



Canadian  
Intellectual Property  
Office

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Un organisme  
d'Industrie Canada

ISSN-1712-4034

# The Patent

Office Record

# La Gazette

du Bureau des brevets



Vol. 150 No. 4 January 25, 2022

Vol. 150 No. 4 le 25 janvier 2022

Canada



# THE CANADIAN PATENT OFFICE RECORD

## LA GAZETTE DU BUREAU DES BREVETS

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

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

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

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

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## Notices

## Avis

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

#### Dates

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

#### Code Numerals

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

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

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

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

#### Dates

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

#### Chiffres de code

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

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

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

## 2. Country Code

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

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

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

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

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

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

## 2. Code des pays

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

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

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

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

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

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

## 5. Advice on Making a Patent Application

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

## 6. Licensing of Patents

### Voluntary Licences

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

### Compulsory Licences

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

## 7. Patents Available for Licence or Sale

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

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

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

None

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

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

## 6. Octroi de licences en vertu des brevets

### Licences librement accordées

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

### Licences obligatoires

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

## 7. Brevets disponibles pour licence ou vente

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

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

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

Aucun

## 9. Applications Open to Public Inspection

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

## 10. Language of Published Documents

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

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

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

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

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

## 9. Demandes mises à la disponibilité du public

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

## 10. Langue du document publié

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

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

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

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

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

## Notices

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

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

### 4. Late payment fee

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

### 4. Taxe pour paiement tardif

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

## Preliminary Examination

## Examen préliminaire

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

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

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

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

\* International fees will be reduced by:

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

\* Les frais seront réduits de:

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

## 12. PCT Notices

## 12. Avis PCT

### Patent Cooperation Treaty (PCT)

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

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

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

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

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

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

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

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

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



### 13. Practice Notice

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

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

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

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

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

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

### 13. Énoncé de pratique

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

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

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

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

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

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

## Notices

Offices.

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

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

## 14. Correspondence Procedures

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

Web Link for MOPOP:

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

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

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

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

Publication date: May 10, 2017

Amendment date: June 17, 2019

### On this page:

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

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

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

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

## 14. Procédures de correspondance

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

Lien Web pour le RPBB :

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

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

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

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

Date de publication : 10 mai 2017

Date de modification : 17 juin 2019

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7. Procédures à suivre lorsque l'Office est ouvert au public, mais les clients sont incapables de communiquer avec l'Office
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This notice is intended to clarify the practice of the Canadian Intellectual Property Office with respect to correspondence procedures and written communications and replaces all previous notices.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Le formulaire de paiements des frais devrait toujours être

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

Download the [Fee Payment Form](#).

### 1.1 Designated Establishments

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

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

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

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

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

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

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

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

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

### 1.1 Établissements désignés

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

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

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

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

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

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

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

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except statutory holiday

l'exception des jours fériés

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### 2. Electronic Correspondence

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

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

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

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

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

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

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

### 2. Correspondance électronique

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

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

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

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

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

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open for business.

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

### 2.1 Facsimile

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

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

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

(819) 934-3833

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

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

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

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

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

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

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

### 2.1 Correspondance par télécopieur

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

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

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

(819) 934-3833

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

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

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

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

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

## Notices

### Patents

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

### 2.2 Online

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

### Patents

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

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

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

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

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

### Trademarks

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

### Brevets

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

### 2.2 En ligne

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

### Brevets

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

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

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

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

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

### Marques de commerce

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



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accessing the following pages:

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

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

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

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

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

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

## Copyright

:

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

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

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

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

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

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

## Droits d'auteur

## Notices

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

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

## Industrial Designs

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

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

## Integrated Circuit Topographies

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

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

### 2.3 Electronic medium

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

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

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

## Dessins industriels

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

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

## Topographies de circuits intégrés

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

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

### 2.3 Supports électroniques

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

## Brevets

## Patents

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## Notices

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

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

### Electronic Media accepted by the Patent Office

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

### Trademarks and Industrial Design

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

## 3. Details Concerning the Electronic Formats Accepted

### Patents

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

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

When applicable, the Patent Office will accept files in the

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

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

### Supports électroniques acceptés par le Bureau des brevets

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

### Marques de commerce et dessins industriels

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

## 3. Précisions concernant les formats électroniques acceptés

### Brevets

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

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

## Avis

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

TIFF Format:

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

PDF Format:

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

ASCII

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

## Trademarks

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

## Industrial Design

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

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

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

Format TIFF

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

Format PDF

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

ASCII

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

## Marques de commerce

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

## Dessins industriels

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

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

## Notices

### 4. General Information

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

### 5. Time Period Extensions

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

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

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

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

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

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

### 4. Renseignements généraux

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

### 5. Prorogation des délais

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

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

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

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

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

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

## Avis

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



## Notices

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

### Time period extensions under the Patent Cooperation Treaty

Rule 80.5 of the Regulations under the PCT provides:

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## Notices

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

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

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

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

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

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

#### Trademarks

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

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

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

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

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

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

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

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

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

#### Marques de commerce

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

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

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

## Avis

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

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

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

The *Canadian Patent Office Record* of January 25, 2022 contains applications open to public inspection from January 9, 2022 to January 15, 2022.

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

La *Gazette du bureau des brevets* du 25 janvier 2022 contient les demandes disponibles au public pour consultation pour la période du 9 janvier 2022 au 15 janvier 2022.

# Canadian Patents Issued

January 25, 2022

## Brevets canadiens délivrés

25 janvier 2022

---

[11] **2,767,014**  
[13] C

[51] **Int.Cl. C12N 5/0789 (2010.01) C12N 5/078 (2010.01)**

[25] EN

[54] **METHOD OF PRODUCING ERYTHROCYTES WITHOUT FEEDER CELLS**

[54] **PROCEDE POUR PRODUIRE DES ERYTHROCYTES SANS CELLULES NOURRICIERES**

[72] ABBOT, STEWART, US

[72] KANG, LIN, US

[72] VOSKINARIAN-BERSE, VANESSA, US

[72] ZHANG, XIAOKUI, US

[73] CELULARITY INC., US

[85] 2011-12-29

[86] 2010-07-01 (PCT/US2010/040707)

[87] (WO2011/002959)

[30] US (61/222,930) 2009-07-02

---

[11] **2,786,351**  
[13] C

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

[25] EN

[54] **METHOD FOR IDENTIFYING A FETAL ANEUPLOIDY OF A CHROMOSOME OF INTEREST**

[54] **METHODE DE DETECTION D'UNE ANEUPLOIDIE FOETALE D'UN CHROMOSOME D'INTERET**

[72] RAVA, RICHARD P., US

[72] RHEES, BRIAN KENT, US

[73] VERINATA HEALTH, INC., US

[85] 2012-07-04

[86] 2010-12-01 (PCT/US2010/058609)

[87] (WO2011/090557)

[30] US (61/296,358) 2010-01-19

[30] US (61/360,837) 2010-07-01

[30] US (61/407,017) 2010-10-26

[30] US (61/455,849) 2010-10-26

---

[11] **2,810,170**  
[13] C

[51] **Int.Cl. C07K 5/12 (2006.01) A61K 38/12 (2006.01) A61P 1/12 (2006.01) C07K 7/64 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **MU OPIOID RECEPTOR AGONIST ANALOGS OF THE ENDOMORPHINS**

[54] **ANALOGUES DE L'AGONISTE DU RECEPTEUR OPIOIDE MU DES ENDOMORPHINES**

[72] ZADINA, JAMES E., US

[72] HACKLER, LASZLO, US

[73] UNITED STATES DEPARTMENT OF VETERANS AFFAIRS, US

[73] THE ADMINISTRATORS OF THE TULANE EDUCATIONAL FUND, US

[85] 2013-01-09

[86] 2011-07-08 (PCT/US2011/043306)

[87] (WO2012/006497)

[30] US (61/363,039) 2010-07-09

---

[11] **2,821,809**  
[13] C

[51] **Int.Cl. A61K 35/50 (2015.01) C12N 5/071 (2010.01) C12N 5/073 (2010.01) A61P 37/06 (2006.01) C12Q 1/02 (2006.01)**

[25] EN

[54] **TREATMENT OF IMMUNE-RELATED DISEASES AND DISORDERS USING AMNION DERIVED ADHERENT CELLS**

[54] **TRAITEMENT DE MALADIES ET DE TROUBLES LIES A LA REPONSE IMMUNE AU MOYEN DE CELLULES ADHERENTES DERIVEES DE L'AMNIO**

[72] ABBOT, STEWART, US

[72] EDINGER, JAMES W., US

[72] FRANCKI, ALEKSANDAR, US

[72] JANKOVIC, VLADIMIR, US

[72] LIANG, BITAO, US

[73] CELULARITY INC., US

[85] 2013-06-14

[86] 2011-12-15 (PCT/US2011/065158)

[87] (WO2012/083021)

[30] US (61/424,593) 2010-12-17

---

[11] **2,839,334**  
[13] C

[51] **Int.Cl. C23F 15/00 (2006.01) B32B 7/04 (2019.01) B32B 33/00 (2006.01) B32B 37/14 (2006.01) C08J 5/12 (2006.01) C09K 3/10 (2006.01)**

[25] EN

[54] **HYBRID STRUCTURE AND METHODS FOR FORMING THE SAME**

[54] **STRUCTURE HYBRIDE ET PROCEDES DE FORMATION DE CELLE-CI**

[72] ERICKSON, MARCUS ALEXANDER, US

[73] THE BOEING COMPANY, US

[86] (2839334)

[87] (2839334)

[22] 2014-01-13

[30] US (13/832,181) 2013-03-15

---

[11] **2,841,181**  
[13] C

[51] **Int.Cl. C12N 15/09 (2006.01) C07K 16/22 (2006.01) C12N 1/15 (2006.01) C12N 1/19 (2006.01) C12N 1/21 (2006.01) C12N 5/10 (2006.01) C12P 21/08 (2006.01)**

[25] EN

[54] **ANTI-HUMAN NGF ANTIBODY**

[54] **ANTICORPS ANTI-NGF HUMAIN**

[72] KAMOHARA, MASAZUMI, JP

[72] TANAKA, HIROTSUGU, JP

[72] KOYA, YUKARI, JP

[72] TAKASAKI, JUN, JP

[72] YONEZAWA, ATSUO, JP

[72] YOSHIMI, EIJI, JP

[73] ATELLAS PHARMA INC., JP

[85] 2014-01-07

[86] 2012-08-10 (PCT/JP2012/070433)

[87] (WO2013/022083)

[30] JP (2011-176209) 2011-08-11

[30] JP (2011-269215) 2011-12-08

**Brevets canadiens délivrés  
25 janvier 2022**

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[11] **2,842,443**  
[13] C

[51] **Int.Cl. A61K 31/28 (2006.01) A61K 31/12 (2006.01) A61K 31/713 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) G01N 33/50 (2006.01) G01N 33/68 (2006.01)**

[25] EN  
[54] **SYNTHETIC LETHALITY AND THE TREATMENT OF CANCER**  
[54] **LETALITE SYNTHETIQUE ET TRAITEMENT ANTICANCEREUX**

[72] BERTHIAUME, LUC G., CA  
[72] BEAUCHAMP, ERWAN, FR  
[72] PERINPANAYAGAM, CONGANIGE MANEKA ANNE, CA  
[72] YAP, CHUIYEE, CA  
[73] PACYLEX PHARMACEUTICALS INC., CA  
[85] 2014-01-20  
[86] 2012-07-23 (PCT/CA2012/000696)  
[87] (WO2013/013302)  
[30] US (61/510,686) 2011-07-22

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[11] **2,843,824**  
[13] C

[51] **Int.Cl. D21H 19/60 (2006.01)**

[25] EN  
[54] **PAPER SUBSTRATE BARRIER COATING COMPOSITION WITH REDUCED MINERAL OIL TRANSMISSION**  
[54] **COMPOSITION DE REVETEMENT BARRIERE SUR SUBSTRAT DE PAPIER OFFRANT UNE TRANSMISSION REDUITE D'HUILE MINERALE**

[72] PRESTON, JANET, GB  
[72] O'NEILL, GRAHAM, GB  
[72] PHIPPS, JONATHAN, GB  
[73] IMERTECH SAS, FR  
[85] 2014-01-31  
[86] 2012-07-27 (PCT/GB2012/051832)  
[87] (WO2013/017857)  
[30] GB (1113385.7) 2011-08-03

---

[11] **2,850,160**  
[13] C

[51] **Int.Cl. A01C 7/16 (2006.01)**

[25] EN  
[54] **SEED DELIVERY APPARATUS, SYSTEMS, AND METHODS**  
[54] **APPAREIL, SYSTEMES ET PROCEDES DE DISTRIBUTION DE GRAINES**

[72] RADTKE, IAN R., US  
[72] HODEL, JEREMY J., US  
[73] PRECISION PLANTING LLC, US  
[85] 2014-03-26  
[86] 2012-09-26 (PCT/US2012/057327)  
[87] (WO2013/049198)  
[30] US (61/539,786) 2011-09-27

---

[11] **2,854,255**  
[13] C

[51] **Int.Cl. C07K 14/47 (2006.01) A61K 38/17 (2006.01) A61P 35/00 (2006.01) C07K 16/18 (2006.01) C12N 15/12 (2006.01) C12Q 1/00 (2006.01) G01N 33/574 (2006.01) G01N 33/68 (2006.01)**

[25] EN  
[54] **MUTATIONS OF HISTONE PROTEINS ASSOCIATED WITH PROLIFERATIVE DISORDERS**  
[54] **MUTATIONS DES PROTEINES HISTONES ASSOCIEES AUX TROUBLES PROLIFERATIFS OF**

[72] JABADO, NADA, CA  
[72] PFISTER, STEFAN M., DE  
[72] PLASS, CHRISTOPH, DE  
[72] KORSHUNOV, ANDREY, DE  
[72] WITT, HENDRIK, DE  
[72] STURM, DOMINIK, DE  
[72] JONES, DAVID, DE  
[72] LICHTER, PETER, DE  
[72] PFAFF, ELKE, DE  
[73] THE ROYAL INSTITUTION FOR THE ADVANCEMENT OF LEARNING / MCGILL UNIVERSITY, CA  
[73] UNIVERSITATSKLINIKUM HEIDELBERG, DE  
[73] GERMAN CANCER RESEARCH CENTER (DKFZ), DE  
[85] 2014-05-01  
[86] 2012-11-21 (PCT/CA2012/050834)  
[87] (WO2013/075237)  
[30] US (61/562,204) 2011-11-21  
[30] US (61/564,390) 2011-11-29

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[11] **2,856,612**  
[13] C

[51] **Int.Cl. A01K 91/08 (2006.01) B63B 21/66 (2006.01)**

[25] EN  
[54] **TROLLING DEVICE FOR CONTROLLING MOVEMENT OF FISHING LINE AND LURE SPEED**  
[54] **DISPOSITIF POUR PECHE A LA TRAINE PERMETTANT DE CONTROLER LE MOUVEMENT DE LA LIGNE ET LA VITESSE DU LEURRE**

[72] MAJSZAK, THOMAS E., US  
[73] MAJSZAK, THOMAS E., US  
[86] (2856612)  
[87] (2856612)  
[22] 2014-07-10  
[30] US (61/845052) 2013-07-11

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[11] **2,859,243**  
[13] C

[51] **Int.Cl. F24F 11/70 (2018.01) F24F 11/62 (2018.01) F24F 7/007 (2006.01)**

[25] EN  
[54] **APPARATUS AND METHODS FOR CONTROLLING A VENTILATION MECHANISM**  
[54] **APPAREIL ET METHODES DE COMMANDE D'UN MECANISME DE VENTILATION**

[72] OSTROVSKY, MICHAEL, US  
[72] GALLO, MARC, US  
[72] SOCCOLI, PAUL, US  
[72] LOMBARDI, ALFRED, US  
[73] LEVITON MANUFACTURING CO., INC., US  
[86] (2859243)  
[87] (2859243)  
[22] 2014-08-12  
[30] US (14/289,285) 2014-05-28

**Canadian Patents Issued  
January 25, 2022**

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[11] **2,862,015**  
[13] C

[51] **Int.Cl. B31B 50/28 (2017.01)**  
[25] EN  
[54] **METHODS AND MACHINE FOR FORMING A CONTAINER FROM A BLANK USING A PRE-FOLD MANDREL SECTION**  
[54] **PROCEDES ET MACHINE POUR FORMER UN CONTENANT A PARTIR D'UN FLAN AU MOYEN D'UN SEGMENT DE MANDRIN DE PRE-PLI**  
[72] GRAHAM, THOMAS D., US  
[72] AGANOVIC, AMER, US  
[72] D'ALESIO, CLAUDIO, US  
[73] ROCK-TENN SHARED SERVICES, LLC, US  
[86] (2862015)  
[87] (2862015)  
[22] 2014-09-05  
[30] US (14/020,403) 2013-09-06

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[11] **2,879,022**  
[13] C

[51] **Int.Cl. B64D 11/02 (2006.01) B64D 11/06 (2006.01)**  
[25] EN  
[54] **SPACE EFFICIENT PARTITION ASSEMBLY FOR COMMERCIAL AIRCRAFT**  
[54] **ENSEMBLE DE DIVISION EFFICACE D'ESPACE DESTINE A UN AERONEF COMMERCIAL**  
[72] HAWKINS, AARON, US  
[72] BRAUER, ROBERT K., US  
[72] KINNIER, ED, US  
[72] PIRIE, CHRISTOPHER I., US  
[73] B/E AEROSPACE, INC., US  
[85] 2015-01-12  
[86] 2013-07-12 (PCT/US2013/050342)  
[87] (WO2014/014780)  
[30] US (13/551,397) 2012-07-17

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[11] **2,885,407**  
[13] C

[51] **Int.Cl. A01K 5/02 (2006.01) A01K 1/10 (2006.01)**  
[25] FR  
[54] **PUSHER DEVICE FOR PUSHING FEED ALONG THE GROUND AND VEHICLE EQUIPPED WITH SUCH A PUSHER DEVICE**  
[54] **DISPOSITIF POUSSEUR POUR POUSSER DES ALIMENTS SUR LE SOL ET VEHICULE EQUIPE D'UN TEL DISPOSITIF POUSSEUR**  
[72] JEANTIL, PHILIPPE, FR  
[73] JEANTIL, FR  
[85] 2015-03-18  
[86] 2013-09-16 (PCT/EP2013/069106)  
[87] (WO2014/044629)  
[30] FR (1258807) 2012-09-19

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[11] **2,890,727**  
[13] C

[51] **Int.Cl. A61M 25/00 (2006.01) A61B 17/34 (2006.01) A61L 29/04 (2006.01) A61M 19/00 (2006.01) A61M 25/06 (2006.01) A61P 23/00 (2006.01) A61P 23/02 (2006.01) A61M 5/142 (2006.01) A61N 1/34 (2006.01)**  
[25] EN  
[54] **CONTINUOUS ANESTHESIA NERVE CONDUCTION APPARATUS, SYSTEM AND METHOD THEREOF**  
[54] **APPAREIL, SYSTEME ET METHODE D'ANESTHESIE CONTINUE DE LA CONDUCTION NERVEUSE**  
[72] RAJENDRAN, SUNDAR, US  
[72] KOPACZ, DAN JOEL, US  
[72] DESAI, SIDDARTH, US  
[73] SOLO-DEX, INC., US  
[85] 2015-05-07  
[86] 2013-09-24 (PCT/US2013/061507)  
[87] (WO2014/074237)  
[30] US (61/724,539) 2012-11-09

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[11] **2,891,279**  
[13] C

[51] **Int.Cl. C12N 5/00 (2006.01) C12N 5/071 (2010.01) C12N 5/02 (2006.01)**  
[25] EN  
[54] **CELL CULTURE MEDIA**  
[54] **MILIEU DE CULTURE CELLULAIRE**  
[72] VON HAGEN, JOERG, DE  
[72] BREUNING, MARCEL ANDRE, DE  
[72] JASPER, CHRISTIAN, DE  
[73] MERCK PATENT GMBH, DE  
[85] 2015-05-12  
[86] 2013-11-14 (PCT/EP2013/003441)  
[87] (WO2014/075807)  
[30] EP (12007711.0) 2012-11-14

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[11] **2,894,624**  
[13] C

[51] **Int.Cl. E04F 13/24 (2006.01)**  
[25] EN  
[54] **BUILDING PANEL CONNECTOR**  
[54] **RACCORD DE PANNEAU DE CONSTRUCTION**  
[72] GLANCY, BRIAN, CA  
[72] VAIL TAYLOR, US  
[73] KINGSPAN INSULATED PANELS, INC., US  
[86] (2894624)  
[87] (2894624)  
[22] 2015-06-17  
[30] US (14/318,617) 2014-06-28

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[11] **2,895,372**  
[13] C

[51] **Int.Cl. F16C 33/62 (2006.01) F16C 33/64 (2006.01)**  
[25] EN  
[54] **A METHOD FOR MANUFACTURING A BALL BEARING, NOTABLY FOR A BUTTERFLY VALVE IN AN AERONAUTICAL ENVIRONMENT**  
[54] **PROCEDE DE FABRICATION D'UN ROULEMENT A BILLES, NOTAMMENT POUR UNE VANNE A PAPILLON DANS UN ENVIRONNEMENT AERONAUTIQUE**  
[72] LE JEUNE, GWENOLE, FR  
[72] MAHEO, YVES, FR  
[72] ROCCHI, JEROME, FR  
[73] SKF AEROSPACE FRANCE, FR  
[73] LIEBHERR-AEROSPACE TOULOUSE SAS, FR  
[85] 2015-06-17  
[86] 2013-12-18 (PCT/EP2013/077160)  
[87] (WO2014/096047)  
[30] FR (1262632) 2012-12-21

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**Brevets canadiens délivrés  
25 janvier 2022**

[11] **2,900,002**  
[13] C

- [51] **Int.Cl. G01N 33/68 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR THE DIAGNOSIS OF ALZHEIMER'S DISEASE**  
[54] **METHODES ET COMPOSITIONS POUR LE DIAGNOSTIC DE LA MALADIE D'ALZHEIMER**  
[72] FITZGERALD, PETER, GB  
[72] MCCONNELL, IVAN, GB  
[72] LAMONT, JOHN, GB  
[72] RICHARDSON, CIARAN, IE  
[73] RANDOX TEORANTA, IE  
[85] 2015-07-31  
[86] 2014-03-04 (PCT/EP2014/054185)  
[87] (WO2014/135546)  
[30] GB (1303936.7) 2013-03-05

[11] **2,901,126**  
[13] C

- [51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6809 (2018.01) C12Q 1/6827 (2018.01) C12Q 1/6844 (2018.01) C12Q 1/6876 (2018.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR DETECTING AND TREATING DRUG RESISTANT AKT MUTANT**  
[54] **PROCEDES ET COMPOSITIONS POUR DETECTER ET TRAITER UN MUTANT D'AKT RESISTANT AUX MEDICAMENTS**  
[72] LIN, KUI, US  
[73] GENENTECH, INC., US  
[85] 2015-08-12  
[86] 2014-02-24 (PCT/US2014/017948)  
[87] (WO2014/130923)  
[30] US (61/769,108) 2013-02-25

[11] **2,901,816**  
[13] C

- [51] **Int.Cl. B41F 17/22 (2006.01) B41F 31/16 (2006.01) B41F 31/20 (2006.01) B41F 33/00 (2006.01)**  
[25] EN  
[54] **CAN DECORATOR APPARATUS AND METHOD**  
[54] **MACHINE ET PROCEDE DE DECORATION DE BOITES**  
[72] HUGHES, GRAHAME, GB  
[72] ROSELAAR, KATHERINE, GB  
[73] CROWN PACKAGING TECHNOLOGY, INC., US  
[85] 2015-08-19  
[86] 2014-02-20 (PCT/EP2014/053296)  
[87] (WO2014/128200)  
[30] GB (1303003.6) 2013-02-20  
[30] GB (1304488.8) 2013-03-13  
[30] GB (1305908.4) 2013-04-02  
[30] GB (1315457.0) 2013-08-30

[11] **2,905,786**  
[13] C

- [51] **Int.Cl. C12N 5/0789 (2010.01) C12N 5/071 (2010.01) C12N 5/0775 (2010.01) C12N 5/095 (2010.01) C12N 5/00 (2006.01)**  
[25] EN  
[54] **METHODS AND MATERIALS FOR HEMATOENDOTHELIAL DIFFERENTIATION OF HUMAN PLURIPOTENT STEM CELLS UNDER DEFINED CONDITIONS**  
[54] **METHODES ET MATERIAUX POUR LA DIFFERENCIATION DE CELLULES SOUCHES PLURIPOTENTES HUMAINES EN CELLULES ENDOTHELIALES ET HEMATOPOIETIQUES DANS DES CONDITIONS DEFINIES**  
[72] SLUKVIN, IGOR, US  
[72] UENISHI, GENE ICHIRO, US  
[73] WISCONSIN ALUMNI RESEARCH FOUNDATION, US  
[85] 2015-09-11  
[86] 2014-03-12 (PCT/US2014/024518)  
[87] (WO2014/165131)  
[30] US (61/779,564) 2013-03-13

[11] **2,907,242**  
[13] C

- [51] **Int.Cl. H04W 4/30 (2018.01) H04W 4/08 (2009.01) H04W 4/10 (2009.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR WALKIE-TALKIE COMMUNICATIONS**  
[54] **METHODES ET SYSTEMES DE COMMUNICATION PAR EMETTEUR-RECEPTEUR PORTATIF**  
[72] PINARD, DEBORAH, CA  
[72] PINARD, MELISSA, CA  
[72] WILLIAMS, LIAM, CA  
[73] INITLIVE INC., CA  
[86] (2907242)  
[87] (2907242)  
[22] 2015-10-02  
[30] US (62/058,741) 2014-10-02

[11] **2,908,156**  
[13] C

- [51] **Int.Cl. C12N 5/10 (2006.01) A61K 45/00 (2006.01) A61K 48/00 (2006.01) A61P 11/00 (2006.01) A61P 43/00 (2006.01) C12N 15/09 (2006.01) C12P 21/02 (2006.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING PROTEIN USING SPLICING FACTOR 3B SUBUNIT 4 (SF3B4) AND P180 PROTEIN**  
[54] **METHODE POUR PRODUIRE UNE PROTEINE UTILISANT UN FACTEUR D'EPISSAGE DE PROTEINE P180 ET 4 (SF3B4) DE LA SOUS-UNITE 3B**  
[72] UENO, TOMONORI, JP  
[72] TAGA, YUKI, JP  
[72] GOTO, KIYOKO, JP  
[72] KAKU, YUKO, JP  
[73] NIPPI, INCORPORATED, JP  
[85] 2015-09-25  
[86] 2014-03-26 (PCT/JP2014/058702)  
[87] (WO2014/157429)  
[30] JP (2013-064357) 2013-03-26  
[30] JP (2013-261178) 2013-12-18

**Canadian Patents Issued  
January 25, 2022**

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[11] **2,912,338**  
[13] C

[51] **Int.Cl. C07D 401/06 (2006.01) A61K 31/506 (2006.01)**  
[25] EN  
[54] **PYRIDONE DERIVATIVES FOR THE TREATMENT OF VIRAL INFECTIONS AND FURTHER DISEASES**  
[54] **DERIVES DE PYRIDONE POUR LE TRAITEMENT D'INFECTIONS VIRALES ET D'AUTRES MALADIES**  
[72] MC GOWAN, DAVID CRAIG, BE  
[72] RABOISSON, PIERRE JEAN-MARIE BERNARD, BE  
[73] JANSSEN SCIENCES IRELAND UC, IE  
[85] 2015-11-12  
[86] 2014-05-23 (PCT/EP2014/060603)  
[87] (WO2014/187932)  
[30] EP (13169076.0) 2013-05-24

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[11] **2,912,595**  
[13] C

[51] **Int.Cl. B42D 15/00 (2006.01) B42D 25/00 (2014.01) G02B 5/18 (2006.01) G02B 27/44 (2006.01)**  
[25] EN  
[54] **OPTICALLY VARIABLE ELEMENT**  
[54] **ELEMENT OPTIQUEMENT VARIABLE**  
[72] BREHM, LUDWIG, DE  
[72] MADER, SEBASTIAN, CH  
[72] SCHILLING, ANDREAS, CH  
[72] TOMPKIN, WAYNE ROBERT, CH  
[72] WALTER, HARALD, CH  
[73] LEONHARD KURZ STIFTUNG & CO. KG, DE  
[73] OVD KINEGRAM AG, CH  
[85] 2015-11-16  
[86] 2014-05-06 (PCT/EP2014/059238)  
[87] (WO2014/187665)  
[30] DE (10 2013 105 246.0) 2013-05-22

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[11] **2,913,548**  
[13] C

[51] **Int.Cl. G06F 40/10 (2020.01) G06F 40/166 (2020.01) G06F 3/14 (2006.01)**  
[25] EN  
[54] **AUTOMATED SYSTEM FOR ORGANIZING PRESENTATION SLIDES**  
[54] **SYSTEME AUTOMATIQUE PERMETTANT D'ORGANISER DES DIAPOSITIVES DE PRESENTATION**  
[72] MALONEY, CHRISTOPHER, US  
[73] MICROSOFT TECHNOLOGY LICENSING, LLC, US  
[85] 2015-11-25  
[86] 2014-05-30 (PCT/US2014/040159)  
[87] (WO2014/197300)  
[30] US (13/911,833) 2013-06-06

---

[11] **2,913,678**  
[13] C

[51] **Int.Cl. C08B 37/08 (2006.01) A61K 31/722 (2006.01) A61L 15/28 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PRODUCING LOW ENDOTOXIN CHITOSAN**  
[54] **PROCEDE POUR LA PRODUCTION DE CHITOSANE A FAIBLE TENEUR EN ENDOTOXINES**  
[72] HARDY, CRAIG, GB  
[72] HOGGARTH, ANDREW, GB  
[72] GLADMAN, JUNE, GB  
[73] MEDTRADE PRODUCTS LIMITED, GB  
[85] 2015-11-26  
[86] 2014-05-29 (PCT/GB2014/051648)  
[87] (WO2014/191755)  
[30] GB (1309606.0) 2013-05-29

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[11] **2,913,691**  
[13] C

[51] **Int.Cl. C07D 495/04 (2006.01) A61K 31/519 (2006.01) A61P 37/04 (2006.01)**  
[25] EN  
[54] **THIENO[3,2-D]PYRIMIDINES DERIVATIVES FOR THE TREATMENT OF VIRAL INFECTIONS**  
[54] **DERIVES DE THIENO[3,2-D]PYRIMIDINES DESTINES AU TRAITEMENT D'INFECTIONS VIRALES**  
[72] MC GOWAN, DAVID CRAIG, BE  
[72] RABOISSON, PIERRE JEAN-MARIE BERNARD, BE  
[73] JANSSEN SCIENCES IRELAND UC, IE  
[85] 2015-11-26  
[86] 2014-07-29 (PCT/EP2014/066219)  
[87] (WO2015/014815)  
[30] EP (13178534.7) 2013-07-30

---

[11] **2,914,004**  
[13] C

[51] **Int.Cl. C07K 5/117 (2006.01) A61K 38/07 (2006.01) A61P 7/02 (2006.01) A61P 39/06 (2006.01)**  
[25] EN  
[54] **NEW COMPOUNDS HAVING TRIPLE ACTIVITIES OF THROMBOLYSIS, ANTITHROMBOTIC AND RADICAL SCAVENGING, AND SYNTHESIS, NANO-STRUCTURE AND USE THEREOF**  
[54] **NOUVEAUX COMPOSES AYANT UNE TRIPLE ACTIVITE DE THROMBOLYSE, ANTITHROMBOTIQUE ET DE CAPTURE DES RADICAUX ET LEUR SYNTHESE, NANOSTRUCTURE ET UTILISATION**  
[72] PENG, SHIQI, CN  
[72] ZHAO, MING, CN  
[72] WU, JIANHUI, CN  
[72] WANG, YUJI, CN  
[72] FENG, QIQI, CN  
[73] SHANGHAI LUMOSA THERAPEUTICS CO., LTD., CN  
[85] 2015-11-19  
[86] 2014-06-03 (PCT/CN2014/079098)  
[87] (WO2014/194809)  
[30] CN (201310225330.6) 2013-06-05



**Brevets canadiens délivrés  
25 janvier 2022**

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[11] **2,916,924**  
[13] C

[51] **Int.Cl. G05D 23/19 (2006.01) F24F 11/49 (2018.01) H02H 3/06 (2006.01) H02J 13/00 (2006.01)**

[25] EN

[54] **THERMOSTAT SWITCHING CIRCUITRY ROBUST AGAINST ANOMALOUS HVAC CONTROL LINE CONDITIONS**

[54] **CIRCUIT DE COMMUTATION DE THERMOSTAT RESISTANT AUX CONDITIONS DE LIGNE DE COMMANDE CVCA ANORMALES**

[72] CONNER, BRIAN J., US

[72] WARREN, DANIEL ADAM, US

[72] BUENAVENTURA, ORVILLE, US

[72] AYOUBI, MICHAEL, US

[72] SATTERTHWAITTE, EDWIN H., US

[73] GOOGLE LLC, US

[86] (2916924)

[87] (2916924)

[22] 2016-01-07

[30] US (14/591,804) 2015-01-07

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[11] **2,920,671**  
[13] C

[51] **Int.Cl. B22D 11/103 (2006.01) B22D 11/04 (2006.01)**

[25] EN

[54] **DISTRIBUTION DEVICE**

[54] **DISPOSITIF DE DISTRIBUTION**

[72] VINCENT, MARK, GB

[72] PALMER, MARK, US

[73] PYROTEK ENGINEERING MATERIALS LIMITED, GB

[85] 2016-02-05

[86] 2014-08-11 (PCT/GB2014/052447)

[87] (WO2015/022507)

[30] GB (1314376.3) 2013-08-12

[30] GB (1406937.1) 2014-04-17

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[11] **2,925,758**  
[13] C

[51] **Int.Cl. C08G 71/02 (2006.01) A61L 27/18 (2006.01) C07C 227/14 (2006.01) C07C 229/36 (2006.01) C07C 275/24 (2006.01)**

[25] EN

[54] **METHODS FOR POST-FABRICATION FUNCTIONALIZATION OF POLY(ESTER UREAS)**

[54] **PROCEDES POUR LA FONCTIONNALISATION DE POLY(ESTER-UREES) APRES FABRICATION**

[72] LIN, FEI, US

[72] BECKER, MATTHEW, US

[73] THE UNIVERSITY OF AKRON, US

[85] 2016-03-29

[86] 2014-09-30 (PCT/US2014/058264)

[87] (WO2015/048728)

[30] US (61/884,166) 2013-09-30

---

[11] **2,926,543**  
[13] C

[51] **Int.Cl. G06Q 10/08 (2012.01) H04W 4/029 (2018.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR MANAGING SHIPMENT OF AN ITEM USING A WIRELESS NODE NETWORK**

[54] **PROCEDES ET SYSTEMES PERMETTANT DE GERER L'EXPEDITION D'UN ARTICLE A L'AIDE D'UN RESEAU DE NOEUDS SANS FIL**

[72] SKAAKSRUD, OLE-PETTER, US

[72] HOLLAHAN, TERENCE, US

[72] BENTON, STEVEN, US

[73] FEDEX CORPORATE SERVICES, INC., US

[85] 2016-04-05

[86] 2014-11-07 (PCT/US2014/064501)

[87] (WO2015/099890)

