COMPOSANTS D'AMEUBLEMENT ET SON PROCEDE DE MISE EN OEUVRE/FABRICATION**

[72] TADDEO, ALFONSO, IT  
[71] TADDEO, ALFONSO, IT  
[85] 2022-01-07  
[86] 2020-07-27 (PCT/IT2020/050185)  
[87] (WO2021/019585)  
[30] IT (102019000013296) 2019-07-30

[21] **3,146,523**  
[13] A1

[51] **Int.Cl. E21B 17/042 (2006.01) E21B 19/16 (2006.01) F16L 15/00 (2006.01) F16L 21/00 (2006.01)**

[25] EN

[54] **MECHANICAL COUPLING OF TUBULARS**

[54] **ACCOUPLLEMENT MECANIQUE D'ELEMENTS TUBULAIRES**

[72] GRINDHAUG, GAUTE, NO  
[72] GRINDHUAG, ERLING, NO  
[72] EIDEM, MORTEN, NO  
[71] EQUINOR ENERGY AS, NO  
[85] 2022-01-07  
[86] 2020-06-12 (PCT/NO2020/050157)  
[87] (WO2021/006741)  
[30] GB (1909755.9) 2019-07-08  
[30] GB (2005866.5) 2020-04-22

[21] **3,146,524**  
[13] A1

[51] **Int.Cl. A01G 9/02 (2018.01) A01G 31/06 (2006.01)**

[25] EN

[54] **PLANT HOLDER FOR HYDROPONIC SYSTEM**

[54] **SUPPORT DE PLANTE POUR SYSTEME HYDROPONIQUE**

[72] PARI, MIKAEL, SE  
[72] PARI, JONAS, SE  
[72] TILK, CHRISTER, SE  
[72] CARLSSON, ROBERT, SE  
[72] DELPORT, GERT CHRISTIAAN, ZA  
[71] GROW PIPES AB, SE  
[85] 2022-01-07  
[86] 2020-07-02 (PCT/SE2020/050703)  
[87] (WO2021/010882)  
[30] SE (1950889-4) 2019-07-12

[21] **3,146,528**  
[13] A1

[51] **Int.Cl. A61K 31/4375 (2006.01) A61K 9/00 (2006.01) A61K 9/19 (2006.01) A61K 47/02 (2006.01) A61K 47/26 (2006.01) A61P 9/10 (2006.01)**

[25] EN

[54] **METHOD FOR TREATING STROKE BY USING TRICYCLIC DERIVATIVE**

[54] **METHODE DE TRAITEMENT D'ACCIDENT VASCULAIRE CEREBRAL A L'AIDE D'UN DERIVE TRICYCLIQUE**

[72] NAM, JOONWOO, KR  
[72] YE, IN-HAE, KR  
[72] LEE, YONGWOO, KR  
[72] KIM, JONGWOO, KR  
[72] LEE, DONGHO, KR  
[72] JANG, HYOEUN, KR  
[71] JEIL PHARMACEUTICAL CO.,LTD, KR  
[85] 2022-01-07  
[86] 2019-07-29 (PCT/KR2019/009444)  
[87] (WO2021/020612)

[21] **3,146,533**  
[13] A1

[51] **Int.Cl. G01N 21/00 (2006.01) G01N 21/3554 (2014.01) G01N 21/3563 (2014.01) A01G 7/02 (2006.01) A01G 9/20 (2006.01) A01G 9/24 (2006.01) A01G 13/02 (2006.01) G01N 21/17 (2006.01)**

[25] EN

[54] **PLANT HEALTH MONITORING APPARATUS AND METHODS**

[54] **APPAREIL ET PROCEDES DE SURVEILLANCE DE LA SANTE DE PLANTE**

[72] HEAVEN, EDWIN MICHAEL GYDE, CA  
[72] CAYANAN, DONNY, CA  
[71] ARGUS CONTROL SYSTEMS LTD., CA  
[85] 2021-11-18  
[86] 2020-05-31 (PCT/CA2020/050747)  
[87] (WO2020/237395)  
[30] US (62/855,641) 2019-05-31

## PCT Applications Entering the National Phase

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[21] **3,146,538**  
[13] A1

[51] **Int.Cl. A61L 27/44 (2006.01) A61L 27/46 (2006.01) A61L 27/50 (2006.01) A61L 27/58 (2006.01) A61L 31/12 (2006.01) A61L 31/14 (2006.01)**

[25] EN

[54] **IMPLANTABLE BODIES COMPRISING A REGIONAL COMPOSITE**

[54] **CORPS IMPLANTABLES COMPRENANT UN COMPOSITE REGIONAL**

[72] BORDEN, MARK D., US

[71] SYNERGY BIOMEDICAL, LLC, US

[85] 2022-01-07

[86] 2020-07-09 (PCT/US2020/041319)

[87] (WO2021/007387)

[30] US (16/507,902) 2019-07-10

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[21] **3,146,539**  
[13] A1

[51] **Int.Cl. A01N 1/02 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR PRESERVING ORGAN TRANSPLANTS**

[54] **COMPOSITIONS ET METHODES DE CONSERVATION DE TRANPLANTS D'ORGANE**

[72] GHATNEKAR, GAUTAM S., US

[71] FIRSTSTRING RESEARCH, INC., US

[85] 2022-01-07

[86] 2020-07-08 (PCT/US2020/041114)

[87] (WO2021/007275)

[30] US (62/871,475) 2019-07-08

---

[21] **3,146,540**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2012.01) G06Q 10/08 (2012.01) G06Q 50/06 (2012.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR AUTOMATED WETSTOCK MANAGEMENT**

[54] **SYSTEMES ET PROCEDES DE GESTION DE PERTE AUTOMATISEE**

[72] HILL, PHILIP, GB

[72] SWAROOP, PREM, US

[72] KAMBLE, ATISH, US

[72] STRELTSOV, KONSTANTIN, PL

[72] KULIG, KRYSYAN, PL

[71] WAYNE FUELING SYSTEMS LLC, US

[85] 2022-01-07

[86] 2020-06-22 (PCT/US2020/038904)

[87] (WO2021/007018)

[30] US (16/506,614) 2019-07-09

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[21] **3,146,541**  
[13] A1

[51] **Int.Cl. C12N 9/98 (2006.01) A23K 10/10 (2016.01) A23K 10/18 (2016.01) A23K 20/189 (2016.01) A23K 40/30 (2016.01) A23K 50/10 (2016.01) A23P 10/30 (2016.01) A23P 20/10 (2016.01) C12N 1/20 (2006.01) C12N 9/00 (2006.01) C12N 9/34 (2006.01) C12N 9/96 (2006.01)**

[25] EN

[54] **FAT COATED PARTICULATE ENZYME COMPOSITIONS**

[54] **COMPOSITIONS A ENZYMES PARTICULAIRES ENROBEES DE MATIERE GRASSE**

[72] YU, SHUKUN, DK

[72] TSE, KATHRYN LOUISE, DK

[72] LI, WENTING, US

[72] MARCHAL, LEON, NL

[72] VILJANEN, JOUNI, FI

[72] KRAGH, KARSTEN MATTHIAS, DK

[72] HORSMANS POULSEN, CHARLOTTE, DK

[71] DUPONT NUTRITION BIOSCIENCES APS, DK

[85] 2022-01-07

[86] 2020-07-09 (PCT/US2020/041301)

[87] (WO2021/007379)

[30] US (62/871,814) 2019-07-09

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[21] **3,146,544**  
[13] A1

[51] **Int.Cl. B65D 83/00 (2006.01) B05B 11/00 (2006.01)**

[25] EN

[54] **FLUID DISPENSING APPARATUS**

[54] **APPAREIL DE DISTRIBUTION DE FLUIDE**

[72] WARNER, JIM, US

[72] GRUPP, JUDITH, US

[72] LAFLAMME, ROGER, US

[71] 1TOUCH HOLDINGS, INC., US

[85] 2022-01-07

[86] 2019-07-09 (PCT/US2019/041090)

[87] (WO2020/014288)

[30] US (62/695,306) 2018-07-09

[30] US (16/507,000) 2019-07-09

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[21] **3,146,546**  
[13] A1

[51] **Int.Cl. A61F 13/00 (2006.01) A61F 13/02 (2006.01) A61N 1/00 (2006.01)**

[25] EN

[54] **METHODS AND DEVICES FOR TREATING EXTERNAL FIXATION SITES**

[54] **PROCEDES ET DISPOSITIFS DE TRAITEMENT DE SITES DE FIXATION EXTERNES**

[72] SOMA, REVANTH, US

[72] TANGUAY, MICHEL, US

[72] SKIBA, LUMINITA, US

[71] VOMARIS INNOVATIONS, INC., US

[85] 2022-01-07

[86] 2020-01-09 (PCT/US2020/012843)

[87] (WO2021/006928)

[30] US (62/872,896) 2019-07-11

---

[21] **3,146,548**  
[13] A1

[51] **Int.Cl. A61C 7/10 (2006.01)**

[25] EN

[54] **DENTAL SYSTEM FOR SYMMETRY OF JAW, PALATE, AND TEETH**

[54] **SYSTEME DENTAIRE POUR SYMETRIE DE LA MACHOIRE, DU PALAIS ET DES DENTS**

[72] HAMM, SUSAN E., US

[71] HAMM, SUSAN E., US

[85] 2022-01-07

[86] 2020-07-07 (PCT/US2020/041023)

[87] (WO2021/007218)

[30] US (62/871,424) 2019-07-08

## Demandes PCT entrant en phase nationale

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[21] **3,146,551**  
[13] A1

[51] **Int.Cl. C07K 1/14 (2006.01) C07K 1/32 (2006.01)**

[25] EN

[54] **PROCESS FOR ISOLATING A HIGH PURITY PROTEIN PREPARATION FROM PLANT MATERIAL AND PRODUCTS THEREOF**

[54] **PROCEDE D'ISOLEMENT D'UNE PREPARATION DE PROTEINE DE HAUTE PURETE A PARTIR D'UNE MATIERE VEGETALE ET PRODUITS ASSOCIES**

[72] MARTENS, TONY, US

[72] FLORES, CESAR, US

[72] REYNOSO MORENO, EDUARDO, US

[72] VAN DER MOLEN, ROLAND, US

[71] PLANTIBLE FOODS, INC., US

[85] 2022-01-07

[86] 2020-07-10 (PCT/US2020/041525)

[87] (WO2021/007484)

[30] US (62/872,917) 2019-07-11

---

[21] **3,146,553**  
[13] A1

[51] **Int.Cl. F16C 32/06 (2006.01) F16C 33/40 (2006.01)**

[25] EN

[54] **ASSEMBLY FOR A COMPUTER TOMOGRAPHY (CT) SYSTEM AND RELATED METHOD**

[54] **ENSEMBLE POUR SYSTEME DE TOMOGRAPHIE PAR ORDINATEUR (CT) ET PROCEDE ASSOCIE**

[72] KNOX, JEFFREY, US

[71] ANALOGIC CORPORATION, US

[85] 2022-01-07

[86] 2020-07-07 (PCT/US2020/041030)

[87] (WO2021/007222)

[30] US (16/507,555) 2019-07-10

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[21] **3,146,555**  
[13] A1

[51] **Int.Cl. H04N 7/12 (2006.01) H04N 19/70 (2014.01)**

[25] EN

[54] **MIXED NAL UNIT PICTURE CONSTRAINTS IN VIDEO CODING**

[54] **CONTRAINTES D'IMAGES D'UNITES NAL MIXTES DANS UN MECANISME DE CODAGE VIDEO**

[72] WANG, YE-KUI, US

[72] HENDRY, FNU, US

[71] HUAWEI TECHNOLOGIES CO., LTD., CN

[85] 2022-01-07

[86] 2020-07-07 (PCT/US2020/041035)

[87] (WO2021/007225)

[30] US (62/871,524) 2019-07-08

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[21] **3,146,556**  
[13] A1

[51] **Int.Cl. H01R 13/213 (2006.01) H01R 4/50 (2006.01) H01R 11/01 (2006.01) H01R 13/04 (2006.01) H01R 13/10 (2006.01) H01R 13/193 (2006.01) H01R 13/52 (2006.01) H01R 13/62 (2006.01) H01R 13/625 (2006.01) H01R 13/639 (2006.01)**

[25] EN

[54] **CABLE LOCKING DEVICE**

[54] **DISPOSITIF DE VERROUILLAGE DE CABLE**

[72] COOPER, EDWARD L., US

[72] HAYES, STEVEN J., US

[71] ELCO ENTERPRISES, INC., US

[85] 2022-01-07

[86] 2020-07-09 (PCT/US2020/041370)

[87] (WO2021/007413)

[30] US (62/871,817) 2019-07-09

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[21] **3,146,557**  
[13] A1

[51] **Int.Cl. C10G 51/02 (2006.01) B01J 8/18 (2006.01)**

[25] EN

[54] **FLUID CATALYTIC CRACKING PROCESS AND APPARATUS FOR MAXIMIZING LIGHT OLEFIN YIELD AND OTHER APPLICATIONS**

[54] **PROCEDE ET APPAREIL DE CRAQUAGE CATALYTIQUE DE FLUIDE PERMETTANT D'AUGMENTER AU MAXIMUM LE RENDEMENT EN OLEFINES LEGERES, ET AUTRES APPLICATIONS ASSOCIEES**

[72] CHEN, LIANG, US

[72] LOEZOS, PETER, US

[72] MARRI, RAMA RAO, US

[72] TOMSULA, BRYAN, US

[72] HOOD, JON A., US

[72] SINGH, HARDIK, US

[72] DORSEY, MICHAEL, US

[72] BRECKENRIDGE, JUSTIN, US

[71] LUMMUS TECHNOLOGY LLC, US

[85] 2022-01-07

[86] 2020-07-08 (PCT/US2020/041148)

[87] (WO2021/011252)

[30] US (16/511,645) 2019-07-15

## PCT Applications Entering the National Phase

[21] **3,146,558**  
[13] A1

[51] **Int.Cl. C08J 7/12 (2006.01) C08F 8/32 (2006.01) C08F 20/32 (2006.01) C08F 20/58 (2006.01) C08J 9/224 (2006.01)**

[25] EN

[54] **FUNCTIONALIZED (METH)ACRYLIC POLYMER OR COPOLYMER MACROPARTICULATES AND METHODS FOR PRODUCTION AND USE THEREOF**

[54] **MACROPARTICULES POLYMERES OU COPOLYMERES (METH)ACRYLIQUES FONCTIONNALISEES ET LEURS PROCEDES DE PRODUCTION ET D'UTILISATION**

[72] HANES, ROBERT E., US  
[72] PETTYS, RICHARD L., US  
[72] HEADLEY, DAVID M., US  
[72] HOOPINGARNER, PAUL T., US  
[72] SCHERER, KAREN A., US  
[71] COUNTERTRACE LLC, US  
[85] 2022-01-07  
[86] 2020-07-09 (PCT/US2020/041407)  
[87] (WO2021/007432)  
[30] US (62/872,507) 2019-07-10  
[30] US (62/898,182) 2019-09-10  
[30] US (62/898,258) 2019-09-10  
[30] US (62/965,352) 2020-01-24

[21] **3,146,559**  
[13] A1

[51] **Int.Cl. G01V 3/12 (2006.01) F24F 11/50 (2018.01) F24F 11/62 (2018.01) G01S 11/02 (2010.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DETECTING OCCUPANCY USING RADIO SIGNALS**

[54] **SYSTEMES ET PROCEDES DE DETECTION D'OCCUPATION AU MOYEN DE SIGNAUX RADIO**

[72] ELIAS, STEPHEN PAUL, US  
[72] GILER, ERIC ROGER, US  
[72] HALL, KATHERINE LAVIN, US  
[72] CELLA, CHARLES HOWARD, US  
[71] STRONG FORCE VCN PORTFOLIO 2019, LLC, US  
[85] 2022-01-07  
[86] 2020-07-08 (PCT/US2020/041151)  
[87] (WO2021/007293)  
[30] US (62/871,235) 2019-07-08

[21] **3,146,560**  
[13] A1

[51] **Int.Cl. A61K 47/64 (2017.01) A61P 35/00 (2006.01) C07D 491/22 (2006.01)**

[25] EN

[54] **PEPTIDE CONJUGATES OF CYTOTOXINS AS THERAPEUTICS**

[54] **CONJUGUES PEPTIDIQUES DE CYTOTOXINES SERVANT D'AGENTS THERAPEUTIQUES**

[72] MARSHALL, DANIEL RICHARD, US  
[72] CSENGERY, JOHANNA MARIE, US  
[72] MAGUIRE, ROBERT JOHN, US  
[72] VOLKMANN, ROBERT A., US  
[71] CYBREXA 2, INC., US  
[85] 2022-01-07  
[86] 2020-07-09 (PCT/US2020/041411)  
[87] (WO2021/007435)  
[30] US (62/872,643) 2019-07-10  
[30] US (63/040,859) 2020-06-18

[21] **3,146,562**  
[13] A1

[51] **Int.Cl. A61B 17/56 (2006.01) A61B 17/00 (2006.01) A61B 17/04 (2006.01) A61B 17/58 (2006.01)**

[25] EN

[54] **SYSTEMS, DEVICES, AND METHODS FOR BONE SUTURE ATTACHMENT AND SUPPORT**

[54] **SYSTEMES, DISPOSITIFS ET METHODES DE FIXATION ET DE SUPPORT DE SUTURE OSSEUSE**

[72] HSIEH, ADAM H., US  
[72] LIN, JOE TY, US  
[71] AESCLEPIUS CORPORATION, US  
[85] 2022-01-07  
[86] 2020-07-09 (PCT/US2020/041416)  
[87] (WO2021/007440)  
[30] US (62/872,530) 2019-07-10

[21] **3,146,563**  
[13] A1

[51] **Int.Cl. A61F 5/453 (2006.01) A61F 5/455 (2006.01)**

[25] EN

[54] **FLUID COLLECTION DEVICES, SYSTEMS, AND METHODS**

[54] **DISPOSITIFS, SYSTEMES ET PROCEDES DE COLLECTE DE FLUIDES**

[72] JOHANNES, ASHLEY MARIE, US  
[72] CHALLA, PRANAV, US  
[71] PUREWICK CORPORATION, US  
[85] 2022-01-07  
[86] 2020-07-08 (PCT/US2020/041242)  
[87] (WO2021/007345)  
[30] US (62/873,045) 2019-07-11

[21] **3,146,565**  
[13] A1

[51] **Int.Cl. C09K 3/32 (2006.01) B01J 20/22 (2006.01) C02F 1/28 (2006.01) C08F 8/32 (2006.01) C08F 20/32 (2006.01) C08F 20/58 (2006.01) C08J 7/12 (2006.01) C08J 9/224 (2006.01) E21B 37/06 (2006.01)**

[25] EN

[54] **CONTAMINANT REMEDIATION WITH FUNCTIONALIZED (METH)ACRYLIC POLYMER OR COPOLYMER MACROPARTICULATES AND SYSTEMS RELATED THERETO**

[54] **ELIMINATION DES CONTAMINANTS A L'AIDE DE MACROPARTICULES D'UN POLYMERE OU D'UN COPOLYMERE (METH)ACRYLIQUE FONCTIONNALISE, ET SYSTEMES ASSOCIES**