[30] US (61/910,202) 2013-11-29

[30] US (14/446,357) 2014-07-30

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[11] **2,928,697**  
[13] C

[51] **Int.Cl. A61K 47/36 (2006.01)**

[25] EN

[54] **DELIVERY OF DRUGS**

[54] **ADMINISTRATION DE MEDICAMENTS**

[72] UCHEGBU, IJEOMA, GB

[72] SCHATZLEIN, ANDREAS, GB

[72] GODFREY, LISA, GB

[72] LALATSA, KATERINA, GB

[72] IANNITELLI, ANTONIO, GB

[73] NANOMERICS LTD, GB

[85] 2016-04-25

[86] 2014-11-03 (PCT/GB2014/053254)

[87] (WO2015/063510)

[30] GB (1319437.8) 2013-11-04

---

[11] **2,929,440**  
[13] C

[51] **Int.Cl. H04N 1/00 (2006.01) G02B 21/36 (2006.01)**

[25] EN

[54] **METHOD FOR CORRECTING IMAGES ACQUIRED VIA ASYNCHRONOUSLY TRIGGERED ACQUISITION**

[54] **PROCEDE DE CORRECTION D'IMAGES ACQUISES PAR LE BIAIS D'UNE ACQUISITION DECLENCHEE DE MANIERE ASYNCHRONE**

[72] GOSSAGE, KIRK, US

[72] ERICKSON, JEFFREY, US

[73] THORLABS, INC., US

[85] 2016-05-02

[86] 2014-10-17 (PCT/US2014/061154)

[87] (WO2015/069440)

[30] US (61/900,804) 2013-11-06

---

[11] **2,929,939**  
[13] C

[51] **Int.Cl. C09K 3/22 (2006.01) B08B 17/00 (2006.01)**

[25] EN

[54] **COMPOSITION FOR DUST CONTROL**

[54] **COMPOSITION POUR LA LUTTE CONTRE LA POUSSIERE**

[72] HAY, DANIEL N. T., US

[72] DIMAS, PETER A., US

[73] ECOLAB USA INC., US

[85] 2016-05-06

[86] 2014-10-08 (PCT/US2014/059718)

[87] (WO2015/076945)

[30] US (14/089,176) 2013-11-25

**Canadian Patents Issued  
January 25, 2022**

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[11] **2,930,299**  
[13] C

[51] **Int.Cl. A61N 2/00 (2006.01) A61N 2/02 (2006.01)**  
[25] EN  
[54] **MONITORING AND DETECTING MAGNETIC STIMULATION**  
[54] **SURVEILLANCE ET DETECTION D'UNE STIMULATION MAGNETIQUE**  
[72] GHIRON, KENNETH MARC, US  
[72] SHIPWAY, IAN MAXWELL, US  
[72] RIEHL, MARK EDWARD, US  
[72] PILLUTA, RAVI, US  
[73] NEURONETICS, INC., US  
[85] 2016-05-10  
[86] 2014-11-12 (PCT/US2014/065302)  
[87] (WO2015/070259)  
[30] US (14/076,975) 2013-11-11

---

[11] **2,930,750**  
[13] C

[51] **Int.Cl. E21B 34/06 (2006.01) E21B 29/02 (2006.01) E21B 29/08 (2006.01) F16K 7/07 (2006.01)**  
[25] EN  
[54] **IMPROVED TOOL**  
[54] **OUTIL PERFECTIONNE**  
[72] OAG, JAMES GEORGE, GB  
[72] YOUNGER, RAE ANDREW, GB  
[72] MCKAY, SIMON, GB  
[73] SPEX GROUP HOLDINGS LIMITED, GB  
[85] 2016-05-16  
[86] 2014-11-18 (PCT/GB2014/053398)  
[87] (WO2015/075428)  
[30] GB (1320435.9) 2013-11-19

---

[11] **2,931,605**  
[13] C

[51] **Int.Cl. B65B 35/38 (2006.01) B25J 15/06 (2006.01) B65G 47/91 (2006.01)**  
[25] EN  
[54] **PICKUP AND DELIVERY STATION FOR PRODUCTS**  
[54] **STATION DE SAISIE ET DE DISTRIBUTION DE PRODUITS**  
[72] SASSI, FABIO, IT  
[72] CINESI, MATTEO, IT  
[73] I.M.A. INDUSTRIA MACCHINE AUTOMATICHE S.P.A., IT  
[85] 2016-05-25  
[86] 2014-08-05 (PCT/IB2014/063702)  
[87] (WO2015/075571)  
[30] IT (BO2013A000643) 2013-11-25

---

[11] **2,931,945**  
[13] C

[51] **Int.Cl. B65D 83/20 (2006.01) B65D 83/30 (2006.01) B65D 83/22 (2006.01)**  
[25] EN  
[54] **AEROSOL DISPENSER HEAD**  
[54] **TETE DE PULVERISATION D'AEROSOL**  
[72] ARORA, AMIT, GB  
[72] CHAMBERS, RICHARD, GB  
[72] GRIFFIN, PAUL ROGER, GB  
[72] HYDE, ELEANOR RACHEL ANN, GB  
[72] JONES, CHRISTOPHER JOHN, GB  
[72] MAWTUS, GEOFFREY STEPHEN, DK  
[72] ROE, JAMES EDWARD, GB  
[72] ROEBUCK, JASON PETER, GB  
[72] TUNE, PETER WILLIAM, GB  
[72] WALLACE, ANDREW GORDON, GB  
[73] UNILEVER GLOBAL IP LIMITED, GB

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[85] 2016-05-27  
[86] 2014-11-25 (PCT/EP2014/075505)  
[87] (WO2015/086306)  
[30] EP (13196202.9) 2013-12-09

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[11] **2,932,269**  
[13] C

[51] **Int.Cl. G01N 27/333 (2006.01) G01N 33/487 (2006.01) G01N 33/543 (2006.01) G01N 33/558 (2006.01)**  
[25] EN  
[54] **ASSAY DEVICE HAVING A WASH PORT**  
[54] **DISPOSITIF D'ANALYSE DOTE D'UN ORIFICE DE NETTOYAGE**  
[72] JAKUBOWICZ, RAYMOND F., US  
[73] ORTHO CLINICAL DIAGNOSTICS, INC., US  
[85] 2016-05-31  
[86] 2014-12-05 (PCT/US2014/068808)  
[87] (WO2015/085181)  
[30] US (61/912,673) 2013-12-06

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[11] **2,932,514**  
[13] C

[51] **Int.Cl. G01N 25/72 (2006.01)**  
[25] EN  
[54] **BUILDING INSULATION AUDITING SYSTEMS AND METHODS**  
[54] **SYSTEMES ET METHODES DE VERIFICATION DE L'ISOLATION D'UN BATIMENT**  
[72] MCNAMEE, THOMAS J., III, US  
[72] NICHOLS, MATTHEW, US  
[72] BERDAN, CLARKE, II, US  
[72] DOLINAR, MICHAEL, CA  
[73] OWENS CORNING INTELLECTUAL CAPITAL, LLC, US  
[86] (2932514)  
[87] (2932514)  
[22] 2016-06-08  
[30] US (62/172,506) 2015-06-08

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[11] **2,933,136**  
[13] C

[51] **Int.Cl. E21B 10/38 (2006.01) E21B 10/40 (2006.01)**  
[25] EN  
[54] **PERCUSSIVE ROCK DRILL BIT WITH FLUSHING GROOVES**  
[54] **OUTIL DE FORAGE PAR PERCUSSION MUNI DE RAINURES DE RINCAGE**  
[72] RINDESKAR, ANDREAS, SE  
[72] HAMMARGREN, JOHN, SE  
[73] SANDVIK INTELLECTUAL PROPERTY AB, SE  
[85] 2016-06-08  
[86] 2014-12-15 (PCT/EP2014/077784)  
[87] (WO2015/113694)  
[30] EP (14153364.6) 2014-01-31

**Brevets canadiens délivrés  
25 janvier 2022**

[11] **2,933,760**

[13] C

- [51] **Int.Cl. A61M 1/36 (2006.01) G01F 23/14 (2006.01)**  
[25] EN  
[54] **AN APPARATUS FOR EXTRACORPOREAL BLOOD TREATMENT AND A CONTROL METHOD THEREFOR**  
[54] **APPAREIL POUR LE TRAITEMENT EXTRACORPOREL DU SANG ET PROCEDE POUR LE COMMANDER**  
[72] SOLEM, KRISTIAN, SE  
[72] STEFANI, DAVID, IT  
[72] HOBRO, STURE, SE  
[72] OLDE, BO, SE  
[73] GAMBRO LUNDIA AB, SE  
[85] 2016-06-14  
[86] 2014-12-09 (PCT/EP2014/076956)  
[87] (WO2015/091082)  
[30] EP (13197966.8) 2013-12-18

[11] **2,934,876**

[13] C

- [51] **Int.Cl. F28D 9/00 (2006.01) F28F 13/08 (2006.01)**  
[25] EN  
[54] **HEAT EXCHANGER, METHOD FOR FORMING THEREOF AND USE THEREOF**  
[54] **ECHANGEUR DE CHALEUR, PROCEDE POUR SA FORMATION ET SON UTILISATION**  
[72] COOL, PETER JAN, NL  
[73] INTERGAS HEATING ASSETS B.V., NL  
[85] 2016-06-22  
[86] 2015-01-09 (PCT/IB2015/000113)  
[87] (WO2015/104634)  
[30] NL (2012066) 2014-01-09

[11] **2,936,306**

[13] C

- [51] **Int.Cl. C09K 8/68 (2006.01)**  
[25] EN  
[54] **USE OF A BORON CROSS LINKER IN AN EMULSION SYSTEM**  
[54] **UTILISATION D'UN AGENT DE RETICULATION AU BORE DANS UN SYSTEME D'EMULSION**  
[72] RAHY, ABDELAZIZ, US  
[72] VELDMAN, RAYNARD RENE, US  
[73] MAGNABLEND INC., US  
[85] 2016-07-08  
[86] 2015-01-07 (PCT/US2015/010462)  
[87] (WO2015/105862)  
[30] US (61/925,912) 2014-01-10

[11] **2,936,895**

[13] C

- [51] **Int.Cl. H04N 5/365 (2011.01) H04N 5/355 (2011.01) H04N 5/357 (2011.01) H04N 5/359 (2011.01) H04N 5/3745 (2011.01)**  
[25] EN  
[54] **IMPROVED IMAGING METHOD AND APPARATUS**  
[54] **PROCEDE ET APPAREIL D'IMAGERIE AMELIORES**  
[72] DENT, ALAN JOHN, GB  
[72] MAN, KWONG CHEUNG, GB  
[73] MBDA UK LIMITED, GB  
[85] 2016-07-14  
[86] 2015-01-23 (PCT/GB2015/050153)  
[87] (WO2015/114311)  
[30] GB (1401442.7) 2014-01-28  
[30] EP (14275017.3) 2014-01-28

[11] **2,939,423**

[13] C

- [51] **Int.Cl. E21B 43/114 (2006.01) E21B 29/08 (2006.01)**  
[25] EN  
[54] **HYDRAULIC CUTTING TOOL, SYSTEM AND METHOD FOR CONTROLLED HYDRAULIC CUTTING THROUGH A PIPE WALL IN A WELL, AND ALSO USES OF THE CUTTING TOOL AND THE SYSTEM**  
[54] **OUTIL DE COUPE HYDRAULIQUE, SYSTEME ET PROCEDE PERMETTANT UNE DECOUPE HYDRAULIQUE COMMANDEE A TRAVERS UNE PAROI DE TUYAU DANS UN PUIT ET EGALEMENT UTILISATIONS DE L'OUTIL DE COUPE ET DU SYSTEME**  
[72] MYHRE, MORTEN, NO  
[72] LARSEN, ARNE GUNNAR, NO  
[72] JENSEN, ROY INGE, NO  
[72] ANDERSEN, PATRICK, NO  
[72] ENGELSGJERD, ERLEND, NO  
[72] IUELL, MARKUS, NO  
[72] DAHL, ARNT OLAV, NO  
[72] HAGA, NILS RUNE, NO  
[72] OSTVOLD, ARNOLD, NO  
[73] HYDRA WELL INTERVENTION AS, NO  
[85] 2016-08-11  
[86] 2015-02-16 (PCT/NO2015/050033)  
[87] (WO2015/126258)  
[30] NO (20140209) 2014-02-18

[11] **2,940,006**

[13] C

- [51] **Int.Cl. B41J 2/165 (2006.01)**  
[25] EN  
[54] **INKJET-HEAD CLEANING DEVICE AND METHOD**  
[54] **DISPOSITIF ET PROCEDE DE NETTOYAGE DE TETE A JET D'ENCRE**  
[72] SEO, MASAHIRO, JP  
[72] KONISHI, YOSHIHISA, JP  
[72] ISHIDA, TETSUHISA, JP  
[72] YAGYU, MOTOHIRO, JP  
[73] QUALICAPS CO., LTD., JP  
[85] 2016-08-17  
[86] 2015-03-02 (PCT/JP2015/056031)  
[87] (WO2015/146494)  
[30] JP (2014-068611) 2014-03-28

[11] **2,940,114**

[13] C

- [51] **Int.Cl. B22F 9/10 (2006.01) B22F 9/08 (2006.01)**  
[25] EN  
[54] **GRANULATION OF MOLTEN FERROCHROMIUM**  
[54] **GRANULATION DE FERROCHROME FONDU**  
[72] LUNDSTROM, PER-AKE, SE  
[73] UVAN HOLDING AB, SE  
[85] 2016-08-18  
[86] 2015-04-02 (PCT/SE2015/050408)  
[87] (WO2015/152814)  
[30] EP (14163382.6) 2014-04-03

[11] **2,941,945**

[13] C

- [51] **Int.Cl. B22C 1/18 (2006.01) B22D 15/04 (2006.01) B22D 35/04 (2006.01) B22D 41/02 (2006.01)**  
[25] EN  
[54] **CASTABLE REFRACTORY MATERIAL**  
[54] **MATERIAU DE TYPE BETON REFRACTAIRE**  
[72] VINCENT, MARK, GB  
[73] PYROTEK ENGINEERING MATERIALS LIMITED, GB  
[85] 2016-09-08  
[86] 2015-03-27 (PCT/GB2015/050929)  
[87] (WO2015/162398)  
[30] GB (1407343.1) 2014-04-25

**Canadian Patents Issued  
January 25, 2022**

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[11] **2,942,241**  
[13] C

[51] **Int.Cl. A24B 3/18 (2006.01) A24B 15/28 (2006.01) A24B 15/42 (2006.01)**  
[25] EN  
[54] **TOBACCO RAW MATERIAL**  
[54] **MATIERE PREMIERE DE TABAC**  
[72] BJORKHOLM, LARS, SE  
[73] WINNINGTON AB, SE  
[85] 2016-09-07  
[86] 2015-04-02 (PCT/EP2015/057278)  
[87] (WO2015/150506)  
[30] SE (1450421-1) 2014-04-04

---

[11] **2,943,599**  
[13] C

[51] **Int.Cl. A61B 5/03 (2006.01) A61B 5/0215 (2006.01)**  
[25] EN  
[54] **AN IMPLANTABLE DUAL SENSOR BIO-PRESSURE TRANSPONDER AND METHOD OF CALIBRATION**  
[54] **TRANSPONDEUR DE BIO-PRESSION IMPLANTABLE A DEUX CAPTEURS, ET PROCEDE D'ETALONNAGE**  
[72] SEAVER, CHAD ERIC, US  
[73] ARKIS BIOSCIENCES INC., US  
[85] 2016-09-22  
[86] 2015-03-24 (PCT/US2015/022284)  
[87] (WO2015/148533)  
[30] US (61/969,789) 2014-03-24

---

[11] **2,944,024**  
[13] C

[51] **Int.Cl. A47C 27/15 (2006.01) A47C 27/14 (2006.01) A47C 27/16 (2006.01) A47C 31/10 (2006.01)**  
[25] EN  
[54] **IMPROVED MATTRESS**  
[54] **MATELAS AMELIORE**  
[72] KRIM, PHILIP, US  
[72] PARIKH, NEIL, US  
[72] CHAPIN, JEFF, US  
[73] CASPER SLEEP INC., US  
[85] 2016-09-26  
[86] 2015-04-19 (PCT/US2015/026564)  
[87] (WO2015/164222)  
[30] US (61/982,235) 2014-04-21  
[30] US (14/689,945) 2015-04-17

---

[11] **2,944,369**  
[13] C

[51] **Int.Cl. G06Q 30/04 (2012.01) G06Q 20/14 (2012.01)**  
[25] EN  
[54] **DATA TRANSFER CONTROL BASED ON CONNECTED DEVICE USAGE ANALYSIS**  
[54] **CONTROLE DE TRANSFERT DE DONNEES FONDE SUR L'ANALYSE D'UTILISATION DE DISPOSITIF CONNCTE**  
[72] AGGARWAL, GARIMA, CA  
[72] BARNETT, JONATHAN K., CA  
[72] FRITZ, ROISIN LARA, CA  
[72] MILLER, ROBERT KYLE, CA  
[72] CHAN, PAUL MON-WAH, CA  
[72] LEE, JOHN JONG SUK, CA  
[72] DELVECCHIO, ORIN, CA  
[73] THE TORONTO-DOMINION BANK, CA  
[86] (2944369)  
[87] (2944369)  
[22] 2016-10-05  
[30] US (62/247,951) 2015-10-29

---

[11] **2,947,490**  
[13] C

[51] **Int.Cl. C08G 18/81 (2006.01) C08G 18/08 (2006.01) C08L 75/14 (2006.01) C09D 175/14 (2006.01)**  
[25] EN  
[54] **RADIATION CURABLE AQUEOUS COMPOSITIONS WITH CONTROLLED POLYMER FLOW**  
[54] **COMPOSITIONS AQUEUSES DURCISSABLES PAR UN RAYONNEMENT DOTEES D'UN ECOULEMENT REGULE DU POLYMERE**  
[72] TIELEMANS, MICHEL, BE  
[72] SALVIATO, JEAN-YVES, BE  
[72] BAURANT, JEAN-NOEL, BE  
[73] ALLNEX BELGIUM, S.A., BE  
[85] 2016-10-31  
[86] 2015-05-19 (PCT/EP2015/060998)  
[87] (WO2015/177151)  
[30] EP (14169199.8) 2014-05-21

---

[11] **2,948,537**  
[13] C

[51] **Int.Cl. F16J 15/06 (2006.01) F16L 23/18 (2006.01)**  
[25] EN  
[54] **SEALING GASKET FOR PIPING SYSTEMS AND ITS MANUFACTURING PROCESS**  
[54] **JOINT D'ETANCHEISATION DESTINE A DES RESEAUX DE TUYAUX ET SON PROCEDE DE FABRICATION**  
[72] USUDA, PAULO KOJI, BR  
[73] PETROLEO BRASILEIRO S.A. - PETROBRAS, BR  
[86] (2948537)  
[87] (2948537)  
[22] 2016-11-14  
[30] BR (BR 10 2015 028821-2) 2015-11-17

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[11] **2,950,425**  
[13] C

[51] **Int.Cl. G02B 27/01 (2006.01) G02B 7/04 (2021.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR DISPLAYING STEREOCOPY WITH A FREEFORM OPTICAL SYSTEM WITH ADDRESSABLE FOCUS FOR VIRTUAL AND AUGMENTED REALITY**  
[54] **PROCEDES ET SYSTEMES D'AFFICHAGE STEREOSCOPIQUE A L'AIDE D'UN SYSTEME OPTIQUE A STRUCTURE LIBRE DOTE D'UN FOYER ADRESSABLE POUR LA REALITE VIRTUELLE ET AUGMENTEE**  
[72] GAO, CHUNYU, US  
[73] MAGIC LEAP, INC., US  
[85] 2016-11-25  
[86] 2015-05-29 (PCT/US2015/033412)  
[87] (WO2015/184409)  
[30] US (62/005,865) 2014-05-30

**Brevets canadiens délivrés  
25 janvier 2022**

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[11] **2,951,776**  
[13] C

[51] **Int.Cl. F25J 1/00 (2006.01) F25B 5/04 (2006.01) F25B 7/00 (2006.01)**

[25] EN

[54] **GAS LIQUEFACTION PLANT**

[54] **DISPOSITIF DE PRODUCTION DE GAZ LIQUEFIE**

[72] TAKEZAWA, NAOYUKI, JP

[72] AKIYAMA, SHIGERU, JP

[72] WAKAMATSU, YOSHIHISA, JP

[73] JGC CORPORATION, JP

[85] 2016-12-09

[86] 2015-03-05 (PCT/JP2015/001202)

[87] (WO2016/024372)

[30] JP (2014-163969) 2014-08-11

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[11] **2,952,224**  
[13] C

[51] **Int.Cl. F04B 17/03 (2006.01) F04B 23/04 (2006.01) F04B 47/06 (2006.01) F04D 13/08 (2006.01)**

[25] EN

[54] **SYSTEM FOR SUBSEA PUMPING OR COMPRESSING**

[54] **SYSTEME DE POMPAGE OU DE COMPRESSION SOUS-MARIN**

[72] HOMSTVEDT, GUNDER, US

[72] PEDERSEN, MARTIN, NO

[72] BJORGUM, RIKHARD, NO

[73] AKER SOLUTIONS AS, NO

[85] 2016-12-13

[86] 2015-01-30 (PCT/NO2015/050021)

[87] (WO2015/199546)

[30] NO (20140808) 2014-06-24

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[11] **2,953,148**  
[13] C

[51] **Int.Cl. H04L 9/32 (2006.01) H04L 41/28 (2022.01)**

[25] EN

[54] **SYSTEM, METHOD AND APPARATUS FOR PROVIDING ENROLLMENT OF DEVICES IN A NETWORK**

[54] **SYSTEME, PROCEDE ET APPAREIL POUR PERMETTRE L'INSCRIPTION DE DISPOSITIFS DANS UN RESEAU**

[72] MOSES, TIMOTHY EDWARD, US

[73] ENTRUST, INC., US

[85] 2016-12-20

[86] 2015-07-09 (PCT/US2015/039693)

[87] (WO2016/007715)

[30] US (62/023,262) 2014-07-11

[30] US (14/795,081) 2015-07-09

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[11] **2,954,331**  
[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 WATER-IN-OIL COOKING COMPOSITION**

[54] **COMPOSITION DE CUISSON EAU DANS HUILE VERSABLE**

[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/EP2015/064830)

[87] (WO2016/005231)

[30] EP (14176779.8) 2014-07-11

---

[11] **2,956,094**  
[13] C

[51] **Int.Cl. B61H 1/00 (2006.01) B61H 11/00 (2006.01)**

[25] EN

[54] **RAILROAD CAR BRAKE SHOE KEY**

[54] **CLAVETTE DE SEMELLE DE FREIN D'UN WAGON DE CHEMIN DE FER**

[72] MORIN, ANDREW J., US

[73] STANDARD CAR TRUCK COMPANY, US

[86] (2956094)

[87] (2956094)

[22] 2017-01-25

[30] US (62/287,617) 2016-01-27

[30] US (15/405,950) 2017-01-13

---

[11] **2,958,241**  
[13] C

[51] **Int.Cl. B01J 13/14 (2006.01) C08J 5/02 (2006.01)**

[25] EN

[54] **VOIDED LATEX PARTICLES**

[54] **PARTICULES DE LATEX AYANT DES VIDES**

[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/US2015/044120)

[87] (WO2016/028512)

[30] US (62/040,569) 2014-08-22

---

[11] **2,960,503**  
[13] C

[51] **Int.Cl. A61F 2/16 (2006.01) A61F 9/011 (2006.01) B29D 11/00 (2006.01)**

[25] EN

[54] **OPHTHALMIC IMPLANTS WITH EXTENDED DEPTH OF FIELD AND ENHANCED DISTANCE VISUAL ACUITY**

[54] **IMPLANTS OPHTALMIQUES AVEC PROFONDEUR DE CHAMP ETENDUE ET ACUITE VISUELLE A DISTANCE RENFORCEE**

[72] PINTO, CANDIDO DIONISIO, US

[72] FAY, CONSTANCE ELIZABETH, US

[73] STAAR SURGICAL COMPANY, US

[85] 2017-03-07

[86] 2015-09-08 (PCT/US2015/048961)

[87] (WO2016/040331)

[30] US (62/048,135) 2014-09-09

[30] US (62/048,705) 2014-09-10

[30] US (62/149,481) 2015-04-17

---

[11] **2,963,374**  
[13] C

[51] **Int.Cl. E21B 43/267 (2006.01) C09K 8/70 (2006.01)**

[25] EN

[54] **METHODS OF ZONAL ISOLATION AND TREATMENT DIVERSION WITH SHAPED PARTICLES**

[54] **PROCEDES D'ISOLEMENT DE ZONE ET LE TRAITEMENT DEVIATION, PRESENTANT DES PARTICULES EN FORME**

[72] IVANOV, MAXIM GRIGORIEVICH, RU

[72] POTAPENKO, DMITRIY IVANOVICH, US

[72] SOVA, ALEXEY ALEXANDROVICH, RU

[72] SOLNYSHKIN, DMITRY SERGEYEVICH, RU

[72] ALEKSEENKO, OLGA PETROVNA, RU

[72] BULOVA, MARINA NIKOLAEVNA, RU

[72] LECERF, BRUNO, US

[73] SCHLUMBERGER CANADA LIMITED, CA

[85] 2017-03-31

[86] 2014-10-06 (PCT/RU2014/000744)

[87] (WO2016/056934)

**Canadian Patents Issued  
January 25, 2022**

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[11] **2,964,817**  
[13] C

[51] **Int.Cl. C12Q 1/04 (2006.01) C12Q 1/00 (2006.01) G01N 30/72 (2006.01) G01N 30/86 (2006.01)**

[25] FR

[54] **METHOD FOR DETECTING DRY ROT FUNGUS CONTAMINATION**

[54] **PROCEDE DE DETECTION D'UNE CONTAMINATION A LA MERULE**

[72] MOULARAT, STEPHANE, FR

[72] ROBINE, ENRIC, FR

[73] CENTRE SCIENTIFIQUE ET TECHNIQUE DU BATIMENT (CSTB), FR

[85] 2017-04-18

[86] 2015-10-28 (PCT/FR2015/052902)

[87] (WO2016/066957)

[30] FR (14 60498) 2014-10-31

---

[11] **2,967,371**  
[13] C

[51] **Int.Cl. C08L 83/14 (2006.01)**

[25] EN

[54] **STABLE ETHYLSILICATE POLYMERS AND METHOD OF MAKING THE SAME**

[54] **POLYMERES DE SILICATE D'ETHYLE STABLES ET LEUR PROCEDE DE FABRICATION**

[72] WARNSHUIS, KENNETH, US

[72] HABER, TYLER, US

[72] RAU, PETER, US

[72] HIRSCH, KEITH, US

[73] SILBOND CORPORATION, US

[85] 2017-05-10

[86] 2015-11-17 (PCT/US2015/060977)

[87] (WO2016/081402)

[30] US (62/080,596) 2014-11-17

[30] US (14/941,107) 2015-11-13

---

[11] **2,969,867**  
[13] C

[51] **Int.Cl. C07K 16/46 (2006.01) A61K 47/68 (2017.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01) C12N 15/13 (2006.01) C12P 21/08 (2006.01)**

[25] EN

[54] **BISPECIFIC TETRAVALENT ANTIBODIES AND METHODS OF MAKING AND USING THEREOF**

[54] **ANTICORPS TETRAVALENTS BISPECIFIQUES ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION**

[72] GAO, ZEREN, US

[72] TAN, PHIL, US

[72] KOVACEVICH, BRIAN, US

[72] RENSCHAW, BLAIR, US

[72] ADAMO, JEFFREY, US

[72] MAK, NGA SZE AMANDA, US

[72] ZHUO, SHI, CN

[72] CHEN, LAN, CN

[72] ZHU, YI, CN

[73] SYSTIMMUNE, INC., US

[73] BAILI-BIO(CHENGDU) PHARMACEUTICAL CO., LTD., CN

[85] 2017-06-05

[86] 2015-12-19 (PCT/US2015/066951)

[87] (WO2016/106157)

[30] US (62/095,348) 2014-12-22

---

[11] **2,971,199**  
[13] C

[51] **Int.Cl. G01F 1/36 (2006.01) F04B 53/10 (2006.01) F16K 37/00 (2006.01) G05D 7/06 (2006.01)**

[25] EN

[54] **A DISCRETE VALVE FLOW RATE CONVERTER**

[54] **CONVERTISSEUR DE DEBIT DE VANNE DISCRET**

[72] CHENG, ANDREW A., US

[72] GU, JAMES J., US

[73] FLUID HANDLING LLC, US

[85] 2017-06-15

[86] 2015-12-15 (PCT/US2015/065789)

[87] (WO2016/100322)

[30] US (62/091,965) 2014-12-15

---

[11] **2,973,477**  
[13] C

[51] **Int.Cl. G01N 21/41 (2006.01) G02B 6/00 (2006.01)**

[25] EN

[54] **TEMPERATURE SENSOR**

[54] **CAPTEUR DE TEMPERATURE**

[72] WARREN-SMITH, STEPHEN, AU

[72] MONRO, TANYA, AU

[73] THE UNIVERSITY OF ADELAIDE, AU

[85] 2017-07-11

[86] 2015-01-14 (PCT/AU2015/000011)

[87] (WO2016/112422)

---

[11] **2,978,080**  
[13] C

[51] **Int.Cl. C12N 5/071 (2010.01) A01N 1/02 (2006.01) C12Q 1/02 (2006.01)**

[25] EN

[54] **METHOD FOR POOLING HEPATOCYTES**

[54] **METHODE DE MISE EN COMMUN D'HEPATOCYTES**

[72] KAISER, ROBERT, US

[72] SHERMAN, MATTHEW, US

[73] LONZA WALKERSVILLE, INC., US

[85] 2017-08-28

[86] 2016-02-26 (PCT/US2016/019742)

[87] (WO2017/119917)

[30] US (62/121,619) 2015-02-27

---

[11] **2,978,552**  
[13] C

[51] **Int.Cl. C09J 123/10 (2006.01) C08F 210/06 (2006.01) C09J 11/00 (2006.01)**

[25] EN

[54] **STRETCH LAMINATES**

[54] **STRATIFIES EXTENSIBLES**

[72] HU, YUHONG, US

[72] CHEN, JINYU, US

[72] REZAI, EBRAHIM, US

[72] TURNER, ROBERT HAINES, US

[72] MORAND, MATTHIAS, DE

[72] LINDNER, TORSTEN, DE

[72] HAMM, MARC, DE

[72] SWAIN, ANDY, GB

[72] THATCHER, JENNIFER, US

[73] HENKEL AG & CO. KGAA, DE

[73] HENKEL IP & HOLDING GMBH, DE

[85] 2017-09-01

[86] 2016-02-23 (PCT/US2016/019011)

[87] (WO2016/140830)

[30] US (62/126,882) 2015-03-02

**Brevets canadiens délivrés  
25 janvier 2022**

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[11] **2,979,613**  
[13] C

[51] **Int.Cl. E04F 13/21 (2006.01) E04F 13/08 (2006.01)**  
[25] EN  
[54] **VENTILATED FACADE**  
[54] **FACADE VENTILEE**  
[72] FERNANDEZ FERNANDEZ, JAVIER, ES  
[73] CUPA INNOVACION S.L.U., ES  
[85] 2017-09-13  
[86] 2016-04-08 (PCT/ES2016/070240)  
[87] (WO2016/166395)  
[30] ES (P201530505) 2015-04-15

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[11] **2,980,834**  
[13] C

[51] **Int.Cl. H04J 14/02 (2006.01) H04L 41/0668 (2022.01) H04L 45/028 (2022.01) H04L 45/28 (2022.01) H04L 69/16 (2022.01) H04L 12/64 (2006.01) H04Q 11/00 (2006.01) H04L 41/0213 (2022.01) H04L 43/08 (2022.01) H04L 45/02 (2022.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR MANAGING MULTI-LAYER COMMUNICATION NETWORKS**  
[54] **SYSTEMES ET PROCEDES DE GESTION DE RESEAUX DE COMMUNICATION MULTICOUCHES**  
[72] GERSTEL, ORNAN ALEXANDER, IL  
[73] SEDONASYS SYSTEMS LTD, IL  
[85] 2017-09-25  
[86] 2016-03-31 (PCT/IL2016/050350)  
[87] (WO2016/157194)  
[30] US (62/141,897) 2015-04-02

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[11] **2,980,970**  
[13] C

[51] **Int.Cl. H04R 1/40 (2006.01) H04R 3/12 (2006.01)**  
[25] EN  
[54] **DIFFERENTIAL SOUND REPRODUCTION**  
[54] **REPRODUCTION SONORE DIFFERENTIELLE**  
[72] BORSS, CHRISTIAN, DE  
[72] SAARI, VILLE, DE  
[72] SCHMIDT, MARKUS, DE  
[72] FALLER, CHRISTOF, CH  
[72] WALTHER, ANDREAS, DE  
[73] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2017-09-26  
[86] 2016-04-07 (PCT/EP2016/057669)  
[87] (WO2016/162445)  
[30] EP (15163233.8) 2015-04-10  
[30] EP (15180745.0) 2015-08-12  
[30] EP (15187729.7) 2015-09-30

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[11] **2,983,169**  
[13] C

[51] **Int.Cl. C10K 3/02 (2006.01) C10B 49/22 (2006.01)**  
[25] EN  
[54] **CATALYTIC UPGRADING OF PYROLYTIC VAPORS**  
[54] **VALORISATION CATALYTIQUE DES VAPEURS PYROLYTIQUES**  
[72] HEISKANEN, JUKKA, FI  
[72] KARKI, SARA, FI  
[72] VALIMAKI, ERKKI, FI  
[72] SHENASSA, REYHANEH, US  
[72] MANTYNIEMI, JUSSI, FI  
[72] JOKELA, PEKKA, FI  
[72] GUTIERREZ, ANDREA, FI  
[72] AUTIO, JOAKIM, FI  
[72] ASIKKALA, JANNE, FI  
[73] VALMET TECHNOLOGIES OY, FI  
[73] NESTE OYJ, FI  
[85] 2017-10-17  
[86] 2016-04-13 (PCT/FI2016/050238)  
[87] (WO2016/166413)  
[30] FI (20155290) 2015-04-17

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[11] **2,983,189**  
[13] C

[51] **Int.Cl. H02K 19/00 (2006.01) H02K 1/14 (2006.01) H02K 1/24 (2006.01) H02K 15/00 (2006.01)**  
[25] EN  
[54] **SWITCHED RELUCTANCE MACHINE WITH EVEN POLE-PHASE INDEX**  
[54] **MACHINE A RELUCTANCE COMMUTEE AVEC INDICE DE POLE-PHASE PAIR**  
[72] BILGIN, BERKER, CA  
[72] EMADI, ALI, CA  
[73] ENEDYM INC., CA  
[85] 2017-10-18  
[86] 2016-05-13 (PCT/CA2016/050548)  
[87] (WO2016/183671)  
[30] US (62/161,905) 2015-05-15

---

[11] **2,983,655**  
[13] C

[51] **Int.Cl. B06B 3/04 (2006.01) B06B 1/00 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR GENERATING MECHANICAL PULSES**  
[54] **PROCEDE ET SYSTEME POUR GENERER DES IMPULSIONS MECANIQUES**  
[72] BROUILLETTE, MARTIN, CA  
[72] DION, STEVEN, CA  
[72] RIEL, LOUIS-PHILIPPE, CA  
[73] LES SOLUTIONS MEDICALES SOUNDBITE INC., CA  
[85] 2017-10-23  
[86] 2016-04-25 (PCT/IB2016/052339)  
[87] (WO2016/170520)  
[30] US (62/152,332) 2015-04-24

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**Canadian Patents Issued  
January 25, 2022**