[72] HANES JR., ROBERT E., US  
[72] PETTYS, RICHARD L., US  
[72] HEADLEY, DAVID M., US  
[72] HOOPINGARNER, PAUL T., US  
[72] SCHERER, KAREN A., US  
[71] COUNTERTRACE LLC, US  
[85] 2022-01-07  
[86] 2020-07-09 (PCT/US2020/041417)  
[87] (WO2021/007441)  
[30] US (62/872,507) 2019-07-10  
[30] US (62/872,513) 2019-07-10  
[30] US (62/872,519) 2019-07-10  
[30] US (62/898,182) 2019-09-10  
[30] US (62/898,258) 2019-09-10  
[30] US (62/965,352) 2020-01-24

## Demandes PCT entrant en phase nationale

[21] **3,146,566**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **DLL3-TARGETING ANTIBODIES AND USES THEREOF**  
[54] **ANTICORPS CIBLANT LA DLL3 ET LEURS UTILISATIONS**  
[72] POIRIER, JOHN T., US  
[72] RUDIN, CHARLES, US  
[72] LEWIS, JASON, US  
[72] KHAN, ABDUL, US  
[72] ANDREW, DAVID, US  
[72] CHEN, XINLEI, US  
[72] LORENZ, IVO, US  
[71] MEMORIAL SLOAN KETTERING CANCER CENTER, US  
[71] TRI-INSTITUTIONAL THERAPEUTICS DISCOVERY INSTITUTE, US  
[85] 2022-01-07  
[86] 2020-07-08 (PCT/US2020/041282)  
[87] (WO2021/007371)  
[30] US (62/872,915) 2019-07-11

[21] **3,146,576**  
[13] A1

[51] **Int.Cl. B23K 9/133 (2006.01) B23K 9/12 (2006.01) B65H 20/00 (2006.01) B65H 57/04 (2006.01)**  
[25] EN  
[54] **DEVICE FOR FEEDING A WIRE ELECTRODE**  
[54] **DISPOSITIF POUR ALIMENTER UN FIL-ELECTRODE**  
[72] COOPER, EDWARD L., US  
[71] ELCO ENTERPRISES, INC., US  
[85] 2022-01-07  
[86] 2020-07-09 (PCT/US2020/041432)  
[87] (WO2021/007448)  
[30] US (62/871,810) 2019-07-09

[21] **3,146,578**  
[13] A1

[51] **Int.Cl. F21V 21/005 (2006.01) F21S 4/20 (2016.01) F21V 21/08 (2006.01) F21V 23/00 (2015.01) F21V 23/06 (2006.01)**  
[25] EN  
[54] **INTEGRATED LIGHTING AND POWER FOR CABINETRY**  
[54] **ALIMENTATION ET ECLAIRAGE INTEGRES POUR ENSEMBLE ARMOIRE**  
[72] RUTHERFORD, GARY B., US  
[72] BARDWELL, PAUL, US  
[72] CONRADY, JEFFREY A., US  
[71] SENSIO AMERICA, LLC, US  
[85] 2022-01-07  
[86] 2020-07-09 (PCT/US2020/041434)  
[87] (WO2021/007449)  
[30] US (62/872,236) 2019-07-09

[21] **3,146,582**  
[13] A1

[51] **Int.Cl. C09D 11/03 (2014.01) A47K 7/03 (2006.01) A47K 10/16 (2006.01) A47L 13/17 (2006.01) C11D 17/04 (2006.01) G01V 3/08 (2006.01) G01V 5/00 (2006.01)**  
[25] EN  
[54] **SANITIZING WIPE WITH METAL DETECTABLE PRINTED INDICIA**  
[54] **LINGETTE DESINFECTANTE A INDICE IMPRIME POUVANT FAIRE L'OBJET D'UNE DETECTION DE METAUX**  
[72] MARTIN, ROBERT, US  
[72] JELONEK, PAUL RICHARD, US  
[71] ILLINOIS TOOL WORKS INC., US  
[85] 2022-01-07  
[86] 2020-07-10 (PCT/US2020/041486)  
[87] (WO2021/007468)  
[30] US (62/873,074) 2019-07-11  
[30] US (16/924,268) 2020-07-09

[21] **3,146,584**  
[13] A1

[51] **Int.Cl. A01N 25/00 (2006.01) A01N 33/12 (2006.01) A01N 37/40 (2006.01)**  
[25] EN  
[54] **HERBICIDAL MIXTURES CONTAINING AMINE SALTS OF ACIDIC HERBICIDES**  
[54] **MELANGES HERBICIDES CONTENANT DES SELS AMINES D'HERBICIDES ACIDES**  
[72] DYSZLEWSKI, ANDREW D., US  
[72] MACINNES, ALISON, US  
[71] MONSANTO TECHNOLOGY LLC, US  
[85] 2022-01-07  
[86] 2020-07-10 (PCT/US2020/041510)  
[87] (WO2021/007479)  
[30] US (62/873,026) 2019-07-11

[21] **3,146,587**  
[13] A1

[51] **Int.Cl. A01N 43/90 (2006.01) A01P 21/00 (2006.01)**  
[25] EN  
[54] **USE OF DIHYDROPORPHIN DERIVED FROM CHLOROPHYLL AS PLANT GROWTH REGULATOR**  
[54] **UTILISATION DE DIHYDROPORPHINE DE CHLOROPHYLLE EN TANT QUE REGULATEUR DE LA CROISSANCE DES PLANTES**  
[72] HUANG, JUNHAI, CN  
[72] CHEN, LIMING, CN  
[72] WANG, LETIAN, CN  
[72] MENG, DONGFENG, CN  
[72] LI, MING, CN  
[72] HU, JIN, CN  
[72] REN, YONG, CN  
[71] NANJING RUIJIANG BIOLOGICAL ENGINEERING CO., LTD., CN  
[71] SHANGHAI INSTITUTE OF PHARMACEUTICAL INDUSTRY, CN  
[85] 2021-12-24  
[86] 2019-06-27 (PCT/CN2019/093380)  
[87] (WO2020/258190)

## PCT Applications Entering the National Phase

[21] **3,146,588**  
[13] A1

[51] **Int.Cl. G06F 30/18 (2020.01) G05B 9/02 (2006.01) G05B 23/02 (2006.01) G05B 19/042 (2006.01)**

[25] EN

[54] **METHODS TO GENERATE A WIRING SCHEMA**

[54] **PROCEDES POUR GENERER UN SCHEMA DE CABLAGE**

[72] KLESK, JOHN, US

[72] LIU, DANIELLE, US

[72] SORVARI, GREG, US

[72] ERICKSON, DEAN, US

[72] ANDERSON, GREG, US

[72] DIXON, JEFF, US

[71] BANNER ENGINEERING CORP., US

[85] 2022-01-07

[86] 2020-07-10 (PCT/US2020/041512)

[87] (WO2021/007481)

[30] US (16/508,137) 2019-07-10

[21] **3,146,635**  
[13] A1

[51] **Int.Cl. G01V 1/40 (2006.01) E21B 21/08 (2006.01) G01V 1/02 (2006.01)**

[25] EN

[54] **MUD PULSE VALVE**

[54] **VANNE D'IMPULSION DE BOUE**

[72] SEGURA, PEDRO R., US

[72] MENCONI, JOHN R., US

[71] BENCH TREE GROUP, LLC, US

[85] 2022-01-07

[86] 2020-07-10 (PCT/US2020/041519)

[87] (WO2021/007483)

[30] US (62/872,300) 2019-07-10

[21] **3,146,637**  
[13] A1

[51] **Int.Cl. B07C 5/342 (2006.01) G01N 21/85 (2006.01) G01N 21/88 (2006.01) G01N 21/94 (2006.01) G01N 33/12 (2006.01)**

[25] EN

[54] **DETECTION ON NON-XR/MD DETECTABLE FOREIGN OBJECTS IN MEAT**

[54] **DETECTION D'OBJETS ETRANGERS DANS LA VIANDE NON DETECTABLES PAR RAYON X OU DETECTEUR DE METAL**

[72] JOYCE, GARY, US

[72] HEBEL, RICHARD, US

[71] METTLER-TOLEDO, LLC, US

[85] 2022-01-07

[86] 2020-07-10 (PCT/US2020/041566)

[87] (WO2021/007500)

[30] US (16/507,505) 2019-07-10

[21] **3,146,638**  
[13] A1

[51] **Int.Cl. H04L 9/00 (2022.01)**

[25] EN

[54] **ORACLE-AIDED PROTOCOL FOR COMPACT DATA STORAGE FOR APPLICATIONS USING COMPUTATIONS OVER FULLY HOMOMORPHIC ENCRYPTED DATA**

[54] **PROTOCOLE ASSISTE PAR ORACLE PERMETTANT LE STOCKAGE DE DONNEES COMPACT POUR DES APPLICATIONS A L'AIDE DE CALCULS SUR DES DONNEES CHIFFREES ENTIEREMENT HOMOMORPHES (FHE)**

[72] VALD, MARGARITA, US

[72] KAHN, LAETITIA, US

[72] SAPIR, BOAZ, US

[72] SHEFFER, YARON, US

[72] RESHEFF, YEHEZKEL SHRAGA, US

[71] INTUIT INC., US

[85] 2021-08-13

[86] 2020-07-01 (PCT/US2020/040395)

[87] (WO2021/158256)

[30] US (16/783,471) 2020-02-06

[21] **3,146,642**  
[13] A1

[51] **Int.Cl. E21B 17/042 (2006.01) E21B 19/16 (2006.01)**

[25] EN

[54] **DOUBLE-SHOULDERED CONNECTION FOR DRILLING TUBULARS WITH LARGE INSIDE DIAMETER**

[54] **RACCORD A DOUBLE EPAULEMENT POUR ELEMENTS TUBULAIRES DE FORAGE A GRAND DIAMETRE INTERIEUR**

[72] COLLINS, ANTHONY LOUIS, US

[71] NTS AMEGA WEST USA, INC., US

[85] 2021-12-29

[86] 2020-03-12 (PCT/US2020/022289)

[87] (WO2020/263363)

[30] US (62/868,561) 2019-06-28

[30] US (16/815,330) 2020-03-11

[21] **3,146,648**  
[13] A1

[51] **Int.Cl. G01D 21/00 (2006.01) G01S 17/86 (2020.01) G03B 17/55 (2021.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR REAL TIME CONTROL OF AN AUTONOMOUS DEVICE**

[54] **SYSTEME ET PROCEDE DE COMMANDE EN TEMPS REEL D'UN DISPOSITIF AUTONOME**

[72] VAN DER MERWE, DIRK A., US

[72] MISHRA, ARUNABH, US

[72] LANGENFELD, CHRISTOPHER C., US

[72] SLATE, MICHAEL J., US

[72] PRINCIPE, CHRISTOPHER J., US

[72] BUITKUS, GREGORY J., US

[72] WHITNEY, JUSTIN M., US

[72] GUMMADI, RAAJITHA, US

[72] KANE, DEREK G., US

[72] CARRIGG, EMILY A., US

[72] STEELE, PATRICK, US

[72] HERSH, BENJAMIN V., US

[72] G SIVA PERUMAL, FNU, US

[72] CARRIGG, DAVID, US

[72] PAWLOWSKI, DANIEL F., US

[72] CHATURVEDI, YASHOVARDHAN, US

[72] KHANNA, KARTIK, US

[71] DEKA PRODUCTS LIMITED PARTNERSHIP, US

[85] 2022-01-07

[86] 2020-07-10 (PCT/US2020/041711)

[87] (WO2021/007561)

[30] US (62/872,320) 2019-07-10

[30] US (62/872,396) 2019-07-10

[30] US (62/990,485) 2020-03-17

## Demandes PCT entrant en phase nationale

[21] **3,146,649**  
[13] A1

[51] **Int.Cl. C07K 14/81 (2006.01) A23L 15/00 (2016.01) A23L 19/00 (2016.01) A23L 21/10 (2016.01) A23L 27/60 (2016.01) A23L 33/195 (2016.01) A23J 1/08 (2006.01) A23J 1/18 (2006.01) A23J 3/04 (2006.01) A23J 3/20 (2006.01) A23L 2/66 (2006.01) C12N 1/16 (2006.01) C12N 9/10 (2006.01) C12N 9/24 (2006.01) C12N 15/81 (2006.01)**

[25] EN

[54] **PROTEIN COMPOSITIONS AND CONSUMABLE PRODUCTS THEREOF**

[54] **COMPOSITIONS A BASE DE PROTEINES ET PRODUITS DE CONSOMMATION ASSOCIES**

[72] MAHADEVAN, KRITIKA, US  
[72] KREPS, JOEL ANDREW, US  
[72] JOSHI, ISHA, US  
[72] AYOUGH, FARNOOSH, US  
[72] ZHONG, WEIXI, US  
[72] KSHIRSAGAR, HARSHAL, US  
[72] CHAPEAUX, ALEXANDRE, US  
[72] RUTHERFORD-JENKINS, WESLEY, US

[72] PATNAIK, RANJAN, US  
[72] IVEY, FRANK DOUGLAS, US  
[71] CLARA FOODS CO., US  
[85] 2022-01-07  
[86] 2020-07-10 (PCT/US2020/041720)  
[87] (WO2021/007565)  
[30] US (62/873,154) 2019-07-11  
[30] US (62/873,159) 2019-07-11

[21] **3,146,652**  
[13] A1

[51] **Int.Cl. B60P 3/22 (2006.01) B60K 15/03 (2006.01) B60K 15/07 (2006.01) B60S 5/02 (2006.01) F02D 19/02 (2006.01) F02M 21/02 (2006.01)**

[25] EN

[54] **DEFUEL PRIORITY PANEL**

[54] **PANNEAU DE PRIORITE DE VIDANGE DE CARBURANT**

[72] KUBISTA, DANIEL, US  
[72] LUCAS, MARTIN EDWARD, US  
[72] PRUTEANU, CLAUDIU DORIAN, US  
[71] TRUSTAR ENERGY LLC, US  
[85] 2022-01-07  
[86] 2020-07-10 (PCT/US2020/041616)  
[87] (WO2021/011382)  
[30] US (62/873,667) 2019-07-12

[21] **3,146,654**  
[13] A1

[51] **Int.Cl. A61M 25/00 (2006.01) A61B 1/00 (2006.01) A61B 1/07 (2006.01) A61M 39/08 (2006.01)**

[25] EN

[54] **TUBING WITH INTEGRATED OPTICAL FIBER, MEDICAL DEVICES, AND METHODS THEREOF**

[54] **TUBULURE AVEC FIBRE OPTIQUE INTEGREE, DISPOSITIFS MEDICAUX ET PROCEDES ASSOCIES**

[72] THOMPSON, CHASE, US  
[71] BARD ACCESS SYSTEMS, INC., US  
[85] 2022-01-07  
[86] 2020-07-10 (PCT/US2020/041692)  
[87] (WO2021/011408)  
[30] US (62/873,794) 2019-07-12

[21] **3,146,657**  
[13] A1

[51] **Int.Cl. A61B 1/00 (2006.01) A61B 5/06 (2006.01) A61M 25/00 (2006.01) G01R 33/02 (2006.01) G01V 3/08 (2006.01)**

[25] EN

[54] **CATHETER TRACKING AND PLACEMENT SYSTEM INCLUDING LIGHT EMITTING DIODE ARRAY**

[54] **SYSTEME DE SUIVI ET DE POSITIONNEMENT DE CATHETER COMPRENANT UN RESEAU DE DIODES ELECTROLUMINESCENTES**

[72] THOMPSON, CHASE, US  
[72] ZHAO, JERRY, US  
[72] KNUDSEN, CLARK, US  
[71] BARD ACCESS SYSTEMS, INC., US  
[85] 2022-01-07  
[86] 2020-07-10 (PCT/US2020/041700)  
[87] (WO2021/011411)  
[30] US (62/873,778) 2019-07-12

[21] **3,146,658**  
[13] A1

[51] **Int.Cl. A63B 71/00 (2006.01) A63B 15/02 (2006.01) A63B 71/06 (2006.01)**

[25] EN

[54] **INTERACTIVE PERSONAL TRAINING SYSTEM**

[54] **SYSTEME D'ENTRAINEMENT PERSONNEL INTERACTIF**

[72] ASIKAINEN, SAMI, CA  
[72] TARKKANEN, RIIKKA, CA  
[72] MONTGOMERY, NATHANAEL, CA  
[71] ELO LABS, INC., US  
[85] 2022-01-07  
[86] 2020-07-13 (PCT/US2020/041860)  
[87] (WO2021/007581)  
[30] US (62/872,766) 2019-07-11

[21] **3,146,660**  
[13] A1

[51] **Int.Cl. A61K 9/08 (2006.01) A61P 1/04 (2006.01) C07D 213/34 (2006.01)**

[25] EN

[54] **EQUINE ESOMEPRAZOLE FORMULATIONS AND METHODS OF USE**

[54] **FORMULATIONS D'ESOMEPRAZOLE POUR EQUIDES ET LEURS PROCEDES D'UTILISATION**

[72] SRIVASTAVA, GEETA, US  
[72] SRIVASTAVA, OM P., US  
[72] SUNDMAN, EMILY, US  
[72] O'BANION, MELINDA POOLE, US  
[71] KINDRED BIOSCIENCES, INC., US  
[85] 2022-01-07  
[86] 2020-07-15 (PCT/US2020/042127)  
[87] (WO2021/011645)  
[30] US (62/874,702) 2019-07-16  
[30] US (63/038,549) 2020-06-12

## PCT Applications Entering the National Phase

[21] **3,146,661**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01) A61K 31/437 (2006.01) A61P 35/00 (2006.01) C07D 401/14 (2006.01) C07D 405/14 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **ALK5 INHIBITORS, CONJUGATES, AND USES THEREOF**

[54] **INHIBITEURS D'ALK5, CONJUGUES ET LEURS UTILISATIONS**

[72] SMITH, SEAN WESLEY, US  
[72] COBURN, CRAIG ALAN, US  
[72] BAUM, PETER ROBERT, US  
[72] DUBOSE, ROBERT FINLEY, US  
[71] SILVERBACK THERAPEUTICS, INC., US

[85] 2022-01-07  
[86] 2020-07-16 (PCT/US2020/042430)  
[87] (WO2021/011834)  
[30] US (62/874,886) 2019-07-16

[21] **3,146,662**  
[13] A1

[51] **Int.Cl. E21B 33/129 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR A FRAC PLUG**

[54] **PROCEDES ET SYSTEMES POUR UN BOUCHON DE FRACTURATION**

[72] SARAYA, MOHAMED, US  
[72] LO, MIKE, US  
[71] VERTICE OIL TOOLS, US

[85] 2022-01-07  
[86] 2020-07-17 (PCT/US2020/042443)  
[87] (WO2021/021464)  
[30] US (16/528,831) 2019-08-01  
[30] US (16/851,563) 2020-04-17

[21] **3,146,663**  
[13] A1

[51] **Int.Cl. A61M 37/00 (2006.01)**

[25] EN

[54] **TECHNOLOGIES FOR NEEDLES WITH MICROCHANNELS**

[54] **TECHNOLOGIES POUR AIGUILLES A MICROCANAU**

[72] SEN, CHANDAN K., US  
[72] XUAN, YI, US  
[71] THE TRUSTEES OF INDIANA UNIVERSITY, US

[85] 2022-01-07  
[86] 2020-07-17 (PCT/US2020/042510)  
[87] (WO2021/016074)  
[30] US (62/877,060) 2019-07-22  
[30] US (62/903,298) 2019-09-20

[21] **3,146,665**  
[13] A1

[51] **Int.Cl. C07K 16/30 (2006.01) A61K 47/68 (2017.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01) G01N 33/53 (2006.01)**

[25] EN

[54] **CLAUDIN18 ANTIBODIES AND METHODS OF TREATING CANCER**

[54] **ANTICORPS DIRIGES CONTRE LA CLAUDINE 18 ET METHODES DE TRAITEMENT DU CANCER**

[72] CONKLIN, DYLAN, US  
[72] PALAZZOLO, MICHAEL J., US  
[72] SLAMON, DENNIS, US  
[72] MCDERMOTT, MARTINA S., US  
[72] O'BRIEN, NEIL A., US  
[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US

[85] 2022-01-07  
[86] 2020-07-17 (PCT/US2020/042573)  
[87] (WO2021/011885)  
[30] US (62/875,416) 2019-07-17

[21] **3,146,670**  
[13] A1

[51] **Int.Cl. C08F 210/16 (2006.01) C08L 23/08 (2006.01) B29C 49/00 (2006.01) C08F 4/6592 (2006.01)**

[25] EN

[54] **BLOW MOLDING POLYMERS WITH IMPROVED CYCLE TIME, PROCESSABILITY, AND SURFACE QUALITY**

[54] **POLYMERES POUR MOULAGE PAR SOUFFLAGE A DUREE DE CYCLE, APTITUDE AU TRAITEMENT ET QUALITE DE SURFACE AMELIOREES**

[72] CRUZ, CARLOS A., US  
[72] INN, YONGWOO, US  
[72] LUMBLEY, JUSTIN, US  
[72] RUTLEDGE-RYAL, BRANDY, US  
[72] RATHMAN, JOHN R., US  
[72] HICKS, JENNIFER L., US  
[72] CHAFFIN, JAY M., US  
[71] CHEVRON PHILLIPS CHEMICAL COMPANY LP, US

[85] 2022-01-07  
[86] 2020-07-20 (PCT/US2020/042711)  
[87] (WO2021/021473)  
[30] US (16/522,788) 2019-07-26

[21] **3,146,675**  
[13] A1

[51] **Int.Cl. A61K 9/51 (2006.01) A61K 31/7088 (2006.01) A61K 48/00 (2006.01)**

[25] EN

[54] **STABLE COMPOSITIONS OF MRNA-LOADED LIPID NANOPARTICLES AND PROCESSES OF MAKING**

[54] **COMPOSITIONS STABLES DE NANOPARTICULES LIPIDIQUES CHARGEES EN ARNM ET LEURS PROCEDES DE FABRICATION**

[72] KARVE, SHRIRANG, US  
[72] DEROSA, FRANK, US  
[72] HEARTLEIN, MICHAEL, US  
[72] MONTOYA, NATALIA VARGAS, US  
[72] PATEL, PRIYAL, US  
[72] SARODE, ASHISH, US  
[71] TRANSLATE BIO, INC., US

[85] 2022-01-07  
[86] 2020-07-23 (PCT/US2020/043223)  
[87] (WO2021/016430)  
[30] US (62/877,597) 2019-07-23

[21] **3,146,679**  
[13] A1

[51] **Int.Cl. A61K 31/7076 (2006.01) A61K 9/00 (2006.01) A61P 27/06 (2006.01)**

[25] EN

[54] **ADENOSINE DERIVATIVE AND PHARMACEUTICAL COMPOSITION COMPRISING THE SAME**

[54] **DERIVE D'ADENOSINE ET COMPOSITION PHARMACEUTIQUE LE COMPRENANT**

[72] XU, LIANHONG, US  
[71] BRII BIOSCIENCES, INC., US

[85] 2022-01-07  
[86] 2020-07-27 (PCT/US2020/043713)  
[87] (WO2021/021717)  
[30] US (62/879,414) 2019-07-27

## Demandes PCT entrant en phase nationale

[21] **3,146,680**  
[13] A1

[51] **Int.Cl. A61L 15/22 (2006.01) A61L 15/32 (2006.01) A61L 15/42 (2006.01) A61L 15/64 (2006.01) A61L 24/00 (2006.01) A61L 24/04 (2006.01) A61L 24/10 (2006.01)**

[25] EN  
[54] **HAEMOSTATIC POWDER**  
[54] **POUDRE HEMOSTATIQUE**  
[72] KEEREWEER, ABRAHAM REINIER, NL  
[72] FELIX LANAO, ROSA PILAR, NL  
[72] OPSTEEN, JOOST, NL  
[72] BENDER, JOHANNES CASPAR MATHIAS ELIZABETH, NL  
[71] GATT TECHNOLOGIES B.V., NL  
[85] 2022-01-10  
[86] 2020-07-09 (PCT/EP2020/069442)  
[87] (WO2021/009014)  
[30] EP (19186028.7) 2019-07-12

[21] **3,146,681**  
[13] A1

[51] **Int.Cl. H01L 27/146 (2006.01) H01L 27/14 (2006.01) H01L 27/144 (2006.01) H01L 31/10 (2006.01)**

[25] EN  
[54] **ULTRAFAST IMAGING SYSTEM WITHOUT ACTIVE PIXEL RESET**  
[54] **SYSTEME D'IMAGERIE ULTRARAPIDE SANS REINITIALISATION DE PIXELS ACTIFS**  
[72] JACOB, ZUBIN, US  
[72] YANG, LIPING, US  
[72] BAUER, LEIF H., US  
[71] PURDUE RESEARCH FOUNDATION, US  
[85] 2022-01-07  
[86] 2020-07-26 (PCT/US2020/043651)  
[87] (WO2021/021690)  
[30] US (62/879,051) 2019-07-26

[21] **3,146,682**  
[13] A1

[51] **Int.Cl. H02J 3/00 (2006.01) H02J 3/14 (2006.01) H02J 3/38 (2006.01)**

[25] EN  
[54] **METHOD AND APPARATUS FOR AUTOMATIC INTERLEAVING OF CYCLED LOADS IN A MICROGRID**  
[54] **PROCEDE ET APPAREIL D'ENTRELACEMENT AUTOMATIQUE DE CHARGES CYCLEES DANS UN MICRO-RESEAU**  
[72] ZIMMANCK, DONALD RICHARD, US  
[72] FORNAGE, MARTIN, US  
[71] ENPHASE ENERGY, INC., US  
[85] 2022-01-07  
[86] 2020-07-29 (PCT/US2020/044083)  
[87] (WO2021/021940)  
[30] US (62/879,919) 2019-07-29

[21] **3,146,684**  
[13] A1

[51] **Int.Cl. F04D 17/10 (2006.01) F04D 29/70 (2006.01) F25J 3/06 (2006.01)**

[25] EN  
[54] **COMPRESSION AND SEPARATION DEVICE AND COMPRESSION PROCESS**  
[54] **APPAREIL DE COMPRESSION ET DE SEPARATION ET PROCEDE DE COMPRESSION**  
[72] LE BOT, PATRICK, FR  
[71] L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, FR  
[85] 2022-01-10  
[86] 2020-07-20 (PCT/FR2020/051310)  
[87] (WO2021/014086)  
[30] FR (FR1908371) 2019-07-24  
[30] FR (FR1911369) 2019-10-14  
[30] FR (FR1913329) 2019-11-27

[21] **3,146,685**  
[13] A1

[51] **Int.Cl. F23D 14/10 (2006.01) A21B 1/28 (2006.01) F23C 5/00 (2006.01) F23D 14/16 (2006.01)**

[25] FR  
[54] **MODULAR BURNER AND FURNACE COMPRISING THIS BURNER**  
[54] **BRULEUR MODULAIRE ET FOUR COMPRENANT CE BRULEUR**  
[72] ROGEMOND, ERIC, FR  
[71] ERATEC, FR  
[85] 2022-01-10  
[86] 2020-07-10 (PCT/FR2020/051250)  
[87] (WO2021/005316)  
[30] FR (FR1907813) 2019-07-11

[21] **3,146,689**  
[13] A1

[51] **Int.Cl. G01C 19/00 (2013.01) G02B 23/12 (2006.01) G02B 27/01 (2006.01) H04N 5/225 (2006.01) H04N 5/232 (2006.01)**

[25] FR  
[54] **DIGITAL NOCTURNAL VISION APPARATUS WITH ADJUSTABLE IMAGE ACQUISITION SPEED**  
[54] **APPAREIL DE VISION NOCTURNE DE TYPE NUMERIQUE AVEC VITESSE D'ACQUISITION D'IMAGE AJUSTABLE**  
[72] DELTEL, GEOFFROY, FR  
[71] PHOTONIS FRANCE, FR  
[85] 2022-01-10  
[86] 2020-07-09 (PCT/FR2020/051230)  
[87] (WO2021/005309)  
[30] FR (FR1907714) 2019-07-10

## PCT Applications Entering the National Phase

[21] **3,146,691**  
[13] A1

[51] **Int.Cl. B63B 3/48 (2006.01) B63B 5/24 (2006.01) C04B 26/16 (2006.01) C08G 18/42 (2006.01)**

[25] EN

[54] **POLYURETHANE COMPOSITION FOR THE MANUFACTURE OF FLOORS, ESPECIALLY FOR MARINE APPLICATIONS**

[54] **COMPOSITION DE POLYURETHANE POUR LA FABRICATION DE SOLS, EN PARTICULIER POUR DES APPLICATIONS MARINES**

[72] RAS, MARCEL, NL  
[72] BORKENT, ROLAND, NL  
[71] SIKA TECHNOLOGY AG, CH  
[85] 2022-01-10  
[86] 2020-08-27 (PCT/EP2020/073993)  
[87] (WO2021/037992)  
[30] EP (19193877.8) 2019-08-27

[21] **3,146,693**  
[13] A1

[51] **Int.Cl. A61K 31/438 (2006.01) A61P 35/00 (2006.01) C07D 221/20 (2006.01) C07D 401/12 (2006.01) C07D 405/12 (2006.01) C07D 409/12 (2006.01) C07D 413/12 (2006.01)**

[25] EN

[54] **KIF18A INHIBITORS**

[54] **INHIBITEURS DE KIF18A**

[72] TAMAYO, NURIA A., US  
[72] BANERJEE, ABHISEK, US  
[72] CHEN, JIAN JEFFREY, US  
[72] BOURBEAU, MATTHEW PAUL, US  
[72] KALLER, MATTHEW RICHARD, US  
[72] LOW, JONATHAN DANTE, US  
[72] MINATTI, ANA ELENA, US  
[72] NGUYEN, THOMAS T., US  
[72] NISHIMURA, NOBUKO, US  
[72] PETTUS, LIPING H., US  
[72] WALTON, MARY CATHERINE, US  
[72] XUE, QIUFEN MAY, US  
[72] ALLEN, JOHN GORDON, US  
[71] AMGEN INC., US  
[85] 2022-01-07  
[86] 2020-08-03 (PCT/US2020/044797)  
[87] (WO2021/026098)  
[30] US (62/882,255) 2019-08-02

[21] **3,146,696**  
[13] A1

[51] **Int.Cl. C10G 9/16 (2006.01) C10G 9/20 (2006.01) F27D 19/00 (2006.01)**

[25] EN

[54] **FORECASTING THE PROGRESS OF COKING AND FOULING FOR IMPROVED PRODUCTION PLANNING IN CHEMICAL PRODUCTION PLANTS**

[54] **PREVISION DE LA PROGRESSION DE LA COKEFACTION ET DE L'ENCRASSEMENT POUR UNE PLANIFICATION DE PRODUCTION AMELIOREE DANS DES USINES DE PRODUCTION DE PRODUITS CHIMIQUES**

[72] SAUER, SIMEON, DE  
[72] KECK, DANIEL, DE  
[72] JENNE, ERIC, DE  
[72] BADINSKI, ALEXANDER, DE  
[72] HAHKALA, MIRIAM ANGELA ANNA, DE  
[72] BLANKERS, BART, BE  
[72] DE WINNE, HENDRIK, BE  
[72] BUCK, BRITTA CAROLIN, DE  
[71] BASF SE, DE  
[85] 2022-01-10  
[86] 2020-07-27 (PCT/EP2020/071140)  
[87] (WO2021/014025)  
[30] EP (19188437.8) 2019-07-25  
[30] EP (19197875.8) 2019-09-17

[21] **3,146,697**  
[13] A1

[51] **Int.Cl. G01J 3/00 (2006.01) G01N 21/33 (2006.01) G01N 33/50 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DETERMINING PROTEIN CONCENTRATIONS OF UNKNOWN PROTEIN SAMPLES BASED ON AUTOMATED MULTI-WAVELENGTH CALIBRATION**

[54] **SYSTEMES ET PROCEDES POUR DETERMINER DES CONCENTRATIONS DE PROTEINES D'ECHANTILLONS DE PROTEINES INCONNUES SUR LA BASE D'UN ETALONNAGE MULTI-LONGUEURS D'ONDE AUTOMATISE**

[72] ZENG, SHANG, US  
[72] XUE, GANG, US  
[71] AMGEN INC., US  
[85] 2022-01-07  
[86] 2020-08-06 (PCT/US2020/045088)  
[87] (WO2021/026284)  
[30] US (62/883,320) 2019-08-06

[21] **3,146,698**  
[13] A1

[51] **Int.Cl. B01D 53/62 (2006.01) C01B 33/22 (2006.01) C01B 33/24 (2006.01) C01F 5/24 (2006.01) C01F 11/18 (2006.01) C04B 7/36 (2006.01) C04B 14/04 (2006.01) C04B 14/28 (2006.01) C04B 20/02 (2006.01) C04B 28/10 (2006.01)**

[25] EN

[54] **PROCESS FOR CONVERTING HYDROCARBONS TO PRODUCTS**

[54] **PROCEDE DE CONVERSION D'HYDROCARBURES EN PRODUITS**

[72] ESSING, GERARDUS CORNELUS OTTO BERNARD, NL  
[72] LACHMAN, VIKASH AVINASH, NL  
[72] KNOPS, PAULUS CAROLUS MARIE, NL  
[71] SCW SYSTEMS B.V., NL  
[85] 2022-01-10  
[86] 2020-07-20 (PCT/EP2020/070487)  
[87] (WO2021/009385)  
[30] EP (19186978.3) 2019-07-18

[21] **3,146,699**  
[13] A1

[51] **Int.Cl. A61F 2/04 (2013.01)**

[25] EN

[54] **SYSTEM AND DEVICE FOR ANCHORING A STENT**

[54] **SYSTEME ET DISPOSITIF D'ANCRAGE D'ENDOPROTHESE**

[72] TUCK, DANIEL, IE  
[72] FOLAN, MARTYN G., IE  
[72] KEATING, THOMAS M., IE  
[72] BURKE, MARTIN, IE  
[71] BOSTON SCIENTIFIC SCIMED, INC., US  
[85] 2022-01-07  
[86] 2020-10-09 (PCT/US2020/055022)  
[87] (WO2021/076419)  
[30] US (62/915,051) 2019-10-15

## Demandes PCT entrant en phase nationale

[21] **3,146,704**  
[13] A1

[51] **Int.Cl. B01J 10/00 (2006.01) B01J 19/24 (2006.01) C07C 2/32 (2006.01) C07C 11/107 (2006.01)**

[25] FR

[54] **OLIGOMERIZATION PROCESS USING A RECYCLE OF GASEOUS HEADSPACE**

[54] **PROCEDE D'OLIGOMERISATION METTANT EN OEUVRE UN RECYCLE DU CIEL GAZEUX**

[72] AUGIER, FREDERIC, FR

[72] VONNER, ALEXANDRE, FR

[72] MAXIMIANO RAIMUNDO, PEDRO, FR

[71] IFP ENERGIES NOUVELLES, FR

[85] 2022-01-10

[86] 2020-07-20 (PCT/EP2020/070438)

[87] (WO2021/018651)

[30] FR (FR1908755) 2019-07-31

[21] **3,146,706**  
[13] A1

[51] **Int.Cl. A61C 5/64 (2017.01) A61J 1/06 (2006.01) A61M 5/24 (2006.01) A61M 5/28 (2006.01) A61M 5/31 (2006.01)**

[25] EN

[54] **CARTRIDGE FOR DISPENSING A MATERIAL**

[54] **CARTOUCHE POUR DISTRIBUTION D'UN MATERIAU**

[72] MARIE, OLIVIER, FR

[72] RICHARD, GILLES, FR

[72] CO, CLEMENCE, FR

[72] ARTAUD, LAURENT, FR

[72] CHABRIER, OLIVIER, FR

[71] SEPTODONT OU SEPTODONT SAS OU SPECIALITES SEPTODONT, FR

[85] 2022-01-10

[86] 2020-07-17 (PCT/EP2020/070358)

[87] (WO2021/013752)

[30] EP (19187180.5) 2019-07-19

[21] **3,146,720**  
[13] A1

[51] **Int.Cl. G01N 21/25 (2006.01)**

[25] EN

[54] **AUTOMATED ON-LINE ACTIVE CLAY ANALYZER IN MINERAL SLURRIES**

[54] **ANALYSEUR AUTOMATISE EN LIGNE D'ARGILE ACTIVE DANS DES BOUES MINERALES**

[72] SUN, RUIJUN, CA

[71] THE SASKATCHEWAN RESEARCH COUNCIL, CA

[85] 2021-08-13

[86] 2020-02-14 (PCT/CA2020/050204)

[87] (WO2020/163971)

[30] US (62/805,483) 2019-02-14

[21] **3,146,737**  
[13] A1

[51] **Int.Cl. A61K 9/22 (2006.01) A61P 25/00 (2006.01) C07D 413/02 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL FORMULATIONS CONTAINING GABOXADOL FOR THERAPEUTIC TREATMENT**

[54] **FORMULATIONS PHARMACEUTIQUES CONTENANT DU GABOXADOL POUR UN TRAITEMENT THERAPEUTIQUE**

[72] DURING, MATTHEW, US

[71] OVID THERAPEUTICS INC., US

[85] 2022-01-07

[86] 2020-07-15 (PCT/US2020/042044)

[87] (WO2021/011597)

[30] US (62/874,152) 2019-07-15

[21] **3,146,738**  
[13] A1

[51] **Int.Cl. C12N 9/16 (2006.01) A61K 35/741 (2015.01) A23L 29/00 (2016.01) C12Q 1/42 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **INTESTINAL ALKALINE PHOSPHATASE-BASED TREATMENTS OF METABOLIC DISORDERS**

[54] **TRAITEMENTS DE TROUBLES METABOLIQUES A BASE DE PHOSPHATASE ALCALINE INTESTINALE**

[72] FURLAN FREGUIA, CHRISTIAN, US

[71] SYNTHETIC BIOLOGICS, INC., US

[85] 2022-01-07

[86] 2020-07-16 (PCT/US2020/042294)

[87] (WO2021/011754)