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[11] **2,984,453**  
[13] C

[51] **Int.Cl. H04W 72/12 (2009.01) H04W 28/04 (2009.01) H04W 28/10 (2009.01) H04W 74/02 (2009.01) H04L 1/00 (2006.01)**

[25] EN

[54] **HYBRID AUTOMATIC REPEAT REQUEST (HARQ) IN LISTEN BEFORE TALK SYSTEMS**

[54] **DEMANDE DE REPETITION AUTOMATIQUE HYBRIDE (HARQ) DANS DES SYSTEMES "ECOUTER AVANT DE PARLER"**

[72] ANDREOLI-FANG, JENNIFER, US

[72] BABAEI, ALIREZA, US

[73] CABLE TELEVISION LABORATORIES, INC., US

[85] 2017-10-30

[86] 2016-05-14 (PCT/US2016/032569)

[87] (WO2016/183533)

[30] US (62/161,443) 2015-05-14

---

[11] **2,986,886**  
[13] C

[51] **Int.Cl. A41D 13/005 (2006.01)**

[25] EN

[54] **WARMING TOOL, WARMING KIT, METHOD FOR MANUFACTURING WARMING KIT, AND WARMING METHOD USING THE WARMING KIT**

[54] **OUTIL D'ISOLATION THERMIQUE, KIT D'ISOLATION THERMIQUE, PROCEDE DE FABRICATION DE KIT D'ISOLATION THERMIQUE, ET PROCEDE D'ISOLATION THERMIQUE**

[72] MIYAKE, KENSAKU, JP

[73] MIYAKE, KENSAKU, JP

[85] 2017-11-22

[86] 2015-05-26 (PCT/JP2015/065142)

[87] (WO2016/189669)

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[11] **2,987,305**  
[13] C

[51] **Int.Cl. B60N 2/22 (2006.01) A47C 1/027 (2006.01) F16F 9/02 (2006.01)**

[25] EN

[54] **DEVICE FOR TRIGGERING A GAS SPRING AND SEATING UNIT COMPRISING ADJUSTABLE BACKREST HAVING A GAS SPRING AND SUCH AN APPARATUS**

[54] **DISPOSITIF DE DECLenchement D'UN RESSORT A GAZ ET ENSEMBLE SIEGE POURVU D'UN DOSSIER REGLABLE EQUIPE D'UN RESSORT DE GAZ ET D'UN TEL DISPOSITIF**

[72] WANDSCHNEIDER, GUIDO, DE

[73] WANDSCHNEIDER, GUIDO, DE

[85] 2017-11-27

[86] 2016-05-14 (PCT/DE2016/000208)

[87] (WO2016/192699)

[30] DE (20 2015 003 901.4) 2015-06-05

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[11] **2,987,307**  
[13] C

[51] **Int.Cl. A01N 25/10 (2006.01) A01N 59/12 (2006.01) A01P 1/00 (2006.01) A61K 9/70 (2006.01) A61K 33/18 (2006.01) A61K 47/32 (2006.01) A61P 31/00 (2006.01)**

[25] EN

[54] **AN AQUEOUS ANTIMICROBIAL FILM-FORMING COMPOSITION FOR TEAT TREATMENT BY SPRAY APPLICATION**

[54] **COMPOSITION FORMANT UNE PELLICULE, ANTIMICROBIENNE ET AQUEUSE POUR LE TRAITEMENT DE MAMELLE PAR APPLICATION EN PULVERISATION**

[72] KLEINE, TILLMANN, DE

[72] KILLEEN, JONATHAN SCOTT, DE

[72] BREIDERHOFF, HELEN, DE

[72] SCHNEIDER, MICHAEL, DE

[73] ECOLAB USA INC., US

[85] 2017-11-27

[86] 2015-06-23 (PCT/EP2015/064166)

[87] (WO2016/206729)

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---

[11] **2,987,701**  
[13] C

[51] **Int.Cl. A61K 31/573 (2006.01) A61K 9/08 (2006.01) A61P 17/14 (2006.01)**

[25] EN

[54] **HIGH CONCENTRATION FORMULATION OF CORTEXOLONE-17A-PROPIONATE FOR TREATING ALOPECIA**

[54] **FORMULATION DE CORTEXOLONE-17A-PROPIONATE EN FORTE CONCENTRATION POUR LETRAITEMENT DE L'ALOPECIE**

[72] LONGO, LUIGI MARIA, IT

[73] CASSIOPEA S.P.A, IT

[85] 2017-11-29

[86] 2016-06-20 (PCT/IB2016/053662)

[87] (WO2016/207778)

[30] US (62/182,988) 2015-06-22

[30] EP (15173860.6) 2015-06-25

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[11] **2,988,281**  
[13] C

[51] **Int.Cl. A61B 3/02 (2006.01) G06T 7/80 (2017.01) A61B 3/032 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DETERMINING DISTANCE FROM AN OBJECT**

[54] **SYSTEMES ET PROCEDES DE DETERMINATION DE DISTANCE PAR RAPPORT A UN OBJET**

[72] CARRAFA, JOSEPH, US

[72] RHODES, MOLLY, US

[73] WARBY PARKER INC., US

[85] 2017-12-04

[86] 2016-06-02 (PCT/US2016/035532)

[87] (WO2016/196803)

[30] US (14/732,435) 2015-06-05

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**Brevets canadiens délivrés  
25 janvier 2022**

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[11] **2,988,617**  
[13] C

[51] **Int.Cl. B65D 47/20 (2006.01) B65D 75/58 (2006.01) B65D 85/72 (2006.01) B67D 1/12 (2006.01) F16K 7/18 (2006.01)**

[25] EN

[54] **MODIFIED ASEPTIC FRONT PULL PIERCING VALVE ASSEMBLY**

[54] **ENSEMBLE VANNE DE PERCAGE A TIRAGE AVANT ASEPTIQUE MODIFIE**

[72] JOHNSON, JAMES W., US

[73] LIQUI-BOX CORPORATION, US

[85] 2017-12-06

[86] 2016-06-10 (PCT/US2016/036890)

[87] (WO2016/201226)

[30] US (62/173,576) 2015-06-10

---

[11] **2,990,390**  
[13] C

[51] **Int.Cl. B63B 27/14 (2006.01) B63B 21/00 (2006.01) B63H 19/08 (2006.01)**

[25] EN

[54] **DOOR SYSTEMS AND METHODS FOR BOATS**

[54] **SYSTEMES DE PORTE ET PROCEDE POUR BATEAUX**

[72] DAY, THOMAS M., US

[73] DAY, THOMAS M., US

[85] 2017-12-20

[86] 2016-06-16 (PCT/US2016/037839)

[87] (WO2016/209709)

[30] US (14/746,672) 2015-06-22

---

[11] **2,990,685**  
[13] C

[51] **Int.Cl. H04L 12/28 (2006.01) H04L 67/1095 (2022.01) H04L 67/125 (2022.01)**

[25] EN

[54] **CLOUD-SYNCHRONIZED ARCHITECTURE FOR A HOME AUTOMATION SYSTEM**

[54] **ARCHITECTURE A NUAGE SYNCHRONISE POUR UN SYSTEME D'AUTOMATISATION DE MAISON**

[72] WELINGKAR, BHARAT, US

[72] JACOBSON, ARTHUR A., US

[72] GLOIER, MATT N., US

[73] SAVANT SYSTEMS, INC., US

[85] 2017-12-21

[86] 2016-10-04 (PCT/US2016/055327)

[87] (WO2017/062360)

[30] US (14/875,399) 2015-10-05

---

[11] **2,996,914**  
[13] C

[51] **Int.Cl. E05C 3/04 (2006.01) E05B 11/02 (2006.01) E05B 11/04 (2006.01)**

[25] EN

[54] **CAM LOCK**

[54] **SERRURE BATTEUSE**

[72] SKOGSTROM, PETER, FI

[73] ABLOY OY, FI

[85] 2018-02-28

[86] 2015-09-15 (PCT/FI2015/050615)

[87] (WO2017/046442)

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[11] **2,999,707**  
[13] C

[51] **Int.Cl. B05D 7/02 (2006.01) B05D 3/12 (2006.01) C09D 5/00 (2006.01) C09D 201/00 (2006.01)**

[25] EN

[54] **PREFORM COATING DEVICE AND PREFORM COATING METHOD**

[54] **DISPOSITIF DE REVETEMENT DE PREFORME ET PROCEDE DE REVETEMENT DE PREFORME**

[72] TOMARI, ICHIRO, JP

[72] YAMANE, RYO, JP

[72] SUZUKI, HIDEYUKI, JP

[72] NISHIYAMA, MASANORI, JP

[73] SUNTORY HOLDINGS LIMITED, JP

[85] 2018-03-22

[86] 2016-09-23 (PCT/JP2016/078082)

[87] (WO2017/057198)

[30] JP (2015-193745) 2015-09-30

[30] JP (2015-193789) 2015-09-30

[30] JP (2015-194765) 2015-09-30

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[11] **3,000,840**  
[13] C

[51] **Int.Cl. F02M 61/18 (2006.01) B05B 1/14 (2006.01) B05B 1/16 (2006.01) F02M 61/00 (2006.01) F02M 61/16 (2006.01)**

[25] EN

[54] **SPRAY TARGETING AND PLUME SHAPING FOR COLLIDING JET ATOMIZER WITH ASYMMETRICAL RADIAL DISTRIBUTION**

[54] **CIBLAGE PAR PULVERISATION ET MISE EN FORME DE PANACHE POUR PULVERISATEUR A JET EN COLLISION AVEC DISTRIBUTION ASYMETRIQUE RADIALE**

[72] MULYE, NIRMAL, US

[72] BARROS NETO, OSANAN L., US

[72] LOSCRUDATO, FRANK S., US

[72] ATKINSON, WILLIAM R., US

[73] NOSTRUM ENERGY PTE. LTD., SG

[85] 2018-04-03

[86] 2016-09-30 (PCT/US2016/054754)

[87] (WO2017/059237)

[30] US (62/235,221) 2015-09-30

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[11] **3,001,911**  
[13] C

[51] **Int.Cl. B65H 59/00 (2006.01) B65H 59/16 (2006.01) B65H 59/38 (2006.01)**

[25] EN

[54] **PASSIVE TENSIONING SYSTEM FOR COMPOSITE MATERIAL PAYOUT CONTROL**

[54] **SYSTEME DE MISE EN TENSION PASSIF POUR COMMANDE DE DEROULEMENT DE MATERIAU COMPOSITE**

[72] BROCKMAN, JOHN, US

[72] VANIGLIA, MILO, US

[73] FIVES MACHINING SYSTEMS, INC., US

[85] 2018-04-12

[86] 2016-10-11 (PCT/US2016/056408)

[87] (WO2017/066178)

[30] US (14/881,480) 2015-10-13

**Canadian Patents Issued  
January 25, 2022**

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[11] **3,002,703**  
[13] C

[51] **Int.Cl. B67D 1/08 (2006.01) F16L 29/04 (2006.01)**  
[25] EN  
[54] **SPOUT-CONNECTOR ASSEMBLY FOR FLUID DISPENSING FROM FLEXIBLE BAGS**  
[54] **RACCORD FORMANT BEC POUR LA DISTRIBUTION DE FLUIDES A PARTIR DE SACS SOUPLES**  
[72] JOHNSON, JAMES W., US  
[73] LIQUI-BOX CORPORATION, US  
[85] 2018-04-19  
[86] 2016-11-02 (PCT/US2016/060077)  
[87] (WO2017/079264)  
[30] US (62/249,657) 2015-11-02

---

[11] **3,004,270**  
[13] C

[51] **Int.Cl. E02F 3/88 (2006.01) B66F 19/00 (2006.01) E02F 5/28 (2006.01)**  
[25] EN  
[54] **AUTONOMOUS VERTICALLY-ADJUSTABLE DREDGE**  
[54] **DRAGAGE AUTONOME AJUSTABLE VERTICALEMENT**  
[72] LEONARD, JEREMY, CA  
[73] LEONARD, JEREMY, CA  
[86] (3004270)  
[87] (3004270)  
[22] 2018-05-08

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[11] **3,009,065**  
[13] C

[51] **Int.Cl. A61K 38/31 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR SOLUTION PHASE GAP PEPTIDE SYNTHESIS**  
[54] **SYSTEME ET PROCEDE DE SYNTHESE DE PEPTIDES GAP EN PHASE SOLUTION**  
[72] LI, GUIGEN, US  
[72] SEIFERT, COLE, US  
[73] TEXAS TECH UNIVERSITY SYSTEM, US  
[85] 2018-06-18  
[86] 2016-12-21 (PCT/US2016/068112)  
[87] (WO2017/112809)  
[30] US (62/270,432) 2015-12-21

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[11] **3,011,333**  
[13] C

[51] **Int.Cl. G01N 33/68 (2006.01)**  
[25] EN  
[54] **MOBILIZATION OF PLURIPOTENT STEM CELLS FOR ISCHEMIC CEREBRAL INFARCTION**  
[54] **MOBILISATION DE CELLULES SOUCHES PLURIPOTENTES POUR L'INFARCTUS CEREBRAL ISCHEMIQUE**  
[72] KURODA, SATOSHI, JP  
[72] DEZAWA, MARI, JP  
[73] UNIVERSITY OF TOYAMA, JP  
[73] LIFE SCIENCE INSTITUTE, INC, JP  
[73] DEZAWA, MARI, JP  
[85] 2018-07-12  
[86] 2017-01-16 (PCT/JP2017/001283)  
[87] (WO2017/122829)  
[30] US (62/279,129) 2016-01-15

---

[11] **3,012,289**  
[13] C

[51] **Int.Cl. B60G 17/017 (2006.01) A61G 3/06 (2006.01) B60G 17/00 (2006.01) B60G 17/005 (2006.01) B60G 17/015 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR RAISING AND LOWERING VEHICLE**  
[54] **SYSTEME DE SOULEVEMENT ET D'ABAISSSEMENT DE VEHICULE**  
[72] KANGAS, AARON, US  
[73] EM SOLUTIONS INCORPORATED, US  
[85] 2018-07-23  
[86] 2017-01-27 (PCT/IB2017/050455)  
[87] (WO2017/130159)  
[30] US (62/287,737) 2016-01-27

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[11] **3,015,332**  
[13] C

[51] **Int.Cl. D02G 3/36 (2006.01) D01H 4/00 (2006.01) D01H 4/38 (2006.01) D04B 1/14 (2006.01)**  
[25] EN  
[54] **SPIRAL YARN STRUCTURE, MANUFACTURING METHOD AND MANUFACTURING DEVICE THEREOF AND TEXTILE UTILIZING THE SAME**  
[54] **STRUCTURE DE FIL EN SPIRAL, METHODE DE FABRICATION ET DISPOSITIF DE FABRICATION ASSOCIE, ET TEXTILE EMPLOYANT LEDIT FIL**  
[72] HUANG, WEN-CHI, CN  
[72] LYU, TING-YI, CN  
[73] CORETEK FIBERS LTD., CN  
[86] (3015332)  
[87] (3015332)  
[22] 2018-08-24  
[30] TW (106132452) 2017-09-21

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[11] **3,015,337**  
[13] C

[51] **Int.Cl. G06F 16/90 (2019.01) G06F 16/11 (2019.01) G06F 17/40 (2006.01)**  
[25] EN  
[54] **AUTO-ADJUSTING DATA LOG RECORD TIMESTAMPS**  
[54] **REGLAGE AUTOMATIQUE DES HORODATAGES D'ENREGISTREMENT DE JOURNAL DE DONNEES**  
[72] KING, JONATHAN DAVID, US  
[73] HUBBELL INCORPORATED, US  
[85] 2018-08-21  
[86] 2017-02-21 (PCT/US2017/018646)  
[87] (WO2017/147045)  
[30] US (62/298,323) 2016-02-22

**Brevets canadiens délivrés  
25 janvier 2022**

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[11] **3,018,191**  
[13] C

[51] **Int.Cl. A61K 35/14 (2015.01) A61K 47/30 (2006.01) A61M 1/34 (2006.01) A61M 1/36 (2006.01) A61P 9/00 (2006.01)**

[25] EN

[54] **METHOD FOR EXTRACORPOREAL TREATMENT OF PREECLAMPSIA AND RELATED DISORDERS**

[54] **PROCEDE DE TRAITEMENT EXTRACORPOREL DE LA PREECLAMPSIE ET DE TROUBLES ASSOCIES**

[72] RAE, CAROL A., US

[72] SIMONI, JAN, US

[72] MOELLER, JOHN F., US

[73] IMMUTRIX THERAPEUTICS, INC., US

[85] 2018-09-17

[86] 2017-03-31 (PCT/US2017/025362)

[87] (WO2017/173260)

[30] US (62/316,113) 2016-03-31

---

[11] **3,020,781**  
[13] C

[51] **Int.Cl. B26D 7/20 (2006.01)**

[25] EN

[54] **COUNTER-DIE CYLINDER BLANKET OF DIE CUTTING MACHINE AND BLANKET MANUFACTURING PROCESS**

[54] **COUVERTURE DE CYLINDRE CONTRE-ESTAMPE DE MACHINE D'ESTAMPAGE ET PROCEDE DE FABRICATION DE COUVERTURE**

[72] BORGES FERNANDEZ, DAVID, ES

[72] CABALEIRO CABALEIRO, JOAQUIN, ES

[72] ALVAREZ ALVAREZ, MARCELINO, ES

[73] RODICUT INDUSTRY, S.A.U., ES

[85] 2018-10-12

[86] 2016-06-10 (PCT/ES2016/070440)

[87] (WO2017/212083)

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[11] **3,020,825**  
[13] C

[51] **Int.Cl. C07K 16/32 (2006.01) A61K 39/00 (2006.01) A61K 39/395 (2006.01) G01N 33/574 (2006.01)**

[25] EN

[54] **ANTIBODIES SPECIFICALLY BINDING TO HER2**

[54] **ANTICORPS A STABILITE AMELIOREE ET SE LIANT SPECIFIQUEMENT A HER2**

[72] LEE, JONG SEO, KR

[72] KIM, KYU TAE, KR

[72] LEE, YOUNG HA, KR

[72] HWANG, IN SIK, KR

[72] KO, BONG KOOK, KR

[73] ABCLON INC., KR

[85] 2018-10-12

[86] 2017-04-12 (PCT/KR2017/003827)

[87] (WO2017/179862)

[30] KR (10-2016-0044747) 2016-04-12

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[11] **3,022,404**  
[13] C

[51] **Int.Cl. E21B 43/24 (2006.01) E21B 43/243 (2006.01)**

[25] EN

[54] **MOVING INJECTION GRAVITY DRAINAGE FOR HEAVY OIL RECOVERY**

[54] **DRAINAGE PAR GRAVITE A INJECTION MOBILE POUR LA RECUPERATION DE PETROLE LOURD**

[72] PERKINS, GREG MARTIN PARRY, AU

[72] BURGER, CASPER JAN HENDRIK, AU

[73] MARTIN PARRY TECHNOLOGY PTY LTD, AU

[85] 2018-10-26

[86] 2016-03-23 (PCT/AU2016/000106)

[87] (WO2016/172757)

[30] AU (2015901552) 2015-04-28

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[11] **3,023,294**  
[13] C

[51] **Int.Cl. G06Q 20/04 (2012.01) G06Q 20/20 (2012.01) G06Q 20/32 (2012.01)**

[25] EN

[54] **DIGITAL RECEIPT PROCESSING AND ANALYTICS SYSTEM**

[54] **SYSTEME D'ANALYSE ET DE TRAITEMENT DE RECU NUMERIQUE**

[72] RAOUDA EL-BALAH, HANI, US

[73] RAOUDA EL-BALAH, HANI, US

[85] 2018-11-05

[86] 2016-05-06 (PCT/US2016/031314)

[87] (WO2016/179543)

[30] US (62/157,711) 2015-05-06

---

[11] **3,024,347**  
[13] C

[51] **Int.Cl. B60L 9/00 (2019.01) B60L 50/60 (2019.01)**

[25] EN

[54] **TRACTION POWER SUPPLY SYSTEM FOR HIGH SPEED TRAIN AND ITS ON-BOARD POWER STORAGE AND DISCHARGE SYSTEM**

[54] **SYSTEME D'ALIMENTATION EN ENERGIE DE TRACTION POUR LIAISON FERROVIAIRE A GRANDE VITESSE ET SYSTEME DE STOCKAGE ET DE DECHARGE D'ENERGIE EMBARQUE**

[72] WANG, MINGHUI, CN

[72] GUAN, XIAOFANG, CN

[72] SONG, YUQUAN, CN

[73] JILIN UNIVERSITY, CN

[85] 2018-11-09

[86] 2016-06-07 (PCT/CN2016/085120)

[87] (WO2017/210858)

**Canadian Patents Issued  
January 25, 2022**

[11] **3,024,634**  
[13] C

[51] **Int.Cl. A62B 7/14 (2006.01) A62B 9/00 (2006.01) B64D 13/00 (2006.01) B64D 25/00 (2006.01) H02N 11/00 (2006.01)**

[25] EN

[54] **OXYGEN SUPPLY DEVICE AND METHOD FOR SUPPLYING A PASSENGER CABIN OF AN AIRCRAFT WITH OXYGEN**

[54] **DISPOSITIF DE FOURNITURE D'OXYGENE ET METHODE DE FOURNITURE D'OXYGENE A UNE CABINE DE PASSAGERS D'UN AERONEF**

[72] LEUENBERGER, FRANK, DE  
[72] NEUMANN, CARSTEN, DE  
[73] AIRBUS OPERATIONS GMBH, DE  
[86] (3024634)  
[87] (3024634)  
[22] 2018-11-20  
[30] DE (10 2017 127 293.3) 2017-11-20

[11] **3,027,813**  
[13] C

[51] **Int.Cl. C06B 29/00 (2006.01) C06B 31/00 (2006.01)**

[25] EN

[54] **USE OF TYPE OF COMPOUNDS AS ENERGETIC MATERIALS**

[54] **UTILISATION DE TYPE DE COMPOSES EN TANT QUE MATERIAU CONTENANT DE L'ENERGIE**

[72] ZHANG, WEIXIONG, CN  
[72] CHEN, SHAOLI, CN  
[72] CHEN, XIAOMING, CN  
[73] XI'AN CRYSTEN MATERIALS TECHNOLOGY CORPORATION LIMITED, CN  
[85] 2018-12-14  
[86] 2017-08-11 (PCT/CN2017/097136)  
[87] (WO2018/028685)  
[30] CN (201610665880.3) 2016-08-12

[11] **3,028,559**  
[13] C

[51] **Int.Cl. G01N 37/00 (2006.01) G01N 21/88 (2006.01) G01R 31/34 (2020.01)**

[25] EN

[54] **INSPECTION SYSTEM AND INSPECTION METHOD**

[54] **SYSTEME D'INSPECTION ET METHODE D'INSPECTION**

[72] WATANABE, MANABU, JP  
[72] MATSUZAKI, AKIHIRO, JP  
[72] SATO, FUMIO, JP  
[72] TERAJ, FUJIO, JP  
[72] KATAYAMA, HITOSHI, JP  
[72] GUNJI, YUICHIRO, JP  
[73] KABUSHIKI KAISHA TOSHIBA, JP  
[73] TOSHIBA ENERGY SYSTEMS & SOLUTIONS CORPORATION, JP  
[86] (3028559)  
[87] (3028559)  
[22] 2018-12-27  
[30] JP (2017-251813) 2017-12-27

[11] **3,027,041**  
[13] C

[51] **Int.Cl. F04B 49/06 (2006.01) F04B 23/04 (2006.01) F04B 49/20 (2006.01) F04B 49/22 (2006.01)**

[25] EN

[54] **DIRECT NUMERIC 3D SENSORLESS CONVERTER FOR PUMP FLOW AND PRESSURE**

[54] **CONVERTISSEUR NUMERIQUE DIRECT 3D SANS CAPTEUR POUR UN DEBIT ET UNE PRESSION DE POMPE**

[72] CHENG, ANDREW A., US  
[72] SCHOENHEIT, KYLE D., US  
[72] GU, JAMES J., US  
[73] FLUID HANDLING LLC, US  
[85] 2018-12-07  
[86] 2017-06-07 (PCT/US2017/036325)  
[87] (WO2017/214257)  
[30] US (62/346,808) 2016-06-07

[11] **3,028,499**  
[13] C

[51] **Int.Cl. H04W 72/04 (2009.01)**

[25] EN

[54] **METHOD FOR SENDING CONTROL INFORMATION, METHOD FOR RECEIVING CONTROL INFORMATION, NETWORK DEVICE, AND TERMINAL DEVICE**

[54] **PROCEDE D'ENVOI ET PROCEDE DE RECEPTION D'INFORMATIONS DE COMMANDE, DISPOSITIF DE RESEAU, ET DISPOSITIF TERMINAL**

[72] CHENG, YAN, CN  
[72] XUE, LIXIA, CN  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2018-12-19  
[86] 2017-06-22 (PCT/CN2017/089562)  
[87] (WO2017/220003)  
[30] CN (201610473937.X) 2016-06-25

[11] **3,033,018**  
[13] C

[51] **Int.Cl. A61M 5/20 (2006.01) A61M 5/48 (2006.01)**

[25] EN

[54] **WEARABLE AUTOMATIC INJECTION DEVICE FOR CONTROLLED DELIVERY OF THERAPEUTIC AGENTS**

[54] **DISPOSITIF D'INJECTION AUTOMATIQUE PORTABLE POUR L'ADMINISTRATION CONTROLEE D'AGENTS THERAPEUTIQUES**

[72] ANDERSON, PHILIP D., US  
[72] CORRIGAN, SEAN, US  
[72] FIENUP, WILLIAM, US  
[72] JANG, SAMUEL M., US  
[72] JULIAN, JOSEPH F., US  
[72] LAURUSONIS, LINAS P., US  
[72] MATUSAITIS, TOMAS, US  
[72] PARMER, TIMOTHY, US  
[72] STRAHM, CHRIS, US  
[72] YOCH, TRAVIS, US  
[73] ABBVIE BIOTECHNOLOGY LTD., BM  
[86] (3033018)  
[87] (3033018)  
[22] 2011-04-21  
[62] 2,796,186  
[30] US (61/326,637) 2010-04-21

**Brevets canadiens délivrés  
25 janvier 2022**

[11] **3,039,514**  
[13] C

- [51] **Int.Cl. A61K 31/198 (2006.01) A61P 11/00 (2006.01)**  
[25] EN  
[54] **AMINO ACID COMPOSITIONS AND USES THEREOF**  
[54] **COMPOSITIONS D'ACIDES AMINES ET UTILISATIONS ASSOCIEES**  
[72] VIDYASAGAR, SADASIVAN, US  
[72] GUPTA, RESHU, US  
[72] YIN, LIANJI, US  
[72] GROSCHKE, ASTRID, US  
[72] OKUNIEFF, PAUL GERSON, US  
[72] GATTO, STEPHEN, US  
[72] DENNISON, DANIEL, US  
[73] UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INCORPORATED, US  
[73] ENTRINSIC BIOSCIENCE, INC., US  
[85] 2019-04-04  
[86] 2017-10-04 (PCT/US2017/055167)  
[87] (WO2018/067717)  
[30] US (62/403,965) 2016-10-04  
[30] US (62/421,443) 2016-11-14

[11] **3,045,914**  
[13] C

- [51] **Int.Cl. B32B 5/02 (2006.01) D04H 1/4209 (2012.01) D04H 1/4374 (2012.01) D04H 1/559 (2012.01) D04H 3/007 (2012.01) B32B 5/22 (2006.01) B32B 5/26 (2006.01) D21H 27/00 (2006.01) D21H 27/30 (2006.01) D21H 27/32 (2006.01) D21H 27/38 (2006.01)**  
[25] EN  
[54] **ACTIVE AGENT-CONTAINING ARTICLES THAT EXHIBIT CONSUMER ACCEPTABLE ARTICLE IN-USE PROPERTIES**  
[54] **ARTICLES CONTENANT DES AGENTS ACTIFS PRESENTANT DES PROPRIETES D'UTILISATION ACCEPTABLES POUR LE CONSOMMATEUR**  
[72] GLASSMEYER, STEPHEN ROBERT, US  
[72] PRATT, MICHAEL SEAN, US  
[72] GORDON, GREGORY CHARLES, US  
[72] SIVIK, MARK ROBERT, US  
[72] WEISMAN, PAUL THOMAS, US  
[73] THE PROCTER & GAMBLE COMPANY, US  
[85] 2019-05-31  
[86] 2018-01-24 (PCT/US2018/014948)  
[87] (WO2018/140432)  
[30] US (62/451,085) 2017-01-27

[11] **3,049,095**  
[13] C

- [51] **Int.Cl. A61K 31/337 (2006.01) A61K 31/519 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **COMBINATION OF A MCL-1 INHIBITOR AND A TAXANE COMPOUND, USES AND PHARMACEUTICAL COMPOSITIONS THEREOF**  
[54] **COMBINAISON D'UN INHIBITEUR DE MCL-1 ET D'UN COMPOSE DE TAXANE, SES UTILISATIONS ET COMPOSITIONS PHARMACEUTIQUES LA COMPRENANT**  
[72] PORTER, DALE, US  
[72] HALILOVIC, ENSAR, US  
[72] CHANRION, MAIA, FR  
[72] MARAGNO, ANA LETICIA, FR  
[72] GENESTE, OLIVIER, FR  
[72] MERINO, DELPHINE, AU  
[72] WHITTLE, JAMES, AU  
[72] VAILLANT, FRANCOIS, AU  
[72] VISVADER, JANE, AU  
[72] LINDEMAN, GEOFFREY, AU  
[72] LESSENE, GUILLAUME, AU  
[72] MARANGONI, ELISABETTA, FR  
[73] LES LABORATOIRES SERVIER, FR  
[73] NOVARTIS AG, CH  
[85] 2019-07-02  
[86] 2018-01-05 (PCT/EP2018/050298)  
[87] (WO2018/127575)  
[30] US (62/443,082) 2017-01-06  
[30] EP (17157779.4) 2017-02-24  
[30] US (62/527,360) 2017-06-30

[11] **3,052,352**  
[13] C

- [51] **Int.Cl. G08B 25/00 (2006.01) G08B 29/00 (2006.01) H04L 12/16 (2006.01)**  
[25] EN  
[54] **BRIDGE DEVICE SUPPORTING ALARM FORMAT**  
[54] **DISPOSITIF DE PONT PRENANT EN CHARGE UN FORMAT D'ALARME**  
[72] USIE, WESLEY ROBERT, US  
[73] CHEKT LLC, US  
[86] (3052352)  
[87] (3052352)  
[22] 2019-08-15  
[30] US (16/505,491) 2019-07-08

[11] **3,053,083**  
[13] C

- [51] **Int.Cl. E21B 12/00 (2006.01) B02C 18/08 (2006.01) E21B 11/00 (2006.01) E21B 21/00 (2006.01)**  
[25] EN  
[54] **ROTATING CUTTER APPARATUS FOR REDUCING THE SIZE OF SOLID OBJECTS IN A FLUID**  
[54] **APPAREIL DE COUTEAU ROTATIF SERVANT A REDUIRE LA TAILLE DES OBJETS SOLIDES DANS UN FLUIDE**  
[72] PARK, STEVEN, CA  
[72] SINGH, BIPINKUMAR, IN  
[73] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2019-08-27  
[86] 2018-10-22 (PCT/CA2018/051333)  
[87] (WO2020/082153)

[11] **3,053,279**  
[13] C

- [51] **Int.Cl. F16S 3/04 (2006.01) A45F 3/24 (2006.01) A47B 13/02 (2006.01) A47B 37/04 (2006.01) F16B 7/00 (2006.01) F16B 12/44 (2006.01) F16S 3/08 (2006.01)**  
[25] EN  
[54] **MODULAR FURNITURE SYSTEM**  
[54] **SYSTEME DE MOBILIER MODULAIRE**  
[72] STYRC, JACEK, CA  
[72] LYSIAK, SEBASTIAN, PL  
[73] 2724889 ONTARIO INC., CA  
[85] 2019-08-12  
[86] 2018-02-15 (PCT/CA2018/050169)  
[87] (WO2018/152624)  
[30] US (62/461,308) 2017-02-21  
[30] US (15/815,973) 2017-11-17

**Canadian Patents Issued  
January 25, 2022**

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[11] **3,054,026**  
[13] C

[51] **Int.Cl. A61B 90/00 (2016.01) A61B 18/00 (2006.01) B08B 15/04 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR ATTACHMENT AND EVACUATION**  
[54] **PROCEDE ET APPAREIL DE FIXATION ET D'EVACUATION**  
[72] HERSEY, TIMOTHY, US  
[72] SHVETSOV, KYRYLO, US  
[72] PEPE, GREG, US  
[72] BONANO, SAMANTHA, US  
[72] CALLAHAN, JOSEPH P., US  
[73] BUFFALO FILTER LLC, US  
[86] (3054026)  
[87] (3054026)  
[22] 2016-12-14  
[62] 3,005,094  
[30] US (62/267,123) 2015-12-14

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[11] **3,056,265**  
[13] C

[51] **Int.Cl. H04J 3/16 (2006.01)**  
[25] EN  
[54] **COMMUNICATION OF SYNCHRONIZATION SIGNAL BLOCKS BASED ON TIMING SEQUENCES THEREOF**  
[54] **COMMUNICATION DE BLOCS DE SIGNAUX DE SYNCHRONISATION EN FONCTION DE SEQUENCES TEMPORELLES CONNEXES**  
[72] ZHANG, ZHI, CN  
[72] TANG, HAI, CN  
[73] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN  
[85] 2019-09-12  
[86] 2017-03-15 (PCT/CN2017/076856)  
[87] (WO2018/165927)

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[11] **3,057,128**  
[13] C

[51] **Int.Cl. G06Q 50/02 (2012.01) G06Q 10/08 (2012.01) G06Q 50/26 (2012.01)**  
[25] EN  
[54] **OFFSHORE TRADING BETWEEN TWO OR MORE VESSELS, BASED ON MONITORED NAVIGATION TRAJECTORIES AND THE DURATION OF PROXIMITY OF THE VESSELS**  
[54] **ECHANGE AU LARGE ENTRE DEUX OU PLUSIEURS NAVIRES EN FONCTION DES TRAJECOIRES DE NAVIGATION SURVEILLEES ET LA DUREE DE LA PROXIMITE DES NAVIRES**  
[72] FURUSAWA, YOSUKE, JP  
[73] FURUSAWA, YOSUKE, JP  
[85] 2019-09-16  
[86] 2018-03-28 (PCT/JP2018/012875)  
[87] (WO2018/193805)  
[30] JP (2017-082855) 2017-04-19

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[11] **3,058,363**  
[13] C

[51] **Int.Cl. A01K 63/00 (2017.01) A01K 61/60 (2017.01)**  
[25] EN  
[54] **DEVICE FOR PREVENTING AQUATIC ORGANISMS FROM JUMPING OUT**  
[54] **DISPOSITIF PERMETTANT D'EMPECHER A DES ORGANISMES AQUATIQUES DE SAUTER HORS D'UN AQUARIUM**  
[72] FURUSAWA, YOSUKE, JP  
[73] FURUSAWA, YOSUKE, JP  
[85] 2019-09-27  
[86] 2018-07-06 (PCT/JP2018/025768)  
[87] (WO2019/026548)  
[30] JP (2017-151082) 2017-08-03

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[11] **3,058,724**  
[13] C

[51] **Int.Cl. E02D 5/02 (2006.01) E02D 5/16 (2006.01)**  
[25] EN  
[54] **COMBINED WALL PILING SYSTEM**  
[54] **SYSTEME DE PALPLANCHES COMBINE**  
[72] ABBONDANZA, DEAN, US  
[73] J.D. FIELDS & COMPANY, INC., US  
[86] (3058724)  
[87] (3058724)  
[22] 2019-10-11  
[30] US (62/748,074) 2018-10-19  
[30] US (16/598,856) 2019-10-10

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[11] **3,058,795**  
[13] C

[51] **Int.Cl. C07D 239/42 (2006.01) A61K 31/505 (2006.01) A61P 29/00 (2006.01)**  
[25] EN  
[54] **POLYSUBSTITUTED PYRIMIDINES INHIBITING THE FORMATION OF PROSTAGLANDIN E2, A METHOD OF PRODUCTION THEREOF AND USE THEREOF**  
[54] **PYRIMIDINES POLYSUBSTITUEES INHIBANT LA FORMATION DE PROSTAGLANDINE E2, LEUR PROCEDE DE PRODUCTION ET LEUR UTILISATION**  
[72] KOLMAN, VIKTOR, CZ  
[72] KALCIC, FILIP, CZ  
[72] JANEBA, ZLATKO, CZ  
[72] ZIDEK, ZDENEK, CZ  
[73] USTAV ORGANICKE CHEMIE A BIOCHEMIE AV CR, V.V.I., CZ  
[73] USTAV EXPERIMENTALNI MEDICINY AV CR, V.V.I., CZ  
[85] 2019-10-02  
[86] 2018-05-23 (PCT/CZ2018/050024)  
[87] (WO2018/215003)  
[30] CZ (PV 2017-293) 2017-05-24

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[11] **3,060,259**  
[13] C

[51] **Int.Cl. B23K 9/173 (2006.01) B23K 9/26 (2006.01) B23K 9/29 (2006.01)**  
[25] EN  
[54] **WELDING SYSTEMS FOR COOLING WELDING CONTACT TIPS**  
[54] **SYSTEMES DE SOUDAGE PERMETTANT DE REFRROIDIR LES EMBOUTS DE CONTACT DE SOUDAGE**  
[72] JANSMA, JEREMY, US  
[73] ILLINOIS TOOL WORKS INC., US  
[85] 2019-10-16  
[86] 2018-04-19 (PCT/US2018/028255)  
[87] (WO2018/195247)  
[30] US (62/487,199) 2017-04-19  
[30] US (15/956,515) 2018-04-18

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**Brevets canadiens délivrés  
25 janvier 2022**

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[11] **3,060,599**  
[13] C

[51] **Int.Cl. G06F 16/903 (2019.01) G06F 16/9038 (2019.01)**  
[25] EN  
[54] **EXPLAINING SEMANTIC SEARCH**  
[54] **EXPLICATION DE LA RECHERCHE SEMANTIQUE**  
[72] DONALDSON, ROGER D., CA  
[72] LANCASTER, GREGORY K., CA  
[73] GALIANO MEDICAL SOLUTIONS INC., CA  
[86] (3060599)  
[87] (3060599)  
[22] 2019-10-28  
[30] CA (3024258) 2018-11-15

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[11] **3,061,469**  
[13] C

[51] **Int.Cl. A01D 17/06 (2006.01)**  
[25] FR  
[54] **DEVICE FOR CLEANING ROOT VEGETABLES AND AGRICULTURAL MACHINE EQUIPPED WITH SUCH A DEVICE**  
[54] **DISPOSITIF DE NETTOYAGE DE LEGUMES RACINES ET MACHINE AGRICOLE EQUIPEE D'UN TEL DISPOSITIF**  
[72] ALEXANDRE, ERIC, FR  
[73] ALEXANDRE, ERIC, FR  
[85] 2019-10-24  
[86] 2018-04-23 (PCT/FR2018/000096)  
[87] (WO2018/197761)  
[30] FR (1753736) 2017-04-28

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[11] **3,061,470**  
[13] C

[51] **Int.Cl. C21D 9/04 (2006.01) C21D 1/20 (2006.01)**  
[25] EN  
[54] **TRACK PART AND METHOD FOR PRODUCING A TRACK PART**  
[54] **PARTIE DE VOIE FERREE ET PROCEDE DE FABRICATION D'UNE PARTIE DE VOIE FERREE**  
[72] KAMMERHOFER, CHRISTOPH, AT  
[72] BRANTNER, HANS PETER, AT  
[73] VOESTALPINE SCHIENEN GMBH, AT  
[85] 2019-10-25  
[86] 2018-05-29 (PCT/AT2018/000049)  
[87] (WO2018/223160)  
[30] AT (A 240/2017) 2017-06-07

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[11] **3,062,474**  
[13] C

[51] **Int.Cl. A61M 16/06 (2006.01) A61M 16/10 (2006.01)**  
[25] EN  
[54] **AN INTERFACE AND A METHOD OF SUPPLYING BREATHING GAS**  
[54] **UNE INTERFACE ET UNE METHODE D'APPROVISIONNEMENT EN GAZ RESPIRATOIRE**  
[72] TATKOV, STANISLAV, NZ  
[73] FISHER & PAYKEL HEALTHCARE LIMITED, NZ  
[86] (3062474)  
[87] (3062474)  
[22] 2010-12-22  
[62] 2,962,659  
[30] US (61/289,544) 2009-12-23

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[11] **3,062,652**  
[13] C

[51] **Int.Cl. B66F 7/28 (2006.01) B66F 7/20 (2006.01)**  
[25] EN  
[54] **VEHICLE LIFT DEVICE**  
[54] **APPAREIL DE LEVAGE DE VEHICULE**  
[72] HORIMIZU, TOSHIHIDE, JP  
[72] MOCHIZUKI, TADASHI, JP  
[73] YASUI CORPORATION, JP  
[86] (3062652)  
[87] (3062652)  
[22] 2019-11-26

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[11] **3,062,809**  
[13] C

[51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/46 (2020.01) C03C 8/24 (2006.01) C04B 37/00 (2006.01)**  
[25] EN  
[54] **COMPOSITE CERAMIC ATOMIZER AND METHOD OF PREPARING THE SAME**  
[54] **ATOMISEUR CERAMIQUE COMPOSITE ET SON PROCEDE DE PREPARATION**  
[72] LIU, BING, CN  
[72] CHEN, YIKUN, CN  
[72] LUO, CHENGHAO, CN  
[72] LIU, HUACHEN, CN  
[72] KE, WEICHANG, CN  
[72] QI, FUYOU, CN  
[72] DENG, TENGFEI, CN  
[73] HUBEI CHINA TOBACCO INDUSTRY CO., LTD., CN  
[85] 2019-10-24  
[86] 2017-06-14 (PCT/CN2017/088245)  
[87] (WO2018/201561)  
[30] CN (201710310965.4) 2017-05-05

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[11] **3,064,221**  
[13] C

[51] **Int.Cl. A61M 25/10 (2013.01) A61F 2/95 (2013.01) A61F 2/24 (2006.01) A61M 25/01 (2006.01)**  
[25] EN  
[54] **LOW PROFILE DELIVERY SYSTEM FOR TRANSCATHETER HEART VALVE**  
[54] **SYSTEME DE MISE EN PLACE DE VALVULE CARDIAQUE PAR TRANSCATHETER A PROFIL ETROIT**  
[72] LE, THANH H., US  
[72] TRAN, TRI, US  
[72] CAYABYAB, RONALDO, US  
[72] TAYLOR, DAVID, US  
[72] VIDAL, ANTONIO, US  
[72] BOWES, ROBERT, US  
[73] EDWARDS LIFESCIENCES CORPORATION, US  
[86] (3064221)  
[87] (3064221)  
[22] 2009-05-01  
[62] 2,936,803  
[30] US (61/052,009) 2008-05-09  
[30] US (61/083,117) 2008-07-23  
[30] US (12/247,846) 2008-10-08

**Canadian Patents Issued  
January 25, 2022**

[11] **3,064,235**  
[13] C

[51] **Int.Cl. C10G 25/05 (2006.01) C10L 3/10 (2006.01)**  
[25] EN  
[54] **PROCESS FOR REMOVING METALS FROM HYDROCARBONS**  
[54] **PROCEDE POUR L'ELIMINATION DES METAUX DANS LES HYDROCARBURES**  
[72] ABAI, MAHPUZAH, GB  
[72] ATKINS, MARTIN PHILIP, GB  
[72] CHEUN, KUAH YONG, GB  
[72] HOLBREY, JOHN, GB  
[72] NOCKEMANN, PETER, GB  
[72] SEDDON, KEN, GB  
[72] SRINIVASAN, GEETHA, GB  
[72] ZOU, YIRAN, GB  
[73] PETROLIAM NASIONAL BERHAD (PETRONAS) (20076-K), MY  
[86] (3064235)  
[87] (3064235)  
[22] 2011-10-05  
[62] 2,813,490  
[30] GB (1016751.8) 2010-10-05

[11] **3,064,278**  
[13] C

[51] **Int.Cl. E21B 17/042 (2006.01)**  
[25] EN  
[54] **COMPRESSION RESISTANT THREADED CONNECTION**  
[54] **RACCORD FILETE RESISTANT A LA COMPRESSION**  
[72] DEHART, CODY ALLEN, US  
[73] MARUBENI-ITOCHU TUBULARS AMERICA INC., US  
[85] 2019-11-19  
[86] 2018-06-07 (PCT/US2018/036405)  
[87] (WO2018/226924)  
[30] US (62/516,466) 2017-06-07

[11] **3,064,503**  
[13] C

[51] **Int.Cl. B03C 3/41 (2006.01) B03C 3/49 (2006.01)**  
[25] EN  
[54] **DEVICE AND METHOD FOR SEPARATING MATERIALS**  
[54] **DISPOSITIF ET PROCEDE DE SEPARATION DE MATERIAUX**  
[72] SAARI, SAMPO, FI  
[72] KARJALAINEN, PANU, FI  
[72] RONKKO, TOPI, FI  
[72] MAKKONEN, PASI, FI  
[73] GENANO OY, FI  
[85] 2019-11-21  
[86] 2018-05-14 (PCT/FI2018/050357)  
[87] (WO2018/220261)  
[30] EP (17174187.9) 2017-06-02  
[30] US (15/611,811) 2017-06-02

[11] **3,065,034**  
[13] C

[51] **Int.Cl. G06Q 20/32 (2012.01) H04W 12/06 (2012.01) G06Q 20/20 (2012.01) G06Q 20/40 (2012.01) G06F 21/32 (2013.01) H04W 12/033 (2012.01) H04W 12/041 (2012.01)**  
[25] EN  
[54] **SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR MOBILE DEVICE TRANSACTIONS**  
[54] **SYSTEME, PROCEDE ET PROGRAMME INFORMATIQUE POUR LES OPERATIONS LIEES AUX APPAREILS MOBILES**  
[72] KAJA, VENKATA NAGA PRADEEP KUMAR, US  
[72] KONKATHI, VIJAYARAJU, US  
[73] VISA INTERNATIONAL SERVICE ASSOCIATION, US  
[85] 2019-12-13  
[86] 2018-08-21 (PCT/US2018/047256)  
[87] (WO2020/040743)

[11] **3,065,576**  
[13] C

[51] **Int.Cl. E21B 43/04 (2006.01) E21B 43/12 (2006.01)**  
[25] EN  
[54] **INFLOW CONTROL DEVICE BYPASS AND BYPASS ISOLATION SYSTEM FOR GRAVEL PACKING WITH SHUNTED SAND CONTROL SCREENS**  
[54] **DERIVATION DE DISPOSITIF DE COMMANDE D'ECOULEMENT ENTRANT ET SYSTEME D'ISOLATION DE DERIVATION POUR GRAVILLONNAGE DES CREPINES AVEC TAMIS EN CONTROLE DE SABLE EN DERIVATION**  
[72] WARREN, CALEB THOMAS, US  
[73] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2019-11-28  
[86] 2018-07-31 (PCT/US2018/044526)  
[87] (WO2019/032334)  
[30] US (62/542,628) 2017-08-08

[11] **3,066,234**  
[13] C

[51] **Int.Cl. B01J 49/00 (2017.01)**  
[25] EN  
[54] **METHOD OF TREATMENT OF SPENT ION-EXCHANGE RESINS FOR DISPOSAL AND DEVICE FOR ITS IMPLEMENTATION**  
[54] **PROCEDE DE TRAITEMENT DE RESINES ECHANGEUSES D'IONS EPUISEES A DES FINS D'ELIMINATION ET DISPOSITIF POUR SA MISE EN OEUVRE**  
[72] SOLDATOV, MIKHAIL ALEKSANDROVICH, RU  
[72] NEUPOKOEV, MIKHAIL ALEKSEEVICH, RU  
[73] JOINT STOCK COMPANY "ROSENERGOATOM", RU  
[73] JOINT STOCK COMPANY "SCIENCE AND INNOVATIONS", RU  
[85] 2020-02-10  
[86] 2018-09-13 (PCT/RU2018/000603)  
[87] (WO2020/013727)  
[30] RU (2018125716) 2018-07-12



**Brevets canadiens délivrés  
25 janvier 2022**

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[11] **3,066,270**  
[13] C

[51] **Int.Cl. B29C 64/147 (2017.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING THREE-DIMENSIONAL SHAPED PRODUCT BY JOINING TOP UNDERCUT REGION AND BOTTOM INTERIOR SPACE-FORMING REGION**  
[54] **PROCEDE DE FABRICATION D'UN PRODUIT DE FORME TRIDIMENSIONNELLE PAR ASSEMBLAGE D'UNE REGION DE CONTRE-DEPOUILLE SUPERIEURE ET D'UNE REGION DE FORMATION D'ESPACE INTERIEUR INFERIEUR**  
[72] TARUMI, SATORU, JP  
[73] MATSUURA MACHINERY CORPORATION, JP  
[86] (3066270)  
[87] (3066270)  
[22] 2019-12-24  
[30] JP (2019-098721) 2019-05-27

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[11] **3,069,128**  
[13] C

[51] **Int.Cl. E21B 44/02 (2006.01) E21B 45/00 (2006.01) E21B 47/06 (2012.01)**  
[25] EN  
[54] **METHODS OF DRILLING A WELLBORE WITHIN A SUBSURFACE REGION AND DRILLING CONTROL SYSTEMS THAT PERFORM THE METHODS**  
[54] **PROCEDES DE FORAGE D'UN Puits DE FORAGE DANS UNE REGION SOUTERRAINE ET SYSTEMES DE COMMANDE DE FORAGE QUI METTENT EN OEUVRE LES PROCEDES**  
[72] KUMARAN, KRISHNAN, US  
[73] EXXONMOBIL UPSTREAM RESEARCH COMPANY, US  
[85] 2020-01-06  
[86] 2018-06-28 (PCT/US2018/040058)  
[87] (WO2019/036122)  
[30] US (62/545,120) 2017-08-14  
[30] US (62/608,242) 2017-12-20

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[11] **3,069,782**  
[13] C

[51] **Int.Cl. F16F 7/108 (2006.01) B23B 29/02 (2006.01)**  
[25] EN  
[54] **DAMPING APPARATUS AND TOOL-HOLDING APPARATUS WITH SUCH A DAMPING APPARATUS**  
[54] **DISPOSITIF D'AMORTISSEMENT ET DISPOSITIF DE SUPPORT D'OUTIL COMPRENANT UN TEL DISPOSITIF D'AMORTISSEMENT**  
[72] BUCK, GUNTER, DE  
[73] WOHLHAUPTER GMBH, DE  
[85] 2020-01-13  
[86] 2018-07-16 (PCT/EP2018/069312)  
[87] (WO2019/016161)  
[30] DE (10 2017 116 326.3) 2017-07-19

---

[11] **3,070,664**  
[13] C

[51] **Int.Cl. H04L 67/12 (2022.01) H04L 67/306 (2022.01)**  
[25] EN  
[54] **DETECTING SERVICE PROVIDER STATE BASED ON RECEIVED AND HISTORIC TELEMATICS DATA AND SERVICE PROVIDER CHARACTERISTICS**  
[54] **DETECTION D'ETAT DE FOURNISSEUR DE SERVICES SUR LA BASE DE DONNEES TELEMATIQUES HISTORIQUES ET RECUES ET DE CARACTERISTIQUES DE FOURNISSEUR DE SERVICES**  
[72] O'HERLIHY, MICHAEL, US  
[72] CHOKSHI, KARNA, US  
[72] DOYLE, MATTHEW JOSEPH, US  
[73] UBER TECHNOLOGIES, INC., US  
[85] 2020-01-21  
[86] 2018-07-09 (PCT/IB2018/055042)  
[87] (WO2019/021090)  
[30] US (15/660,947) 2017-07-26

---

[11] **3,073,489**  
[13] C

[51] **Int.Cl. E21B 33/13 (2006.01) B82Y 30/00 (2011.01) C09K 8/42 (2006.01) E21B 43/12 (2006.01) E21B 43/22 (2006.01)**  
[25] EN  
[54] **METHOD FOR KILLING OIL AND GAS WELLS**  
[54] **PROCEDE D'OBTURATION DE Puits DE PETROLE ET DE GAZ**  
[72] SERGEEV, VITALII VYACHESLAVOVICH, RU  
[73] LIMITED LIABILITY COMPANY "GR PETROLEUM", RU  
[85] 2020-02-20  
[86] 2018-08-23 (PCT/RU2018/050103)  
[87] (WO2019/039974)  
[30] RU (2017129595) 2017-08-21

---

[11] **3,073,939**  
[13] C

[51] **Int.Cl. B23D 45/10 (2006.01) B23D 45/08 (2006.01) B23D 59/00 (2006.01) B23Q 3/155 (2006.01) B27B 5/065 (2006.01) B27B 5/32 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR AUTOMATED BLADE CHANGE FOR TISSUE SAW**  
[54] **APPAREIL ET PROCEDE DE CHANGEMENT AUTOMATISE DE LAME POUR SCIE A PAPIER**  
[72] CHIKE, MATTHEW J., US  
[72] SPINELLI, STEFANO, US  
[72] GUSSERT, CORY P., US  
[72] ZAHN, JONATHON T., US  
[73] PAPER CONVERTING MACHINE COMPANY, US  
[85] 2020-02-25  
[86] 2018-08-23 (PCT/US2018/047642)  
[87] (WO2019/046082)  
[30] US (62/553,244) 2017-09-01  
[30] US (16/109,028) 2018-08-22

**Canadian Patents Issued  
January 25, 2022**

---

[11] **3,076,347**  
[13] C

[51] **Int.Cl. H02H 3/00 (2006.01) H02H 7/04 (2006.01) H02H 7/26 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR ISOLATING HIGH IMPEDANCE FAULT IN MULTI-TAP ELECTRICAL POWER DISTRIBUTION SYSTEM**  
[54] **APPAREIL POUR ISOLER UN DEF AUT D'IMPEDANCE ELEVEE DANS UN SYSTEME DE DISTRIBUTION D'ELECTRICITE A PRISES MULTIPLES**  
[72] O'REGAN, TIMOTHY M., US  
[72] O'REGAN, TIMOTHY J., US  
[73] ELECTRICAL MATERIALS COMPANY, US  
[86] (3076347)  
[87] (3076347)  
[22] 2020-03-19  
[30] US (16/362,117) 2019-03-22

---

[11] **3,079,698**  
[13] C

[51] **Int.Cl. H04H 20/72 (2009.01) H04N 21/44 (2011.01) H04L 65/80 (2022.01) H04J 11/00 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR RECEIVING BROADCAST SIGNAL, AND METHOD AND APPARATUS FOR TRANSMITTING BROADCAST SIGNAL**  
[54] **PROCEDE ET APPAREIL DE RECEPTION ET D'EMISSION DE SIGNAL DE DIFFUSION**  
[72] HWANG, JAEHO, KR  
[72] KO, WOOSUK, KR  
[72] HONG, SUNGRYONG, KR  
[73] LG ELECTRONICS INC., KR  
[86] (3079698)  
[87] (3079698)  
[22] 2015-03-05  
[62] 2,966,980  
[30] US (62/075,898) 2014-11-06  
[30] US (62/080,382) 2014-11-16

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[11] **3,081,970**  
[13] C

[51] **Int.Cl. H02G 3/06 (2006.01) F16L 5/02 (2006.01) H01B 7/282 (2006.01) H01B 9/00 (2006.01) H02G 15/076 (2006.01)**  
[25] EN  
[54] **TRANSITION COUPLING FOR TERMINATING CONNECTOR AND LIQUIDTIGHT CONDUIT FITTING**  
[54] **COUPLAGE DE TRANSITION POUR TERMINER LE RACCORD DE LA CANALISATION ETANCHE AUX LIQUIDES ET LE CONNECTEUR**  
[72] MORRISON, GARY L., US  
[72] PERRY, LEE ALLEN, US  
[73] SERVICE WIRE COMPANY, US  
[86] (3081970)  
[87] (3081970)  
[22] 2020-06-05  
[30] US (16/797,325) 2020-02-21  
[30] US (62/859,808) 2019-06-11

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[11] **3,082,413**  
[13] C

[51] **Int.Cl. H04N 19/593 (2014.01)**  
[25] EN  
[54] **INTRA-PREDICTION METHOD, AND VIDEO ENCODER AND DECODER USING SAME**  
[54] **METHODE INTRAPREDICTION, ET CODEUR ET DECODEUR VIDEO EMPLOYANT LADITE METHODE**  
[72] PARK, JOONYOUNG, KR  
[72] PARK, SEUNGWOOK, KR  
[72] LIM, JAEHYUN, KR  
[72] KIM, JUNGSUN, KR  
[72] CHOI, YOUNGHEE, KR  
[72] JEON, BYEONGMOON, KR  
[72] JEON, YONGJOON, KR  
[73] LG ELECTRONICS INC., KR  
[86] (3082413)  
[87] (3082413)  
[22] 2012-04-20  
[62] 2,968,765  
[30] US (61/478,912) 2011-04-25

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[11] **3,083,172**  
[13] C

[51] **Int.Cl. H04N 19/44 (2014.01) H04N 21/434 (2011.01) H04N 19/30 (2014.01) H04N 19/70 (2014.01)**  
[25] EN  
[54] **INDIVIDUAL BUFFER MANAGEMENT IN TRANSPORT OF SCALABLE VIDEO**  
[54] **GESTION DE MEMOIRE TAMPON INDIVIDUELLE LORS DU TRANSPORT D'UNE VIDEO EXTENSIBLE**  
[72] NARASIMHAN, MANDAYAM, US  
[72] LUTHRA, AJAY K., US  
[73] ARRIS ENTERPRISES LLC, US  
[86] (3083172)  
[87] (3083172)  
[22] 2015-05-21  
[62] 2,949,823  
[30] US (62/001,412) 2014-05-21  
[30] US (14/718,188) 2015-05-21

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[11] **3,086,662**  
[13] C

[51] **Int.Cl. C07D 417/14 (2006.01) A61K 31/5395 (2006.01) A61K 31/549 (2006.01) A61P 19/08 (2006.01) A61P 43/00 (2006.01) C07D 417/06 (2006.01)**  
[25] EN  
[54] **NITROGEN-CONTAINING 6-MEMBERED CYCLIC COMPOUND**  
[54] **COMPOSE CYCLIQUE A SIX CHAINONS CONTENANT DE L'AZOTE**  
[72] SHIKANAI, DAISUKE, JP  
[72] ISHIGURO, NORIKO, JP  
[72] OMORI, OSAMU, JP  
[73] ASAHI KASEI PHARMA CORPORATION, JP  
[85] 2020-06-22  
[86] 2018-12-25 (PCT/JP2018/047450)  
[87] (WO2019/131582)  
[30] JP (2017-248173) 2017-12-25

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**Brevets canadiens délivrés  
25 janvier 2022**

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[11] **3,087,381**  
[13] C

[51] **Int.Cl. F16B 1/00 (2006.01) F16B 7/00 (2006.01) F16M 11/04 (2006.01) F16M 11/20 (2006.01) F16S 3/04 (2006.01) F16H 55/36 (2006.01) G01D 11/30 (2006.01) G03B 17/00 (2021.01)**

[25] EN

[54] **PULLEY ASSEMBLIES FOR USE IN MODULAR UTILITY SYSTEMS**

[54] **ENSEMBLES DE POULIES DESTINES POUR UTILISATION DANS DES SYSTEMES UTILITAIRES MODULAIRES**

[72] LEBLANC, ALEXANDER, CA

[73] ARCHI ENTERPRISES INC., CA

[86] (3087381)

[87] (3087381)

[22] 2019-11-08

[62] 3,061,149

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[11] **3,089,307**  
[13] C

[51] **Int.Cl. G06T 17/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR CREATING GEO-LOCALIZED ENHANCED FLOOR PLANS**

[54] **SYSTEME ET PROCEDE DE CREATION DE PLANS D'ETAGES AMELIORES GEOLOCALISES**

[72] KHOSROWPOUR, ARDALAN, US

[73] THE JOAN AND IRWIN JACOBS TECHNOION-CORNELL INSTITUTE, US

[85] 2020-07-22

[86] 2018-12-14 (PCT/US2018/065712)

[87] (WO2019/118856)

[30] US (62/598,670) 2017-12-14

---

[11] **3,092,826**  
[13] C

[51] **Int.Cl. G05D 1/02 (2020.01) B25J 5/00 (2006.01) B25J 9/18 (2006.01)**

[25] EN

[54] **NONHOLONOMIC ROBOT FIELD COVERAGE METHOD**

[54] **PROCEDE DE COUVERTURE DE CHAMP PAR ROBOT NON HOLONOME**

[72] BARBOI, MICKEY, US

[72] GILBERT, NEVIN, US

[72] HOURANI, EESAM, US

[72] OLKIN, TERRY MICHAEL, US

[73] THE TORO COMPANY, US

[85] 2020-09-10

[86] 2020-04-13 (PCT/US2020/027976)

[87] (WO2021/150262)

[30] US (62/965,026) 2020-01-23

---

[11] **3,093,478**  
[13] C

[51] **Int.Cl. A62C 3/02 (2006.01) A62C 35/58 (2006.01) A62C 35/68 (2006.01)**

[25] EN

[54] **FIRE SUPPRESSION SYSTEM AND PROCESS OF DEPLOYMENT**

[54] **SYSTEME D'EXTINCTION D'INCENDIE ET PROCEDE DE DEPLOIEMENT ASSOCIE**

[72] RAYMOND, TERRY, CA

[73] FIRE & FLOOD EMERGENCY SERVICES LTD., CA

[85] 2020-09-09

[86] 2019-03-13 (PCT/CA2019/050307)

[87] (WO2019/183715)

[30] US (62/648,092) 2018-03-26

[30] US (62/668,627) 2018-05-08

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[11] **3,093,833**  
[13] C

[51] **Int.Cl. H04N 7/18 (2006.01) H04L 67/10 (2022.01) H04N 5/232 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR COORDINATED COLLECTION OF STREET-LEVEL IMAGE DATA**

[54] **SYSTEMES ET PROCEDES DE COLLECTE COORDONNEE DE DONNEES D'IMAGES DE REZ-DE-VOIRIE**

[72] PARK, RENEE, US

[72] SARAF, SAURABH, US

[72] SARUKKAI, RAMESH, US

[72] SHET, VINAY, US

[73] LYFT INC, US

[85] 2020-09-11

[86] 2019-03-12 (PCT/US2019/021947)

[87] (WO2019/178168)

[30] US (15/920,438) 2018-03-13

---

[11] **3,100,024**  
[13] C

[51] **Int.Cl. B01D 21/24 (2006.01)**

[25] EN

[54] **OUTLET NOZZLE FOR A FLUID-SOLID PROCESSING UNIT**

[54] **BUSE DE SORTIE POUR UNITE DE TRAITEMENT FLUIDE-SOLIDE**

[72] CHIALVO, SEBASTIAN, US

[72] BONDOS, JOSEPH C., US

[72] HERNANDEZ, JERONIMO, US

[73] EXXONMOBIL UPSTREAM RESEARCH COMPANY, US

[86] (3100024)

[87] (3100024)

[22] 2020-11-19

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[11] **3,101,952**  
[13] C

[51] **Int.Cl. A01H 5/00 (2018.01)**

[25] EN

[54] **HEMP PLANT NAMED 'CWIASI'**

[54] **PLANTE DE CHANVRE NOMMEE "CWIASI"**

[72] STANLEY, JOEL, US

[72] REEL, KERI, US

[73] CHARLOTTE'S WEB, INC., US

[85] 2020-11-06

[86] 2019-12-19 (PCT/US2019/067414)

[87] (WO2020/132206)

[30] US (62/783,782) 2018-12-21

---

[11] **3,102,432**  
[13] C

[51] **Int.Cl. G08G 1/133 (2006.01) B60W 50/14 (2020.01) G08B 3/10 (2006.01) G08B 5/36 (2006.01)**

[25] EN

[54] **VEHICLE ADVISORY SYSTEM**

[54] **SYSTEME DE CONSEILS POUR VEHICULE**

[72] ANGEL, KIM, US

[72] GRIMM, ANN, US

[73] WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION, US

[86] (3102432)

[87] (3102432)

[22] 2020-12-11

[30] US (16/724,434) 2019-12-23

---

[11] **3,103,248**  
[13] C

[51] **Int.Cl. A01K 7/00 (2006.01) A01K 7/06 (2006.01) F16K 31/00 (2006.01)**

[25] EN

[54] **FLUID DELIVERY VALVE SYSTEM AND METHOD**

[54] **SYSTEME ET METHODE DE CIRCUIT DE CLAPET DE REFOULEMENT DE FLUIDE**

[72] GABRIEL, GEORGE S., US

[72] CAMPBELL, NEIL E., US

[72] GERRINGER, RODNEY E., US

[72] IRWIN, LYNN B., US

[72] ELDTRETH, EDWARD K., US

[73] HYDROPAC, LLC, US

[86] (3103248)

[87] (3103248)

[22] 2014-03-17

[62] 2,907,373

[30] US (13/836,187) 2013-03-15

**Canadian Patents Issued  
January 25, 2022**

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[11] **3,103,416**  
[13] C

[51] **Int.Cl. F17D 1/00 (2006.01) F17D 1/17 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR INLINE MIXING OF HYDROCARBON LIQUIDS**  
[54] **PROCEDES ET SYSTEMES DE MELANGE EN CONDUITE DE LIQUIDES D'HYDROCARBURES**  
[72] MILLER, KYLE E., US  
[73] MARATHON PETROLEUM COMPANY LP, US  
[86] (3103416)  
[87] (3103416)  
[22] 2020-12-21  
[30] US (17/247,704) 2020-12-21  
[30] US (62/954,960) 2019-12-30  
[30] US (62/705,538) 2020-07-02  
[30] US (63/198,356) 2020-10-13

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[11] **3,106,266**  
[13] C

[51] **Int.Cl. F16L 59/16 (2006.01)**  
[25] EN  
[54] **AN APPARATUS AND METHOD FOR SEALING AN END CAP ON AN INSULATED PIPE SYSTEM**  
[54] **APPAREIL ET METHODE POUR SCELLER UN CAPUCHON SUR UN SYSTEME DE TUYAUTERIE ISOLE**  
[72] BRIGHAM, GRAHAM, CA  
[73] INTEGRITY PRODUCTS AND SUPPLIES INC., CA  
[86] (3106266)  
[87] (3106266)  
[22] 2021-01-20

---

[11] **3,106,472**  
[13] C

[51] **Int.Cl. G06F 40/40 (2020.01) G10L 15/00 (2013.01)**  
[25] EN  
[54] **DEVICE, SYSTEM AND METHOD FOR CAUSING AN OUTPUT DEVICE TO PROVIDE INFORMATION FOR VOICE COMMAND FUNCTIONALITY**  
[54] **DISPOSITIF, SYSTEME ET PROCEDE AMENANT UN DISPOSITIF DE SORTIE A FOURNIR DES INFORMATIONS A UNE FONCTIONNALITE DE COMMANDE VOCALE**  
[72] KING, MELANIE A., US  
[72] SIDDOWAY, CRAIG F., US  
[73] MOTOROLA SOLUTIONS, INC., US  
[85] 2021-01-06  
[86] 2019-07-19 (PCT/US2019/042542)  
[87] (WO2020/023298)  
[30] US (16/042,056) 2018-07-23

---

[11] **3,107,103**  
[13] C

[51] **Int.Cl. E21B 43/10 (2006.01) E21B 41/00 (2006.01) E21B 47/08 (2012.01)**  
[25] EN  
[54] **MONITORING EXPANDABLE SCREEN DEPLOYMENT IN HIGHLY DEVIATED WELLS IN OPEN HOLE ENVIRONMENT**  
[54] **SURVEILLANCE D'UN DEPLOIEMENT DE TAMIS EXTENSIBLE DANS DES PUITES HAUTEMENT DEVIEES DANS UN ENVIRONNEMENT A TROU OUVERT**  
[72] MALBREL, CHRISTOPHE, US  
[72] WAKEFIELD, JOHN K., US  
[73] BAKER HUGHES HOLDINGS LLC, US  
[85] 2021-01-20  
[86] 2019-06-21 (PCT/US2019/038379)  
[87] (WO2020/027939)  
[30] US (16/050,734) 2018-07-31

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[11] **3,107,237**  
[13] C

[51] **Int.Cl. H04L 9/30 (2006.01) G06F 21/62 (2013.01) H04L 9/08 (2006.01) H04L 9/32 (2006.01)**  
[25] EN  
[54] **KEY GENERATION FOR USE IN SECURED COMMUNICATION**  
[54] **GENERATION DE CLES A UTILISER DANS UNE COMMUNICATION SECURISEE**  
[72] LO, HOI-KWONG, CA  
[72] MONTAGNA, MATTIA, IT  
[73] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA  
[85] 2021-01-26  
[86] 2020-09-30 (PCT/CA2020/051307)  
[87] (3107237)  
[30] US (62/907,997) 2019-09-30  
[30] GB (1917748.4) 2019-12-05

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[11] **3,107,547**  
[13] C

[51] **Int.Cl. G01S 5/02 (2010.01) H04W 64/00 (2009.01) G01S 5/10 (2006.01) G01S 5/14 (2006.01) G01S 13/87 (2006.01)**  
[25] EN  
[54] **PERSONNEL LOCATION AND MONITORING SYSTEM**  
[54] **DISPOSITIF DE SUIVI ET DE SURVEILLANCE DE PERSONNEL**  
[72] TABER, PHILLIP P., US  
[72] TABER, TIMOTHY P., US  
[73] TABER INNOVATIONS GROUP LLC, US  
[85] 2021-01-22  
[86] 2019-08-07 (PCT/US2019/045448)  
[87] (WO2020/033507)  
[30] US (62/715,391) 2018-08-07  
[30] US (16/534,186) 2019-08-07

**Brevets canadiens délivrés  
25 janvier 2022**

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[11] **3,112,146**  
[13] C

[51] **Int.Cl. G01V 3/15 (2006.01)**  
[25] EN  
[54] **COAL MINE ADVANCED  
DETECTION METHOD FOR  
HEADING MACHINE**  
[54] **METHODE DE DETECTION  
AVANCEE DE MINE DE  
CHARBON POUR UNE HAVEUSE**  
[72] XU, SHAOYI, CN  
[72] ZHU, ZHENCAI, CN  
[72] LI, WEI, CN  
[72] SUN, YANJING, CN  
[72] XING, FANGFANG, CN  
[72] XUE, HONGYU, CN  
[72] PENG, QIANG, CN  
[72] DONG, FENG, CN  
[72] CHEN, GUANG, CN  
[73] CHINA UNIVERSITY OF MINING  
AND TECHNOLOGY, CN  
[85] 2021-04-23  
[86] 2020-03-13 (PCT/CN2020/079258)  
[87] (WO2021/120423)  
[30] CN (2019113015277) 2019-12-17