[30] US (62/875,536) 2019-07-18

[21] **3,146,742**  
[13] A1

[51] **Int.Cl. A42B 3/26 (2006.01) A61F 9/02 (2006.01) B08B 1/00 (2006.01)**

[25] EN

[54] **A FILM ROLL, AND A FILM ADVANCE SYSTEM AND PROTECTIVE GOGGLES COMPRISING SUCH A FILM ROLL**

[54] **ROULEAU DE FILM, SYSTEME D'AVANCE DE FILM ET LUNETTES DE PROTECTION COMPRENANT UN TEL ROULEAU DE FILM**

[72] GUSTAFSSON, ANDRE, SE

[71] VISIEDGE AB, SE

[85] 2022-01-10

[86] 2019-07-10 (PCT/EP2019/068515)

[87] (WO2021/004628)

## PCT Applications Entering the National Phase

[21] **3,146,745**  
[13] A1

[51] **Int.Cl. F03B 13/06 (2006.01)**  
[25] EN  
[54] **METHOD FOR PROVISIONALLY USING AN AT LEAST PARTIALLY CONSTRUCTED LOWER RESERVOIR FOR AN UNDERWATER PUMPED-STORAGE POWER PLANT**  
[54] **PROCEDE POUR L'UTILISATION TEMPORAIRE D'UN RESERVOIR INFERIEUR AU MOINS PARTIELLEMENT CONSTRUIT POUR UNE CENTRALE DE POMPAGE-TURBINAGE IMMERGEE**  
[72] SCHMIDT-BOCKING, HORST, DE  
[72] LUTHER, GERHARD, DE  
[71] SCHMIDT-BOCKING, HORST, DE  
[71] LUTHER, GERHARD, DE  
[85] 2022-01-10  
[86] 2019-12-10 (PCT/EP2019/084491)  
[87] (WO2021/004650)  
[30] DE (10 2019 118 726.5) 2019-07-10

[21] **3,146,769**  
[13] A1

[51] **Int.Cl. B24C 5/04 (2006.01) B05B 12/00 (2018.01) B05B 12/14 (2006.01) B24C 3/12 (2006.01) B24C 3/22 (2006.01) B24C 3/28 (2006.01)**  
[25] EN  
[54] **A DEAD MAN CONTROL ARRANGEMENT**  
[54] **AGENCEMENT A COMMANDE D'HOMME MORT**  
[72] THOMAS, GRAEME, AU  
[72] GOODEN, RICK, AU  
[72] ROWLAND, MATTHEW, AU  
[72] SEEWALD, TREVOR, AU  
[71] BLASTONE TECHNOLOGY PTY LTD, AU  
[85] 2022-01-10  
[86] 2020-07-11 (PCT/AU2020/050720)  
[87] (WO2021/007613)  
[30] AU (2019902480) 2019-07-12

[21] **3,146,770**  
[13] A1

[51] **Int.Cl. C12N 7/00 (2006.01) A61K 9/10 (2006.01) A61K 35/76 (2015.01) A61P 17/02 (2006.01) A61P 31/04 (2006.01) C12Q 1/70 (2006.01)**  
[25] EN  
[54] **BACTERIOPHAGE HYDROGEL COMPOSITIONS AND USES THEREOF**  
[54] **COMPOSITIONS D'HYDROGEL AVEC BACTERIOPHAGES ET LEURS UTILISATIONS**  
[72] HOSSEINIDOUST, ZEINAB, CA  
[71] MCMASTER UNIVERSITY, CA  
[85] 2022-01-10  
[86] 2020-07-13 (PCT/CA2020/050975)  
[87] (WO2021/003582)  
[30] US (62/872,904) 2019-07-11

[21] **3,146,771**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 48/00 (2006.01) C12N 15/00 (2006.01) C12N 15/09 (2006.01)**  
[25] EN  
[54] **TARGETED RNA EDITING BY LEVERAGING ENDOGENOUS ADAR USING ENGINEERED RNAS**  
[54] **EDITION CIBLEE D'ARN PAR EXPLOITATION D'ADAR ENDOGENE A L'AIDE D'ARN MODIFIES**  
[72] WEI, WENSHENG, CN  
[72] YI, ZONGYI, CN  
[72] QU, LIANG, CN  
[72] TIAN, FENG, CN  
[72] WANG, CHUNHUI, CN  
[72] ZHU, SHIYOU, CN  
[72] ZHOU, ZHUO, CN  
[71] PEKING UNIVERSITY, CN  
[85] 2022-01-10  
[86] 2020-07-10 (PCT/CN2020/101246)  
[87] (WO2021/008447)  
[30] CN (PCT/CN2019/095802) 2019-07-12

[21] **3,146,772**  
[13] A1

[51] **Int.Cl. G01K 17/10 (2006.01) H04W 4/33 (2018.01) H04W 4/38 (2018.01) G01K 17/08 (2006.01)**  
[25] EN  
[54] **ENERGY METER APPARATUS**  
[54] **APPAREIL COMPTEUR D'ENERGIE**  
[72] BENNETT, CURTIS, CA  
[72] HERMANN, TOM, CA  
[71] HBX CONTROL SYSTEMS INC., CA  
[85] 2022-01-10  
[86] 2020-07-10 (PCT/CA2020/050958)  
[87] (WO2021/003579)  
[30] US (62/872,614) 2019-07-10

[21] **3,146,773**  
[13] A1

[51] **Int.Cl. H04N 19/17 (2014.01) H04N 19/117 (2014.01) H04N 19/82 (2014.01)**  
[25] EN  
[54] **SAMPLE PADDING IN ADAPTIVE LOOP FILTERING**  
[54] **REMPLISSAGE D'ECHANTILLON DANS UN FILTRAGE DE BOUCLE ADAPTATIF**  
[72] ZHANG, LI, US  
[72] ZHANG, KAI, US  
[72] LIU, HONGBIN, CN  
[72] WANG, YUE, CN  
[71] BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD., CN  
[71] BYTEDANCE INC., US  
[85] 2022-01-10  
[86] 2020-07-13 (PCT/CN2020/101589)  
[87] (WO2021/004542)  
[30] CN (PCT/CN2019/095657) 2019-07-11

[21] **3,146,774**  
[13] A1

[51] **Int.Cl. G06N 10/00 (2022.01) B82Y 20/00 (2011.01) G02B 1/00 (2006.01) G06E 3/00 (2006.01)**  
[25] EN  
[54] **RYDBERG EXCITON QUANTUM SIMULATOR**  
[54] **SIMULATEUR QUANTIQUE D'EXCITONS DE RYDBERG**  
[72] HESHAMI, KHABAT, CA  
[72] TAYLOR, JACOB, CA  
[71] NATIONAL RESEARCH COUNCIL OF CANADA, CA  
[85] 2022-01-10  
[86] 2020-07-10 (PCT/CA2020/050960)  
[87] (WO2021/003580)  
[30] US (62/872,959) 2019-07-11

## Demandes PCT entrant en phase nationale

[21] **3,146,775**  
[13] A1

[51] **Int.Cl. B01D 1/12 (2006.01) B01D 1/14 (2006.01) B01D 5/00 (2006.01)**

[25] EN

[54] **A SYSTEM FOR INCREASING THE CONCENTRATION OF SULFURIC ACID COMPRISING AN AIR LIFT PUMP**

[54] **SYSTEME POUR AUGMENTER LA CONCENTRATION D'ACIDE SULFURIQUE COMPRENANT UNE POMPE A EMULSION**

[72] MOLLERHOJ, MARTIN, DK  
[72] THELLEFSEN, MORTEN, DK  
[71] HALDOR TOPSOE A/S, DK  
[85] 2022-01-10  
[86] 2020-07-10 (PCT/EP2020/069595)  
[87] (WO2021/009061)  
[30] DK (PA 2019 00867) 2019-07-12

[21] **3,146,776**  
[13] A1

[51] **Int.Cl. C02F 3/10 (2006.01) C02F 3/00 (2006.01)**

[25] EN

[54] **SOLID BACTERIAL GROWTH SUPPORT FOR WASTEWATER TREATMENT, METHODS AND USES THEREOF**

[54] **SUPPORT DE CROISSANCE BACTERIENNE SOLIDE POUR TRAITEMENT D'EAUX USEES, PROCEDES ET UTILISATIONS DE CELUI-CI**

[72] LABRECQUE, MARISOL, CA  
[71] TECHNOLOGIES ECOFIXE INC., CA  
[85] 2022-01-10  
[86] 2020-07-13 (PCT/CA2020/050972)  
[87] (WO2021/007664)  
[30] US (62/873,853) 2019-07-13

[21] **3,146,777**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) C07K 16/18 (2006.01) C12N 5/20 (2006.01) C12N 15/13 (2006.01) G01N 33/574 (2006.01) G01N 33/577 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **ANTI-PD-1 ANTIBODY AND PHARMACEUTICAL USE THEREOF**

[54] **ANTICORPS ANTI-PD-1 ET UTILISATION MEDICALE ASSOCIEE**

[72] WANG, ZHONGMIN, CN  
[72] ZHANG, PENG, CN  
[72] LI, BAIYONG, CN  
[72] XIA, YU, CN  
[71] CTTQ-AKESO (SHANGHAI) BIOMED. TECH. CO., LTD., CN

[85] 2022-01-10  
[86] 2020-07-31 (PCT/CN2020/106219)  
[87] (WO2021/023108)  
[30] CN (201910711138.5) 2019-08-02  
[30] CN (201911105711.4) 2019-11-13  
[30] CN (201911105715.2) 2019-11-13  
[30] CN (201911133858.4) 2019-11-19

[21] **3,146,778**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2012.01) G06Q 50/02 (2012.01) B64C 39/02 (2006.01)**

[25] EN

[54] **METHOD FOR DETERMINING AND PROVIDING AN APPLICATION SCHEME FOR PESTICIDES**

[54] **PROCEDE DE DETERMINATION ET DE FOURNITURE D'UN SCHEMA D'APPLICATION POUR DES PESTICIDES**

[72] HOFFMANN, HOLGER, DE  
[72] PASOLIUS WEXEL, WAGNER, DE  
[72] ILBASI, UMIT BARAN, BR  
[72] KIEPE, BJOERN, DE  
[72] ZANI, HIRAN, BR  
[72] DE EUSTAQUIO RESENDE, FABRISIO, BR  
[72] LOPES AGNESE, MAURICIO, DE  
[72] BALDASSIN, SAMYRA, BR  
[72] SALVADOR, ANDRE, BR  
[71] BASF AGRO TRADEMARKS GMBH, DE

[85] 2022-01-10  
[86] 2020-07-13 (PCT/EP2020/069785)  
[87] (WO2021/009135)  
[30] EP (19186344.8) 2019-07-15

[21] **3,146,779**  
[13] A1

[51] **Int.Cl. F25C 5/18 (2018.01) A63C 19/10 (2006.01) E01H 4/02 (2006.01) E04B 1/343 (2006.01) E04H 1/12 (2006.01) F25C 3/04 (2006.01)**

[25] EN

[54] **METHOD AND EQUIPMENT FOR PROVIDING A SNOW STORAGE WITH HEAT INSULATION**

[54] **PROCEDE ET EQUIPEMENT POUR FOURNIR UN STOCKAGE DE NEIGE AVEC ISOLATION THERMIQUE**

[72] MARTIKAINEN, MIKKO, FI  
[71] SNOW SECURE OY, FI  
[85] 2022-01-10  
[86] 2019-07-10 (PCT/FI2019/050541)  
[87] (WO2021/005261)

[21] **3,146,780**  
[13] A1

[51] **Int.Cl. C07K 16/46 (2006.01) A61K 39/395 (2006.01) A61P 7/06 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) C07K 16/28 (2006.01) C12N 15/13 (2006.01) C12N 15/62 (2006.01) C12N 15/63 (2006.01) G01N 33/577 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **ANTI-CTLA4/ANTI-PD-1 BISPECIFIC ANTIBODY AND USE THEREOF**

[54] **ANTICORPS ANTI-CTLA4-ANTI-PD-1 BISPECIFIQUE ET SES UTILISATIONS**

[72] XIA, YU, CN  
[72] WANG, ZHONGMIN, CN  
[72] ZHANG, PENG, CN  
[72] LI, BAIYONG, CN  
[71] AKESO PHARMACEUTICALS, INC., CN

[85] 2022-01-10  
[86] 2020-07-31 (PCT/CN2020/106309)  
[87] (WO2021/023117)  
[30] CN (201910711122.4) 2019-08-02  
[30] CN (201911224135.5) 2019-12-02

## PCT Applications Entering the National Phase

[21] **3,146,782**  
[13] A1

[51] **Int.Cl. B63B 35/66 (2006.01) B63B 21/04 (2006.01) B63B 21/08 (2006.01) B63B 27/08 (2006.01) B63B 27/30 (2006.01) B66D 1/60 (2006.01)**

[25] EN

[54] **A METHOD AND DEVICE FOR HANDLING A MOORING LINE**

[54] **PROCEDE ET DISPOSITIF DE MANIPULATION DE LIGNE D'AMARRAGE**

[72] GRUNDTVIG, ESBEN, DK

[72] BANGSLUND, THOMAS, DK

[71] SVITZER A/S, DK

[85] 2022-01-10

[86] 2020-07-15 (PCT/EP2020/070008)

[87] (WO2021/009233)

[30] DK (PA201900878) 2019-07-15

[21] **3,146,783**  
[13] A1

[51] **Int.Cl. A61N 1/04 (2006.01) A61N 1/05 (2006.01) A61N 1/36 (2006.01)**

[25] EN

[54] **MEDICAL DEVICE**

[54] **DISPOSITIF MEDICAL**

[72] PROCTOR, CHRISTOPHER, GB

[72] BARONE, DAMIANO GIUSEPPE, GB

[72] CURTO, VINCENZO, GB

[72] WOODINGTON, BEN, GB

[72] MALLIARAS, GEORGE, GB

[71] CAMBRIDGE ENTERPRISE LIMITED, GB

[85] 2022-01-10

[86] 2020-07-13 (PCT/GB2020/051684)

[87] (WO2021/005382)

[30] GB (1909984.5) 2019-07-11

[21] **3,146,784**  
[13] A1

[51] **Int.Cl. A24F 40/30 (2020.01) A24F 47/00 (2020.01) A61M 11/00 (2006.01)**

[25] EN

[54] **VAPING DEVICE FOR DYNAMIC AEROSOL FORMULATION**

[54] **DISPOSITIF DE VAPOTAGE POUR FORMULATION D'AEROSOL DYNAMIQUE**

[72] JUSTER, BERNARD GABRIEL, IL

[71] JUSTER, BERNARD GABRIEL, IL

[85] 2022-01-10

[86] 2020-07-12 (PCT/IL2020/050779)

[87] (WO2021/005611)

[30] US (62/872,720) 2019-07-11

[21] **3,146,785**  
[13] A1

[51] **Int.Cl. A61K 31/519 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **AMORPHOUS UMBRALISIB MONOTOSYLATE**

[54] **MONOTOSYLATE D'UMBRALISIB AMORPHE**

[72] YAO, NA, US

[71] JOHNSON MATTHEY PUBLIC LIMITED COMPANY, GB

[85] 2022-01-10

[86] 2020-07-15 (PCT/GB2020/051701)

[87] (WO2021/009509)

[30] US (62/874,207) 2019-07-15

[21] **3,146,787**  
[13] A1

[51] **Int.Cl. B29C 65/06 (2006.01) B29D 23/00 (2006.01)**

[25] EN

[54] **METHOD FOR MANUFACTURING WELDED MOLDING, WELDED MOLDING, AND PIPE**

[54] **PROCEDE DE FABRICATION D'UN MOULAGE SOUDE, MOULAGE SOUDE ET TUYAU**

[72] SAKAI, TAIGA, JP

[71] SUMITOMO CHEMICAL COMPANY, LIMITED, JP

[85] 2022-01-10

[86] 2020-07-16 (PCT/JP2020/027669)

[87] (WO2021/010436)

[30] JP (2019-131629) 2019-07-17

[21] **3,146,788**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01)**

[25] EN

[54] **PROCESS FOR THE PREPARATION OF RIDINILAZOLE AND CRYSTALLINE FORMS THEREOF**

[54] **PROCEDE DE PREPARATION DE RIDINILAZOLE ET DE FORMES CRISTALLINES DE CELUI-CI**

[72] WILSON, FRANCIS XAVIER, GB

[72] ADAMS, NIGEL, GB

[72] CARNIAUX, JEAN-FRANCOIS, GB

[71] SUMMIT (OXFORD) LIMITED, GB

[85] 2022-01-10

[86] 2020-07-16 (PCT/GB2020/051710)

[87] (WO2021/009514)

[30] GB (1910250.8) 2019-07-17

[30] GB (1912144.1) 2019-08-23

[21] **3,146,789**  
[13] A1

[51] **Int.Cl. A61K 31/437 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) A61P 35/04 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **POLYMORPH OF VENETOCLAX AND METHOD FOR PREPARING THE POLYMORPH**

[54] **POLYMORPHE DE VENETOCLAX ET SON PROCEDE DE PREPARATION**

[72] BUIST, AMANDA, GB

[72] EBERLIN, ALEX, GB

[71] JOHNSON MATTHEY PUBLIC LIMITED COMPANY, GB

[85] 2022-01-10

[86] 2020-08-12 (PCT/GB2020/051913)

[87] (WO2021/028678)

[30] GB (1911627.6) 2019-08-14

[21] **3,146,790**  
[13] A1

[51] **Int.Cl. C07B 35/02 (2006.01) C07D 471/08 (2006.01)**

[25] EN

[54] **METHOD FOR PRODUCING MORPHINAN DERIVATIVE**

[54] **PROCEDE DE PRODUCTION D'UN DERIVE DE MORPHINANE**

[72] SAITO, DAISUKE, JP

[72] HAYASHIDA, KOHEI, JP

[71] NIPPON CHEMIPHAR CO., LTD., JP

[85] 2022-01-10

[86] 2020-07-17 (PCT/JP2020/027767)

[87] (WO2021/015108)

[30] JP (2019-134051) 2019-07-19

## Demandes PCT entrant en phase nationale

[21] **3,146,792**  
[13] A1

[51] **Int.Cl. A61K 31/198 (2006.01) A61K 31/407 (2006.01) A61K 31/4745 (2006.01) A61K 31/519 (2006.01) A61K 31/555 (2006.01) A61K 31/7048 (2006.01) A61K 31/706 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01) A61P 35/04 (2006.01)**

[25] EN  
[54] **COMBINATION THERAPY FOR CANCER TREATMENT**  
[54] **POLYTHERAPIE POUR LE TRAITEMENT DU CANCER**

[72] OHASHI, AKIHIRO, JP  
[72] IWAI, KENICHI, JP  
[72] NAMBU, TADAHIRO, JP  
[72] YU, JIE, US  
[72] ENG, KURT, US  
[72] KURANDA, MICHAEL JOSEPH, US  
[72] NISHIMURA, KAZUHO, JP  
[72] LI, CONG, US  
[71] TAKEDA PHARMACEUTICAL COMPANY LIMITED, JP