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[11] **3,112,586**  
[13] C

[51] **Int.Cl. C08J 11/24 (2006.01) C08L  
67/02 (2006.01)**  
[25] EN  
[54] **CONTINUOUS REPROCESSING  
OF WASTE POLYALKYLENE  
TEREPHTHALATE**  
[54] **RETRAITEMENT CONTINU DU  
POLYALKYLENETEREPHTALAT  
E A PARTIR DE DECHETS**  
[72] EICHERT, CARSTEN, DE  
[72] BREPOHL, ESTHER, DE  
[72] SCHOLL, STEPHAN, DE  
[72] BIERMANN, LARS, DE  
[73] RITTEC UMWELTECHNIK GMBH,  
DE  
[85] 2021-03-12  
[86] 2019-09-04 (PCT/EP2019/073598)  
[87] (WO2020/053051)  
[30] DE (10 2018 122 210.6) 2018-09-12

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[11] **3,115,326**  
[13] C

[51] **Int.Cl. H04L 51/046 (2022.01) H04L  
51/224 (2022.01) H04L 51/42  
(2022.01)**  
[25] EN  
[54] **TRIGGERING EVENT  
NOTIFICATIONS BASED ON  
MESSAGES TO APPLICATION  
USERS**  
[54] **DECLenchement des  
NOTIFICATIONS D'evenement  
en fonction des messages  
aux utilisateurs de  
L'APPLICATION**  
[72] XU, SAI, CN  
[72] LU, TAODONG, CN  
[72] ZHANG, QIN, CN  
[73] CITRIX SYSTEMS, INC., US  
[85] 2021-04-15  
[86] 2020-04-14 (PCT/CN2020/084670)  
[87] (WO2021/098131)

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[11] **3,118,077**  
[13] C

[51] **Int.Cl. C23F 1/04 (2006.01) B44C 1/22  
(2006.01) C23F 1/36 (2006.01)**  
[25] EN  
[54] **PROCESS FOR SURFACE  
TREATMENT OF ALUMINUM OR  
ALUMINUM ALLOYS BY MEANS  
OF AN ALKALINE CHEMICAL  
BATH**  
[54] **PROCEDE DE TRAITEMENT DE  
SURFACE DE L'ALUMINIUM OU  
D'ALLIAGES D'ALUMINIUM AU  
MOYEN D'UN BAIN CHIMIQUE  
ALCALIN**  
[72] MARENCO, CLAUDIO, IT  
[73] SIMET S.R.L., IT  
[85] 2021-04-28  
[86] 2019-11-05 (PCT/IB2019/059478)  
[87] (WO2020/095191)  
[30] IT (102018000010025) 2018-11-05

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[11] **3,118,126**  
[13] C

[51] **Int.Cl. G06Q 10/06 (2012.01) G06Q  
10/04 (2012.01) G06Q 10/08 (2012.01)  
G06Q 50/30 (2012.01)**  
[25] EN  
[54] **AUTOMATIC DISPATCH SYSTEM  
FOR TOW SERVICE PROVIDERS**  
[54] **SYSTEME DE DEPLOIEMENT  
AUTOMATIQUE POUR DES  
FOURNISSEURS DE SERVICES DE  
REMORQUAGE**  
[72] WALLIN, BRETT, US  
[72] ROTH, ANTHONY, US  
[72] POULOS, CHRISTOPHER, US  
[72] MODI, MRADUL, US  
[73] IAA, INC., US  
[86] (3118126)  
[87] (3118126)  
[22] 2021-05-12  
[30] US (16/876,440) 2020-05-18

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[11] **3,120,183**  
[13] C

[51] **Int.Cl. F04D 9/00 (2006.01) E21B  
43/12 (2006.01) F04D 1/06 (2006.01)  
F04D 9/02 (2006.01) F04D 13/10  
(2006.01)**  
[25] EN  
[54] **GAS-LOCK RE-PRIME SHAFT  
PASSAGE IN SUBMERSIBLE  
WELL PUMP AND METHOD OF  
RE-PRIMING THE PUMP**  
[54] **PASSAGE D'ARBRE DE  
REAMORCAGE A  
VERROUILLAGE DE GAZ DANS  
UNE POMPE DE Puits  
SUBMERSIBLE ET PROCEDE DE  
REAMORCAGE DE LA POMPE**  
[72] LU, XIAONAN, US  
[72] RUTTER, RISA, US  
[72] YE, ZHENG, US  
[73] BAKER HUGHES HOLDINGS LLC,  
US  
[85] 2021-05-14  
[86] 2019-11-11 (PCT/US2019/060738)  
[87] (WO2020/106480)  
[30] US (62/769,145) 2018-11-19  
[30] US (16/678,105) 2019-11-08

**Canadian Patents Issued  
January 25, 2022**

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[11] **3,120,414**  
[13] C

[51] **Int.Cl. G06Q 50/30 (2012.01) G06T 19/00 (2011.01) H04N 21/2187 (2011.01) H04N 21/2743 (2011.01) H04N 21/81 (2011.01) G01C 21/36 (2006.01) G08G 1/00 (2006.01)**

[25] EN

[54] **MUTUAL AUGMENTED REALITY EXPERIENCE FOR USERS IN A NETWORK SYSTEM**

[54] **EXPERIENCE DE REALITE AUGMENTEE MUTUELLE POUR DES UTILISATEURS DANS UN SYSTEME DE RESEAU**

[72] ROGAN, AARON MATTHEW, US

[72] LEUNG, WES, US

[72] BELMONTE, NICOLAS GARCIA, US

[73] UBER TECHNOLOGIES, INC., US

[85] 2021-05-18

[86] 2019-01-24 (PCT/IB2019/050612)

[87] (WO2020/104857)

[30] US (16/197,243) 2018-11-20

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[11] **3,121,505**  
[13] C

[51] **Int.Cl. F16G 1/22 (2006.01) F16G 1/28 (2006.01) F16G 3/00 (2006.01)**

[25] EN

[54] **HELICAL BELT ASSEMBLY, METHOD OF USE, AND KIT THEREFORE**

[54] **ENSEMBLE COURROIE HELICOIDALE, PROCEDE D'UTILISATION ET KIT ASSOCIE**

[72] GODSEY, GREGORY A., US

[73] GODSEY, GREGORY A., US

[85] 2021-05-28

[86] 2019-11-29 (PCT/US2019/063885)

[87] (WO2020/113190)

[30] US (62/773,578) 2018-11-30

[30] US (16/699,519) 2019-11-29

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[11] **3,121,854**  
[13] C

[51] **Int.Cl. D21H 21/18 (2006.01) B32B 29/06 (2006.01) B32B 29/08 (2006.01) B65D 5/42 (2006.01) D21H 17/33 (2006.01) D21H 21/20 (2006.01)**

[25] EN

[54] **PROCESSES FOR MAKING IMPROVED CELLULOSE-BASED MATERIALS AND CONTAINERS**

[54] **PROCEDES DE FABRICATIONS DE MATERIAUX ET DE CONTENANTS AMELIORES A BASE DE CELLULOSE**

[72] HUSSAIN, SADAKAT, US

[72] REGEL, JAMES D., US

[73] INTERNATIONAL PAPER COMPANY, US

[86] (3121854)

[87] (3121854)

[22] 2021-06-07

[30] US (16/916,382) 2020-06-30

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[11] **3,122,442**  
[13] C

[51] **Int.Cl. H01L 27/00 (2006.01) H01M 10/056 (2010.01) B82Y 30/00 (2011.01) H01L 31/053 (2014.01) H01L 29/92 (2006.01) H01L 31/18 (2006.01) H01L 51/48 (2006.01) H02M 7/48 (2007.01)**

[25] EN

[54] **HYBRID-ENERGY APPARATUS, SYSTEM, AND METHOD THEREFOR**

[54] **APPAREIL A ENERGIE HYBRIDE, SYSTEME ET PROCEDE ASSOCIE**

[72] SCHERWITZ, SAM, CA

[72] PAHLEVANINEZHAD, MAJID, CA

[73] 10644137 CANADA INC., CA

[85] 2021-06-08

[86] 2020-04-09 (PCT/CA2020/050482)

[87] (WO2020/206554)

[30] US (62/831,828) 2019-04-10

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[11] **3,123,339**  
[13] C

[51] **Int.Cl. B60N 2/06 (2006.01) B60N 2/07 (2006.01)**

[25] EN

[54] **SLIDING DEVICE FOR A VEHICLE SEAT WITH AN IMPROVED RAIL DESIGN**

[54] **DISPOSITIF DE COULISSEMENT POUR SIEGE DE VEHICULE DOTE D'UNE CONCEPTION DE RAIL AMELIOREE**

[72] USTUNBERK, CAN, IT

[72] KRPO, AZRA, IT

[73] MARTUR ITALY S.R.L., IT

[85] 2021-06-14

[86] 2019-10-30 (PCT/IB2019/059304)

[87] (WO2020/144504)

[30] IT (102019000000313) 2019-01-09

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[11] **3,124,459**  
[13] C

[51] **Int.Cl. A61B 3/028 (2006.01) A61B 3/02 (2006.01) G02B 27/28 (2006.01)**

[25] EN

[54] **PREPARING A STRUCTURED OPTICAL BEAM FOR HUMAN OBSERVATION**

[54] **PREPARATION D'UN FAISCEAU OPTIQUE STRUCTURE POUR OBSERVATION HUMAINE**

[72] SARENAC, DUSAN, CA

[72] KAPAHI, CONNOR, CA

[72] CORY, DAVID G., CA

[72] PUSHIN, DMITRY A., CA

[73] QUANTUM VALLEY INVESTMENT FUND LP, CA

[85] 2021-06-21

[86] 2020-02-13 (PCT/CA2020/050188)

[87] (WO2020/163956)

[30] US (62/804,883) 2019-02-13

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[11] **3,124,481**  
[13] C

[51] **Int.Cl. G21K 1/16 (2006.01) H05H 3/06 (2006.01)**

[25] EN

[54] **COLLIMATOR SYSTEM**

[54] **SYSTEME DE COLLIMATEUR**

[72] SARENAC, DUSAN, CA

[72] KAPAHI, CONNOR, CA

[72] PUSHIN, DMITRY A., CA

[72] CORY, DAVID G., CA

[73] QUANTUM VALLEY INVESTMENT FUND LP, CA

[85] 2021-06-18

[86] 2020-01-24 (PCT/CA2020/050080)

[87] (WO2020/150828)

[30] US (62/796,377) 2019-01-24

**Brevets canadiens délivrés**  
**25 janvier 2022**

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[11] **3,125,262**

[13] C

[51] **Int.Cl. G09F 17/00 (2006.01) F16M  
11/04 (2006.01) F16M 13/02 (2006.01)**

[25] EN

[54] **ROTATING MESSAGE PANEL  
APPARATUS**

[54] **APPAREIL DE PANNEAU DE  
MESSAGE ROTATIF**

[72] PORZIO, THOMAS, US

[73] FANASIT LLC., US

[85] 2021-02-02

[86] 2019-08-06 (PCT/US2019/045232)

[87] (WO2020/033362)

[30] US (62/717,580) 2018-08-10

[30] US (16/531,816) 2019-08-05

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[11] **3,133,201**

[13] C

[51] **Int.Cl. C25B 11/073 (2021.01) C25B  
1/04 (2021.01)**

[25] EN

[54] **ALKALINE WATER  
ELECTROLYSIS METHOD AND  
ALKALINE WATER  
ELECTROLYSIS ANODE**

[54] **PROCEDE D'ELECTROLYSE  
D'EAU ALCALINE ET ANODE  
POUR ELECTROLYSE D'EAU  
ALCALINE**

[72] MITSUSHIMA SHIGENORI, JP

[72] KURODA YOSHIYUKI, JP

[72] NISHIMOTO TAKESHI, JP

[73] DE NORA PERMELEC LTD, JP

[73] NATIONAL UNIVERSITY  
CORPORATION YOKOHAMA  
NATIONAL UNIVERSITY, JP

[85] 2021-09-10

[86] 2020-03-11 (PCT/JP2020/010477)

[87] (WO2020/184607)

[30] JP (2019-045008) 2019-03-12

# Canadian Applications Open to Public Inspection

January 9, 2022 to January 15, 2022

## Demands canadiennes mises à la disponibilité du public

9 janvier 2022 au 15 janvier 2022

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[21] **3,086,142**  
[13] A1  
[51] **Int.Cl. H02G 1/04 (2006.01) H02G 7/00 (2006.01)**  
[25] EN  
[54] **FLEXIBLE ELECTRICAL ISOLATION DEVICE**  
[54] **DISPOSITIF D'ISOLATION ELECTRIQUE SOUPLE**  
[72] WABNEGGER, DAVID KARL, CA  
[72] PALMER, ROBERT WAYNE, US  
[72] GREER, JODY MILTON, US  
[72] O'CONNELL, DANIEL NEIL, CA  
[72] JODOIN, RAYMOND, HENRY, CA  
[72] TRIP, IAN EDWARD, CA  
[72] BOUDREAU, MICHAEL HOWARD, CA  
[71] QUANTA ASSOCIATES, L.P., US  
[22] 2020-07-09  
[41] 2022-01-09

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[21] **3,086,309**  
[13] A1  
[51] **Int.Cl. G06F 1/16 (2006.01) G06F 15/00 (2006.01)**  
[25] EN  
[54] **UNIVERSAL PORTABLE COMPUTERS**  
[54] **ORDINATEURS PORTATIFS UNIVERSELS**  
[72] LIANG, ZHONGHONG, CA  
[72] LIANG, BENJAMIN, CA  
[71] LIANG, ZHONGHONG, CA  
[71] LIANG, BENJAMIN, CA  
[22] 2020-07-12  
[41] 2022-01-12

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[21] **3,086,377**  
[13] A1  
[51] **Int.Cl. H02H 7/26 (2006.01) H02J 3/46 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR USE WITH MICROGRIDS HAVING INVERTER-BASED DISTRIBUTED GENERATORS**  
[54] **SYSTEME ET METHODE A UTILISER AVEC DES MICROGRILLES AYANT DES GENERATRICES DISTRIBUEES A BASE D'INVERSEUR**  
[72] SALEH, KHALED, CA  
[72] MEHRIZI-SANI, ALI, US  
[71] HER MAJESTY THE QUEEN IN RIGHT OF CANADA, AS REPRESENTED BY THE MINISTRE, CA  
[22] 2020-07-10  
[41] 2022-01-10

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[21] **3,086,572**  
[13] A1  
[51] **Int.Cl. G06Q 50/16 (2012.01)**  
[25] EN  
[54] **AI POWERED REAL ESTATE REFERRAL NETWORK**  
[54] **RESEAU DE REFERENCES DANS LE SECTEUR DE L'IMMOBILIER FONDE SUR L'INTELLIGENCE ARTIFICIELLE**  
[72] ROMEUS, EDOUARD, CA  
[72] DUVALSAINT, LOUDVIKA, CA  
[71] ROMEUS, EDOUARD, CA  
[71] DUVALSAINT, LOUDVIKA, CA  
[22] 2020-07-13  
[41] 2022-01-13

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[21] **3,086,660**  
[13] A1  
[51] **Int.Cl. G06F 11/30 (2006.01) G06F 15/16 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR MONITORING APPLICATION HEALTH IN A DISTRIBUTED ARCHITECTURE**  
[54] **SYSTEMES ET METHODES POUR SURVEILLER LA SANTE D'UNE APPLICATION DANS UNE ARCHITECTURE REPARTIE**  
[72] MEERAN, AHAMED P. S., CA  
[72] BHATTACHARYA, SOMAK, CA  
[71] THE TORONTO-DOMINION BANK, CA  
[22] 2020-07-10  
[41] 2022-01-10

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[21] **3,086,727**  
[13] A1  
[51] **Int.Cl. C23F 13/14 (2006.01)**  
[25] EN  
[54] **WATER HEATER LIFE EXTENDER**  
[54] **DISPOSITIF DE PROLONGATION DE LA DUREE DE VIE D'UN CHAUFFE-EAU**  
[72] STARANCHUK, GEORGE, CA  
[71] STARANCHUK, GEORGE, CA  
[22] 2020-07-14  
[41] 2022-01-14

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[21] **3,086,742**  
[13] A1  
[51] **Int.Cl. C07D 311/80 (2006.01) C07B 61/00 (2006.01) C07C 37/50 (2006.01)**  
[25] EN  
[54] **METHOD OF CANNABIS DECARBOXYLATION**  
[54] **METHODE DE DECARBOXYLATION DU CANNABIS**  
[72] NOORBAKHS, REIHANEH, CA  
[71] BC HOP COMPANY LTD., CA  
[22] 2020-07-14  
[41] 2022-01-14



**Demandes canadiennes mises à la disponibilité du public  
9 janvier 2022 au 15 janvier 2022**

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[21] **3,086,840**  
[13] A1

[51] **Int.Cl. A41D 13/00 (2006.01) A61F 7/00 (2006.01) A61N 1/04 (2006.01) A61N 1/36 (2006.01)**

[25] EN

[54] **GARMENT STRUCTURE HAVING ADJUSTMENT MECHANISM FOR ABUTTING AT LEAST ONE PAD UNIT FIRMLY AGAINST SKIN TO PROVIDE AT LEAST ONE OF ELECTROTHERAPY AND HEAT THERAPY**

[54] **STRUCTURE DE VETEMENT AYANT UN MECANISME D'AJUSTEMENT POUR APPUYER AU MOINS UNE UNITE DE COUSSIN FERMEMENT CONTRE LA PEAU AFIN DE FOURNIR AU MOINS UNE ELECTROTHERAPIE ET UNE THERAPIE THERMIQUE**

[72] HO, HOI MING MICHAEL, HK  
[71] HO, HOI MING MICHAEL, HK  
[22] 2020-07-15  
[41] 2022-01-15

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[21] **3,086,851**  
[13] A1

[51] **Int.Cl. E04H 3/08 (2006.01) A47B 41/00 (2006.01) A47B 85/00 (2006.01) A47C 13/00 (2006.01) A63G 31/00 (2006.01) E04B 1/343 (2006.01) E04H 3/10 (2006.01)**

[25] EN

[54] **OUTDOOR CLASSROOM SYSTEM**

[54] **SYSTEME DE SALLE DE CLASSE A L'EXTERIEUR**

[72] BIENENSTOCK, ADAM, CA  
[71] BIENENSTOCK NATURAL PLAYGROUNDS, INC., CA  
[22] 2020-07-15  
[41] 2022-01-15

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[21] **3,086,861**  
[13] A1

[51] **Int.Cl. G01F 9/00 (2006.01) B67D 7/08 (2010.01) A47K 5/12 (2006.01)**

[25] EN

[54] **FLUID DISPENSER WITH THERMOMETER**

[54] **DISTRIBUTEUR DE LIQUIDE AVEC THERMOMETRE**

[72] OPHARDT, HEINER, CH  
[71] OP-HYGIENE IP GMBH, CH  
[22] 2020-07-14  
[41] 2022-01-14

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[21] **3,086,864**  
[13] A1

[51] **Int.Cl. F16L 3/13 (2006.01) F16L 1/11 (2006.01)**

[25] EN

[54] **TRACER WIRE HOLDER**

[54] **SUPPORT A CABLE TRACEUR**

[72] CLUNE, JORDON, CA  
[72] BIRD, ANDREW, CA  
[72] MEEUWSE, ROBERT, CA  
[72] MOLNAR, BRETT, CA  
[71] TRACER WAY INC., CA  
[22] 2020-07-15  
[41] 2022-01-15

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[21] **3,086,868**  
[13] A1

[51] **Int.Cl. B60D 1/24 (2006.01) B60D 1/06 (2006.01) B60D 1/30 (2006.01) B60D 1/34 (2006.01)**

[25] EN

[54] **WEIGHT DISTRIBUTING AND SWAY CONTROL HITCH**

[54] **ATTACHE DE REMORQUAGE A COMMANDE DU DEPLACEMENT LATERAL ET A DISTRIBUTION DU POIDS**

[72] MCCALL, TRAVIS M., US  
[72] JELINEK, TYLER, US  
[71] B & W CUSTOM TRUCK BEDS, INC., US  
[22] 2020-07-13  
[41] 2022-01-13

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[21] **3,086,875**  
[13] A1

[51] **Int.Cl. E21B 43/04 (2006.01) E21B 43/10 (2006.01)**

[25] EN

[54] **COMMINGLING FLOW BETWEEN TRANSPORT TUBES OF A MULTI-TRANSPORT TUBE SHUNT SYSTEM**

[54] **FLUX DE MELANGE ENTRE DES TUBES DE TRANSPORT D'UN SYSTEME DE CONDUIT COLLECTIF DE TUBES MULTI-TRANSPORT**

[72] LANGLAIS, MICHAEL DEAN, US  
[72] KUMAR, AMRENDRA, US  
[71] SCHLUMBERGER CANADA LIMITED, CA  
[22] 2020-07-14  
[41] 2022-01-14

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[21] **3,086,883**  
[13] A1

[51] **Int.Cl. A61K 33/242 (2019.01) A61K 9/08 (2006.01) A61K 9/14 (2006.01) A61P 31/14 (2006.01)**

[25] EN

[54] **COMPOSITION FOR PREVENTING OR TREATING COVID-19, INCLUDING GOLD NANOPARTICLE AS ACTIVE INGREDIENT**

[54] **COMPOSITION POUR PREVENIR OU TRAITER LA COVID-19 COMPRENANT UNE NANOPARTICULE D'OR COMME INGREDIENT ACTIF**

[72] CHIN, CHUR, KR  
[71] CHIN, CHUR, KR  
[22] 2020-07-14  
[41] 2022-01-14

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[21] **3,086,886**  
[13] A1

[51] **Int.Cl. G06F 9/451 (2018.01) G06Q 40/02 (2012.01) G06F 3/14 (2006.01) G06F 11/30 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR PROVIDING AUTOMATED PREDICTIVE INFORMATION ON A USER INTERFACE**

[54] **SYSTEME ET METHODE POUR FOURNIR DES RENSEIGNEMENTS PREDICTIFS AUTOMATISES SUR UNE INTERFACE UTILISATEUR**

[72] DEGRAZIA, ESTERINA, CA  
[71] THE TORONTO-DOMINION BANK, CA  
[22] 2020-07-15  
[41] 2022-01-15

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[21] **3,086,909**  
[13] A1

[51] **Int.Cl. A42B 3/04 (2006.01)**

[25] EN

[54] **HELMET WITH SWEAT GUTTER**

[54] **CASQUE A GOUTTIERE POUR LA SUEUR**

[72] LANGLOIS, SIMON, CA  
[72] MARTIN, PHILIPPE, CA  
[72] BEAUCHAMP, PIERRE-LUC, CA  
[72] STEENBRINK, BRIAN, CA  
[71] SPORT MASKA INC., CA  
[22] 2020-07-15  
[41] 2022-01-15

**Canadian Applications Open to Public Inspection  
January 9, 2022 to January 15, 2022**

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[21] **3,087,396**  
[13] A1

[51] **Int.Cl. E04B 1/80 (2006.01) E04B 1/90 (2006.01)**

[25] EN

[54] **EXTERIOR INSULATION AND CLADDING SUPPORT SYSTEM FOR LOW THERMAL CONDUCTIVITY IN BUILDINGS**

[54] **ISOLATION EXTERIEURE ET SYSTEME DE SUPPORT DE PLACAGE POUR LA FAIBLE CONDUCTIVITE THERMIQUE DANS LES BATIMENTS**

[72] LEANING, ANTHONY, CA

[71] LEANING, ANTHONY, CA

[22] 2020-07-15

[41] 2022-01-15

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[21] **3,087,544**  
[13] A1

[51] **Int.Cl. G16H 15/00 (2018.01) G06Q 30/06 (2012.01) A61B 5/00 (2006.01) A61M 21/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR SLEEP ENVIRONMENT MANAGEMENT**

[54] **SYSTEME ET METHODE DE GESTION DE L'ENVIRONNEMENT DE SOMMEIL**

[72] VIVEIROS, WALTER, US

[71] VIVEIROS, WALTER, US

[22] 2020-07-15

[41] 2022-01-10

[30] US (16/946,914) 2020-07-10

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[21] **3,088,502**  
[13] A1

[51] **Int.Cl. A41F 1/00 (2006.01) A44B 99/00 (2010.01) A44B 1/18 (2006.01)**

[25] EN

[54] **MAGNETIC FASTENER SYSTEM**

[54] **SYSTEME D'ATTACHE MAGNETIQUE**

[72] HARRIS, RICHARD H., US

[72] THORNSBURY, AUDRIANA, US

[72] YORK, KATHRYN ANN, US

[72] GRAY, ALYSHA LYNN, US

[71] LION GROUP, INC., US

[22] 2020-07-30

[41] 2022-01-13

[30] US (63/051,073) 2020-07-13

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[21] **3,092,503**  
[13] A1

[51] **Int.Cl. F41H 9/00 (2006.01) C06D 3/00 (2006.01) F42B 12/48 (2006.01)**

[25] EN

[54] **SMOKE DEVICE**

[54] **APPAREIL POUR FUMER**

[72] ROSE, JAMES, US

[72] PERRIAM, JOHN, US

[71] 3RD LIGHT IP HOLDINGS LLC, US

[22] 2020-09-09

[41] 2022-01-10

[30] US (16/925,356) 2020-07-10

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[21] **3,095,877**  
[13] A1

[51] **Int.Cl. B42C 3/00 (2006.01) B42C 7/00 (2006.01) B42F 7/06 (2006.01)**

[25] EN

[54] **BOOKLET AND METHOD OF FORMING SAME**

[54] **CAHIER ET METHODE DE PRODUCTION**

[72] BUECHEL, STEVEN, US

[72] VAN OOST, RANDY, US

[71] THE SEGERDAHL CORP. DBA SG360, US

[22] 2020-10-09

[41] 2022-01-13

[30] US (63/051,831) 2020-07-14

[30] US (16/986,561) 2020-08-06

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[21] **3,096,659**  
[13] A1

[51] **Int.Cl. B65D 43/00 (2006.01)**

[25] EN

[54] **COMPOSITE ARTICLE ASSEMBLY SYSTEMS AND METHODS**

[54] **SYSTEMES ET METHODES D'ASSEMBLAGE D'ARTICLE COMPOSITE**

[72] SAVENOK, PAVEL, US

[71] SAVENOK, PAVEL, US

[22] 2020-10-21

[41] 2022-01-13

[30] US (16/927,904) 2020-07-13

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[21] **3,097,171**  
[13] A1

[51] **Int.Cl. E04H 3/08 (2006.01) E04B 1/343 (2006.01) E04H 1/12 (2006.01)**

[25] EN

[54] **OUTDOOR CLASSROOM SYSTEM AND EARLY LEARNING PODS**

[54] **SYSTEME DE SALLE DE CLASSE EXTERIEURE ET CELLULES D'APPRENTISSAGE PRECOCE**

[72] BIENENSTOCK, ADAM, CA

[71] BIENENSTOCK NATURAL PLAYGROUNDS, INC., CA

[22] 2020-10-27

[41] 2022-01-15

[30] CA (3086851) 2020-07-15

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[21] **3,101,159**  
[13] A1

[51] **Int.Cl. B32B 27/04 (2006.01) B32B 7/12 (2006.01) B32B 27/02 (2006.01) B32B 27/08 (2006.01) B32B 27/20 (2006.01)**

[25] EN

[54] **A COATING STRUCTURE OF BLACKOUT ADVERTISING CLOTH**

[54] **STRUCTURE DE REVETEMENT DE TISSU D'ANNONCE D'OCCULTATION**

[72] LIN, I-CHIEN, CN

[71] TAYA CANVAS (SHANGHAI) COMPANY LIMITED, CN

[22] 2020-11-30

[41] 2022-01-10

[30] TW (109208813) 2020-07-10

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**Demandes canadiennes mises à la disponibilité du public  
9 janvier 2022 au 15 janvier 2022**

[21] **3,103,796**  
[13] A1

[51] **Int.Cl. H04L 12/16 (2006.01) G06F 16/33 (2019.01) G06F 40/205 (2020.01) G06F 17/00 (2019.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS TO AUTOMATICALLY CATEGORIZE SOCIAL MEDIA POSTS AND RECOMMEND SOCIAL MEDIA POSTS**  
[54] **SYSTEMES ET METHODES POUR CATEGORISER ET RECOMMANDER AUTOMATIQUEMENT DES PUBLICATIONS SUR LES MEDIAS SOCIAUX**  
[72] MAREY, YUSUF ABDELHAKAM ABDELKADER, US  
[71] ROVI GUIDES, INC., US  
[22] 2020-12-22  
[41] 2022-01-13  
[30] US (16/927372) 2020-07-13

[21] **3,109,045**  
[13] A1

[51] **Int.Cl. F21V 21/088 (2006.01) F16M 13/02 (2006.01)**  
[25] EN  
[54] **BULB FIXING AND CLAMPING DEVICE**  
[54] **DISPOSITIF DE FIXATION ET DE SERRAGE**  
[72] CHEN, DONGCHANG, CN  
[71] DONGGUAN CITY MINLEON ELECTRONICS CO., LTD., CN  
[22] 2021-02-16  
[41] 2022-01-13  
[30] CN (202021365418.X) 2020-07-13

[21] **3,109,827**  
[13] A1

[51] **Int.Cl. E04F 13/26 (2006.01)**  
[25] EN  
[54] **INSTALLATION CLIP, ESPECIALLY FOR INSTALLING PLANKS, AND ASSOCIATED INSTALLATION SYSTEM**  
[54] **ETRIER D'INSTALLATION, EN PARTICULIER POUR L'INSTALLATION DE PLANCHES, ET SYSTEME D'INSTALLATION CONNEXE**  
[72] VOSS, MARCUS, DE  
[71] SCHMITT, GOTZ S., DE  
[22] 2021-02-23  
[41] 2022-01-10  
[30] EP (20185319.9) 2020-07-10

[21] **3,113,458**  
[13] A1

[51] **Int.Cl. F03B 13/10 (2006.01) B63B 21/50 (2006.01) B63G 8/14 (2006.01)**  
[25] EN  
[54] **UNDERWATER TURBINE APPARATUS AND METHOD**  
[54] **APPAREIL ET METHODE D'HYDROLIENNE**  
[72] PETROV, DIMITRI, CA  
[71] DIMITRI PETROV CONSULTANTS INC., CA  
[22] 2021-03-30  
[41] 2022-01-10  
[30] US (16/925,994) 2020-07-10

[21] **3,117,193**  
[13] A1

[51] **Int.Cl. E05F 11/54 (2006.01) E05C 17/50 (2006.01)**  
[25] EN  
[54] **DUAL-PURPOSE FOOT-OPERATED DOOR OPENER**  
[54] **OUVRE-PORTE DOUBLE FONCTION A PIED**  
[72] LIN, SHENG-CHUN, TW  
[71] GREATIM INTERNATIONAL INC., TW  
[22] 2021-05-05  
[41] 2022-01-09  
[30] TW (109208753) 2020-07-09

[21] **3,117,629**  
[13] A1

[51] **Int.Cl. H05B 47/19 (2020.01) H04W 24/04 (2009.01) H04W 4/30 (2018.01) H05B 47/16 (2020.01)**  
[25] EN  
[54] **AUTONOMOUS ADAPTIVE CONTROLLER FOR ACTIVE WIRELESS LIGHTING COMMUNICATION**  
[54] **UNITE DE COMMANDE ADAPTATIVE AUTONOME POUR LA COMMUNICATION D'ECLAIRAGE SANS FIL ACTIVE**  
[72] SELVARAJ, GOMEZ SAM, US  
[71] ABL IP HOLDING LLC, US  
[22] 2021-05-06  
[41] 2022-01-10  
[30] US (16/925,743) 2020-07-10

[21] **3,118,643**  
[13] A1

[51] **Int.Cl. B65C 9/00 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR REMOVING UNATTACHED LABELS FROM A LABEL APPLICATOR SYSTEM**  
[54] **METHODE ET APPAREIL POUR RETIRER DES ETIQUETTES NON ATTACHEES D'UN SYSTEME D'APPLICATION D'ETIQUETTES**  
[72] LICHTENBERG, ARI, US  
[71] HURST INTERNATIONAL, LLC, US  
[22] 2021-05-14  
[41] 2022-01-10  
[30] US (16/925702) 2020-07-10

[21] **3,118,681**  
[13] A1

[51] **Int.Cl. F16J 15/447 (2006.01) F16J 15/453 (2006.01)**  
[25] EN  
[54] **LABYRINTH BARRIER WITH MEMBERS CONSTRUCTED OF A SHAPE MEMORY MATERIAL**  
[54] **BARRIERE DE LABYRINTHE COMPORTANT DES ELEMENTS FAITS D'UN MATERIAU DE MEMOIRE DE FORME**  
[72] BERKEY, TYLER EMERSON, US  
[72] PAGE, NICHOLAS, US  
[71] THE BOEING COMPANY, US  
[22] 2021-05-13  
[41] 2022-01-15  
[30] US (63/052,178) 2020-07-15

[21] **3,119,905**  
[13] A1

[51] **Int.Cl. H02G 7/12 (2006.01) H02G 7/08 (2006.01)**  
[25] EN  
[54] **AERIAL CABLE SPACER INSULATOR**  
[54] **ISOLATEUR POUR SEPARATEUR DE CABLE AERIEN**  
[72] CLEMENT, CHARLES, US  
[72] BARTHOL, JORDAN, US  
[72] TALABATHULA, SHRAVANI, US  
[72] LAUGHLIN, EDWARD, US  
[72] MERCEDAT, GUBERSON, US  
[71] MARMON UTILITY LLC, US  
[22] 2021-05-27  
[41] 2022-01-10  
[30] US (16/925,749) 2020-07-10

**Canadian Applications Open to Public Inspection  
January 9, 2022 to January 15, 2022**

[21] **3,120,287**  
[13] A1

[51] **Int.Cl. G06Q 10/04 (2012.01)**  
[25] EN  
[54] **USING RANDOMNESS  
COMPENSATING FACTORS TO  
IMPROVE FORECAST  
ACCURACY**

[54] **UTILISATION DE FACTEURS DE  
COMPENSATION DU HASARD  
POUR AMELIORER  
L'EXACTITUDE DES PREVISIONS**

[72] PARAMESWARAN, SATHIYAN, US  
[72] VARADARAJULA, PADMANABHA  
SHAstry, US  
[72] DODDIPALLI, PAVAN, US  
[72] PARIKH, DHRUVIL, US  
[71] UNITED PARCEL SERVICE OF  
AMERICA, INC., US  
[22] 2021-05-31  
[41] 2022-01-10  
[30] US (16/925,744) 2020-07-10

[21] **3,120,972**  
[13] A1

[51] **Int.Cl. F21K 9/60 (2016.01) F21K 9/68  
(2016.01)**  
[25] EN  
[54] **LIGHTING APPARATUS HAVING  
AN OBLONG OPTIC  
CORRESPONDING TO MULTIPLE  
LIGHT SOURCES**

[54] **APPAREIL D'ECLAIRAGE AYANT  
UN ELEMENT OPTIQUE OVALE  
CORRESPONDANT A DE  
MULTIPLES SOURCES DE  
LUMIERE**

[72] FRANKIEWICZ, GREGORY PHILIP,  
US  
[72] SERRA, JOHN GLENN, US  
[71] ABL IP HOLDING LLC, US  
[22] 2021-06-03  
[41] 2022-01-10  
[30] US (16/925,807) 2020-07-10

[21] **3,121,512**  
[13] A1

[51] **Int.Cl. A01C 7/20 (2006.01) A01C  
7/08 (2006.01)**  
[25] EN  
[54] **COLLECTION DEVICE FOR  
METER CALIBRATION OF AIR  
SEEDER TANKS**