[85] 2022-01-10  
[86] 2020-07-17 (PCT/JP2020/028773)  
[87] (WO2021/015294)  
[30] US (62/876,167) 2019-07-19

[21] **3,146,793**  
[13] A1

[51] **Int.Cl. C10G 9/36 (2006.01) C10G 45/44 (2006.01) C10G 69/06 (2006.01)**

[25] EN  
[54] **SYSTEM AND METHOD FOR PRODUCING UN-HYDROGENATED AND HYDROGENATED C9+ COMPOUNDS**  
[54] **SYSTEME ET PROCEDE DE PRODUCTION DE COMPOSES EN C9+ NON HYDROGENES ET HYDROGENES**

[72] KHURRAM, SHEHZADA, SA  
[72] UEHARA, ERNESTO, SA  
[71] SABIC GLOBAL TECHNOLOGIES B.V., NL

[85] 2022-01-10  
[86] 2020-07-13 (PCT/IB2020/056588)  
[87] (WO2021/009666)  
[30] US (62/874,401) 2019-07-15

[21] **3,146,795**  
[13] A1

[51] **Int.Cl. G05D 1/02 (2020.01) B65G 1/00 (2006.01)**

[25] EN  
[54] **A METHOD AND SYSTEM FOR AUTONOMOUS CONTROLLING OF MOVEMENTS OF CONTAINER HANDLING VEHICLES OPERATING IN AN AUTOMATED STORAGE AND RETRIEVAL SYSTEM**  
[54] **PROCEDE ET SYSTEME DE COMMANDE AUTONOME DE MOUVEMENTS DE VEHICULES DE MANIPULATION DE CONTENEURS QUI FONCTIONNENT DANS UN SYSTEME AUTOMATISE DE STOCKAGE ET DE RECUPERATION**

[72] FAGERLAND, INGVAR, NO  
[71] AUTOSTORE TECHNOLOGY AS, NO

[85] 2022-01-10  
[86] 2020-05-29 (PCT/EP2020/064940)  
[87] (WO2021/008766)  
[30] NO (20190884) 2019-07-12

[21] **3,146,796**  
[13] A1

[25] EN  
[54] **CARDIAC CHAMBER PROSTHESIS AND RELATED CARDIAC ASSISTANCE SYSTEM**  
[54] **PROTHESE DE CHAMBRE CARDIAQUE ET SYSTEME D'ASSISTANCE CARDIAQUE ASSOCIE**

[72] ROMANO, SALVATORE, IT  
[71] ROMANO, SALVATORE, IT

[85] 2022-01-10  
[86] 2020-07-13 (PCT/IB2020/056544)  
[87] (WO2021/009651)  
[30] IT (102019000011640) 2019-07-12

[21] **3,146,798**  
[13] A1

[51] **Int.Cl. C07K 19/00 (2006.01) A61K 47/64 (2017.01) C07K 14/21 (2006.01) C07K 14/52 (2006.01)**

[25] EN  
[54] **FUSION TOXIN PROTEINS FOR TREATMENT OF DISEASES RELATED TO CMV INFECTIONS**  
[54] **PROTEINES DE TOXINES DE FUSION POUR LE TRAITEMENT DE MALADIES ASSOCIEES A DES INFECTIONS PAR LE CMV**

[72] KLEDAL, THOMAS NITSCHKE, DK  
[72] ROSENKILDE, METTE MARIE, DK  
[71] KOBENHAVNS UNIVERSITET, DK  
[71] DANMARKS TEKNISKE UNIVERSITET, DK

[85] 2022-01-10  
[86] 2020-06-25 (PCT/EP2020/067785)  
[87] (WO2021/008840)  
[30] EP (19186000.6) 2019-07-12

[21] **3,146,799**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01) A61K 39/00 (2006.01) A61P 35/00 (2006.01) C07K 14/54 (2006.01) C07K 16/28 (2006.01) C12N 7/01 (2006.01) C12N 15/13 (2006.01) C12N 15/24 (2006.01)**

[25] EN  
[54] **TUMOR IMMUNOTHERAPY USING SINDBIS VIRAL VECTORS AND AGONIST MONOCLONAL ANTIBODIES**  
[54] **IMMUNOTHERAPIE ANTITUMORALE UTILISANT DES VECTEURS VIRAUX SINDBIS ET DES ANTICORPS MONOCLONAUX AGONISTES**

[72] MERUELO, DANIEL, US  
[72] SCHERWITZL, IRIS, US  
[72] OPP, SILVANA, US  
[72] YU, MINJUN, US  
[72] HURTADO-MARTINEZ, ALICIA, US  
[72] PAMPENO, CHRISTINE, US  
[71] NEW YORK UNIVERSITY, US

[85] 2022-01-10  
[86] 2020-07-08 (PCT/US2020/041116)  
[87] (WO2021/007276)  
[30] US (62/871,675) 2019-07-08

## PCT Applications Entering the National Phase

[21] **3,146,801**  
[13] A1

[51] **Int.Cl. C08G 18/22 (2006.01) C08G 18/40 (2006.01) C08G 18/42 (2006.01) C08G 18/48 (2006.01) C08G 18/67 (2006.01) C08G 18/75 (2006.01) C08G 18/76 (2006.01) C08L 75/16 (2006.01) C09J 175/16 (2006.01)**

[25] EN

[54] **(METH)ACRYLATE-FUNCTIONALIZED OLIGOMERS AND METHODS OF PREPARING AND USING SUCH OLIGOMERS**

[54] **OLIGOMERES FONCTIONNALISES PAR METHACRYLATE ET PROCEDES DE PREPARATION ET D'UTILISATION DE TELS OLIGOMERES**

[72] SCHOLTE, JON, US  
[72] MCGRAIL, BRENDAN, US  
[71] ARKEMA FRANCE, FR  
[85] 2022-01-10  
[86] 2020-07-16 (PCT/IB2020/000621)  
[87] (WO2021/009565)  
[30] US (62/875,014) 2019-07-17

[21] **3,146,802**  
[13] A1

[51] **Int.Cl. H01M 4/13 (2010.01) H01M 4/131 (2010.01) H01M 4/133 (2010.01) H01M 4/134 (2010.01) H01M 4/136 (2010.01) H01M 4/139 (2010.01) H01M 4/1391 (2010.01) H01M 4/1393 (2010.01) H01M 4/1395 (2010.01) H01M 4/1397 (2010.01) H01M 4/587 (2010.01) H01M 10/052 (2010.01) H01M 10/0525 (2010.01) C01B 32/00 (2017.01) C01B 21/00 (2006.01) C01B 35/00 (2006.01) H01M 4/04 (2006.01) H01M 4/38 (2006.01) H01M 4/48 (2010.01) H01M 4/58 (2010.01) H01M 4/62 (2006.01)**

[25] EN

[54] **METHODS FOR THE PRODUCTION OF NANOCOMPOSITES FOR HIGH TEMPERATURE ELECTROCHEMICAL ENERGY STORAGE DEVICES**

[54] **PROCEDES DE PRODUCTION DE NANOCOMPOSITES POUR DISPOSITIFS DE STOCKAGE D'ENERGIE ELECTROCHIMIQUE A HAUTE TEMPERATURE**

[72] ARSALAN, MUHAMMAD, SA  
[72] ALSHARAHEH, EDREESE, SA  
[72] MUSSA, YASMIN, SA  
[71] SAUDI ARABIAN OIL COMPANY, SA  
[85] 2022-01-10  
[86] 2020-07-08 (PCT/IB2020/056431)  
[87] (WO2021/005535)  
[30] US (62/871,785) 2019-07-09

[21] **3,146,803**  
[13] A1

[51] **Int.Cl. G09B 9/08 (2006.01) G09B 9/16 (2006.01) G09B 19/00 (2006.01)**

[25] EN

[54] **DEVICE AND METHOD FOR ANALYSING THE BEHAVIOUR OF A SUBJECT**

[54] **DISPOSITIF ET PROCEDE D'ANALYSE DU COMPORTEMENT D'UN SUJET**

[72] COUVET, SERGE, FR  
[72] PEYRONNET, PASCAL, FR  
[72] MICHAL, QUENTIN, FR  
[72] GUILLOU, PIERRE-EMMANUEL, FR  
[71] THALES, FR  
[85] 2022-01-10  
[86] 2020-06-25 (PCT/EP2020/067794)  
[87] (WO2021/004799)  
[30] FR (FR1907793) 2019-07-11

[21] **3,146,805**  
[13] A1

[51] **Int.Cl. E21B 34/14 (2006.01) E21B 34/00 (2006.01) F16K 5/06 (2006.01) F16K 5/20 (2006.01)**

[25] EN

[54] **DOUBLE ACTING BOOST ARRANGEMENT**

[54] **AGENCEMENT DE SURALIMENTATION A DOUBLE EFFET**

[72] REID, MICHAEL ADAM, GB  
[71] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2022-01-10  
[86] 2019-09-17 (PCT/US2019/051408)  
[87] (WO2021/054939)

[21] **3,146,807**  
[13] A1

[51] **Int.Cl. H01R 4/66 (2006.01)**

[25] EN

[54] **INTEGRATED NEEDLE-SHAPED GROUND PLATE, METHOD FOR MANUFACTURING SAME AND GROUND UNIT CONSTRUCTION METHOD USING SAME**

[54] **PLAQUE DE MISE A LA TERRE INTEGREE EN FORME D'AIGUILLE, PROCEDE DE FABRICATION ET PROCEDE DE CONSTRUCTION D'UNITE DE MISE A LA TERRE LA METTANT EN ŒUVRE**

[72] KIM, MOON SIK, KR  
[71] KIM, MOON SIK, KR  
[85] 2022-01-10  
[86] 2020-07-01 (PCT/KR2020/008554)  
[87] (WO2021/006530)  
[30] KR (10-2019-0083881) 2019-07-11

## Demandes PCT entrant en phase nationale

[21] <b>3,146,808</b> [13] A1	[21] <b>3,146,812</b> [13] A1	[21] <b>3,146,817</b> [13] A1
<p>[51] <b>Int.Cl. H01M 4/139 (2010.01) H01M 4/1397 (2010.01) H01M 10/052 (2010.01) H01G 11/00 (2013.01) C01B 13/14 (2006.01) C01B 17/00 (2006.01) C01B 25/00 (2006.01) H01M 4/04 (2006.01) H01M 4/36 (2006.01) H01M 4/38 (2006.01) H01M 4/52 (2010.01) H01M 4/58 (2010.01) H01M 4/62 (2006.01) H01M 4/02 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>METHODS FOR THE PRODUCTION OF NANOCOMPOSITES FOR HIGH TEMPERATURE ELECTROCHEMICAL ENERGY STORAGE DEVICES</b></p> <p>[54] <b>PROCEDES DE PRODUCTION DE NANOCOMPOSITES POUR DISPOSITIFS DE STOCKAGE D'ENERGIE ELECTROCHIMIQUE A HAUTE TEMPERATURE</b></p> <p>[72] ARSALAN, MUHAMMAD, SA [72] ALSHARAEH, EDREESE, SA [72] ALTHUBAITI, NADA, SA [72] BAYHAN, ZAHRA, SA [72] MUSSA, YASMIN, SA [71] SAUDI ARABIAN OIL COMPANY, SA</p> <p>[85] 2022-01-10 [86] 2020-07-08 (PCT/IB2020/056436) [87] (WO2021/005538) [30] US (62/871,785) 2019-07-09</p>	<p>[51] <b>Int.Cl. A61N 5/10 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>STRONTIUM SEALED SOURCE</b></p> <p>[54] <b>SOURCE SCHELLEE AU STRONTIUM</b></p> <p>[72] SHILTON, MARK G., US [72] VOSE, MARK W., US [72] BOURN, JASON W., US [71] QSA GLOBAL, INC., US</p> <p>[85] 2022-01-10 [86] 2020-06-26 (PCT/US2020/039845) [87] (WO2021/011175) [30] US (16/513,032) 2019-07-16</p>	<p>[51] <b>Int.Cl. C22B 15/00 (2006.01) C22B 23/00 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>METHOD FOR PROCESSING COPPER-NICKEL SULFIDE MATERIALS</b></p> <p>[54] <b>PROCEDE DE RETRAITEMENT DE MATERIAUX SULFURES A BASE DE CUIVRE ET DE NICKEL</b></p> <p>[72] ZATITSKY, BORIS EDUARDOVICH, RU [72] DUBROVSKY, VADIM LVOVICH, RU [72] KHOMCHENKO, OLEG ALEKSANDROVICH, RU</p> <p>[71] JOINT STOCK COMPANY "KOLA GMK", RU</p> <p>[85] 2022-01-10 [86] 2020-07-08 (PCT/RU2020/050152) [87] (WO2021/006772) [30] RU (2019121796) 2019-07-11</p>
[21] <b>3,146,810</b> [13] A1	[21] <b>3,146,815</b> [13] A1	[21] <b>3,146,819</b> [13] A1
<p>[51] <b>Int.Cl. B03C 1/28 (2006.01) B01D 35/06 (2006.01) B03C 1/033 (2006.01) E21B 21/06 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>DEVICE FOR CAPTURING AND REMOVING MAGNETIC MATERIAL FROM A FLOW OF MATERIAL</b></p> <p>[54] <b>DISPOSITIF POUR CAPTURER ET RETIRER UN MATERIAU MAGNETIQUE DANS UN ECOULEMENT DE MATERIAU</b></p> <p>[72] ANESBUG, GEIR OLAV, NO [72] PALLIN, JAN EGIL, NO [71] JAGTECH AS, NO</p> <p>[85] 2022-01-10 [86] 2020-07-10 (PCT/NO2020/050194) [87] (WO2021/010840) [30] NO (20190879) 2019-07-12</p>	<p>[51] <b>Int.Cl. G06F 9/38 (2018.01) G06F 9/50 (2006.01) G06F 9/52 (2006.01) G06F 11/36 (2006.01) G06F 15/78 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>QUIESCE RECONFIGURABLE DATA PROCESSOR</b></p> <p>[54] <b>PROCESSEUR DE DONNEES RECONFIGURABLE DE MISE AU REPOS</b></p> <p>[72] PRABHAKAR, RAGHU, US [72] SHAH, MANISH K., US [72] NATARAJA, PRAMOD, US [72] JACKSON, DAVID BRIAN, US [72] LEUNG, KIN HING, US [72] SIVARAMAKRISHNAN, RAM, US [72] JAIRATH, SUMTI, US [72] GROHOSKI, GREGORY FREDERICK, US</p> <p>[71] SAMBANOVA SYSTEMS, INC., US</p> <p>[85] 2022-01-10 [86] 2020-07-03 (PCT/US2020/040832) [87] (WO2021/007131) [30] US (16/504,627) 2019-07-08</p>	<p>[51] <b>Int.Cl. E21B 47/26 (2012.01) E21B 43/30 (2006.01) E21B 47/024 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>ANTI-COLLISION WELL TRAJECTORY DESIGN</b></p> <p>[54] <b>CONCEPTION DE TRAJECTOIRE DE Puits ANTI-COLLISION</b></p> <p>[72] CHEN, XIN, CN [72] LIU, QING, CN [72] JIANG, LU, CN [72] SHENG, XIAOWEI, CN [72] BOLCHOVER, PAUL, CN</p> <p>[71] SCHLUMBERGER CANADA LIMITED, CA</p> <p>[85] 2022-01-10 [86] 2020-07-07 (PCT/US2020/040969) [87] (WO2021/007194) [30] US (62/871,759) 2019-07-09</p>

## PCT Applications Entering the National Phase

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[21] **3,146,822**  
[13] A1

[51] **Int.Cl. F41B 3/02 (2006.01) F41B 5/10 (2006.01) F41B 5/12 (2006.01)**

[25] EN

[54] **COMPOUND PROJECTILE LAUNCHER**

[54] **LANCEUR DE PROJECTILE COMPOSITE**

[72] TRPKOVSKI, PAUL, US

[71] RAVIN CROSSBOWS, LLC, US

[85] 2022-01-10

[86] 2020-07-10 (PCT/US2020/041690)

[87] (WO2021/034422)

[30] US (62/872,324) 2019-07-10

[30] US (62/902,310) 2019-09-18

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[21] **3,146,827**  
[13] A1

[51] **Int.Cl. H01J 37/26 (2006.01) G01N 23/04 (2018.01) G02B 21/00 (2006.01) G02B 21/36 (2006.01) H01J 3/26 (2006.01) H01J 37/147 (2006.01)**

[25] EN

[54] **HIGH FRAMERATE AND HIGH DYNAMIC RANGE ELECTRON MICROSCOPY**

[54] **MICROSCOPIE ELECTRONIQUE A HAUTE FREQUENCE D'IMAGES ET A PLAGES DYNAMIQUE ELEVEE**

[72] BLOOM, RUTH, US

[72] PARK, SANG TAE, US

[72] REED, BRYAN, US

[72] MASIEL, DANIEL, US

[71] INTEGRATED DYNAMIC ELECTRON SOLUTIONS, INC., US

[85] 2022-01-10

[86] 2020-07-08 (PCT/US2020/041266)

[87] (WO2021/007360)

[30] US (62/872,645) 2019-07-10

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[21] **3,146,830**  
[13] A1

[51] **Int.Cl. A61K 31/5377 (2006.01) A61P 25/00 (2006.01) C07D 413/12 (2006.01)**

[25] EN

[54] **PROCESS FOR THE PREPARATION OF SUBSTITUTED PYRAZOLE DERIVATIVES**

[54] **PROCEDE DE PREPARATION DE DERIVES PYRAZOLES**

[72] SPURR, PAUL, CH

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

[85] 2022-01-10

[86] 2020-07-09 (PCT/EP2020/069317)

[87] (WO2021/005137)

[30] EP (19185640.0) 2019-07-11

[30] EP (19194896.7) 2019-09-02

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[21] **3,146,831**  
[13] A1

[51] **Int.Cl. B01D 15/16 (2006.01) B01D 15/36 (2006.01) B01D 15/42 (2006.01) C12N 7/02 (2006.01)**

[25] EN

[54] **SEPARATION AND QUANTIFICATION OF EMPTY AND FULL VIRAL CAPSID PARTICLES**

[54] **SEPARATION ET QUANTIFICATION DE PARTICULES DE CAPSIDE VIRALE VIDES ET COMPLETEES**

[72] KHATWANI, SANTOSHKUMAR, US

[72] PIROT, ZHU, US

[71] SANGAMO THERAPEUTICS, INC., US

[85] 2022-01-10

[86] 2020-07-12 (PCT/US2020/041741)

[87] (WO2021/011436)

[30] US (62/873,619) 2019-07-12

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[21] **3,146,832**  
[13] A1

[51] **Int.Cl. B60C 9/20 (2006.01) B60C 11/00 (2006.01) B60C 11/03 (2006.01)**

[25] EN

[54] **TIRE ENHANCEMENT PRODUCT, PACKAGE, AND METHOD**

[54] **PRODUIT D'AMELIORATION DE PNEU, EMBALLAGE ET PROCEDE**

[72] JONES, MATTHEW, US

[72] KELLY, RYAN, US

[71] GRIFFIN BROS., INC., US

[85] 2022-01-10

[86] 2020-07-08 (PCT/US2020/041271)

[87] (WO2021/007364)

[30] US (62/872,979) 2019-07-11

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[21] **3,146,833**  
[13] A1

[51] **Int.Cl. G06Q 30/00 (2012.01) H04H 60/32 (2009.01) H04H 60/33 (2009.01) H04H 60/45 (2009.01) H04H 60/56 (2009.01) G06Q 30/02 (2012.01)**