[54] **DISPOSITIF DE COLLECTE POUR  
L'ETALONNAGE DE DOSEUR  
DES RESERVOIRS DE SEMOIR  
PNEUMATIQUE**

[72] MARTENS, WILHELM, CA  
[71] GREENVALLEY EQUIPMENT (2009)  
INC., CA  
[22] 2021-06-08  
[41] 2022-01-14  
[30] US (63/051,429) 2020-07-14

[21] **3,121,770**  
[13] A1

[51] **Int.Cl. H01B 13/012 (2006.01)**  
[25] FR  
[54] **ANGULAR ORIENTATION TOOL  
FOR MAKING AND  
CONTROLLING A HARNESS**

[54] **OUTIL D'ORIENTATION  
ANGULAIRE POUR PERMETTRE  
UNE FABRICATION ET UN  
CONTROLE D'UN HARNAIS**

[72] PITTAU, SERGE, FR  
[72] MARTINO, FRANCK, FR  
[71] AIRBUS HELICOPTERS, FR  
[22] 2021-06-10  
[41] 2022-01-10  
[30] FR (2007330) 2020-07-10

[21] **3,122,253**  
[13] A1

[51] **Int.Cl. B23Q 16/00 (2006.01) B60R  
16/02 (2006.01)**  
[25] FR  
[54] **ANGULAR ORIENTATION TOOL  
FOR MAKING AND  
CONTROLLING A HARNESS**

[54] **OUTIL D'ORIENTATION  
ANGULAIRE POUR PERMETTRE  
UNE FABRICATION ET UN  
CONTROLE D'UN HARNAIS**

[72] PITTAU, SERGE, FR  
[72] MARTINO, FRANCK, FR  
[71] AIRBUS HELICOPTERS, FR  
[22] 2021-06-10  
[41] 2022-01-10  
[30] FR (2007330) 2020-07-10

[21] **3,122,376**  
[13] A1

[51] **Int.Cl. G06F 21/31 (2013.01) G06F  
21/45 (2013.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR  
SECURING LOGIN ACCESS**

[54] **SYSTEMES ET METHODES POUR  
SECURISER L'ACCES DE  
CONNEXION**

[72] WALTERS, AUSTIN, US  
[72] FARIVAR, REZA, US  
[72] RAFFERTY, GALEN, US  
[72] TRUONG, ANH, US  
[72] PHAM, VINCENT, US  
[72] WATSON, MARK, US  
[72] GOODSITT, JEREMY EDWARD, US  
[71] CAPITAL ONE SERVICES, LLC, US  
[22] 2021-06-15  
[41] 2022-01-10  
[30] US (16/926,567) 2020-07-10

[21] **3,122,763**  
[13] A1

[51] **Int.Cl. B64D 45/00 (2006.01) B64C  
25/58 (2006.01) G01M 1/12 (2006.01)**  
[25] EN  
[54] **AIRCRAFT WEIGHT AND  
CENTER OF MASS ESTIMATION  
SYSTEM**

[54] **SYSTEME D'ESTIMATION DE LA  
MASSE ET DU CENTRE DE  
GRAVITE D'UN AERONEF**

[72] REBER, SUSANNE M., US  
[72] HAWKO, KEVIN, US  
[72] FAZELI, AMIR, CA  
[72] CEPIC, ADNAN, CA  
[71] GOODRICH CORPORATION, US  
[22] 2021-06-17  
[41] 2022-01-13  
[30] US (16/927,813) 2020-07-13

[21] **3,122,889**  
[13] A1

[51] **Int.Cl. B01D 47/02 (2006.01)**  
[25] EN  
[54] **SWIRL AIR/LIQUID AIR  
PURIFIER**

[54] **PURIFICATEUR D' AIR A  
LIQUIDE/TOURBILLON D'AIR**

[72] LIN, CHEN-HSIN, TW  
[71] LIN, CHEN-HSIN, TW  
[22] 2021-06-22  
[41] 2022-01-10  
[30] TW (109208787) 2020-07-10

**Demandes canadiennes mises à la disponibilité du public  
9 janvier 2022 au 15 janvier 2022**

[21] **3,122,923**  
[13] A1

[51] **Int.Cl. G01S 7/52 (2006.01) G01S 15/89 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR ESTIMATING AN ULTRASOUND ATTENUATION PARAMETER**  
[54] **METHODE ET SYSTEME POUR ESTIMER UN PARAMETRE D'ATTENUATION DE L'ULTRASON**  
[72] FRASCHINI, CHRISTOPHE, FR  
[71] SUPERSONIC IMAGINE, FR  
[22] 2021-06-22  
[41] 2022-01-10  
[30] EP (20315348.1) 2020-07-10

[21] **3,123,282**  
[13] A1

[51] **Int.Cl. H01M 10/48 (2006.01) H01M 10/44 (2006.01) H02J 7/00 (2006.01)**  
[25] EN  
[54] **BATTERY AND BATTERY CHARGER**  
[54] **BATTERIE ET CHARGEUR DE BATTERIE**  
[72] GRANDJEAN, PASCALE, US  
[72] CARTIER, MEDERIC, US  
[71] ILLINOIS TOOL WORKS INC., US  
[22] 2021-06-25  
[41] 2022-01-14  
[30] EP (EP20185650) 2020-07-14  
[30] EP (EP21175903) 2021-05-26  
[30] EP (EP21176524) 2021-05-28

[21] **3,123,423**  
[13] A1

[51] **Int.Cl. A61B 17/068 (2006.01) A61B 17/072 (2006.01)**  
[25] EN  
[54] **TOOL ASSEMBLY WITH PIVOTABLE CLAMPING BEAM**  
[54] **ASSEMBLAGE D'OUTIL AVEC BARROT DE SERRAGE PIVOTANT**  
[72] FREMD, JENNIFER C., US  
[71] COVIDIEN LP, US  
[22] 2021-06-28  
[41] 2022-01-09  
[30] US (16/924,735) 2020-07-09

[21] **3,123,061**  
[13] A1

[51] **Int.Cl. A01F 12/44 (2006.01) A01D 41/12 (2006.01) A01F 12/48 (2006.01)**  
[25] EN  
[54] **AGRICULTURAL CHAFF COLLECTOR**  
[54] **COLLECTEUR DE PAILLETES AGRICOLES**  
[72] STUKENHOLTZ, TY E., US  
[72] STUKENHOLTZ, JAY E., US  
[71] FARMMAX, LLC, US  
[22] 2021-06-23  
[41] 2022-01-09  
[30] US (16/924,837) 2020-07-09

[21] **3,123,284**  
[13] A1

[51] **Int.Cl. A45F 3/18 (2006.01) A47G 19/22 (2006.01)**  
[25] EN  
[54] **BEVERAGE CONTAINER WITH HANDLE AND METHOD OF MAKING SAME**  
[54] **CONTENANT A BREUVAGE AVEC POIGNEE ET METHODE DE FABRICATION**  
[72] ROBILLARD, DANIELLE, US  
[71] AAKRON RULE CORP., US  
[22] 2021-06-25  
[41] 2022-01-14  
[30] US (16/928,082) 2020-07-14

[21] **3,123,441**  
[13] A1

[51] **Int.Cl. G01N 21/90 (2006.01)**  
[25] EN  
[54] **SPECIMEN INFORMATION DETECTION APPARATUS AND SPECIMEN INFORMATION DETECTION METHOD**  
[54] **APPAREIL ET METHODE DE DETECTION DES RENSEIGNEMENTS DE SPECIMENS**  
[72] ITOH, TERUAKI, JP  
[71] AOI SEIKI CO., LTD., JP  
[22] 2021-06-29  
[41] 2022-01-10  
[30] JP (2020-119101) 2020-07-10

[21] **3,123,147**  
[13] A1

[51] **Int.Cl. H01L 31/18 (2006.01) H01L 31/05 (2014.01)**  
[25] EN  
[54] **REPAIRING A SOLAR CELL BONDED ON A FLEXIBLE CIRCUIT**  
[54] **REPARATION D'UNE CELLULE PHOTOVOLTAIQUE COLLEE SUR UN CIRCUIT FLEXIBLE**  
[72] LUC, PHIL, US  
[71] THE BOEING COMPANY, US  
[22] 2021-06-23  
[41] 2022-01-15  
[30] US (63/052,278) 2020-07-15  
[30] US (17/337,890) 2021-06-03

[21] **3,123,422**  
[13] A1

[51] **Int.Cl. A61B 17/072 (2006.01)**  
[25] EN  
[54] **CONTOURED STAPLE PUSHER**  
[54] **POUSSOIR A AGRAFES ENTOURE**  
[72] VALENTINE, DAVID E., US  
[72] EISINGER, JOSEPH T., US  
[71] COVIDIEN LP, US  
[22] 2021-06-28  
[41] 2022-01-09  
[30] US (16/925,270) 2020-07-09

[21] **3,123,539**  
[13] A1

[51] **Int.Cl. A61L 2/10 (2006.01) A61L 2/28 (2006.01) A61L 9/20 (2006.01)**  
[25] EN  
[54] **UV EMITTER AND CONTROLLER FOR DISINFECTION OF SPACES**  
[54] **EMETTEUR DE RAYONNEMENT ULTRAVIOLET ET CONTROLEUR POUR LA DESINFECTION DES ESPACES**  
[72] KARITONAS, TAUTVYDAS, GB  
[71] SPECIALIST HEALTH SOLUTIONS LIMITED, GB  
[22] 2021-06-29  
[41] 2022-01-09  
[30] GB (2010591.2) 2020-07-09

**Canadian Applications Open to Public Inspection  
January 9, 2022 to January 15, 2022**

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[21] **3,123,557**  
[13] A1

[51] **Int.Cl. B60S 9/04 (2006.01) B62D 63/08 (2006.01) B66C 23/80 (2006.01) B66F 3/24 (2006.01)**

[25] EN  
[54] **INCLINABLE SUPPORT FOOT**  
[54] **PIED DE SUPPORT INCLINABLE**  
[72] RIGHETTI, VALTER, IT  
[71] SIMOL S.P.A., IT  
[22] 2021-06-30  
[41] 2022-01-10  
[30] IT (102020000016843) 2020-07-10

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[21] **3,123,574**  
[13] A1

[51] **Int.Cl. A63C 9/06 (2012.01) A63C 9/12 (2012.01)**

[25] EN  
[54] **SKI BINDING WITH HEELESS TELEMARK COUPLING**  
[54] **ATTACHE DE SKI AVEC RACCORD DE TELEMARK SANS TALON**  
[72] MILLER, THOMAS, US  
[71] MILLER, THOMAS, US  
[22] 2021-06-30  
[41] 2022-01-14  
[30] US (16/928,961) 2020-07-14

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[21] **3,123,667**  
[13] A1

[51] **Int.Cl. C04B 35/634 (2006.01) C04B 35/01 (2006.01) C04B 35/645 (2006.01) G02B 1/00 (2006.01)**

[25] EN  
[54] **METHOD FOR PRODUCING TRANSPARENT CERAMICS**  
[54] **METHODE DE PRODUCTION DE CERAMIQUES TRANSPARENTES**  
[72] TANAKA, KEITA, JP  
[71] SHIN-ETSU CHEMICAL CO., LTD., JP  
[22] 2021-06-30  
[41] 2022-01-15  
[30] JP (2020-121496) 2020-07-15

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[21] **3,123,811**  
[13] A1

[51] **Int.Cl. F24F 1/0328 (2019.01) F24F 1/03 (2019.01) F24F 8/108 (2021.01) F24F 8/22 (2021.01) E04B 1/92 (2006.01) E04B 2/82 (2006.01) F24F 7/013 (2006.01)**

[25] EN  
[54] **VENTILATION PARTITIONS AND SYSTEMS**  
[54] **CLOISONS DE VENTILATION ET SYSTEMES**  
[72] SMITH, THOMAS C., US  
[71] 3FLOW, INC., US  
[22] 2021-07-06  
[41] 2022-01-10  
[30] US (63/050.415) 2020-07-10

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[21] **3,123,820**  
[13] A1

[51] **Int.Cl. B25F 5/02 (2006.01) B23B 45/02 (2006.01) B23B 47/00 (2006.01)**

[25] EN  
[54] **ERGONOMIC HOUSING FOR A POWER TOOL**  
[54] **LOGEMENT ERGONOMIQUE POUR UN OUTIL ELECTRIQUE**  
[72] PATTERSON, MATTHEW D., US  
[72] DANCE, WILLIAM B., US  
[71] SNAP-ON INCORPORATED, US  
[22] 2021-07-06  
[41] 2022-01-09  
[30] US (63/049,800) 2020-07-09  
[30] US (17/348,050) 2021-06-15

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[21] **3,123,822**  
[13] A1

[51] **Int.Cl. E04B 2/88 (2006.01)**

[25] EN  
[54] **WALL COVERING WITH ADJUSTABLE SPACING**  
[54] **RECOUVREMENT MURAL AVEC ESPACEMENT AJUSTABLE**  
[72] STARKWEATHER, SCOTT G., US  
[72] PETKOV, ANTONIY R., US  
[71] D.A. DISTRIBUTION INC., US  
[22] 2021-07-06  
[41] 2022-01-10  
[30] US (63/050,675) 2020-07-10  
[30] US (17/066,355) 2020-10-08

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[21] **3,123,823**  
[13] A1

[51] **Int.Cl. B62D 55/07 (2006.01) B60K 1/04 (2019.01)**

[25] EN  
[54] **ELECTRIC SNOWMOBILE**  
[54] **MOTONEIGE ELECTRIQUE**  
[72] MATSUSHITA, YASUSHI, JP  
[71] YAMAHA HATSUDOKI KABUSHIKI KAISHA, JP  
[22] 2021-07-06  
[41] 2022-01-09  
[30] JP (2020-118374) 2020-07-09

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[21] **3,123,895**  
[13] A1

[51] **Int.Cl. A47K 5/12 (2006.01) A47K 1/00 (2006.01)**

[25] EN  
[54] **FLUID DISPENSER WITH THERMOMETER**  
[54] **DISTRIBUTEUR DE LIQUIDE AVEC THERMOMETRE**  
[72] OPHARDT, HEINER, CH  
[71] OP-HYGIENE IP GMBH, CH  
[22] 2021-07-05  
[41] 2022-01-14  
[30] CA (3,086,861) 2020-07-14

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[21] **3,123,896**  
[13] A1

[51] **Int.Cl. B25D 1/12 (2006.01)**

[25] EN  
[54] **DEAD BLOW HAMMER HEAD**  
[54] **TETE DE MARTEAU A COUP AMORTI**  
[72] BENDORF, SCOTT A., US  
[72] ANDERSEN, JONATHAN I., US  
[71] SNAP-ON INCORPORATED, US  
[22] 2021-07-06  
[41] 2022-01-15  
[30] US (16/929,553) 2020-07-15

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**Demandes canadiennes mises à la disponibilité du public  
9 janvier 2022 au 15 janvier 2022**

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[21] **3,123,920**  
[13] A1

[51] **Int.Cl. G06F 17/00 (2019.01) G06Q 30/02 (2012.01) H04W 4/38 (2018.01) G06F 16/95 (2019.01) H04L 12/16 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DETECTING MULTIPLE USERS OF AN ONLINE ACCOUNT**

[54] **SYSTEMES ET METHODES DE DETECTION DE MULTIPLES UTILISATEURS D'UN COMPTE EN LIGNE**

[72] LEE, JOHN JONG-SUK, CA

[72] MILLER, CRAIG, CA

[71] SHOPIFY INC., CA

[22] 2021-07-07

[41] 2022-01-09

[30] US (16/924,975) 2020-07-09

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[21] **3,123,932**  
[13] A1

[51] **Int.Cl. B60R 19/56 (2006.01) B62D 35/00 (2006.01)**

[25] EN

[54] **SIDE UNDERRIDE GUARD ASSEMBLY FOR A TRAILER**

[54] **ASSEMBLAGE DE BARRE ANTIENCASTREMENT LATERALE POUR UNE REMORQUE**

[72] WATSON, MICHAEL H., US

[71] FONTAINE COMMERCIAL TRAILER, INC., US

[22] 2021-07-08

[41] 2022-01-09

[30] US (63/049,722) 2020-07-09

[30] US (17/369,076) 2021-07-07

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[21] **3,123,947**  
[13] A1

[51] **Int.Cl. B61L 23/04 (2006.01) G01V 9/00 (2006.01)**

[25] EN

[54] **AVALANCHE SLIDE DETECTION SYSTEM AND METHOD**

[54] **SYSTEME ET METHODE DE DETECTION DES AVALANCHES**

[72] BEARD, MITCHELL WAYNE, US

[71] BNSF RAILWAY COMPANY, US

[22] 2021-07-06

[41] 2022-01-09

[30] US (16/924,694) 2020-07-09

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[21] **3,123,950**  
[13] A1

[51] **Int.Cl. B27F 5/02 (2006.01) B23C 3/30 (2006.01)**

[25] EN

[54] **MORTISER**

[54] **MORTAISEUSE**

[72] TURCOT, PHILIPPE, CA

[71] NAP ASSET HOLDINGS LTD., US

[22] 2021-07-06

[41] 2022-01-09

[30] US (63/049,774) 2020-07-09

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[21] **3,123,958**  
[13] A1

[51] **Int.Cl. G01S 15/96 (2006.01) G01S 15/86 (2020.01) A01K 79/00 (2006.01) A01K 97/00 (2006.01)**

[25] EN

[54] **FISH FINDING DEVICES, SYSTEMS AND METHODS**

[54] **DISPOSITIFS, SYSTEMES ET METHODES DE REPERAGE DES POISSONS**

[72] BRANDON, NIGEL, US

[71] BRANDON, NIGEL, US

[22] 2021-07-08

[41] 2022-01-13

[30] US (16/926,921) 2020-07-13

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[21] **3,124,029**  
[13] A1

[51] **Int.Cl. B01D 27/08 (2006.01) B01D 35/16 (2006.01)**

[25] EN

[54] **FLUID FILTERING APPARATUS AND METHOD**

[54] **APPAREIL ET METHODE DE FILTRATION DE FLUIDE**

[72] PATTERSON, ALBERT, CA

[72] CLARK, TYLER, CA

[71] PATTERSON, ALBERT, CA

[22] 2021-07-06

[41] 2022-01-09

[30] US (63/049874) 2020-07-09

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[21] **3,124,060**  
[13] A1

[51] **Int.Cl. G01F 23/14 (2006.01) G01F 23/18 (2006.01)**

[25] EN

[54] **CRYOGENIC FLUID MEASUREMENT**

[54] **MESURE DE FLUIDE CRYOGENIQUE**

[72] HEWELT, SCOTT, US

[71] HEWTECH ELECTRONICS, LLC, US

[22] 2021-07-08

[41] 2022-01-13

[30] US (16/927,895) 2020-07-13

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[21] **3,124,099**  
[13] A1

[51] **Int.Cl. G02B 6/46 (2006.01) H02G 3/02 (2006.01)**

[25] EN

[54] **WALL MOUNT BRACKET FOR MULTIPORTS**

[54] **SUPPORT MURAL DE MULTIPORTS**

[72] WILCOX, DAYNE, US

[71] CORNING RESEARCH & DEVELOPMENT CORPORATION, US

[22] 2021-07-09

[41] 2022-01-09

[30] US (63/049,739) 2020-07-09

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[21] **3,124,105**  
[13] A1

[51] **Int.Cl. E06C 1/12 (2006.01) E06C 7/06 (2006.01)**

[25] EN

[54] **A STRAND GRAB, LADDER AND METHOD**

[54] **PRISE DE CORDON, ECHELLE ET METHODE**

[72] PARKER, THOMAS, US

[72] COVINGTON, ADRIEN, US

[72] ARMENOFF, CLAIRE, US

[71] WERNER CO., US

[22] 2021-07-07

[41] 2022-01-09

[30] US (63/049,898) 2020-07-09

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**Canadian Applications Open to Public Inspection  
January 9, 2022 to January 15, 2022**

[21] **3,124,164**  
[13] A1

[51] **Int.Cl. B60P 1/00 (2006.01)**  
[25] EN  
[54] **A MOTORIZED RAIL TRANSPORT SYSTEM AND TRANSPORTABLE STORAGE CONTAINER FOR A VEHICLE**  
[54] **SYSTEME DE TRANSPORT SUR RAIL MOTORISE ET CONTENEUR DE STOCKAGE TRANSPORTABLE POUR UN VEHICULE**  
[72] MANNONE, RICHARD K., US  
[71] MANNONE, RICHARD K., US  
[22] 2021-07-09  
[41] 2022-01-09  
[30] US (16/924,715) 2020-07-09

[21] **3,124,173**  
[13] A1

[51] **Int.Cl. E01C 23/01 (2006.01) H04W 4/38 (2018.01) G06V 20/52 (2022.01) G06V 20/56 (2022.01) G06V 20/60 (2022.01) H04N 7/18 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR DETECTING AND TRANSMITTING INCIDENTS OF INTEREST OF A ROADWAY TO A REMOTE SERVER**  
[54] **SYSTEME ET METHODE POUR DETECTER ET TRANSMETTRE DES INCIDENTS D'INTERET SUR LA ROUTE A UN SERVEUR ELOIGNE**  
[72] TAL, ROYI, CA  
[72] BAKONYI, THOMAS, CA  
[72] WANG, XIMING, CA  
[72] ARTMAN, OMRI, CA  
[72] IBANA, REDENTHOR, CA  
[72] CURRY, DAVID, CA  
[72] KANDASAMY, SUTHAKARAN, CA  
[71] VISUAL DEFENCE, INC., CA  
[22] 2021-07-09  
[41] 2022-01-15  
[30] US (16/930,070) 2020-07-15

[21] **3,124,201**  
[13] A1

[51] **Int.Cl. H04W 40/24 (2009.01) H04W 52/00 (2009.01) H04W 4/38 (2018.01)**  
[25] EN  
[54] **OPTIMIZED PARENT AND PATH SELECTION FOR BATTERY POWERED DEVICES WITHIN A WIRELESS NETWORK**  
[54] **PARENT OPTIMISE ET SELECTION DE VOIE POUR DES DISPOSITIFS A BATTERIE DANS UN RESEAU SANS FIL**  
[72] BARNES, KEITH WAYNE, US  
[72] UHLING, THOMAS, US  
[72] OSTERLOH, CHRISTOPHER LLOYD, US  
[71] ITRON, INC., US  
[22] 2021-07-07  
[41] 2022-01-15  
[30] US (16/930,228) 2020-07-15

[21] **3,124,203**  
[13] A1

[51] **Int.Cl. A01F 15/07 (2006.01)**  
[25] EN  
[54] **BALING ASSEMBLY**  
[54] **ASSEMBLAGE DE MISE EN BALLE**  
[72] BRISBIN, WILLIAM D., US  
[72] SEBRIGHT, BRENT, US  
[71] SEBRIGHT PRODUCTS, INC., US  
[22] 2021-07-08  
[41] 2022-01-09  
[30] US (62/705,670) 2020-07-09

[21] **3,124,210**  
[13] A1

[51] **Int.Cl. E02F 5/10 (2006.01) F16L 1/028 (2006.01)**  
[25] EN  
[54] **CABLE PLOW SYSTEM**  
[54] **SYSTEME D'ENFOUISSEUSE DE CABLES**  
[72] MAIER, ROLAND, DE  
[72] KRESS, ARMIN, DE  
[71] FRANK FOCKERSPERGER GMBH, DE  
[22] 2021-07-09  
[41] 2022-01-10  
[30] DE (10 2020 118 288.0) 2020-07-10

[21] **3,124,217**  
[13] A1

[51] **Int.Cl. B32B 3/08 (2006.01) B29C 48/15 (2019.01) B29C 44/18 (2006.01) B29C 44/24 (2006.01) B32B 3/06 (2006.01) B32B 5/18 (2006.01) B32B 27/08 (2006.01) B32B 37/15 (2006.01) E04B 1/80 (2006.01) E04C 2/284 (2006.01) E04C 2/292 (2006.01) E04B 1/343 (2006.01)**  
[25] EN  
[54] **SANDWICH PANEL AND BUILDING MODULE**  
[54] **PANNEAU SANDWICH ET MODULE DE FABRICATION**  
[72] STONYER, MICHAEL DAVID, NZ  
[71] REVE ARCHITECTURE LIMITED, NZ  
[22] 2021-07-09  
[41] 2022-01-15  
[30] NZ (766265) 2020-07-15

[21] **3,124,219**  
[13] A1

[51] **Int.Cl. E06B 3/673 (2006.01) E06B 3/663 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHODS OF ATTACHING RETENTION MEMBERS TO INSULATING GLAZING UNITS**  
[54] **SYSTEME ET METHODES D'ATTACHE D'ELEMENTS DE RETENUE POUR ISOLER DES UNITES DE GIVRAGE**  
[72] RIETZ, ADAM RICHARD, US  
[72] JOHNSON, CRAIG MICHAEL, US  
[72] GRAHAM, KATHERINE APRIL STEPHAN, US  
[72] MUELLER, ERIC MATTHEW, US  
[72] PAVLACKY, DREW ADAM, US  
[72] LOSNESS, AMANDA LYNNAE, US  
[72] SZUMOWSKI, DUSTIN JOSEPH, US  
[71] ANDERSEN CORPORATION, US  
[22] 2021-07-08  
[41] 2022-01-09  
[30] US (63/049994) 2020-07-09



**Demandes canadiennes mises à la disponibilité du public**  
**9 janvier 2022 au 15 janvier 2022**

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[21] **3,124,226**  
[13] A1

[51] **Int.Cl. F04D 29/66 (2006.01) B67D 7/06 (2010.01) B67D 7/62 (2010.01) F04D 15/00 (2006.01) G05D 13/62 (2006.01)**

[25] EN

[54] **LIQUID DISCHARGE SYSTEM INCLUDING LIQUID PRODUCT PUMP HAVING VIBRATION SENSOR**

[54] **SYSTEME DE DISTRIBUTION DE LIQUIDE COMPRENANT UNE POMPE A PRODUIT LIQUIDE AYANT UN CAPTEUR DE VIBRATIONS**

[72] GOODIER, PETER CHARLES, US

[72] MOORE, SHAWN R., US

[71] PARAGON TANK TRUCK EQUIPMENT, LLC, US

[22] 2021-07-12

[41] 2022-01-14

[30] US (16/928,676) 2020-07-14

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[21] **3,124,227**  
[13] A1

[51] **Int.Cl. H05K 5/02 (2006.01) A01B 71/08 (2006.01) A01B 76/00 (2006.01)**

[25] EN

[54] **PROTECTIVE DEVICE AND PROTECTIVE METHOD FOR ELECTRONIC PRODUCTS AND ELECTRONIC DEVICE FOR AGRICULTURAL MACHINERY**

[54] **DISPOSITIF ET METHODE DE PROTECTION POUR PRODUITS ELECTRONIQUES, ET PRODUIT ELECTRONIQUE POUR DES MACHINES AGRICOLES**

[72] LI, ZI-XUAN, CN

[72] XUE, WEI-LIAN, CN

[72] WU, DI, CN

[72] YAO, YUAN, CN

[71] FJ DYNAMICS CO., LTD., CN

[22] 2021-07-12

[41] 2022-01-14

[30] CN (202010675183.2) 2020-07-14

[30] CN (202021387099.2) 2020-07-14

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[21] **3,124,232**  
[13] A1

[51] **Int.Cl. H04B 7/17 (2006.01) H04B 17/309 (2015.01) H03H 17/02 (2006.01) H04B 1/40 (2015.01) H04B 1/50 (2006.01) H04B 7/08 (2006.01)**

[25] EN

[54] **SOFTWARE-DEFINED FILTERING IN A REPEATER**

[54] **FILTRAGE DEFINI PAR LOGICIEL DANS UN REPETEUR**

[72] ANDERSON, DALE ROBERT, US

[72] NORDGRAN, JAMES CASEY, US

[72] ASHWORTH, CHRISTOPHER KEN, US

[72] PATEL, ILESH V., US

[71] WILSON ELECTRONICS, LLC., US

[22] 2021-07-10

[41] 2022-01-10

[30] US (63/050,684) 2020-07-10

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[21] **3,124,237**  
[13] A1

[51] **Int.Cl. G06N 20/00 (2019.01) G16Z 99/00 (2019.01) G06Q 40/08 (2012.01)**

[25] EN

[54] **MANAGING PREDICTIONS FOR VEHICLE REPAIR ESTIMATES**

[54] **GESTION DES PREDICTIONS POUR DES ESTIMATIONS DE REPARATION DE VEHICULE**

[72] HYLAND, JOSEPH, US

[72] GULATI, ABHIJEET, US

[72] SOLOVIEV, DMITRI, US

[72] ZHANG, CHENLEI, US

[72] LAMBA, PRARIT, US

[71] MITCHELL INTERNATIONAL, INC., US

[22] 2021-07-12

[41] 2022-01-15

[30] US (16/929,984) 2020-07-15

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[21] **3,124,241**  
[13] A1

[51] **Int.Cl. E01H 5/07 (2006.01)**

[25] EN

[54] **ANGLED DRIVE FOR SNOWBLOWER**

[54] **MOTEUR EN ANGLE POUR SOUFFLEUSE A NEIGE**

[72] HOULE, PASCAL, CA

[71] IMMEUBLES MFP 1006 INC., CA

[22] 2021-07-12

[41] 2022-01-13

[30] US (63/050,928) 2020-07-13

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[21] **3,124,270**  
[13] A1

[51] **Int.Cl. B41M 3/14 (2006.01) B42D 25/27 (2014.01) B42D 25/40 (2014.01) B41M 7/00 (2006.01)**

[25] EN

[54] **APPLYING IMAGING SPECIALTY INKS TO SCRATCH-OFF DOCUMENTS**

[54] **APPLICATIONS D'ENCREES SPECIALISEES D'IMAGERIE A DES DOCUMENTS A GRATTER**

[72] IRWIN, KENNETH, JR, US

[72] CASH, KEITH, US

[72] ADKINS, GEORGE, US

[71] HYDRAGRAPHIX LLC, US

[22] 2021-07-08

[41] 2022-01-15

[30] US (63/052,097) 2020-07-15

[30] US (17/369,051) 2021-07-07

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[21] **3,124,304**  
[13] A1

[51] **Int.Cl. B60N 2/28 (2006.01)**

[25] EN

[54] **INFANT CARRIER RELEASING STRUCTURE, INFANT CARRIER AND INFANT SAFETY SEAT**

[54] **STRUCTURE DE LIBERATION DE PORTE-BEBE, PORTE-BEBE ET SIEGE DE SECURITE POUR BEBE**

[72] MASON, KYLE S., US

[72] IGGERT-CROWDE, COLIN F., US

[71] CHINA WONDERLAND NURSERYGOODS CO., LTD., CN

[22] 2021-07-08

[41] 2022-01-10

[30] CN (202021359183.3) 2020-07-10

**Canadian Applications Open to Public Inspection  
January 9, 2022 to January 15, 2022**

[21] **3,124,329**  
[13] A1

[51] **Int.Cl. G06N 10/00 (2022.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR EXTRACTABLE RANDOMNESS SCALING IN QUANTUM RANDOM NUMBER GENERATORS**  
[54] **METHODE ET SYSTEME D'ECHELONNEMENT DU HASARD EXTRACTIBLE DANS DES GENERATEURS DE NOMBRES ALEATOIRES QUANTIQUES**  
[72] VAN HOWE, JAMES, US  
[72] ROZTOCKI, PIOTR, CA  
[72] JESTIN, YOANN, CA  
[72] AZANA, JOSE, CA  
[72] MORANDOTTI, ROBERTO, CA  
[72] BHARADWAJ, SHASHWATH SHANKAR, US  
[71] INSTITUT NATIONAL DE LA RECHERCHE SCIENTIFIQUE, CA  
[22] 2021-07-09  
[41] 2022-01-14  
[30] US (63/051,539) 2020-07-14

[21] **3,124,372**  
[13] A1

[51] **Int.Cl. A47F 5/00 (2006.01) A47B 57/58 (2006.01) B65G 1/14 (2006.01)**  
[25] EN  
[54] **CLIP-ON ADAPTOR FOR INVENTORY DIVIDER**  
[54] **ADAPTATEUR A PINCE POUR UN SEPARATEUR DE STOCKS**  
[72] ROBERTS, MARK, US  
[72] LANGSTON, KEVIN, US  
[71] LOGIQUIP LLC, US  
[22] 2021-07-08  
[41] 2022-01-09  
[30] US (16/924,980) 2020-07-09  
[30] US (17/166,638) 2021-02-03

[21] **3,124,378**  
[13] A1

[51] **Int.Cl. B65D 73/00 (2006.01) A47K 10/04 (2006.01)**  
[25] EN  
[54] **HOME HARDWARE PACKAGE ASSEMBLY**  
[54] **ASSEMBLAGE D'EMBALLAGE AVEC PRODUIT DE QUINCAILLERIE**  
[72] MARTIN, RYAN PATRICK, US  
[72] COAN, YASMEEN GABRIELLE, US  
[72] CURTIS, PAUL, GB  
[72] AVES, JOHN ROBERT, GB  
[71] LIBERTY HARDWARE MFG. CORP., US  
[22] 2021-07-13  
[41] 2022-01-13  
[30] US (63/050,879) 2020-07-13

[21] **3,124,379**  
[13] A1

[51] **Int.Cl. A47D 7/02 (2006.01)**  
[25] EN  
[54] **SLEEP APPARATUS FOR INFANTS AND METHOD**  
[54] **APPAREIL DE SOMMEIL POUR LES BEBES ET METHODE**  
[72] GOLDSMITH, AMY, US  
[72] MACARI, JESSICA, US  
[71] HALO INNOVATIONS, INC., US  
[22] 2021-07-13  
[41] 2022-01-13  
[30] EP (EP20185575.6) 2020-07-13

[21] **3,124,381**  
[13] A1

[51] **Int.Cl. F16L 55/115 (2006.01) F16L 23/16 (2006.01) F16L 55/163 (2006.01) F16L 57/06 (2006.01)**  
[25] EN  
[54] **COMPRESSION RING APPARATUS AND METHOD FOR SEALING A PIPE LINER**  
[54] **APPAREIL DE BAGUE DE COMPRESSION ET METHODE POUR SCELLER UNE DOUBLURE DE TUYAU**  
[72] HENRY, GREGORY MICHAEL, CA  
[72] CHEN, WEI-EN, CA  
[72] BEER, MATTHEW FRANK, CA  
[71] CORE LINEPIPE INC., CA  
[22] 2021-07-13  
[41] 2022-01-15  
[30] US (63/052,012) 2020-07-15

[21] **3,124,388**  
[13] A1

[51] **Int.Cl. E05B 75/00 (2006.01)**  
[25] EN  
[54] **DEVICE AND METHOD FOR RESTRAINING THE WRISTS OF A SUBJECT**  
[54] **DISPOSITIF ET METHODE POUR RETENIR LES POIGNETS D'UN SUJET**  
[72] LEVIEN, CHRISTIEN, CA  
[72] DANIEL, CHRIS, CA  
[71] PARATIN CORPORATION, CA  
[22] 2021-07-13  
[41] 2022-01-13  
[30] US (63/051,123) 2020-07-13

[21] **3,124,390**  
[13] A1

[51] **Int.Cl. G01N 1/14 (2006.01)**  
[25] EN  
[54] **CRYOGENIC LIQUID COMPOSITE SAMPLING SYSTEMS AND METHODS**  
[54] **SYSTEMES ET METHODES D'ECHANTILLONNAGE DE COMPOSITE LIQUIDE CRYOGENIQUE**  
[72] THOMPSON, KENNETH O., US  
[72] WARNER, KEVIN, US  
[72] QUERREY, TIMOTHY L., US  
[71] MUSTANG SAMPLING, LLC, US  
[22] 2021-07-13  
[41] 2022-01-14  
[30] US (16/928,133) 2020-07-14

**Demandes canadiennes mises à la disponibilité du public**  
**9 janvier 2022 au 15 janvier 2022**

[21] **3,124,393**  
[13] A1

[51] **Int.Cl. A23K 10/12 (2016.01) A23K 10/10 (2016.01) A23K 10/14 (2016.01) A23K 10/30 (2016.01) A23K 20/00 (2016.01) C12N 9/04 (2006.01) C12N 9/88 (2006.01) C12P 1/00 (2006.01) C12P 7/06 (2006.01)**

[25] EN

[54] **PROCESS FOR MODULATING THE NUTRITIONAL VALUE OF WHOLE STILLAGE AND DISTILLERS PRODUCTS ASSOCIATED THERETO**

[54] **PROCEDE DE MODULATION DE LA VALEUR NUTRITIVE DE LA VINASSE ENTIERE ET PRODUITS DE DISTILLERIE CONNEXES**

[72] BROADBENT, JEFFERY R., US  
[72] STEELE, JAMES L., US  
[72] HENNINGSEN, BROOKS, US  
[72] PHROMMAO, EAKKARAT, US  
[72] FIRMINO, FERNANDA CRISTINA, US

[71] LALLEMAND HUNGARY LIQUIDITY MANAGEMENT LLC, HU

[22] 2021-07-09  
[41] 2022-01-10  
[30] US (63/050,588) 2020-07-10

[21] **3,124,414**  
[13] A1

[51] **Int.Cl. B64D 31/00 (2006.01) B64D 27/00 (2006.01) B64D 27/24 (2006.01)**

[25] EN

[54] **HYBRID ELECTRIC POWERPLANT (HEP) CONTROL ARCHITECTURE**

[54] **ARCHITECTURE DE COMMANDE DE CENTRALE ELECTRIQUE HYBRIDE**

[72] MARK, MICHAEL, CA  
[72] GUERCHKOVITCH, LEONID, CA  
[71] PRATT & WHITNEY CANADA CORP., CA

[22] 2021-07-09  
[41] 2022-01-10  
[30] US (16/926,009) 2020-07-10

[21] **3,124,417**  
[13] A1

[51] **Int.Cl. A01F 12/18 (2006.01) A01F 7/02 (2006.01)**

[25] EN

[54] **THRESHING TOOL**

[54] **OUTIL DE BATTAGE**

[72] BIGELOW, DEAN, CA  
[72] THEIS, DYLAN, CA  
[72] POMEDLI, ROBIN, CA  
[72] CHOMENCHUK, CORNY, CA  
[71] F.P. BOURGAULT TILLAGE TOOLS LTD., CA

[22] 2021-07-09  
[41] 2022-01-10  
[30] US (63/050215) 2020-07-10  
[30] US (63/179763) 2021-04-26

[21] **3,124,453**  
[13] A1

[51] **Int.Cl. C12N 1/21 (2006.01) C12N 1/19 (2006.01) C12N 9/04 (2006.01) C12N 9/50 (2006.01) C12N 9/52 (2006.01) C12N 15/00 (2006.01) C12N 15/53 (2006.01) C12N 15/57 (2006.01) C12N 15/60 (2006.01) C12N 15/63 (2006.01) C12P 7/06 (2006.01)**

[25] EN

[54] **BACTERIAL-DERIVED NITROGEN SOURCE FOR ETHANOL FERMENTATION**

[54] **SOURCE D'AZOTE DERIVEE DE BACTERIES POUR LA FERMENTATION DE L'ETHANOL**

[72] BROADBENT, JEFF, US  
[72] STEELE, JAMES, US  
[72] HENNINGSEN, BROOKS, US  
[72] PHROMMAO, EAKKARAT, US  
[72] FIRMINO, FERNANDA CRISTINA, US

[71] LALLEMAND HUNGARY LIQUIDITY MANAGEMENT LLC, HU

[22] 2021-07-09  
[41] 2022-01-10  
[30] US (63/050,588) 2020-07-10  
[30] US (63/106,785) 2020-10-28

[21] **3,124,488**  
[13] A1

[51] **Int.Cl. A63B 22/14 (2006.01) A47C 3/18 (2006.01) A63B 23/02 (2006.01)**

[25] EN

[54] **ECCENTRIC COLUMN AND WAIST TWISTER**

[54] **COLONNE EXCENTRIQUE POUR APPAREIL DE TORSION DE LA TAILLE**

[72] WU, DONG-HER, TW  
[71] EMOMO TECHNOLOGY CO., LTD., CN

[22] 2021-07-12  
[41] 2022-01-15  
[30] TW (10920923) 2020-07-15

[21] **3,124,502**  
[13] A1

[51] **Int.Cl. G06Q 20/38 (2012.01) G06Q 20/40 (2012.01) G06Q 40/02 (2012.01)**

[25] EN

[54] **SECURE IDENTITY DATA TOKENIZATION AND PROCESSING**

[54] **MISE EN JETON ET TRAITEMENT DES DONNEES D'IDENTITE SECURISEES**

[72] GERMAIN, BENOIT, CA  
[72] BADAL-BADALIAN, ARNOLD, CA  
[72] BAEK, SEUNG BONG, CA  
[71] ROYAL BANK OF CANADA, CA

[22] 2021-07-13  
[41] 2022-01-13  
[30] US (63/051,318) 2020-07-13

[21] **3,124,531**  
[13] A1

[51] **Int.Cl. B05B 11/00 (2006.01) B05B 7/24 (2006.01)**

[25] EN

[54] **POWERED SPRAYER**

[54] **PULVERISATEUR ELECTRIQUE**

[72] HELMBERGER, ERIN, US  
[72] AMICK, ASHLEY, US  
[72] CUNNINGHAM, ADAM, US  
[72] MONTGOMERY, BENJAMIN E., US  
[72] WISEMAN, DAVID, US  
[71] TECHTRONIC CORDLESS GP, US

[22] 2021-07-14  
[41] 2022-01-14  
[30] US (63/051,661) 2020-07-14  
[30] US (63/054,265) 2020-07-21  
[30] US (63/153,564) 2021-02-25

**Canadian Applications Open to Public Inspection  
January 9, 2022 to January 15, 2022**

[21] **3,124,541**  
[13] A1

[51] **Int.Cl. B65G 67/08 (2006.01)**  
[25] EN  
[54] **FLOW CONTROL FOR BOTTOM DUMP PNEUMATIC MATERIAL HANDLING**  
[54] **CONTROLE DE FLUX POUR UNE MANIPULATION PNEUMATIQUE DE MATERIAUX DANS UN DEPOT DE FOND**  
[72] HERMAN, ALVIN, US  
[72] HERMAN, ERIN, US  
[72] MANSON, SCOTT, US  
[72] WELTER, JOSEPH, US  
[71] QUICKTHREE TECHNOLOGY, LLC, US  
[22] 2021-07-14  
[41] 2022-01-14  
[30] US (63/051,734) 2020-07-14

[21] **3,124,565**  
[13] A1

[51] **Int.Cl. C13B 25/02 (2011.01) B01B 1/00 (2006.01) B01D 1/00 (2006.01) F22B 3/02 (2006.01) C02F 1/04 (2006.01)**  
[25] EN  
[54] **CONDENSATION SYSTEM AND METHOD**  
[54] **SYSTEME ET METHODE DE CONDENSATION**  
[72] DUMONT, JOCELYN, CA  
[71] DUMONT, JOCELYN, CA  
[22] 2021-07-14  
[41] 2022-01-14  
[30] US (63/051,613) 2020-07-14

[21] **3,124,579**  
[13] A1

[51] **Int.Cl. A61K 31/426 (2006.01) A61K 31/192 (2006.01) A61P 1/04 (2006.01)**  
[25] EN  
[54] **UNIT ORAL DOSE COMPOSITIONS COMPOSED OF NAPROXEN SODIUM AND FAMOTIDINE FOR THE TREATMENT OF ACUTE PAIN AND THE REDUCTION OF THE SEVERITY OF HEARTBURN AND/OR THE RISK OF HEARTBURN**  
[54] **COMPOSITIONS DE DOSES ORALES UNITAIRES COMPOSEES DE NAPROXENE SODIQUE ET DE FAMOTIDINE POUR LE TRAITEMENT DES DOULEURS AIGUES ET LA REDUCTION DE LA GRAVITE DES AIGREURS ET/OU DU RISQUE D'AIGREURS**  
[72] SCHACHTEL, BERNARD, US  
[71] SCHABAR RESEARCH ASSOCIATES LLC, US  
[22] 2021-07-14  
[41] 2022-01-15  
[30] US (63/052,397) 2020-07-15

[21] **3,124,600**  
[13] A1

[51] **Int.Cl. G06F 16/903 (2019.01) G06F 16/901 (2019.01) G06F 17/00 (2019.01)**  
[25] EN  
[54] **SWIFT QUERY ENGINE AND METHOD THEREFOR**  
[54] **MOTEUR DE RECHERCHE RAPIDE ET METHODE CONNEXE**  
[72] HANKINSON, STEPHEN, CA  
[71] AFFINIO INC., CA  
[22] 2021-07-14  
[41] 2022-01-14  
[30] US (17/243,512) 2021-04-28  
[30] US (63/051,591) 2020-07-14

[21] **3,124,632**  
[13] A1

[51] **Int.Cl. B60R 9/06 (2006.01) B60R 9/08 (2006.01)**  
[25] EN  
[54] **MULTI-USE ADAPTABLE HITCH-MOUNTED LOAD SUPPORT SYSTEM**  
[54] **SYSTEME DE SUPPORT SUR CHARGE MULTI-USAGE ADAPTATIF INSTALLE SUR UNE ATTACHE DE REMORQUAGE**  
[72] MCFADDEN, SCOTT A., US  
[72] LESLEY, KEVIN, US  
[72] KRAEUTER, CHARLES, US  
[72] CONDON, DAVID, US  
[72] HOCH, ASHLEY, US  
[72] RODRIGUEZ, MARCOS HENRY, US  
[72] SAGEN, JASON ATTFIELD, US  
[72] WILLEMS, BRANDON MICHAEL, US  
[72] DEAMBROSE, CRAIG, US  
[71] YAKIMA PRODUCTS, INC., US  
[22] 2021-07-14  
[41] 2022-01-14  
[30] US (63/051806) 2020-07-14

[21] **3,124,650**  
[13] A1

[51] **Int.Cl. A61H 23/00 (2006.01) A61H 7/00 (2006.01) A61H 23/02 (2006.01)**  
[25] EN  
[54] **SELF-MASSAGE DEVICE HAVING INTERCHANGEABLE MASSAGE HEADS AND BOARD**  
[54] **DISPOSITIF DE MASSAGE PERSONNEL AYANT DES TETES DE MASSAGE INTERCHANGEABLES ET UNE PLANCHE**  
[72] SMITH, WILLIAM, US  
[72] SMITH, CAMERON, US  
[72] RAINVILLE, DOMINIC, CA  
[71] SMITH, WILLIAM, US  
[71] SMITH, CAMERON, US  
[71] RAINVILLE, DOMINIC, CA  
[22] 2021-07-13  
[41] 2022-01-13  
[30] US (63/051164) 2020-07-13  
[30] US (63/116655) 2020-11-20  
[30] US (63/128636) 2020-12-21  
[30] US (17/180654) 2021-02-19

**Demandes canadiennes mises à la disponibilité du public**  
**9 janvier 2022 au 15 janvier 2022**

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[21] **3,124,657**  
[13] A1

[51] **Int.Cl. E02D 27/32 (2006.01) E02D 27/02 (2006.01)**  
[25] EN  
[54] **A FOUNDATION UNIT**  
[54] **UNITE DE FONDATION**  
[72] WELLENS, STEWART, GB  
[71] TROJAN SERVICES LIMITED, GB  
[22] 2021-07-13  
[41] 2022-01-15  
[30] GB (2010907.0) 2020-07-15

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[21] **3,124,683**  
[13] A1

[51] **Int.Cl. A61B 34/20 (2016.01) A61B 90/00 (2016.01) A61B 5/107 (2006.01) A61B 17/70 (2006.01) A61B 17/88 (2006.01)**  
[25] EN  
[54] **INTRAOPERATIVE ALIGNMENT ASSESSMENT SYSTEM AND METHOD**  
[54] **SYSTEME ET METHODE D'EVALUATION DE L'ALIGNEMENT INTRAOPERATIF**  
[72] GULLOTTI, DAVID MICHAEL, US  
[72] SOLTANIANZADEH, AMIR HOSSEIN, US  
[72] THEODORE, NICHOLAS, US  
[72] RUPPEL, EDWARD FREDERICK III, US  
[72] FUJITA, SAKI, US  
[72] FRANCONI, NICHOLAS GRIESMER, US  
[72] INSERNI, MICHAEL ANTONIO, US  
[72] LIN, JENNIFER, US  
[72] LI, ROBERT, US  
[72] UNERI, ALI, US  
[72] ROUT, SRITAM PARASHAR, US  
[72] CHELALA, MARC, US  
[72] COWDRICK, KYLE ROBERT, US  
[72] TORRES, MARIA FERNANDA, US  
[71] SPINE ALIGN, LLC, US  
[22] 2021-07-09  
[41] 2022-01-10  
[30] US (16/926390) 2020-07-10

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[21] **3,124,686**  
[13] A1

[51] **Int.Cl. B61L 99/00 (2006.01)**  
[25] EN  
[54] **WIRELESS SLIDE FENCE SYSTEM AND METHOD**  
[54] **SYSTEME ET METHODE DE CLOTURE SANS FIL CONTRE LES EBOULEMENTS**  
[72] BEARD, MITCHELL WAYNE, US  
[72] SHIH, PAUL CHIYANG, US  
[72] WEIDLE, PAUL AARON, US  
[72] SPECHT, JERRY WADE, US  
[72] SHUE, KENT ROBERT, US  
[71] BNSF RAILWAY COMPANY, US  
[22] 2021-07-13  
[41] 2022-01-14  
[30] US (16/928,433) 2020-07-14

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[21] **3,124,689**  
[13] A1

[51] **Int.Cl. F02C 9/18 (2006.01) F01D 9/02 (2006.01) F02C 6/08 (2006.01) F02K 3/02 (2006.01)**  
[25] EN  
[54] **DEVICES AND METHODS FOR GUIDING BLEED AIR IN A TURBOFAN ENGINE**  
[54] **DISPOSITIFS ET METHODES DE DIRECTION D'AIR DE PRELEVEMENT DANS UNE TURBOSOUFFLANTE**  
[72] CAPRON, ALEXANDRE, CA  
[72] YAM, TAMMY, CA  
[72] ANAND, KARAN, CA  
[72] DUONG, HIEN, CA  
[72] TOWNSEND, PETER, CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2021-07-13  
[41] 2022-01-15  
[30] US (16/929,715) 2020-07-15

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[21] **3,124,699**  
[13] A1

[51] **Int.Cl. C02F 11/13 (2019.01) A23K 10/38 (2016.01) B01D 3/00 (2006.01) B01D 21/00 (2006.01) C12F 3/00 (2006.01) C12P 1/00 (2006.01) C12P 7/06 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR CONCENTRATING A SOLIDS STREAM RECOVERED FROM A PROCESS STREAM IN A BIOREFINERY**  
[54] **METHODES ET SYSTEMES POUR CONCENTRER UN FLUX DE SOLIDES RECUPERE D'UN FLUX DE TRAITEMENT DANS UNE BIORAFFINERIE**  
[72] RINDSIG, MATTHEW J., US  
[72] ANDERSON, NEIL D., US  
[72] PIERSON, RODNEY D., US  
[72] BUSHONG, DAVID, D., US  
[72] MILBRANDT, JACOB A., US  
[72] FIX, GREGORY G., US  
[71] POET RESEARCH, INC., US  
[22] 2021-07-13  
[41] 2022-01-15  
[30] US (63/052250) 2020-07-15

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[21] **3,124,737**  
[13] A1

[51] **Int.Cl. A01H 6/54 (2018.01) C12Q 1/6895 (2018.01) A01N 63/22 (2020.01) A01H 1/00 (2006.01) A01H 1/04 (2006.01) A01H 5/00 (2018.01) A01H 17/00 (2006.01) A01P 3/00 (2006.01) C12N 1/20 (2006.01) C12N 5/04 (2006.01)**  
[25] EN  
[54] **GREEN BEAN PLANTS WITH IMPROVED DISEASE RESISTANCE**  
[54] **PLANTES DE HARICOTS VERTS A RESISTANCE AUX MALADIES AMELIOREES**  
[72] EVANS, ELLEN L., US  
[72] KMIECIK, KENNETH, US  
[72] KRAMER, CHAD, US  
[72] OPPELAAR, ARIE, US  
[71] SEMINIS VEGETABLE SEEDS, INC., US  
[22] 2021-07-13  
[41] 2022-01-15  
[30] US (16/930304) 2020-07-15

**Canadian Applications Open to Public Inspection  
January 9, 2022 to January 15, 2022**

[21] **3,124,761**  
[13] A1

[51] **Int.Cl. E04B 1/86 (2006.01) B32B 3/08 (2006.01) B32B 5/26 (2006.01) B32B 17/02 (2006.01) B32B 17/12 (2006.01) E04C 2/30 (2006.01)**

[25] EN

[54] **FRAMED LAMINATED FIBERGLASS PANEL AND METHOD OF MANUFACTURE**

[54] **PANNEAU DE FIBRE DE VERRE STRATIFIE ENCADRE ET METHODE DE FABRICATION**

[72] BARTELLA, LUIGI, CA

[72] SIVAPATHASUNTHARAM, SRIRATHAKRISHNA, CA

[72] LEMBO, MICHAEL J., US

[71] CERTAINTEED CANADA, INC, CA

[22] 2021-07-15

[41] 2022-01-15

[30] US (63/052,307) 2020-07-15

[21] **3,124,911**  
[13] A1

[51] **Int.Cl. A61B 34/00 (2016.01) A61B 34/30 (2016.01) A61B 5/021 (2006.01) A61B 5/0295 (2006.01) A61B 8/06 (2006.01) A61B 17/132 (2006.01)**

[25] EN

[54] **INTEGRATED ROBOTIC SURGERY SYSTEM WITH TOURNIQUET SYSTEM**

[54] **SYSTEME DE CHIRURGIE ROBOTISEE INTEGREE AVEC SYSTEME DE GARROT**

[72] COUTURE, PIERRE, CA

[72] CERDA-CARVAJAL, VICTOR, CA

[72] FREIBERG, ANDREW, US

[72] MCDONELL, MATTHEW J., US

[71] ORTHOSOFT ULC, CA

[22] 2021-07-15

[41] 2022-01-15

[30] US (63/120,323) 2020-12-02

[30] US (63/052,137) 2020-07-15

[21] **3,132,553**  
[13] A1

[51] **Int.Cl. G06Q 50/00 (2012.01) G06Q 30/02 (2012.01) B64G 1/10 (2006.01)**

[25] EN

[54] **SATELLITE IMAGE PLATFORM PROVIDING APPARATUS USING LAUNCH VEHICLE-SATELLITE-GROUND STATION-SYSTEM INTEGRATION**

[54] **APPAREIL FOURNISSANT UNE PLATEFORME D'IMAGE-SATELLITE AU MOYEN DE L'INTEGRATION VEHICULE DE LANCEMENT-SATELLITE-STATION AU SOL-SYSTEME**

[72] LEE, SUNGHEE, KR

[71] CONTEC CO., LTD., KR

[22] 2021-09-30

[41] 2022-01-12

[30] KR (10-2020-0184777) 2020-12-28

[21] **3,124,780**  
[13] A1

[51] **Int.Cl. F16J 15/3212 (2016.01) F16J 15/3284 (2016.01) F04B 1/0408 (2020.01) F04B 1/0448 (2020.01) F04B 15/00 (2006.01) F04B 37/12 (2006.01)**

[25] EN

[54] **PUMP SEAL**

[54] **JOINT D'ETANCHEITE DE POMPE**

[72] THOR, ERIC, US

[71] CHART INC., US

[22] 2021-07-15

[41] 2022-01-15

[30] US (63/052,018) 2020-07-15

[21] **3,125,034**  
[13] A1

[51] **Int.Cl. E04F 13/22 (2006.01) E04B 1/41 (2006.01)**

[25] EN

[54] **FACADE SUPPORT SYSTEM**

[54] **SYSTEME DE SUPPORT DE FACADE**

[72] OSMANSKI, RICHARD, US

[71] MARMON GROUP HOLDINGS, INC., US

[22] 2021-07-15

[41] 2022-01-15

[30] US (16/929455) 2020-07-15

[21] **3,134,283**  
[13] A1

[51] **Int.Cl. F16H 61/662 (2006.01) F16H 9/12 (2006.01) F16H 59/06 (2006.01) F16H 59/36 (2006.01)**

[25] EN

[54] **ADJUSTABLE LEVER FOR A CENTRIFUGAL ACTUATOR OF A CONTINUOUSLY VARIABLE TRANSMISSION DRIVE PULLEY**

[54] **LEVIER AJUSTABLE POUR UN ACTIONNEUR CENTRIFUGE D'UNE POULIE MOTRICE A TRANSMISSION VARIABLE DE FACON CONTINUE**

[72] LASKO, JEFFERY WADE, CA

[71] 1431209 ALBERTA INC., CA

[22] 2021-10-14

[41] 2022-01-11

[21] **3,124,845**  
[13] A1

[51] **Int.Cl. E04G 3/18 (2006.01) E04G 5/08 (2006.01)**

[25] EN

[54] **CANTILEVER PLATFORM BOARD ASSEMBLY**

[54] **ASSEMBLAGE DE PANNEAU DE PLATEFORME EN PORTE-A-FAUX**

[72] SPEELMAN, WENDALL, US

[71] QUANTA ASSOCIATES, L.P., US

[22] 2021-07-15

[41] 2022-01-15

[30] US (63/052,051) 2020-07-15

[21] **3,125,148**  
[13] A1

[51] **Int.Cl. F03B 13/26 (2006.01) F03B 13/08 (2006.01) F03G 3/00 (2006.01) F03G 7/04 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR GENERATION OF POWER UTILIZING LUNAR GRAVITY**

[54] **SYSTEME ET METHODE DE GENERATION DE PUISSANCE A L'AIDE DE LA GRAVITE LUNAIRE**

[72] DENIS, DAVID R., US

[71] DENIS, DAVID R., US

[22] 2021-07-15

[41] 2022-01-15

[30] US (16/929,346) 2020-07-15

[30] US (17/101,309) 2020-11-23

[21] **3,138,451**  
[13] A1

[51] **Int.Cl. G06F 40/279 (2020.01) G06F 40/30 (2020.01) G06F 40/35 (2020.01)**

[25] EN

[54] **MULTILINGUAL CONVERSATIONAL SEMANTIC PROCESSOR**

[54] **PROCESSEUR SEMANTIQUE CONVERSATIONNEL MULTILINGUE**

[72] HINES, VAUGHAN, CA

[71] GENERAL SOFTWARE CORPORATION, CA

[22] 2021-11-10

[41] 2022-01-10

# PCT Applications Entering the National Phase

## Demandes PCT entrant en phase nationale

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[21] **3,116,302**  
[13] A1

[51] **Int.Cl. C03C 13/02 (2006.01)**  
[25] EN

[54] **HIGH-MODULUS GLASS FIBER COMPOSITION, GLASS FIBER AND COMPOSITE MATERIAL THEREOF**

[54] **COMPOSITION DE FIBRE DE VERRE A MODULE ELEVE, FIBRE DE VERRE ET MATERIAU COMPOSITE CONNEXE**

[72] ZHANG, LIN, CN  
[72] XING, WENZHONG, CN  
[72] CAO, GUORONG, CN  
[72] YAO, ZHONGHUA, CN  
[71] JUSHI GROUP CO., LTD., CN  
[85] 2021-05-26  
[86] 2020-07-16 (PCT/CN2020/102349)  
[87] (WO2022/006947)  
[30] CN (202010664254.9) 2020-07-10

---

[21] **3,123,551**  
[13] A1

[51] **Int.Cl. C03C 13/02 (2006.01)**  
[25] EN

[54] **HIGH-MODULUS GLASS FIBER COMPOSITION, GLASS FIBER AND COMPOSITE MATERIAL THEREOF**

[54] **COMPOSITION DE FIBRE DE VERRE A MODULE ELEVE, FIBRE DE VERRE ET MATERIAU COMPOSITE CONNEXE**

[72] ZHANG, LIN, CN  
[72] XING, WENZHONG, CN  
[72] CAO, GUORONG, CN  
[72] YAO, ZHONGHUA, CN  
[71] JUSHI GROUP CO., LTD., CN  
[85] 2021-06-29  
[86] 2020-07-16 (PCT/CN2020/102359)  
[87] (WO2022/006948)  
[30] CN (202010665076.1) 2020-07-10

---

[21] **3,124,221**  
[13] A1

[51] **Int.Cl. C09D 175/04 (2006.01) C09D 7/47 (2018.01) C09D 7/61 (2018.01) C09D 5/00 (2006.01) E04F 15/16 (2006.01)**

[25] EN

[54] **SCRATCH-RESISTANT FLOOR AND METHOD FOR PRODUCING SAME, AND FLOOR COATING**

[54] **PLANCHER RESISTANT AUX EGRATIGNURES, METHODE DE PRODUCTION ET REVETEMENT DE PLANCHER**

[72] ZHANG, XIAOLING, CN  
[72] XIAO, ZHIYUAN, CN  
[72] LI, YANHUI, CN  
[71] CHANGZHOU BEMATE HOME TECHNOLOGY CO., LTD., CN  
[85] 2021-07-08  
[86] 2021-05-14 (PCT/CN2021/093860)  
[87] (3124221)  
[30] CN (202011488104.3) 2020-12-16

---

[21] **3,129,419**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 47/68 (2017.01) C07K 16/00 (2006.01) C07K 16/30 (2006.01)**

[25] EN

[54] **ANTIBODY DRUG CONJUGATE LOADED WITH BINARY TOXINS AND ITS APPLICATION**

[54] **CONJUGUE ANTICORPS-MEDICAMENT PORTANT DES TOXINES BINAIRES ET SON APPLICATION**

[72] HUANG, CHANGJIANG, CN  
[72] SUN, YOUXIANG, CN  
[72] XIONG, JIUKAI, CN  
[72] KONG, NANA, CN  
[72] YAN, XINXIN, CN  
[71] MABPLEX INTERNATIONAL CO., LTD., CN  
[85] 2021-08-30  
[86] 2021-07-19 (PCT/CN2021/107079)  
[87] (3129419)

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[21] **3,133,678**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 35/17 (2015.01) A61P 35/00 (2006.01) C07K 14/705 (2006.01) C07K 19/00 (2006.01) C12N 5/10 (2006.01) C12N 15/13 (2006.01) C12N 15/62 (2006.01) C12P 21/08 (2006.01)**

[25] EN

[54] **ANTI-MESOTHELIN CHIMERIC ANTIGEN RECEPTOR SPECIFICALLY BINDING TO MESOTHELIN**

[54] **RECEPTEUR ANTIGENIQUE CHIMERIQUE ANTI-MESOTHELIN SE LIANT PRECISEMENT A LA MESOTHELIN**

[72] AN, JAE HYUNG, KR  
[72] HAN, NA KYUNG, KR  
[71] CELLENGENE INC., KR  
[85] 2021-10-07  
[86] 2021-04-30 (PCT/KR2021/005527)  
[87] (3133678)  
[30] KR (10-2020-0097546) 2020-08-04

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[21] **3,135,722**  
[13] A1

[51] **Int.Cl. G06F 9/50 (2006.01) G06F 9/455 (2018.01) G06F 15/16 (2006.01)**

[25] EN

[54] **SHARING RESOURCES BETWEEN CLIENT DEVICES IN A VIRTUAL WORKSPACE ENVIRONMENT**

[54] **PARTAGE DE RESSOURCES ENTRE DES DISPOSITIFS CLIENT DANS UN ENVIRONNEMENT DE TRAVAIL VIRTUEL**

[72] SANGHAI, DEVYASH, US  
[72] JAIN, RISHABH, US  
[72] MOMCHILOV, GEORGY, US  
[71] CITRIX SYSTEMS, INC., US  
[85] 2021-10-25  
[86] 2021-07-19 (PCT/US2021/042156)  
[87] (3135722)  
[30] US (16/942,037) 2020-07-29

## PCT Applications Entering the National Phase

[21] **3,136,587**  
[13] A1

[51] **Int.Cl. H04N 19/117 (2014.01) H04N 19/176 (2014.01)**  
[25] EN  
[54] **AN ENCODER, A DECODER AND CORRESPONDING METHODS USING AN ADAPTIVE LOOP FILTER**  
[54] **CODEUR, DECODEUR ET PROCEDES CORRESPONDANTS UTILISANT UN FILTRE A BOUCLE ADAPTATIF**  
[72] KOTRA, ANAND MEHER, DE  
[72] ESENLIK, SEMIH, DE  
[72] CHEN, JIANLE, US  
[72] GAO, HAN, DE  
[72] WANG, BIAO, DE  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2021-11-03  
[86] 2020-04-30 (PCT/CN2020/088389)  
[87] (WO2020/224545)  
[30] US (62/843,431) 2019-05-04

[21] **3,136,593**  
[13] A1

[51] **Int.Cl. B60C 15/024 (2006.01)**  
[25] FR  
[54] **TYRE HAVING A CROWN REINFORCEMENT MADE UP OF TWO WORKING CROWN LAYERS AND OPTIMIZED SIDEWALLS**  
[54] **PNEUMATIQUE COMPORTANT UNE ARMATURE DE SOMMET CONSTITUEE DE DEUX COUCHES DE SOMMET DE TRAVAIL ET DES FLANCS OPTIMISES**  
[72] FOURNIER, OREL, FR  
[72] NOEL, SEBASTIEN, FR  
[72] BESTGEN, LUC, FR  
[72] GUERBERT-JUBERT, JEAN-LUC, FR  
[71] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR  
[85] 2021-11-03  
[86] 2020-06-04 (PCT/EP2020/065418)  
[87] (WO2020/245241)  
[30] FR (FR1906039) 2019-06-06

[21] **3,136,595**  
[13] A1

[51] **Int.Cl. B60C 13/00 (2006.01) B60C 9/02 (2006.01) B60C 9/20 (2006.01) B60C 15/00 (2006.01) B60C 15/024 (2006.01) B60C 15/06 (2006.01)**  
[25] FR  
[54] **TYRE HAVING OPTIMIZED SIDEWALLS AND A CROWN REINFORCEMENT MADE UP OF TWO WORKING CROWN LAYERS AND A LAYER OF CIRCUMFERENTIAL REINFORCING ELEMENTS**  
[54] **PNEUMATIQUE COMPORTANT DES FLANCS OPTIMISES ET UNE ARMATURE DE SOMMET CONSTITUEE DE DEUX COUCHES DE SOMMET DE TRAVAIL ET D'UNE COUCHE D'ELEMENTS DE REINFORCEMENT CIRCONFERENCELS**  
[72] REHAB, HICHEM, FR  
[72] NOEL, SEBASTIEN, FR  
[72] BESTGEN, LUC, FR  
[72] DAYET, PATRICK, FR  
[71] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR  
[85] 2021-11-03  
[86] 2020-06-04 (PCT/EP2020/065420)  
[87] (WO2020/245242)  
[30] FR (FR1906040) 2019-06-06

[21] **3,136,596**  
[13] A1

[51] **Int.Cl. H01Q 1/38 (2006.01)**  
[25] EN  
[54] **ANTENNA, METHOD FOR SUPPLYING POWER TO ANTENNA, SINGLE-FEEDING-BASED METHOD FOR COMBINING ANTENNAS, AND TERMINAL**  
[54] **ANTENNE, PROCEDE D'ALIMENTATION ELECTRIQUE D'ANTENNE, PROCEDE DE COMBINAISON D'ALIMENTATION UNIQUE D'ANTENNE ET TERMINAL**  
[72] SHU, CHAOFAN, CN  
[72] LIU, YANG, CN  
[71] ZTE CORPORATION, CN  
[85] 2021-11-03  
[86] 2020-09-28 (PCT/CN2020/118375)  
[87] (WO2021/068784)  
[30] CN (201910951453.5) 2019-10-08

[21] **3,136,597**  
[13] A1

[51] **Int.Cl. A43B 7/14 (2022.01) A43B 17/00 (2006.01) A43B 17/02 (2006.01)**  
[25] EN  
[54] **FLEXIBLE ARCH SUPPORT FOR FOOTWEAR**  
[54] **SUPPORT DE VOUTE PLANTAIRE SOUPLE POUR CHAUSSURES**  
[72] FROMHOLTZ, ALEXANDER, US  
[72] MIRANDA, DANIEL L., US  
[72] HOWLETT, HAROLD A., US  
[71] SCHOLL'S WELLNESS COMPANY LLC, US  
[85] 2021-11-03  
[86] 2020-05-08 (PCT/US2020/032224)  
[87] (WO2020/227683)  
[30] US (62/845,102) 2019-05-08

[21] **3,136,598**  
[13] A1

[51] **Int.Cl. C07K 16/18 (2006.01) C07K 16/28 (2006.01) C07K 16/30 (2006.01)**  
[25] EN  
[54] **BINDING MOLECULES**  
[54] **MOLECULES DE LIAISON**  
[72] DUNLEVY, GRAINNE, GB  
[72] JOHNSTON, COLETTE, GB  
[72] SYDORUK, DANIELA, GB  
[72] LEWANDOWSKA, MARTYNA, GB  
[71] CRESCENDO BIOLOGICS LIMITED, GB  
[85] 2021-11-03  
[86] 2020-05-15 (PCT/GB2020/051199)  
[87] (WO2020/229842)  
[30] GB (1906870.9) 2019-05-15  
[30] GB (1906872.5) 2019-05-15

[21] **3,136,703**  
[13] A1

[51] **Int.Cl. E21B 4/14 (2006.01) E21B 21/18 (2006.01)**  
[25] EN  
[54] **DOWN THE HOLE DRILLING ASSEMBLY EXHAUST ASSEMBLY**  
[54] **ENSEMBLE D'EVACUATION D'ENSEMBLE DE FORAGE EN PROFONDEUR DE FORAGE**  
[72] BRUANDET, OLIVIER, FI  
[71] SANDVIK MINING AND CONSTRUCTION OY, FI  
[85] 2021-11-04  
[86] 2020-06-18 (PCT/EP2020/066860)  
[87] (WO2020/254458)  
[30] EP (19181470.6) 2019-06-20



## Demandes PCT entrant en phase nationale

[21] **3,136,738**  
[13] A1

[51] **Int.Cl. E21B 4/14 (2006.01) E21B 21/18 (2006.01)**  
[25] EN  
[54] **DOWN THE HOLE DRILLING ASSEMBLY AND APPARATUS**  
[54] **ENSEMBLE ET APPAREIL DE FORAGE DE FOND DE TROU**  
[72] BRUANDET, OLIVIER, FI  
[71] SANDVIK MINING AND CONSTRUCTION OY, FI  
[85] 2021-11-04  
[86] 2020-06-18 (PCT/EP2020/066859)  
[87] (WO2020/254457)  
[30] EP (19181471.4) 2019-06-20