[25] EN

[54] **CROSS-MEDIA MEASUREMENT DEVICE AND METHOD**

[54] **DISPOSITIF ET PROCEDE DE MESURE INTER-SUPPORT**

[72] ZAMUDIO, GERARDO LOPEZ, MX

[72] DREWS, JOANNA, US

[71] HYPHOMETRICS, INC., US

[85] 2022-01-10

[86] 2020-07-09 (PCT/US2020/041426)

[87] (WO2021/007446)

[30] US (62/871,789) 2019-07-09

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[21] **3,146,836**  
[13] A1

[51] **Int.Cl. E21B 7/02 (2006.01) B60P 1/34 (2006.01) E21B 15/00 (2006.01) E21B 19/14 (2006.01) E21B 19/15 (2006.01) E21B 19/24 (2006.01)**

[25] EN

[54] **GUIDE FOR TOP DRIVE UNIT**

[54] **GUIDE POUR UNITE D'ENTRAINEMENT SUPERIEURE**

[72] GORDON, ROBERT L., US

[72] GILLESPIE, RONALD K., US

[72] WILLIAMS, DAVID L., US

[72] GRAMMER, JAMES T., US

[72] FISK, BOBBY D., US

[72] HARJO, CHARLES W., US

[71] GORDON BROS. SUPPLY, INC., US

[85] 2022-01-10

[86] 2020-07-10 (PCT/US2020/041585)

[87] (WO2021/007509)

[30] US (16/507,895) 2019-07-10

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## Demandes PCT entrant en phase nationale

[21] **3,146,839**  
[13] A1

[51] **Int.Cl. A61L 15/22 (2006.01) A61L 15/42 (2006.01) A61L 15/64 (2006.01) A61L 24/00 (2006.01) A61L 24/04 (2006.01)**

[25] EN  
[54] **BIOCOMPATIBLE, FLEXIBLE, HAEMOSTATIC SHEET**  
[54] **FEUILLE HEMOSTATIQUE FLEXIBLE BIOCOMPATIBLE**  
[72] KEEREWEER, ABRAHAM REINIER, NL  
[72] FELIX LANAO, ROSA PILAR, NL  
[72] OPSTEEN, JOOST, NL  
[72] BENDER, JOHANNES CASPAR MATHIAS ELIZABETH, NL  
[71] GATT TECHNOLOGIES B.V., NL  
[85] 2022-01-10  
[86] 2020-07-09 (PCT/EP2020/069441)  
[87] (WO2021/009013)  
[30] EP (19186036.0) 2019-07-12  
[30] EP (20151779.4) 2020-01-14

[21] **3,146,840**  
[13] A1

[51] **Int.Cl. B65D 33/00 (2006.01) B31B 70/00 (2017.01) B31B 70/88 (2017.01) B29C 59/04 (2006.01) B29C 65/00 (2006.01) B29D 22/00 (2006.01)**

[25] EN  
[54] **EXPANDING STORAGE BAGS**  
[54] **SACS DE STOCKAGE DILATABLES**  
[72] FERRACANE, DEAN, US  
[72] RUSNAK, JOHN, US  
[71] THE GLAD PRODUCTS COMPANY, US  
[85] 2022-01-10  
[86] 2020-07-13 (PCT/US2020/041776)  
[87] (WO2021/011454)  
[30] US (62/875,645) 2019-07-18

[21] **3,146,841**  
[13] A1

[51] **Int.Cl. C22B 59/00 (2006.01) C22B 3/00 (2006.01) C22B 15/00 (2006.01)**

[25] EN  
[54] **SYSTEMS AND PROCESSES FOR RECOVERY OF HIGH-GRADE RARE EARTH CONCENTRATE FROM ACID MINE DRAINAGE**  
[54] **SYSTEMES ET PROCESSUS DE RECUPERATION DE CONCENTRE DE TERRES RARES DE QUALITE ELEVEE PRESENTES DANS UN DRAINAGE MINIER ACIDE**  
[72] ZIEMKIEWICZ, PAUL, US  
[72] NOBLE, AARON, US  
[72] VASS, CHRIS, US  
[71] WEST VIRGINIA UNIVERSITY, US  
[85] 2022-01-10  
[86] 2020-07-17 (PCT/US2020/042674)  
[87] (WO2021/011926)  
[30] US (62/875,502) 2019-07-17  
[30] US (16/795,471) 2020-02-19

[21] **3,146,842**  
[13] A1

[51] **Int.Cl. A61K 39/02 (2006.01) A61P 31/04 (2006.01) C07K 14/29 (2006.01) C07K 16/12 (2006.01)**

[25] EN  
[54] **EHRlichIA VACCINES AND IMMUNOGENIC COMPOSITIONS**  
[54] **VACCINS ANTI-EHRlichIA ET COMPOSITIONS IMMUNOGENES**  
[72] MCBRIDE, JERE W., US  
[72] DOMINOWSKI, PAUL J., US  
[72] MAHAN, SUMAN, US  
[72] MILLERSHIP, JASON J., US  
[72] MWANGI, DUNCAN M., US  
[72] RAI, SHARATH, US  
[72] WAPPEL, SHARON M., US  
[71] RESEARCH DEVELOPMENT FOUNDATION, US  
[71] ZOETIS SERVICES LLC, US  
[85] 2022-01-10  
[86] 2020-07-13 (PCT/US2020/041779)  
[87] (WO2021/011456)  
[30] US (62/873,843) 2019-07-12  
[30] US (62/879,762) 2019-07-29  
[30] US (63/049,476) 2020-07-08

[21] **3,146,843**  
[13] A1

[51] **Int.Cl. F04B 53/10 (2006.01) F04B 19/22 (2006.01) F04B 53/16 (2006.01)**

[25] EN  
[54] **VALVE STOP AND SUCTION COVER PLATFORMED ASSEMBLY**  
[54] **SOUPAPE ET ENSEMBLE A PLATEFORME DE COUVERCLE D'ASPIRATION**  
[72] MYERS, JEFF, US  
[72] MARQUEZ, JR. JOHN STEVEN, US  
[72] CORTES, ADALBERTO, US  
[72] DELEON, II JOHNNY E., US  
[71] SPM OIL & GAS INC., US  
[85] 2022-01-10  
[86] 2020-07-21 (PCT/US2020/042863)  
[87] (WO2021/016232)  
[30] US (62/877,109) 2019-07-22

[21] **3,146,844**  
[13] A1

[51] **Int.Cl. B62D 5/06 (2006.01)**

[25] EN  
[54] **END-OF-TRAVEL RELIEF IN A POWER STEERING SYSTEM**  
[54] **RELACHEMENT DE FIN DE COURSE DANS UN SYSTEME DE DIRECTION ASSISTEE**  
[72] TIPTON, JEFFREY, US  
[72] TERWAD, MANJUNATH, US  
[72] PITZER, JARED, US  
[71] R.H. SHEPPARD CO., INC., US  
[85] 2022-01-10  
[86] 2020-07-10 (PCT/US2020/041494)  
[87] (WO2021/011329)  
[30] US (62/873,414) 2019-07-12  
[30] US (62/930,731) 2019-11-05

## PCT Applications Entering the National Phase

[21] **3,146,845**  
[13] A1

[51] **Int.Cl. C07K 14/725 (2006.01) C12Q 1/68 (2018.01) C40B 20/00 (2006.01) C40B 30/04 (2006.01)**

[25] EN

[54] **METHOD TO ISOLATE TCR GENES**

[54] **PROCEDE D'ISOLEMENT DE GENES DE TCR**

[72] SCHUMACHER, ANTONIUS  
NICOLAAS MARIA, NL

[72] LINNEMANN, CARSTEN, NL

[72] KUILMAN, THOMAS, NL

[72] BENDLE, GAVIN M., NL

[72] GADIOT, JULES F.C., NL

[72] VAN HEIJST, JEROEN W.J., NL

[72] GOMEZ-EERLAND, RAQUEL, NL

[72] SCHRIKKEMA, DEBORAH SOPHIE, NL

[71] NEOGENE THERAPEUTICS B.V., NL

[85] 2022-01-10

[86] 2020-07-13 (PCT/US2020/041824)

[87] (WO2021/011482)

[30] US (62/874,125) 2019-07-15

[30] US (62/975,924) 2020-02-13

[30] US (63/024,341) 2020-05-13

[30] US (63/034,157) 2020-06-03

[30] US (63/039,346) 2020-06-15

[21] **3,146,846**  
[13] A1

[51] **Int.Cl. A61K 36/81 (2006.01) A61K 31/165 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR INDUCING DEFECATION**

[54] **COMPOSITIONS ET PROCEDES POUR INDIURE LA DEFECATION**

[72] THOR, KARL, BRUCE, US

[72] MARSON, LESLEY, US

[71] DIGNIFY THERAPEUTICS, LLC, US

[85] 2022-01-10

[86] 2019-07-18 (PCT/US2019/042320)

[87] (WO2021/011002)

[21] **3,146,848**  
[13] A1

[51] **Int.Cl. A61F 9/00 (2006.01) A61K 33/34 (2006.01) A61P 27/02 (2006.01)**

[25] EN

[54] **MULTI-AGENT OCULAR FORMULATIONS AND TREATMENT METHODS**

[54] **FORMULATIONS OCULAIRES MULTI-AGENTS ET METHODES DE TRAITEMENT**

[72] BURR, RANDON MICHAEL, US

[72] AMBATI, BALAMURALI K., US

[72] MOLOKHIA, SARAH A., US

[71] UNIVERSITY OF UTAH RESEARCH FOUNDATION, US

[85] 2022-01-10

[86] 2020-07-13 (PCT/US2020/041837)

[87] (WO2021/007578)

[30] US (62/873,121) 2019-07-11

[21] **3,146,849**  
[13] A1

[51] **Int.Cl. A61B 5/145 (2006.01) G16H 10/60 (2018.01) A61M 5/00 (2006.01) G01N 33/50 (2006.01) G05B 23/02 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR ONLINE DOMAIN ADAPTATION OF MODELS FOR HYPOGLYCEMIA PREDICTION IN TYPE 1 DIABETES**

[54] **SYSTEME ET PROCEDE D'ADAPTATION DE DOMAINE EN LIGNE DE MODELES POUR LA PREDICTION DE L'HYPOGLYCEMIE DANS LE DIABETE DE TYPE 1**

[72] BRETON, MARC D., US

[72] HUGHES, JONATHAN, US

[72] ANDERSON, STACEY, US

[71] UNIVERSITY OF VIRGINIA PATENT FOUNDATION, US

[85] 2022-01-10

[86] 2020-07-10 (PCT/US2020/041528)

[87] (WO2021/007485)

[30] US (62/872,532) 2019-07-10

[21] **3,146,850**  
[13] A1

[51] **Int.Cl. G07F 17/00 (2006.01) A47J 17/00 (2006.01) A47J 27/14 (2006.01) A47J 27/16 (2006.01) A47J 37/00 (2006.01) G07F 9/10 (2006.01)**

[25] EN

[54] **FOOD VENDING MACHINE AND FOOD VENDING METHOD USING THE SAME**

[54] **DISTRIBUTEUR AUTOMATIQUE D'ALIMENTS ET PROCEDE DE DISTRIBUTION AUTOMATIQUE D'ALIMENTS L'UTILISANT**

[72] LIN, CHIH HUNG, US

[71] YO-KAI EXPRESS INC., US

[85] 2022-01-10

[86] 2020-07-22 (PCT/US2020/043028)

[87] (WO2021/016326)

[30] US (62/877,503) 2019-07-23

[30] US (62/895,606) 2019-09-04

[30] US (62/899,343) 2019-09-12

[21] **3,146,851**  
[13] A1

[51] **Int.Cl. A61B 17/00 (2006.01) A61B 17/12 (2006.01) B21F 45/00 (2006.01)**

[25] EN

[54] **COAXIAL COIL DETACHMENT SYSTEMS BASED ON TARGETING AND SHOCK ABSORBING COIL IMPROVEMENTS**

[54] **AMELIORATIONS DE SYSTEMES COAXIAUX DE DETACHEMENT DE SPIRALE BASES SUR UNE SPIRALE DE CIBLAGE ET D'ABSORPTION DE CHOC**

[72] LE, JAKE, US

[72] GONG, STEPHANIE, US

[71] BALT USA, LLC, US

[85] 2022-01-10

[86] 2020-07-13 (PCT/US2020/041841)

[87] (WO2021/011494)

[30] US (62/873,893) 2019-07-13

## Demandes PCT entrant en phase nationale

[21] **3,146,852**  
[13] A1

[51] **Int.Cl. G06Q 40/06 (2012.01) G06Q 40/04 (2012.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR SCREENING ENTITIES USING MULTI-LEVEL RULES AND FINANCIAL INFORMATION**  
[54] **SYSTEME ET PROCEDE DE FILTRAGE D'ENTITES A L'AIDE DE REGLES MULTINIVEAU ET D'INFORMATIONS FINANCIERES**  
[72] KHAN, AHMAD ALI, CA  
[72] JAFFERY, HASNAIN SAJJAD, US  
[71] KHAN, AHMAD ALI, CA  
[71] JAFFERY, HASNAIN SAJJAD, US  
[85] 2022-01-10  
[86] 2019-08-06 (PCT/US2019/045307)  
[87] (WO2021/006919)  
[30] US (62/872,579) 2019-07-10

[21] **3,146,853**  
[13] A1

[51] **Int.Cl. C10G 47/10 (2006.01)**  
[25] EN  
[54] **METAL-ORGANIC FRAMEWORK CATALYSTS AND THEIR USE IN CATALYTIC CRACKING**  
[54] **CATALYSEURS A STRUCTURE ORGANOMETALLIQUE ET LEUR UTILISATION DANS LE CRAQUAGE CATALYTIQUE**  
[72] O'NEILL, BRANDON J., US  
[72] FALKOWSKI, JOSEPH M., US  
[72] BURTON, ALLEN W., US  
[72] WEIGEL, SCOTT J., US  
[71] EXXONMOBIL RESEARCH AND ENGINEERING COMPANY, US  
[85] 2022-01-10  
[86] 2020-07-14 (PCT/US2020/041868)  
[87] (WO2021/034426)  
[30] US (62/889,133) 2019-08-20

[21] **3,146,856**  
[13] A1

[51] **Int.Cl. A61M 5/142 (2006.01) A61M 5/145 (2006.01) A61M 5/148 (2006.01)**  
[25] EN  
[54] **MEDICAL FLUID INJECTION AND TRANSFER DEVICES AND METHOD**  
[54] **DISPOSITIFS ET PROCEDE D'INJECTION ET DE TRANSFERT DE FLUIDE MEDICAL**  
[72] CONVERSE, ROWAN JOSEPH, US  
[72] HUDDLESTON, MATTHEW J., US  
[72] GEIGER, DANIEL L., US  
[72] LOWE, JAMES, US  
[72] NUCHOLS, RICHARD P., US  
[72] STEFANCHIK, DAVID, US  
[71] ENABLE INJECTIONS, INC., US  
[85] 2022-01-10  
[86] 2020-07-24 (PCT/US2020/043515)  
[87] (WO2021/016567)  
[30] US (62/878,111) 2019-07-24

[21] **3,146,857**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01)**  
[25] EN  
[54] **FORMULATIONS OF T-TYPE CALCIUM CHANNEL MODULATORS AND METHODS OF USE THEREOF**  
[54] **FORMULATIONS DE MODULATEURS DE CANAL CALCIQUE DE TYPE T ET LEURS PROCEDES D'UTILISATION**  
[72] REDDY, KIRAN, US  
[72] LEE, MARGARET S., US  
[72] BELFORT, GABRIEL MAURICE, US  
[72] GARAD, SAPNA MAKHIJA, US  
[72] HUANG, LISA, US  
[72] PADVAL, MAHESH, US  
[72] WAGNER, RANDALL, US  
[72] WITTMANN, MARION, US  
[71] PRAXIS PRECISION MEDICINES, INC., US  
[85] 2022-01-10  
[86] 2020-07-10 (PCT/US2020/041530)  
[87] (WO2021/007487)  
[30] US (62/873,022) 2019-07-11  
[30] US (62/934,820) 2019-11-13  
[30] US (62/958,923) 2020-01-09

[21] **3,146,859**  
[13] A1

[51] **Int.Cl. A61B 17/04 (2006.01) A61F 2/24 (2006.01)**  
[25] EN  
[54] **TISSUE REMODELING SYSTEMS AND METHODS**  
[54] **SYSTEMES ET METHODES DE REMODELAGE D'UN TISSU**  
[72] LAU, JAN R., US  
[71] HEARTCHORD MEDICAL, INC., US  
[85] 2022-01-10  
[86] 2020-07-14 (PCT/US2020/041899)  
[87] (WO2021/011522)  
[30] US (62/874,837) 2019-07-16

[21] **3,146,861**  
[13] A1

[51] **Int.Cl. G01S 17/89 (2020.01) G01J 3/28 (2006.01) G01S 7/481 (2006.01) G01S 17/08 (2006.01) G01S 17/42 (2006.01) G02B 5/18 (2006.01)**  
[25] EN  
[54] **FOCAL PLANE ARRAY SYSTEM FOR FMCW LIDAR**  
[54] **SYSTEME DE MATRICE DE PLAN FOCAL POUR LIDAR A MODULATION DE FREQUENCE D'ONDE ENTRETEENUE**  
[72] MICHAELS, ANDREW STEIL, US  
[72] LIN, SEN, US  
[71] OURS TECHNOLOGY, LLC, US  
[85] 2022-01-10  
[86] 2020-07-24 (PCT/US2020/043556)  
[87] (WO2021/021654)  
[30] US (62/879,382) 2019-07-26  
[30] US (62/879,383) 2019-07-26

[21] **3,146,862**  
[13] A1

[51] **Int.Cl. G06F 11/00 (2006.01)**  
[25] EN  
[54] **NOTIFICATIONS FOR CAMERA TAMPERING**  
[54] **NOTIFICATIONS D'ALTERATION DE CAMERA**  
[72] HUTZ, DAVID JAMES, US  
[72] BEACH, ALLISON, US  
[72] YIN, WEIHONG, US  
[72] MADDEN, DONALD GERARD, US  
[72] GORDON, ADAM, US  
[72] BERG, BENJAMIN ASHER, US  
[72] SILVERMAN, CHRISTOPHER, US  
[72] FARACI, DONALD, US  
[71] ALARM.COM INCORPORATED, US  
[85] 2022-01-10  
[86] 2020-07-14 (PCT/US2020/041983)  
[87] (WO2021/011569)  
[30] US (62/874,071) 2019-07-15

## PCT Applications Entering the National Phase

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[21] **3,146,867**  
[13] A1

[51] **Int.Cl. G16H 40/63 (2018.01) G16H 50/20 (2018.01) G16H 50/30 (2018.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DETECTION OF POTENTIAL HEALTH ISSUES**

[54] **SYSTEMES ET PROCEDES DE DETECTION DE PROBLEMES DE SANTE POTENTIELS**

[72] BERGMAN, ERIC, US

[72] LECLERC, JONATHAN, US

[72] YUDS, DAVID, US

[72] TAMAYO-COFFEY, MARIA, US

[72] STEUBER, JESSICA, US

[71] FRESENIUS MEDICAL CARE HOLDINGS, INC., US

[85] 2022-01-10

[86] 2020-07-27 (PCT/US2020/043702)

[87] (WO2021/025886)

[30] US (16/534,319) 2019-08-07

---

[21] **3,146,871**  
[13] A1

[51] **Int.Cl. H04M 1/60 (2006.01) H04M 9/08 (2006.01) H04R 3/00 (2006.01) H04R 3/02 (2006.01) H04S 7/00 (2006.01) G10L 15/06 (2013.01) H04R 1/02 (2006.01) H04R 1/40 (2006.01) H04R 3/12 (2006.01) H04R 27/00 (2006.01)**

[25] EN

[54] **ACOUSTIC ECHO CANCELLATION CONTROL FOR DISTRIBUTED AUDIO DEVICES**

[54] **COMMANDE D'ANNULATION D'ECHO ACOUSTIQUE POUR DISPOSITIFS AUDIO DISTRIBUES**

[72] DICKINS, GLENN N., AU

[72] HINES, CHRISTOPHER GRAHAM, US

[72] GUNAWAN, DAVID, US

[72] CARTWRIGHT, RICHARD J., US

[72] SEEFELDT, ALAN J., US

[72] ARTEAGA, DANIEL, US

[72] THOMAS, MARK R. P., US

[72] LANDO, JOSHUA B., US

[71] DOLBY LABORATORIES LICENSING CORPORATION, US

[71] DOLBY INTERNATIONAL AB, NL

[85] 2022-01-10

[86] 2020-07-29 (PCT/US2020/043958)

[87] (WO2021/021857)

[30] ES (P201930702) 2019-07-30

[30] US (62/880,113) 2019-07-30

[30] US (62/880,122) 2019-07-30

[30] EP (19212391.7) 2019-11-29

[30] US (62/950,004) 2019-12-18

[30] US (62/971,421) 2020-02-07

[30] US (62/705,410) 2020-06-25

[30] US (62/705,897) 2020-07-21

---

[21] **3,146,872**  
[13] A1

[51] **Int.Cl. G16H 40/40 (2018.01) A61M 1/00 (2006.01)**

[25] EN

[54] **BLOOD GLUCOSE CONTROL SYSTEM**

[54] **SYSTEME DE CONTROLE DE LA GLYCEMIE**

[72] DAMIANO, EDWARD R., US

[72] EL-KHATIB, FIRAS H., US

[72] ROSINKO, MICHAEL J., US

[72] BROWN, JUSTIN P., US

[72] LIM, DAVID CHI-WAI, US

[72] KNODEL, BRYAN DALE, US

[72] PATEL, HIMANSHU, US

[72] COSTIK, JOHN R., US

[71] BETA BIONICS, INC., US

[85] 2022-01-10

[86] 2020-07-15 (PCT/US2020/042195)

[87] (WO2021/011697)

[30] US (62/874,934) 2019-07-16

[30] US (62/874,950) 2019-07-16

[30] US (62/874,968) 2019-07-16

[30] US (62/910,970) 2019-10-04

[30] US (62/911,017) 2019-10-04

[30] US (62/911,143) 2019-10-04

[30] US (62/987,842) 2020-03-10

[30] US (63/037,472) 2020-06-10

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[21] **3,146,878**  
[13] A1

[51] **Int.Cl. A63B 69/00 (2006.01)**

[25] EN

[54] **BASKETBALL TRAINING APPARATUS FOR IMPROVING BASKETBALL SHOT MAKING AND A METHOD THEREOF**

[54] **APPAREIL D'ENTRAINEMENT AU BASKET-BALL DESTINE A AMELIORER LA JUSTESSE DES TIRS AU BASKET-BALL ET PROCEDE ASSOCIE**

[72] SPONT, BRIAN, US

[71] SPONT, BRIAN, US

[85] 2022-01-10

[86] 2020-07-29 (PCT/US2020/043972)

[87] (WO2021/021868)

[30] US (62/879,837) 2019-07-29

[30] US (16/940,771) 2020-07-28

## Demandes PCT entrant en phase nationale

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[21] **3,146,909**

[13] A1

[51] **Int.Cl. A61F 5/44 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR PROVIDING OSTOMY**

**FACEPLATES IN CLOSE**

**PROXIMITY WITH NEGATIVE**

**PRESSURE WOUND DEVICES**

[54] **SYSTEMES ET PROCESSES POUR FOURNIR DES PLAQUES AVANT DE PROTECTION DE STOMIE A PROXIMITE ETROITE AVEC DES DISPOSITIFS POUR PLAIE A PRESSION NEGATIVE**

[72] GRANET, ROSEMARY, US

[72] GRANET, PAUL, US

[72] MURPHY, GREGORY, US

[71] SANGUINE TECHNOLOGY, LLC, US

[85] 2022-01-07

[86] 2020-07-07 (PCT/US2020/041065)

[87] (WO2021/007247)

[30] US (62/871,670) 2019-07-08

[30] US (16/849,909) 2020-04-15

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[21] **3,146,912**

[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K**

**39/395 (2006.01) A61K 45/06**

**(2006.01)**

[25] EN

[54] **METHOD OF ELIMINATING**

**HEMATOPOIETIC STEM**

**CELLS/HEMATOPOIETIC**

**PROGENITORS (HSC/HP) IN A**

**PATIENT USING BI-SPECIFIC**

**ANTIBODIES**

[54] **PROCEDE D'ELIMINATION DE**

**CELLULES SOUCHES**

**HEMATOPOIETIQUE/PROGENIT**

**EURS HEMATOPOIETIQUES**

**(CSH/PH) CHEZ UN PATIENT A**

**L'AIDE D'ANTICORPS**

**BISPECIFIQUES**

[72] SANDLER, VLADISLAV, US

[71] HEMOGENYX

PHARMACEUTICALS LLC, US

[85] 2022-01-07

[86] 2020-07-08 (PCT/US2020/041095)

[87] (WO2021/007266)

[30] US (16/506,764) 2019-07-09

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[21] **3,146,911**

[13] A1

[51] **Int.Cl. G06Q 10/08 (2012.01) H04W**

**52/02 (2009.01) H04W 4/029 (2018.01)**

[25] EN

[54] **REMOTE INTEGRATION OF**

**CLOUD SERVICES AND**

**TRANSPORTABLE PERISHABLE**

**PRODUCTS ACTIVE MONITOR**

[54] **INTEGRATION A DISTANCE DE**

**SERVICES EN NUAGE ET**

**DISPOSITIF DE SURVEILLANCE**

**ACTIF DE PRODUITS**

**PERISSABLES**

**TRANSPORTABLES**

[72] SHANMUGAVELAYUDAM,

SARAVAN KUMAR, US

[72] SHAIKH, SHOAB, US

[72] JAYAKUMAR, BALAJI, US

[72] RAHMAN, ARIF, US

[72] NGUYEN, TRUNG DANG, US

[71] MAXQ RESEARCH LLC, US

[85] 2022-01-07

[86] 2020-07-07 (PCT/US2020/041080)

[87] (WO2021/011242)

[30] US (16/505,581) 2019-07-08

# Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

## Demandes canadiennes apparentées par division et demandes mises à la disponibilité du public non disponibles auparavant

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[21] **3,123,129**  
[13] A1

[51] **Int.Cl. H01S 5/02315 (2021.01) F16L 1/10 (2006.01)**  
[25] EN  
[54] **LASER LOWERING DEVICE**  
[54]  
[72] ROCHELEAU, DARYL, CA  
[72] SNOWDON, MICHAEL ALLEN, CA  
[71] SHEAROCK CONSTRUCTION GROUP INC., XX  
[22] 2021-06-04  
[41] 2021-12-10  
[30] US (63/037,456) 2020-06-10

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[21] **3,145,583**  
[13] A1

[25] EN  
[54] **ELECTRIC CELL POTTING COMPOUND AND METHOD OF MAKING**  
[54] **COMPOSE D'ENROBAGE DE CELLULES ELECTRIQUES ET SON PROCEDE DE FABRICATION**  
[72] GIORGINI, ALBERT M., US  
[71] H.B. FULLER COMPANY, US  
[22] 2019-02-15  
[41] 2019-08-22  
[62] 3,091,147  
[30] US (62/631,584) 2018-02-16

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[21] **3,145,585**  
[13] A1

[51] **Int.Cl. G01B 11/16 (2006.01) G01B 9/02002 (2022.01)**  
[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  
[71] HIFI ENGINEERING INC., CA  
[22] 2014-07-04  
[41] 2016-01-07  
[62] 2,954,207

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[21] **3,145,590**  
[13] A1

[51] **Int.Cl. B65G 35/06 (2006.01) B61B 13/00 (2006.01)**  
[25] EN  
[54] **ARTICLE TRANSPORT FACILITY EQUIPEMENT POUR TRANSPORT DE MARCHANDISES**  
[72] FUJIO, YOSHIHIKO, JP  
[72] ISOMURA, TAKUYA, JP  
[71] DAIFUKU CO., LTD., JP  
[22] 2014-03-28  
[41] 2014-10-02  
[62] 2,908,413  
[30] JP (2013-074846) 2013-03-29

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[21] **3,145,600**  
[13] A1

[25] EN  
[54] **ARTICLE TRANSPORT FACILITY EQUIPEMENT POUR TRANSPORT DE MARCHANDISES**  
[72] FUJIO, YOSHIHIKO, JP  
[72] ISOMURA, TAKUYA, JP  
[71] DAIFUKU CO., LTD., JP  
[22] 2014-03-28  
[41] 2014-10-02  
[62] 2,908,413  
[30] JP (2013-074846) 2013-03-29

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[21] **3,145,606**  
[13] A1

[25] EN  
[54] **SAMPLE PREPARATION DEVICE DISPOSITIF DE PREPARATION D'ECHANTILLONS**  
[72] HAWORTH, DANIEL, NICHOLAS, GB  
[72] PALMER-FELGATE, JOHN, PAUL, GB  
[71] ABBOTT DIAGNOSTICS SCARBOROUGH, INC., US  
[22] 2016-10-31  
[41] 2017-05-11  
[62] 3,004,130  
[30] GB (1519565.4) 2015-11-05

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[21] **3,145,607**  
[13] A1

[25] EN  
[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  
[71] FIDELITY INFORMATION SERVICES, LLC, US  
[22] 2013-03-15  
[41] 2013-09-26  
[62] 2,867,697  
[30] US (61/612,897) 2012-03-19

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[21] **3,145,660**  
[13] A1

[51] **Int.Cl. C12N 15/82 (2006.01) C12N 15/113 (2010.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/04 (2006.01)**  
[25] EN  
[54] **PLANT REGULATORY ELEMENTS AND USES THEREOF**  
[54] **ELEMENTS DE REGULATION DES PLANTES ET LEURS UTILISATIONS**  
[72] CHITTOOR, JAISHREE M., US  
[72] MIYAMOTO, AMY J., US  
[72] NICHOLS, AMY M., US  
[72] OUFATTOLE, MOHAMMED, US  
[72] PETERSEN, MICHAEL W., US  
[71] MONSANTO TECHNOLOGY LLC, US  
[22] 2014-03-11  
[41] 2014-10-02  
[62] 2,904,408  
[30] US (61/785,268) 2013-03-14

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,145,713**  
[13] A1

[25] EN  
[54] **MULTIVIEW BACKLIGHT, MODE-SWITCHABLE BACKLIGHT, AND 2D/3D MODE-SWITCHABLE DISPLAY**  
[54] **RETROECLAIRAGE A VUES MULTIPLES, RETROECLAIRAGE A MODE COMMUTABLE ET AFFICHAGE A MODE 2D/3D COMMUTABLE**  
[72] FATTAL, DAVID A., US  
[72] MA, MING, US  
[71] LEIA INC., US  
[22] 2017-04-08  
[41] 2018-10-11  
[62] 3,055,556

[21] **3,145,758**  
[13] A1

[25] EN  
[54] **IMAGE DECODING METHOD AND APPARATUS RELYING ON INTRA PREDICTION IN IMAGE CODING SYSTEM**  
[54] **PROCEDE ET APPAREIL DE DECODAGE D'IMAGE REPOSANT SUR UNE PREDICTION INTRA DANS UN SYSTEME DE CODAGE D'IMAGE**  
[72] HEO, JIN, KR  
[71] LG ELECTRONICS INC., KR  
[22] 2017-08-30  
[41] 2018-04-19  
[62] 3,040,236  
[30] US (62/406,410) 2016-10-11

[21] **3,145,849**  
[13] A1

[25] EN  
[54] **METHODS AND SYSTEMS FOR VEHICLE OCCUPANCY CONFIRMATION**  
[54] **PROCEDES ET SYSTEMES DE CONFIRMATION D'OCCUPATION DE VEHICULE**  
[72] HERBACH, JOSHUA, US  
[71] WAYMO LLC, US  
[22] 2018-06-27  
[41] 2019-01-17  
[62] 3,068,433  
[30] US (62/531,152) 2017-07-11  
[30] US (15/681,041) 2017-08-18

[21] **3,145,879**  
[13] A1

[25] EN  
[54] **COMPOSITIONS, DEVICES, AND METHODS OF IBS SENSITIVITY TESTING**  
[54] **COMPOSITIONS, DISPOSITIFS ET PROCEDES DE TEST DE SENSIBILITE DU SII**  
[72] LADERMAN, ELISABETH, US  
[72] IRANI-COHEN, ZACKARY, US  
[71] BIOMERICA, INC., US  
[22] 2015-11-13  
[41] 2016-05-19  
[62] 2,967,817  
[30] US (62/079,783) 2014-11-14

[21] **3,145,881**  
[13] A1

[51] **Int.Cl. C12Q 1/6895 (2018.01) A01H 6/54 (2018.01) A01H 1/00 (2006.01) A01H 1/04 (2006.01) A01H 5/00 (2018.01) C12N 5/04 (2006.01) C12N 15/11 (2006.01) C12N 15/29 (2006.01)**  
[25] EN  
[54] **GREEN BEAN PLANTS WITH IMPROVED DISEASE RESISTANCE**  
[54] **PLANTES DE HARICOT VERT PRESENTANT UNE RESISTANCE AMELIOREE AUX MALADIES**  
[72] EVANS, ELLEN L., US  
[72] KMIIECIK, KENNETH, US  
[72] KRAMER, CHAD, US  
[72] OPPELAAR, ARIE, US  
[71] SEMINIS VEGETABLE SEEDS, INC., US  
[22] 2020-01-13  
[41] 2020-07-23  
[62] 3,126,761  
[30] US (62/792,814) 2019-01-15

[21] **3,145,893**  
[13] A1

[51] **Int.Cl. A61N 5/067 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR SELECTIVE TREATMENT OF BIOLOGICAL TISSUE**  
[54] **PROCEDE ET APPAREIL DE TRAITEMENT SELECTIF DE TISSU BIOLOGIQUE**  
[72] ANDERSON, RICHARD ROX, US  
[72] MANSTEIN, DIETER, US  
[72] CHAN, HENRY HIN LEE, CN  
[72] ZUO, VINCENT, US  
[71] THE GENERAL HOSPITAL CORPORATION, US  
[22] 2017-12-22  
[41] 2018-06-28  
[62] 3,047,587  
[30] US (62/438,818) 2016-12-23

[21] **3,145,928**  
[13] A1

[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  
[71] EATON INTELLIGENT POWER LIMITED, IE  
[22] 2014-10-08  
[41] 2015-04-23  
[62] 2,927,059  
[30] US (61/890,495) 2013-10-14  
[30] US (14/501,969) 2014-09-30

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

[21] **3,145,929**  
[13] A1

[51] **Int.Cl. A61B 10/02 (2006.01) A61B 17/16 (2006.01)**  
[25] EN  
[54] **INTRAOSSUEOUS NEEDLE SETS AND KITS**  
[54]  
[72] MILLER, LARRY J., MT  
[72] TITKEMEYER, ROBERT W., MT  
[72] MORGAN, JOHN, MT  
[72] KILCOIN, CHRIS, MT  
[71] TELEFLEX LIFE SCIENCES LIMITED, MT  
[22] 2014-03-14  
[41] 2014-09-18  
[62] 2,907,150  
[30] US (13/835,046) 2013-03-15

[21] **3,145,938**  
[13] A1

[25] EN  
[54] **PANEL, COVERING AND METHOD FOR INSTALLING SUCH PANELS**  
[54] **PANNEAU, REVETEMENT ET METHODE POUR INSTALLER DE TELS PANNEAUX**  
[72] CAPPELLE, MARK, BE  
[71] FLOORING INDUSTRIES LIMITED, SARL, LU  
[22] 2010-12-09  
[41] 2011-06-30  
[62] 3,040,097  
[30] EP (09 015 855.1) 2009-12-22  
[30] US (61/333.510) 2010-05-11

[21] **3,145,953**  
[13] A1

[25] EN  
[54] **METHODS AND MEANS FOR THE MEASUREMENT OF TUBING, CASING, PERFORATION AND SAND-SCREEN IMAGING USING BACKSCATTERED X-RAY RADIATION IN A WELLBORE ENVIRONMENT**  
[54] **PROCEDES ET MOYENS POUR LA MESURE PAR IMAGERIE DE TUBAGE, DE CAISSON, DE PERFORATION ET DE TAMIS A SABLE A L'AIDE D'UN RAYONNEMENT DE RAYONS X RETRODIFFUSE DANS UN ENVIRONNEMENT D E Puits DE FORAGE**  
[72] SPANNUTH, MELISSA, US  
[72] TEAGUE, PHILIP, US  
[72] STEWART, ALEX, US  
[72] TUTT, TERESA, US  
[71] TUTT, TERESA, US  
[71] TEAGUE, PHILIP, US  
[71] SPANNUTH, MELISSA, US  
[71] STEWART, ALEX, US  
[22] 2019-03-01  
[41] 2019-09-06  
[62] 3,092,477  
[30] US (62/636,907) 2018-03-01  
[30] US (16/290,360) 2019-03-01

[21] **3,145,958**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **HEART VALVE SEALING DEVICES**  
[54] **DISPOSITIFS DE SCELLEMENT ETANCHE DE VALVULE CARDIAQUE**  
[72] CHAU, MARK, US  
[72] OBA, TRAVIS, US  
[72] DELGADO, SERGIO, US  
[72] TAFT, ROBERT, C., US  
[72] ROWE, STANTON, J., US  
[72] COOPER, ALEXANDER, H., US  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[22] 2013-08-30  
[41] 2014-03-13  
[62] 2,882,381  
[30] US (61/697,706) 2012-09-06  
[30] US (61/763,848) 2013-02-12  
[30] US (14/011,598) 2013-08-27

[21] **3,145,998**  
[13] A1

[51] **Int.Cl. B65D 41/34 (2006.01) B65D 1/02 (2006.01) B65D 41/04 (2006.01)**  
[25] EN  
[54] **CLOSURE AND FINISH FOR SMALL CARBONATED BEVERAGE PACKAGING WITH ENHANCED SHELF LIFE PROPERTIES**  
[54]  
[72] DE CLEIR, PIARAS, US  
[72] GEHINDY, FRANK, DE  
[72] BRAUER, LOTHAR, DE  
[72] SHI, SIMON, US  
[71] THE COCA-COLA COMPANY, US  
[22] 2015-07-31  
[41] 2016-02-04  
[62] 2,956,727  
[30] US (62/032,423) 2014-08-01

[21] **3,146,103**  
[13] A1

[25] EN  
[54] **CARBOHYDRATE CONJUGATES AS DELIVERY AGENTS FOR OLIGONUCLEOTIDES**  
[54] **CONJUGUES GLUCIDIQUES UTILISES EN TANT QU'AGENTS D'ADMINISTRATION POUR DES OLIGONUCLEOTIDES**  
[72] MANOHARAN, MUTHIAH, US  
[72] RAJEEV, KALLANTHOTTATHIL G., US  
[72] NARAYANANNAIR, JAYAPRAKASH K., US  
[72] MAIER, MARTIN, US  
[71] ALNYLAM PHARMACEUTICALS, INC., US  
[22] 2008-12-04  
[41] 2009-06-11  
[62] 2,930,393  
[30] US (60/992,309) 2007-12-04  
[30] US (61/013,597) 2007-12-13  
[30] US (61/127,751) 2008-05-14  
[30] US (61/091,093) 2008-08-22  
[30] US (61/097,261) 2008-09-16

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,146,151**  
[13] A1

[25] EN  
[54] **MANUFACTURE OF ACTIVE HIGHLY PHOSPHORYLATED HUMAN N-ACETYL GALACTOSAMINE-6-SULFATASE AND USES THEREOF**  
[54] **FABRICATION DE N-ACETYL GALACTOSAMINE-6-SULFATASE HUMAINE ACTIVE TRES PHOSPHORYLEE ET SES UTILISATIONS**  
[72] KOPPAKA, VISH, US  
[72] VELLARD, MICHEL, CLAUDE, US  
[72] OKHAMAFE, AUGUSTUS, US  
[72] ARAYA, KIDISTI, US  
[71] BIOMARIN PHARMACEUTICAL INC., US  
[22] 2011-07-22  
[41] 2012-01-26  
[62] 2,805,673  
[30] US (61/366,714) 2010-07-22

[21] **3,146,190**  
[13] A1

[25] EN  
[54] **ELECTRONIC LOCKSET WITH MULTI-SOURCE ENERGY HARVESTING CIRCUIT**  
[54] **SERRURE ELECTRONIQUE AVEC CIRCUIT COLLECTEUR A SOURCE D'ENERGIE MULTIPLE**  
[72] NGUYEN, THUAN, US  
[72] MARIDAKIS, MICHAEL, US  
[72] BROWN, TROY, US  
[72] ALMOMANI, NEDAL AKRAM, US  
[71] SPECTRUM BRANDS, INC., US  
[22] 2014-03-05  
[41] 2014-10-09  
[62] 2,903,732  
[30] US (61/777,872) 2013-03-12  
[30] US (61/820,437) 2013-05-07

[21] **3,146,256**  
[13] A1

[25] EN  
[54] **COMPOSITIONS COMPRISING 2,3,3,3-TETRAFLUOROPROPENE, 1,1,2,3-TETRACHLOROPROPENE, 2-CHLORO-3,3,3-TRIFLUOROPROPENE, OR 2-CHLORO-1,1,1,2-TETRAFLUOROPROPANE**  
[54] **COMPOSITIONS COMPRENANT DU 2,3,3,3-TETRAFLUOROPROPENE, DU 1,1,2,3-TETRACHLOROPROPENE, DU 2-CHLORO-3,3,3-TRIFLUOROPROPENE, OU DU 2-CHLORO-1,1,1,2-TETRAFLUOROPROPANE**  
[72] NAPPA, MARIO JOSEPH, US  
[71] THE CHEMOURS COMPANY FC, LLC, US  
[22] 2010-12-22  
[41] 2011-07-21  
[62] 3,088,186  
[30] US (61/289,027) 2009-12-22

[21] **3,146,281**  
[13] A1

[25] EN  
[54] **REAL-TIME DATA ACQUISITION AND RECORDING SYSTEM VIEWER**  
[54] **SYSTEME D'ACQUISITION ET D'ENREGISTREMENT DE DONNEES EN TEMPS REEL ET VISUALISEUR**  
[72] JORDAN, LAWRENCE B., US  
[72] PATEL, SAVANKUMAR V., US  
[72] WEAVER, BRYAN, US  
[71] WI-TRONIX, LLC, US  
[22] 2017-05-16  
[41] 2017-11-23  
[62] 3,024,348  
[30] US (62/337,227) 2016-05-16  
[30] US (62/337,228) 2016-05-16  
[30] US (62/337,225) 2016-05-16  
[30] US (15/595,689) 2017-05-15  
[30] US (15/595,650) 2017-05-15

[21] **3,146,285**  
[13] A1

[25] EN  
[54] **METHOD FOR THE PREPARATION OF (4S)-4-(4-CYANO-2-METHOXYPHENYL)-5-ETHOXY-2,8-DIMETHYL-1,4-DIHYDRO-1,6-NAPHTHYRIDINE-3-CARBOX-AMIDE AND THE PURIFICATION THEREOF FOR USE AS AN ACTIVE PHARMACEUTICAL INGREDIENT**  
[54] **PROCEDE POUR FABRIQUER DU (4S)-4-(4-CYANO-2-METHOXYPHENYL)-5-ETHOXY-2,8-DIMETHYL-1,4-DIHYDRO-1,6-NAPHTHYRIDIN-3-CARBOXAMIDE ET LE PURIFIER EN VUE DE L'UTILISER EN TANT QUE PRINCIPE ACTIF PHARMACEUTIQUE**  
[72] PLATZEK, JOHANNES, DE  
[72] GARKE, GUNNAR, DE  
[72] GRUNENBERG, ALFONS, DE  
[71] BAYER PHARMA AKTIENGESELLSCHAFT, DE  
[22] 2015-07-29  
[41] 2016-02-04  
[62] 2,956,529  
[30] EP (14179544.3) 2014-08-01

[21] **3,146,315**  
[13] A1

[25] EN  
[54] **MULTIPLE-FIRING CRIMP DEVICE**  
[54] **DISPOSITIF DE SERTISSAGE A DECLENCHEMENT MULTIPLE**  
[72] SMITH, KEVIN, W., US  
[72] MENDEZ, MAX, PIERRE, US  
[72] PALMER, MATTHEW, A., US  
[72] MCBRAYER, M., SEAN, US  
[72] BALES, THOMAS, O., JR., US  
[72] DEVILLE, DEREK, DEE, US  
[72] CARTLEDGE, RICHARD, US  
[72] KLINE, KOREY, US  
[72] RIVERA, CARLOS, US  
[72] NUNEZ, GEORGE, US  
[71] EDWARDS LIFESCIENCES AG, FR  
[22] 2014-11-18  
[41] 2015-05-21  
[62] 2,934,307  
[30] US (61/905,578) 2013-11-18  
[30] US (61/951,162) 2014-03-11  
[30] US (62/069,183) 2014-10-27  
[30] US (14/543,240) 2014-11-17

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

[21] **3,146,321**  
[13] A1

[51] **Int.Cl. A61B 17/04 (2006.01)**  
[25] EN  
[54] **MULTIPLE-FIRING CRIMP DEVICE**  
[54] **DISPOSITIF DE SERTISSAGE A DECLENCHEMENT MULTIPLE**  
[72] BALES, THOMAS O., JR., US  
[72] CARTLEDGE, RICHARD, US  
[72] DEVILLE, DEREK DEE, US  
[72] KLINE, KOREY, US  
[72] MCBRAYER, M. SEAN, US  
[72] MENDEZ, MAX PIERRE, US  
[72] NUNEZ, GEORGE, US  
[72] PALMER, MATTHEW A., US  
[72] RIVERA, CARLOS, US  
[72] SMITH, KEVIN W., US  
[71] EDWARDS LIFESCIENCES AG, FR  
[22] 2014-11-18  
[41] 2015-05-21  
[62] 2,934,307  
[30] US (61/905,578) 2013-11-18  
[30] US (61/951,162) 2014-03-11  
[30] US (62/069,183) 2014-10-27  
[30] US (14/543,240) 2014-11-17

[21] **3,146,345**  
[13] A1

[25] EN  
[54] **OPTICAL FIBER CABLE**  
[54] **CABLE A FIBRES OPTIQUES**  
[72] GUENTER, CORY FRITZ, US  
[72] HUDSON, II, HAROLD EDWARD, US  
[72] HURLEY, WILLIAM CARL, US  
[72] SISTARE, REBECCA ELIZABETH, US  
[71] CORNING OPTICAL COMMUNICATIONS LLC, US  
[22] 2015-09-18  
[41] 2016-03-31  
[62] 2,962,308  
[30] US (62/053,340) 2014-09-22  
[30] US (14/818,611) 2015-08-05

[21] **3,146,348**  
[13] A1

[25] EN  
[54] **TRACKED ALL-TERRAIN VEHICLE**  
[54] **VEHICULE TOUT TERRAIN A CHENILLES**  
[72] BORUD, ERIC J., US  
[72] SAFRANSKI, BRIAN M., US  
[72] BRACHT, BRADLEY A., US  
[71] POLARIS INDUSTRIES INC., US  
[22] 2017-06-20  
[41] 2017-12-28  
[62] 3,028,152  
[30] US (15/187,368) 2016-06-20

[21] **3,146,422**  
[13] A1

[25] EN  
[54] **COMBINATIONS OF AN ANTI-HER2 ANTIBODY-DRUG CONJUGATE AND CHEMOTHERAPEUTIC AGENTS, AND METHODS OF USE**  
[54] **COMBINAISONS DE CONJUGUES ANTICORPS ANTI-HER2-MEDICAMENT ET D'AGENTS CHIMIOETHERAPIQUES, ET PROCEDES D'UTILISATION**  
[72] BERRY, LEANNE, US  
[72] PHILLIPS, GAIL LEWIS, US  
[72] SLIWKOWSKI, MARK X., US  
[71] GENENTECH, INC., US  
[22] 2009-03-10  
[41] 2009-09-24  
[62] 2,990,929  
[30] US (61/037,410) 2008-03-18

[21] **3,146,450**  
[13] A1

[25] EN  
[54] **REMOTE LOCATED CLUTCH**  
[54] **EMBRAYAGE DISTANT**  
[72] TIRY, MICHAEL J., US  
[71] ARCTIC CAT INC., US  
[22] 2015-04-01  
[41] 2015-10-04  
[62] 2,887,275  
[30] US (14/245901) 2014-04-04

[21] **3,146,478**  
[13] A1

[25] EN  
[54] **BLANK FOR FORMING A CONTAINER TRAY**  
[54]  
[72] VALENCIA, JOHN, US  
[71] WESTROCK SHARED SERVICES, LLC, US  
[22] 2021-07-20  
[41] 2022-01-20  
[30] US (63/053825) 2020-07-20

[21] **3,146,668**  
[13] A1

[51] **Int.Cl. A24F 40/50 (2020.01) A24F 40/51 (2020.01) A24F 40/53 (2020.01)**  
[25] EN  
[54] **AEROSOL-GENERATING ARTICLE AND ELECTRICALLY OPERATED SYSTEM INCORPORATING A TAGGANT**  
[54] **ARTICLE DE GENERATION D'AEROSOL, ET SYSTEME ACTIONNE ELECTRIQUEMENT INCORPORANT UN TRACEUR**  
[72] FERNANDO, FELIX, GB  
[72] BERNAUER, DOMINIQUE, CH  
[71] PHILIP MORRIS PRODUCTS S.A., CH  
[22] 2014-12-03  
[41] 2015-06-11  
[62] 2,923,374  
[30] EP (13195494.3) 2013-12-03

[21] **3,146,744**  
[13] A1

[51] **Int.Cl. A24F 40/50 (2020.01) A24F 40/65 (2020.01) A61M 15/06 (2006.01) A61M 11/04 (2006.01)**  
[25] EN  
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[71] NICOVENTURES TRADING LIMITED, GB  
[22] 2013-10-09  
[41] 2014-04-24  
[62] 3,037,030  
[30] GB (1218820.7) 2012-10-19

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PARK, MIN-WOO	3,039,663	ROLLS-ROYCE NORTH AMERICAN		SERPIN PHARMA, LLC	2,996,975
PATEL, KRINA	2,978,095	TECHNOLOGIES, INC.	2,939,505	SERVICENOW, INC.	2,990,252
PATENT AGENCIES LIMITED	2,952,384	ROSEN SWISS AG	2,926,263	SEVIGNY VILLEUX, VINCENT	2,977,471
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PEREZ, JUAN CARLOS FLORES	3,058,351	ROTHKRAZ, REINHARD L.M.H.	3,002,714	SHARGOTS, SCOTT J.	2,870,945
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PIPCHUK, DOUGLAS	2,974,703	RYKLINA, ELENA PROKOPIEVNA	3,027,376	SHINDE, SANTOSH GANPAT	2,867,820
PLASTIC SAFETY SYSTEMS, INC.	2,928,575	SACCA, GIUSEPPE	2,926,900	SHOSEYOV, ODED	2,938,142
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THE BOEING COMPANY	2,977,143	VEILLEUX, SERGE	2,977,471	YERRAMALLI, SRINIVAS	3,074,402
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		VOTOLATO, EARL	3,075,369	ZHANG, JI	3,068,965
		VU, QUANG NGOC	2,926,900	ZHANG, YI	3,055,647
		W. L. GORE & ASSOCIATES, INC.	3,053,118	ZHANG, YI	3,101,634
		W. L. GORE & ASSOCIATES, INC.	3,068,965	ZHANG, YU-E	2,892,025
		WALLACE, DEAN	3,012,385	ZHANG, ZHIHUI	3,058,351
		WANG, JUE	2,978,095	ZHANG, ZHIHUI	3,058,351
		WANG, WENCAN	2,961,096	ZHOU, MING	2,799,501
		WANG, YANLONG	3,028,703	ZHOU, WUBIN	3,056,162
		WANG, YOUZHEN	3,030,967	ZIEN, JACOB DANIEL	2,897,511
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ILLINOIS TOOL WORKS INC.	3,125,853	LIU, FENG	3,126,643	PARK, JONGHYUN	3,126,568
ILLINOIS TOOL WORKS INC.	3,126,496	LIU, SHANGQING	3,126,555	PARK, KYUNGMIN	3,127,117
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JEON, HYOUNGSUK	3,126,568	MARATHON PETROLEUM COMPANY LP	3,126,678	PETITPAS, GUILLAUME	3,123,556
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BRACHT, BRADLEY A.	3,146,348	KILCOIN, CHRIS	3,145,929	RIVERA, CARLOS	3,146,321
BRAUER, LOTHAR	3,145,998	KLINE, KOREY	3,146,315	ROCHELEAU, DARYL	3,123,129
BROWN, TROY	3,146,190	KLINE, KOREY	3,146,321	ROWE, STANTON, J.	3,145,958
CAPPELLE, MARK	3,145,938	KMIECIK, KENNETH	3,145,881	SAFRANSKI, BRIAN M.	3,146,348
CARTLEDGE, RICHARD	3,146,315	KOPPAKA, VISH	3,146,151	SEMINIS VEGETABLE SEEDS,	
CARTLEDGE, RICHARD	3,146,321	KRAMER, CHAD	3,145,881	INC.	3,145,881
CHAN, HENRY HIN LEE	3,145,893	KROUSHL, DANIEL B.	3,145,928	SHEAROCK CONSTRUCTION	
CHAU, MARK	3,145,958	LADERMAN, ELISABETH	3,145,879	GROUP INC.	3,123,129
CHITTOOR, JAISHREE M.	3,145,660	LEIA INC.	3,145,713	SHI, SIMON	3,145,998
COOPER, ALEXANDER, H.	3,145,958	LG ELECTRONICS INC.	3,145,758	SISTARE, REBECCA	
CORNING OPTICAL		LORD, CHRISTOPHER	3,146,744	ELIZABETH	3,146,345
COMMUNICATIONS LLC	3,146,345	MA, MING	3,145,713	SLIWKOWSKI, MARK X.	3,146,422
DAIFUKU CO., LTD.	3,145,590	MAIER, MARTIN	3,146,103	SMITH, KEVIN W.	3,146,321
DAIFUKU CO., LTD.	3,145,600	MANOHARAN, MUTHIAH	3,146,103	SMITH, KEVIN, W.	3,146,315
DE CLEUR, PIARAS	3,145,998	MANSTEIN, DIETER	3,145,893	SNOWDON, MICHAEL ALLEN	3,123,129
DELGADO, SERGIO	3,145,958	MARCOUS, NEIL	3,145,607	SPANNUTH, MELISSA	3,145,953
DEVILLE, DEREK DEE	3,146,321	MARIDAKIS, MICHAEL	3,146,190	SPECTRUM BRANDS, INC.	3,146,190
DEVILLE, DEREK, DEE	3,146,315	MCBRAYER, M. SEAN	3,146,321	STEWART, ALEX	3,145,953
EATON INTELLIGENT POWER		MCBRAYER, M., SEAN	3,146,315	TAFT, ROBERT, C.	3,145,958
LIMITED	3,145,928	MENDEZ, MAX PIERRE	3,146,321	TEAGUE, PHILIP	3,145,953
EDWARDS LIFESCIENCES AG	3,146,315	MENDEZ, MAX, PIERRE	3,146,315	TELEFLEX LIFE SCIENCES	
EDWARDS LIFESCIENCES AG	3,146,321	MILLER, LARRY J.	3,145,929	LIMITED	3,145,929
EDWARDS LIFESCIENCES		MIYAMOTO, AMY J.	3,145,660	THE CHEMOURS COMPANY	
CORPORATION	3,145,958	MONSANTO TECHNOLOGY		FC, LLC	3,146,256
EVANS, ELLEN L.	3,145,881	LLC	3,145,660	THE COCA-COLA COMPANY	3,145,998
FATTAL, DAVID A.	3,145,713	MORGAN, JOHN	3,145,929	THE GENERAL HOSPITAL	
FERNANDO, FELIX	3,146,668	MORRIS, ROBERT A.	3,145,928	CORPORATION	3,145,893
FIDELITY INFORMATION		NAPPA, MARIO JOSEPH	3,146,256	TIRY, MICHAEL J.	3,146,450
SERVICES, LLC	3,145,607	NARAYANANNAIR,		TITKEMEYER, ROBERT W.	3,145,929
FLOORING INDUSTRIES		JAYAPRAKASH K.	3,146,103	TUTT, TERESA	3,145,953
LIMITED, SARL	3,145,938	NGUYEN, THUAN	3,146,190	VALENCIA, JOHN	3,146,478
FUJIO, YOSHIHIKO	3,145,590	NICHOLS, AMY M.	3,145,660	VELLARD, MICHEL, CLAUDE	3,146,151
FUJIO, YOSHIHIKO	3,145,600	NICOVENTURES TRADING		WAYMO LLC	3,145,849
GARKE, GUNNAR	3,146,285	LIMITED	3,146,744	WEAVER, BRYAN	3,146,281
GEHINDY, FRANK	3,145,998	NUNEZ, GEORGE	3,146,315	WESTROCK SHARED	
GENENTECH, INC.	3,146,422	NUNEZ, GEORGE	3,146,321	SERVICES, LLC	3,146,478

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WI-TRONIX, LLC	3,146,281
WOODBURY, ROBERT	3,145,607
ZUO, VINCENT	3,145,893