[21] **3,136,746**  
[13] A1

[51] **Int.Cl. H01R 13/639 (2006.01) B60L 53/16 (2019.01)**  
[25] FR  
[54] **ELECTRICAL CONNECTION MOUNT SYSTEM**  
[54] **SYSTEME DE SOCLE DE CONNEXION ELECTRIQUE**  
[72] GALLAND, JULIEN, FR  
[72] PILLARD, ROMAIN, FR  
[72] ZAGROUN, FRANCIS, FR  
[71] MARECHAL ELECTRIC, FR  
[85] 2021-11-04  
[86] 2020-05-12 (PCT/FR2020/050780)  
[87] (WO2020/229768)  
[30] FR (FR1904938) 2019-05-13

[21] **3,136,751**  
[13] A1

[51] **Int.Cl. A61B 46/20 (2016.01) A45D 44/08 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR HELPING TO PROTECT A PATIENT'S HAIR**  
[54] **APPAREIL ET PROCEDE POUR AIDER A PROTEGER LES CHEVEUX D'UN PATIENT**  
[72] TILT, ALEXANDRA, US  
[72] TAN, PAMELA, US  
[71] MEDSTAR HEALTH, INC., US  
[85] 2021-11-04  
[86] 2020-05-27 (PCT/US2020/034645)  
[87] (WO2020/243136)  
[30] US (62/853,979) 2019-05-29

[21] **3,136,753**  
[13] A1

[51] **Int.Cl. C07D 401/04 (2006.01) A61K 31/454 (2006.01) A61K 31/4545 (2006.01) C07D 401/14 (2006.01) C07D 405/14 (2006.01) C07D 491/107 (2006.01)**  
[25] EN  
[54] **SUBSTITUTED 1-OXO-ISOINDOLINE-5-CARBOXAMIDE COMPOUNDS, COMPOSITIONS THEREOF, AND METHODS OF TREATMENT THEREWITH**  
[54] **COMPOSES DE 1-OXO-ISOINDOLINE-5-CARBOXAMIDE SUBSTITUES, COMPOSITIONS DE CEUX-CI, ET PROCEDES DE TRAITEMENT ASSOCIES**  
[72] BACULI, FRANS, US  
[72] NORTHCOTE, KATHERINE, US  
[72] CORREA, MATTHEW D., US  
[72] HANSEN, JOSHUA, US  
[72] LEBRUN, LAURIE A., US  
[72] LU, CHIN-CHUN, US  
[72] LU, GANG, US  
[72] NAGY, MARK A., US  
[72] PENG, SOPHIE, US  
[72] PERRIN-NINKOVIC, SOPHIE, US  
[71] CELGENE CORPORATION, US  
[85] 2021-11-04  
[86] 2020-05-29 (PCT/US2020/035043)  
[87] (WO2020/243379)  
[30] US (62/855,619) 2019-05-31

[21] **3,136,755**  
[13] A1

[51] **Int.Cl. A61M 15/00 (2006.01) G16H 20/10 (2018.01)**  
[25] EN  
[54] **IMPROVEMENTS RELATING TO INHALERS**  
[54] **AMELIORATIONS CONCERNANT DES INHALATEURS**  
[72] MCLAUGHLIN, DAVID, GB  
[71] CIPO, CA  
[71] E-BREATHE LIMITED, GB  
[85] 2021-11-04  
[86] 2020-05-07 (PCT/GB2020/051129)  
[87] (WO2020/225570)  
[30] GB (1906515.0) 2019-05-09

[21] **3,136,756**  
[13] A1

[51] **Int.Cl. C07K 14/005 (2006.01) A61K 39/12 (2006.01) G01N 33/569 (2006.01)**  
[25] EN  
[54] **RUBELLA VIRUS SPIKE CONSTRUCT**  
[54] **STRUCTURE DE SPICULE DU VIRUS DE LA RUBEOLE**  
[72] SCHUMACHER, THOMAS, DE  
[72] ARENDS, HUGO M., DE  
[71] INSTITUT VIRION-SERION GMBH WURZBURG, DE  
[71] STURMER, JUDITH, DE  
[85] 2021-11-04  
[86] 2020-02-14 (PCT/DE2020/000024)  
[87] (WO2021/004561)  
[30] DE (10 2019 004 812.1) 2019-07-10

[21] **3,137,700**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01)**  
[25] EN  
[54] **GENE THERAPY VECTORS FOR INFANTILE MALIGNANT OSTEOPETROSIS**  
[54] **VECTEURS DE THERAPIE GENIQUE POUR L'OSTEOPOROSE MALIGNNE INFANTILE**  
[72] BEARD, BRIAN, US  
[72] RICKS, DAVID, US  
[72] PRABHAKAR, RAJ, US  
[71] SPACECRAFT SEVEN, LLC, US  
[85] 2021-11-10  
[86] 2020-05-22 (PCT/US2020/034394)  
[87] (WO2020/237219)  
[30] US (62/852,216) 2019-05-23

## PCT Applications Entering the National Phase

[21] **3,137,891**  
[13] A1

[51] **Int.Cl. G01N 15/08 (2006.01) G01N 33/24 (2006.01)**  
[25] EN  
[54] **TESTING PETRO-PHYSICAL PROPERTIES USING A TRI-AXIAL PRESSURE CENTRIFUGE APPARATUS**  
[54] **TEST DE PROPRIETES PETROPHYSIQUES A L'AIDE D'UN APPAREIL CENTRIFUGE A PRESSION TRIAXIALE**  
[72] HAKIMUDDIN, MUSTAFA, SA  
[71] SAUDI ARABIAN OIL COMPANY, SA  
[85] 2021-10-22  
[86] 2020-04-23 (PCT/US2020/029607)  
[87] (WO2020/219739)  
[30] US (16/393,059) 2019-04-24

[21] **3,138,636**  
[13] A1

[51] **Int.Cl. E01C 19/21 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR AUTOMATING THE APPLICATION OF FRICTION-MODIFYING COATINGS**  
[54] **SYSTEMES ET PROCEDES POUR L'AUTOMATISATION DE L'APPLICATION DE REVETEMENTS MODIFICATEURS DE LA FRICTION**  
[72] RAINWATER, KEITH, US  
[72] RAINWATER, JEFF, US  
[72] STONE, JACK D. JR., US  
[72] KIRKPATRICK, JIM, US  
[72] HOWORKO, MATTHEW, CA  
[72] HOWORKO, RICK, CA  
[71] DBI HOLDING, LLC, US  
[85] 2021-11-18  
[86] 2020-06-11 (PCT/US2020/037138)  
[87] (WO2020/252106)  
[30] US (16/438,300) 2019-06-11

[21] **3,139,218**  
[13] A1

[51] **Int.Cl. F03D 13/40 (2016.01)**  
[25] EN  
[54] **UNIVERSAL ROOT END SUPPORT FIXTURE FOR WIND TURBINE BLADES**  
[54] **ACCESSOIRE DE SUPPORT DE PIED DE PALE UNIVERSEL DESTINE AUX PALES D'EOLIENNE**  
[72] SULLIVAN, ANDREW J., US  
[72] JONES, JAMES H., III, US  
[72] GOODWIN, BILLY R., US  
[71] BNSF LOGISTICS, LLC, US  
[85] 2021-11-23  
[86] 2020-10-28 (PCT/US2020/057606)  
[87] (WO2021/086881)  
[30] US (16/669,729) 2019-10-31

[21] **3,139,311**  
[13] A1

[51] **Int.Cl. G06Q 40/00 (2012.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR LEDGER ANALYTICS AND APPLICATION OF DIGITAL TAX STAMPS**  
[54] **SYSTEME ET PROCEDE D'ANALYSE DE GRAND LIVRE ET D'APPLICATION DE TIMBRES FISCAUX NUMERIQUES**  
[72] ZAFAR, FAWAD, GB  
[71] ZAFAR, FAWAD, GB  
[85] 2021-11-23  
[86] 2020-05-29 (PCT/EP2020/065005)  
[87] (WO2020/245046)  
[30] US (62/857,695) 2019-06-05

[21] **3,139,764**  
[13] A1

[51] **Int.Cl. F04C 2/16 (2006.01)**  
[25] EN  
[54] **COOLED DRY VACUUM SCREW PUMP**  
[54] **POMPE A VIS A VIDE SECHE REFROIDIE**  
[72] AKHTAR, KHURRAM, CA  
[72] WHITE, CHRISTOPHER, CA  
[71] FRUVAC LTD., CA  
[85] 2021-11-26  
[86] 2019-08-02 (PCT/CA2019/051066)  
[87] (WO2021/022352)

[21] **3,140,179**  
[13] A1

[51] **Int.Cl. B32B 15/09 (2006.01) B65D 25/36 (2006.01) C08J 5/18 (2006.01)**  
[25] EN  
[54] **POLYESTER FILM AND METHOD FOR PRODUCING SAME**  
[54] **FILM DE POLYESTER ET SON PROCEDE DE PRODUCTION**  
[72] ASHIHARA, HIROSHI, JP  
[72] OKUZU, TAKAYOSHI, JP  
[72] AKAMATSU, KEN, JP  
[72] KUROSAWA, AKIKO, JP  
[72] ARAKI, GORO, JP  
[72] KAJITA, AKITO, JP  
[71] UNITIKA LTD., JP  
[85] 2021-11-30  
[86] 2021-03-08 (PCT/JP2021/009015)  
[87] (WO2021/182402)  
[30] JP (2020-040388) 2020-03-10

[21] **3,140,190**  
[13] A1

[51] **Int.Cl. G07F 11/00 (2006.01) G06F 3/048 (2013.01) G07F 9/02 (2006.01)**  
[25] EN  
[54] **VENDING MACHINE WITH CHARACTER-BASED USER INTERFACE, CHARACTER-BASED USER INTERFACE AND USES THEREOF**  
[54] **DISTRIBUTEUR AUTOMATIQUE A INTERFACE UTILISATEUR BASEE SUR DES CARACTERES, INTERFACE UTILISATEUR BASEE SUR DES CARACTERES ET SES UTILISATIONS**  
[72] HILL, NICOLE, CA  
[72] SCHWARZLI, BERNIE, CA  
[72] SCHWARZLI, ROBERT, CA  
[71] BMC UNIVERSAL TECHNOLOGIES INC., CA  
[85] 2021-11-30  
[86] 2020-06-05 (PCT/CA2020/050785)  
[87] (WO2020/243847)  
[30] US (62/857,377) 2019-06-05

## Demandes PCT entrant en phase nationale

[21] **3,140,428**  
[13] A1

[51] **Int.Cl. A61B 5/08 (2006.01) A61M 16/06 (2006.01)**

[25] EN

[54] **RESPIRATION SENSOR ATTACHMENT DEVICE**

[54] **DISPOSITIF DE FIXATION DE CAPTEUR DE RESPIRATION**

[72] HAVERI, HEIKKI, FI

[71] VYAIR MEDICAL, INC., US

[85] 2021-12-02

[86] 2020-06-10 (PCT/US2020/037055)

[87] (WO2020/252067)

[30] US (62/860,171) 2019-06-11

[21] **3,140,429**  
[13] A1

[51] **Int.Cl. C01B 7/13 (2006.01) B01J 23/42 (2006.01)**

[25] EN

[54] **HYDROGEN IODIDE (HI) PRODUCTION BY REACTION OF HYDROGEN (H2) WITH IODINE (I2) DISSOLVED IN A SOLVENT**

[54] **PRODUCTION D'IODURE D'HYDROGENE (HI) PAR REACTION D'HYDROGENE (H2) AVEC DE L'IODE (I2) DISSOUS DANS UN SOLVANT**

[72] NAIR, HARIDASAN K., US

[72] HULSE, RYAN J., US

[71] HONEYWELL INTERNATIONAL INC., US

[85] 2021-12-02

[86] 2020-06-02 (PCT/US2020/035655)

[87] (WO2020/247346)

[30] US (62/856,243) 2019-06-03

[30] US (16/887,225) 2020-05-29

[21] **3,140,444**  
[13] A1

[51] **Int.Cl. E03C 1/304 (2006.01) B08B 9/032 (2006.01)**

[25] EN

[54] **MULTI-CARTRIDGE DRAIN GUNS, ACCESSORIES THEREFOR, AND METHODS OF USE AND MANUFACTURE THEREOF**

[54] **PISTOLETS DE VIDANGE A CARTOUCHES MULTIPLES, ACCESSOIRES POUR CEUX-CI, ET PROCEDES D'UTILISATION ET DE FABRICATION DE CEUX-CI**

[72] LOGAN, MARK CAMPBELL, US

[72] LOWE, BRYCE, US

[72] KITCHEN, JAMES A., US

[72] SADA, JONATHAN, US

[72] PLATT, KEITH, US

[71] DIVERSITECH CORPORATION, US

[85] 2021-12-02

[86] 2019-06-03 (PCT/US2019/035124)

[87] (WO2020/246950)

[21] **3,140,479**  
[13] A1

[51] **Int.Cl. A01D 34/52 (2006.01) A01D 34/30 (2006.01) A01D 34/56 (2006.01)**

[25] EN

[54] **COUNTERBALANCED CUTTING HEAD FOR A SOD HARVESTER**

[54] **TETE DE COUPE A CONTREPOIDS POUR DEPLAQUEUSE DE GAZON**

[72] APOSHIAN, STEVEN, US

[72] ASTON, ERIC, US

[72] DECKER, WILLIAM, US

[72] LEBLANC, MARK, US

[72] NEUNER, AUSTIN, US

[72] JEPPSON, SETH, US

[71] FIREFLY AUTOMATIX, INC., US

[85] 2021-12-02

[86] 2020-06-08 (PCT/US2020/036684)

[87] (WO2020/247941)

[30] US (16/435,195) 2019-06-07

[21] **3,140,539**  
[13] A1

[51] **Int.Cl. A61M 25/02 (2006.01) A61J 15/00 (2006.01) A61M 1/28 (2006.01) A61M 16/04 (2006.01) A61M 16/06 (2006.01) A61M 39/02 (2006.01)**

[25] EN

[54] **CATHETERS AND INTERLOCKING RESTRAINT SYSTEMS THEREFOR**

[54] **CATHETERS ET SYSTEMES DE RETENUE A VERROUILLAGE S'Y RAPPORTANT**

[72] KANOWITZ, ARTHUR, US

[72] BRUNING, MARK, US

[72] LETENDRE, GREG, US

[71] SECURISYN MEDICAL LLC, US

[85] 2021-12-03

[86] 2020-06-10 (PCT/US2020/037083)

[87] (WO2020/252085)

[30] US (62/859,569) 2019-06-10

[21] **3,140,569**  
[13] A1

[51] **Int.Cl. B23P 11/00 (2006.01) F16B 4/00 (2006.01) F16H 7/08 (2006.01) F16H 7/12 (2006.01) F16H 7/20 (2006.01)**

[25] EN

[54] **PRESS-FIT-INTERLOCKING CONNECTION AND BELT TENSIONER HAVING SUCH A CONNECTION**

[54] **LIAISON DE PRESSE PAR COMPLEMENTARITE DE FORME ET TENDEUR DE COURROIE POURVU D'UNE TELLE LIAISON**

[72] MARICIC, ZORAN, DE

[72] KURZ, ALEXANDER, DE

[71] SCHAEFFLER TECHNOLOGIES AG & CO. KG, DE

[85] 2021-12-03

[86] 2020-06-24 (PCT/DE2020/100535)

[87] (WO2020/259758)

[30] DE (10 2019 117 170.9) 2019-06-26

## PCT Applications Entering the National Phase

[21] **3,140,682**  
[13] A1

[51] **Int.Cl. B01J 8/04 (2006.01) B01J 19/24 (2006.01)**  
[25] EN  
[54] **HYDROPROCESSING REACTOR TO LOWER PRESSURE DROP AND EXTEND CATALYST LIFE**  
[54] **REACTEUR D'HYDROTRAITEMENT POUR REDUIRE LA CHUTE DE PRESSION ET PROLONGER LA DUREE DE VIE DU CATALYSEUR**  
[72] ACKERSON, MICHAEL D., US  
[72] BYARS, MICHAEL STEVEN, US  
[71] DUKE TECHNOLOGIES, LLC, US  
[85] 2021-12-06  
[86] 2020-06-12 (PCT/US2020/037471)  
[87] (WO2020/252290)  
[30] US (62/861,038) 2019-06-13  
[30] US (16/900,043) 2020-06-12

[21] **3,141,235**  
[13] A1

[51] **Int.Cl. G07C 9/00 (2020.01) G07C 9/25 (2020.01) G07C 9/37 (2020.01) B64F 1/36 (2017.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR BAGGAGE CONTROL**  
[54] **SYSTEME ET PROCEDE DE CONTROLE DE BAGAGES**  
[72] SPITZER, FRANZ, AT  
[71] FLUGHAFEN WIEN AKTIENGESELLSCHAFT, AT  
[85] 2021-12-09  
[86] 2019-06-11 (PCT/EP2019/065199)  
[87] (WO2020/249192)

[21] **3,141,268**  
[13] A1

[51] **Int.Cl. G06F 3/01 (2006.01) G06T 7/20 (2017.01)**  
[25] EN  
[54] **DYNAMIC EYE-TRACKING CAMERA ALIGNMENT UTILIZING EYE-TRACKING MAPS**  
[54] **ALIGNEMENT DYNAMIQUE D'UNE CAMERA DE SUIVI OCULAIRE A L'AIDE DE CARTES DE SUIVI OCULAIRE**  
[72] ZERMAN, LEONARD, US  
[72] FORSLAND, ANDREAS, US  
[71] CIPO, CA  
[71] COGNIXION, US  
[85] 2021-12-09  
[86] 2020-04-24 (PCT/US2020/029938)  
[87] (WO2020/223131)  
[30] US (16/401,918) 2019-05-02

[21] **3,142,861**  
[13] A1

[51] **Int.Cl. A23K 10/10 (2016.01) C12N 1/20 (2006.01) C12N 1/30 (2006.01)**  
[25] EN  
[54] **METHOD FOR OPTIMIZING A FERMENTATION PROCESS**  
[54] **PROCEDE D'OPTIMISATION D'UN PROCESSUS DE FERMENTATION**  
[72] NANDY, SUBIR KUMAR, DK  
[72] PETERSEN, LEANDER, US  
[72] CHRISTENSEN, IB, DK  
[71] UNIBIO A/S, DK  
[85] 2021-12-07  
[86] 2020-06-03 (PCT/EP2020/065347)  
[87] (WO2020/245197)  
[30] DK (PA 2019 00697) 2019-06-07  
[30] DK (PA 2019 01279) 2019-10-31

[21] **3,142,862**  
[13] A1

[51] **Int.Cl. B64C 1/14 (2006.01) E05F 11/54 (2006.01)**  
[25] FR  
[54] **AIRCRAFT DOOR WITH DEVICE FOR HOLDING THE HANDLING ARMS**  
[54] **PORTE D'AERONEF A DISPOSITIF DE MAINTIEN DES BRAS DE MANIPULATION**  
[72] DUBOSC, GREGORY, FR  
[71] LATECOERE, FR  
[85] 2021-12-07  
[86] 2020-06-12 (PCT/EP2020/025274)  
[87] (WO2020/253985)  
[30] FR (FR1906437) 2019-06-15

[21] **3,142,863**  
[13] A1

[51] **Int.Cl. H05K 7/14 (2006.01)**  
[25] FR  
[54] **AIRCRAFT AVIONICS RACK WITH INTERCONNECTION PLATFORM**  
[54] **BAIE AVIONIQUE D'AERONEF A PLEATEAU D'INTERCONNEXION**  
[72] MOURIERAS, JULIEN, FR  
[72] PUERTOLAS, BASTIEN, FR  
[71] LATELEC, FR  
[85] 2021-12-07  
[86] 2020-06-09 (PCT/EP2020/025268)  
[87] (WO2020/249258)  
[30] FR (FR1906195) 2019-06-11

[21] **3,142,864**  
[13] A1

[51] **Int.Cl. A61F 9/007 (2006.01) A61M 1/00 (2006.01)**  
[25] EN  
[54] **MULTI-STAGE TRIGGER FOR OPHTHALMOLOGY CUTTING TOOL**  
[54] **DECLENCHEUR A PLUSIEURS ETAGES POUR OUTIL DE COUPE OPHTHALMOLOGIQUE**  
[72] SCHALLER, MICHAEL P., US  
[71] CARL ZEISS MEDITEC CATARACT TECHNOLOGY INC., US  
[85] 2021-12-07  
[86] 2020-05-15 (PCT/US2020/033142)  
[87] (WO2020/247165)  
[30] US (62/858,785) 2019-06-07

[21] **3,142,936**  
[13] A1

[51] **Int.Cl. A61M 25/04 (2006.01) A61B 5/00 (2006.01) A61B 5/01 (2006.01) A61B 5/03 (2006.01) A61B 5/20 (2006.01) A61M 25/00 (2006.01)**  
[25] EN  
[54] **URINARY CATHETER**  
[54] **CATHETER URINAIRE**  
[72] HERRERA, DEREK, US  
[72] KASALCO, JEFFERY S., US  
[71] SPINAL SINGULARITY, INC., US  
[85] 2021-12-07  
[86] 2020-06-09 (PCT/US2020/036859)  
[87] (WO2020/251961)  
[30] US (16/436,773) 2019-06-10

## Demandes PCT entrant en phase nationale

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[21] **3,142,978**  
[13] A1

[51] **Int.Cl. E06B 3/663 (2006.01) E06B 3/66 (2006.01)**  
[25] EN  
[54] **SPACER FOR INSULATED GLASS UNITS**  
[54] **INTERCALAIRES POUR UNITES DE VITRAGE ISOLANT**  
[72] KUSTER, HANS-WERNER, DE  
[72] MARJAN, CHRISTOPHER, DE  
[72] SCHREIBER, WALTER, DE  
[71] SAINT-GOBAIN GLASS FRANCE, FR  
[85] 2021-12-08  
[86] 2020-07-14 (PCT/EP2020/069901)  
[87] (WO2021/009176)  
[30] EP (19186751.4) 2019-07-17

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[21] **3,142,984**  
[13] A1

[51] **Int.Cl. A61K 47/56 (2017.01) A61K 9/00 (2006.01) A61K 39/145 (2006.01)**  
[25] EN  
[54] **RNA FORMULATIONS SUITABLE FOR THERAPY**  
[54] **FORMULATIONS D'ARN APPROPRIEES POUR UNE THERAPIE**  
[72] HAAS, HEINRICH, DE  
[72] MORENO HERRERO, JORGE, DE  
[72] SCHLEGEL, ANNE MARION GENEVIEVE, DE  
[72] ERBAR, STEPHANIE, DE  
[71] BIONTECH SE, DE  
[85] 2021-12-08  
[86] 2020-07-01 (PCT/EP2020/068502)  
[87] (WO2021/001417)  
[30] EP (PCT/EP2019/067717) 2019-07-02

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[21] **3,142,991**  
[13] A1

[51] **Int.Cl. A61K 9/16 (2006.01) A61K 31/19 (2006.01) A61K 31/34 (2006.01) A61K 31/45 (2006.01)**  
[25] FR  
[54] **COMPOSITION COMPRISING AT LEAST ONE TRITERPENE AND/OR AT LEAST ONE TRITERPENOID AND/OR AT LEAST ONE OF THE GLYCOSYLATED FORMS THEREOF**  
[54] **COMPOSITION COMPRENANT AU MOINS UN TRITERPENE ET/OU AU MOINS UN TRITERPENOIDE ET/OU AU MOINS UNE DE LEURS FORMES GLYCOSYLEES**  
[72] DIERCKXSENS, YVAN, BE  
[72] MEINGUET, CELINE, BE  
[72] TILMAN, JEAN-NOEL, BE  
[72] WERY, BENOIT, BE  
[72] LOIRA-PASTORIZA, CRISTINA, BE  
[72] MARTINEZ-TOVAR, DANIELA, FR  
[72] PRIEM, FABIAN, BE  
[71] TILMAN, BE  
[71] ELEONOR, BE  
[85] 2021-12-08  
[86] 2020-06-24 (PCT/EP2020/067742)  
[87] (WO2020/260413)  
[30] BE (2019/5419) 2019-06-28  
[30] BE (2019/5448) 2019-07-10  
[30] BE (2020/5254) 2020-04-17

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[21] **3,142,992**  
[13] A1

[51] **Int.Cl. A61K 31/40 (2006.01) A61K 31/405 (2006.01) A61K 31/4164 (2006.01) A61K 31/42 (2006.01) A61K 31/437 (2006.01) A61P 25/28 (2006.01) A61P 29/00 (2006.01) A61P 33/00 (2006.01) C07D 207/337 (2006.01) C07D 231/12 (2006.01) C07D 235/18 (2006.01) C07D 249/06 (2006.01) C07D 249/08 (2006.01) C07D 261/08 (2006.01) C07D 471/04 (2006.01)**  
[25] EN  
[54] **HETEROAROMATIC INHIBITORS OF ASTACIN PROTEINASES**  
[54] **INHIBITEURS HETEROAROMATIQUES DE PROTEINASES DE LA FAMILLE DES ASTACINES**  
[72] RAMSBECK, DANIEL, DE  
[72] TAN, KATHRIN, DE  
[72] SCHLENZIG, DAGMAR, DE  
[72] BUCHHOLZ, MIRKO, DE  
[72] CYNIS, HOLGER, DE  
[72] SCHILLING, STEPHAN, DE  
[71] VIVORYON THERAPEUTICS N.V., DE  
[85] 2021-12-08  
[86] 2020-06-12 (PCT/EP2020/066352)  
[87] (WO2020/249760)  
[30] EP (19180240.4) 2019-06-14

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[21] **3,142,994**  
[13] A1

[51] **Int.Cl. A61P 31/04 (2006.01) C07K 16/18 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL FORMULATIONS OF BI-SPECIFIC DIABODIES AND USE OF THE SAME**  
[54] **FORMULATIONS PHARMACEUTIQUES DE DIACORPS BI-SPECIFIQUES, ET LEUR UTILISATION**  
[72] LENT, IAN, US  
[72] SAMPATHKUMAR, KRISHNAN, US  
[71] MACROGENICS, INC, US  
[85] 2021-12-08  
[86] 2020-05-29 (PCT/US2020/035143)  
[87] (WO2020/251781)  
[30] US (62/860,082) 2019-06-11  
[30] US (63/030,010) 2020-05-26

## PCT Applications Entering the National Phase

[21] **3,142,995**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **PROSTHETIC HEART VALVE HAVING NON-LINEAR STRUTS**  
[54] **VALVULE CARDIAQUE PROTHETIQUE AYANT UNE PLURALITE D'ENTRETOISES**  
[72] DVORSKY, ANATOLY, IL  
[72] MAIMON, DAVID, IL  
[72] KERSH, DIKLA, IL  
[72] SAGI, GIDEON, IL  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-08  
[86] 2020-12-04 (PCT/US2020/063205)  
[87] (WO2021/113571)  
[30] US (62/945,000) 2019-12-06  
[30] US (63/094,459) 2020-10-21

[21] **3,142,999**  
[13] A1

[51] **Int.Cl. A61K 35/74 (2015.01) C12N 9/02 (2006.01) C12N 9/10 (2006.01) C12N 9/78 (2006.01) C12N 9/88 (2006.01)**  
[25] EN  
[54] **ADVANCED MICROBIOME THERAPEUTICS ENGINEERED TO PRODUCE SEROTONIN IN VIVO**  
[54] **AGENTS THERAPEUTIQUES DU MICROBIOME AVANCES MODIFIES POUR PRODUIRE DE LA SEROTONINE IN VIVO**  
[72] SOMMER, MORTEN OTTO ALEXANDER, DK  
[72] BONGERS, MAREIKE, DK  
[72] WANG, HARRIS HE, US  
[72] CUSIMANO, FRANK, US  
[71] DANMARKS TEKNISKE UNIVERSITET, DK  
[71] THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, US  
[85] 2021-12-08  
[86] 2020-06-12 (PCT/EP2020/066383)  
[87] (WO2020/249784)  
[30] US (62/861,007) 2019-06-13  
[30] EP (19186680.5) 2019-07-17

[21] **3,143,002**  
[13] A1

[51] **Int.Cl. G01V 3/08 (2006.01)**  
[25] FR  
[54] **OPEN METAL DETECTOR**  
[54] **DETECTEUR DE METAUX OUVERT**  
[72] MANNESCHI, ALESSANDRO, IT  
[71] MANNESCHI, ALESSANDRO, IT  
[85] 2021-12-08  
[86] 2020-06-22 (PCT/EP2020/067338)  
[87] (WO2020/254686)  
[30] FR (FR1906685) 2019-06-20

[21] **3,143,006**  
[13] A1

[51] **Int.Cl. A23C 9/127 (2006.01) A23C 9/12 (2006.01) C12N 9/10 (2006.01) C12N 9/52 (2006.01) C12N 9/58 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PREPARING AN ACIDIFIED MILK PRODUCT**  
[54] **PROCEDE DE PREPARATION D'UN PRODUIT LAITIER ACIDIFIE**  
[72] LILBAEK, HANNA MARIA, DK  
[72] HELDT-HANSEN, HANS PETER, DK  
[72] EKLOF, JENS MAGNUS, DK  
[71] NOVOZYMES A/S, DK  
[85] 2021-12-08  
[86] 2020-06-26 (PCT/EP2020/068117)  
[87] (WO2021/004817)  
[30] EP (19184782.1) 2019-07-05

[21] **3,143,007**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **PROSTHETIC HEART VALVES WITH COMMISSURE POST PROTRUSIONS FOR COMMISSURE ASSEMBLY POSITION LOCKING**  
[54] **VALVULES CARDIAQUES PROTHETIQUES DOTEES DE SAILLIES DE MONTANT DE COMMISSURE POUR VERROUILLER LA POSITION D'UN ENSEMBLE COMMISSURE**  
[72] NIR, NOAM, IL  
[72] GARMAHI, DANNY M., IL  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-08  
[86] 2020-11-25 (PCT/US2020/062225)  
[87] (WO2021/113143)  
[30] US (62/945,029) 2019-12-06

[21] **3,143,010**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/95 (2013.01)**  
[25] EN  
[54] **FRAME WITH VARIED STRUT WIDTHS FOR PROSTHETIC IMPLANT**  
[54] **SUPPORT AYANT DES LARGEURS D'ENTRETOISE VARIEES POUR IMPLANT PROTHETIQUE**  
[72] HOANG, LIEN HUONG THI, US  
[72] SHANMUGAM, VENKATESWARAN, US  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-08  
[86] 2020-12-01 (PCT/US2020/062644)  
[87] (WO2021/113201)  
[30] US (62/942,704) 2019-12-02

[21] **3,143,011**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **BELT FOR PROSTHETIC HEART VALVE**  
[54] **COURROIE POUR VALVULE CARDIAQUE PROTHETIQUE**  
[72] REICH, TAL, IL  
[72] NIR, NOAM, IL  
[72] YOHANAN, ZIV, IL  
[72] LEVI, TAMIR S., IL  
[72] BUKIN, MICHAEL, IL  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-08  
[86] 2020-11-25 (PCT/US2020/062212)  
[87] (WO2021/113142)  
[30] US (62/945,059) 2019-12-06

## Demandes PCT entrant en phase nationale

[21] **3,143,012**  
[13] A1

[51] **Int.Cl. G01N 21/57 (2006.01) G06T 7/90 (2017.01) G01J 3/46 (2006.01) G01N 21/89 (2006.01)**

[25] EN

[54] **SURFACE CHARACTERISTICS EVALUATION METHOD, SURFACE CHARACTERISTICS EVALUATION APPARATUS, AND SURFACE CHARACTERISTICS EVALUATION PROGRAM**

[54] **PROCEDE, APPAREIL ET PROGRAMME D'EVALUATION DE CARACTERISTIQUE DE SURFACE**

[72] WATANABE, SHUHEI, JP  
[72] GOTOH, TAKAYUKI, JP  
[72] SONE, TAKUROH, JP  
[71] RICOH COMPANY, LTD., JP  
[85] 2021-12-06  
[86] 2020-07-29 (PCT/JP2020/029165)  
[87] (WO2021/020482)  
[30] JP (2019-140260) 2019-07-30

[21] **3,143,014**  
[13] A1

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

[25] EN

[54] **HEART VALVE SEALING DEVICES AND DELIVERY DEVICES THEREFOR**

[54] **DISPOSITIFS D'ETANCHEITE DE VALVE CARDIAQUE ET DISPOSITIFS DE DISTRIBUTION ASSOCIES**

[72] DELGADO, SERGIO, US  
[72] OBERWISE, ERIC MICHAEL, US  
[72] POPP, MICHAEL J., US  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-08  
[86] 2020-10-14 (PCT/US2020/055482)  
[87] (WO2021/076555)  
[30] US (62/915,589) 2019-10-15

[21] **3,143,016**  
[13] A1

[51] **Int.Cl. C12N 9/22 (2006.01) C12N 15/10 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **DONOR DESIGN STRATEGY FOR CRISPR-CAS9 GENOME EDITING**

[54] **STRATEGIE DE CONCEPTION DE DONNEUR POUR L'EDITION DE GENOME CRISPR-CAS9**

[72] DAS, AMIT, US  
[72] KANUGANTI, SATISH, US  
[72] MOHANTY, AMITABH, IN  
[72] SVITASHEV, SERGEI, US  
[72] TAVVA, VENKATA S, US  
[71] PIONEER HI-BRED INTERNATIONAL, INC., US  
[85] 2021-12-08  
[86] 2020-07-17 (PCT/US2020/042579)  
[87] (WO2021/016098)  
[30] US (62/877,359) 2019-07-23

[21] **3,143,019**  
[13] A1

[51] **Int.Cl. A01D 34/14 (2006.01) A01D 34/03 (2006.01)**

[25] EN

[54] **CHANNEL KNIFEBACK**

[54] **TRINGLE A CANAL**

[72] JOHNSON, KEITH A., US  
[71] KONDEX CORPORATION, US  
[85] 2021-12-08  
[86] 2020-07-17 (PCT/US2020/042528)  
[87] (WO2021/011867)  
[30] US (62/875,693) 2019-07-18  
[30] US (16/931,148) 2020-07-16

[21] **3,143,023**  
[13] A1

[51] **Int.Cl. A61B 17/17 (2006.01) A61B 17/04 (2006.01) A61B 17/56 (2006.01)**

[25] EN

[54] **AUTOMATED ANCHOR INSERTION SYSTEM**

[54] **SYSTEME D'INSERTION D'ANCRAGE AUTOMATISE**

[72] HERNANDEZ, ALAN, US  
[72] MILLER, PETER, US  
[72] BRESLICH, GRADY, US  
[71] CONMED CORPORATION, US  
[85] 2021-12-08  
[86] 2020-07-02 (PCT/US2020/040685)  
[87] (WO2021/003382)  
[30] US (62/869,718) 2019-07-02

[21] **3,143,025**  
[13] A1

[51] **Int.Cl. A61K 35/744 (2015.01) A61K 35/745 (2015.01) A61K 35/74 (2015.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01)**

[25] EN

[54] **PROCESSED MICROBIAL EXTRACELLULAR VESICLES**

[54] **VESICULES EXTRACELLULAIRES MICROBIENNES TRAITEES**

[72] BALLOK, ALICIA, US  
[72] BODMER, MARK, US  
[72] BOSE, BAUNDAUNA, US  
[72] CARLTON, SOFIA M. R., US  
[72] CORMACK, TAYLOR A., US  
[72] DAVITT, CHRISTOPHER J. H., US  
[72] FRANCISCO-ANDERSON, LOISE, US  
[72] GOODMAN, BRIAN, US  
[72] ITANO, ANDREA, US  
[72] OKAN, NIHAL, US  
[72] PONICHTERA, HOLLY, US  
[72] TROY, ERIN B., US  
[72] ROMANO-CHERNAC, FABIAN B., US  
[72] SIZOVA, MARIA, US  
[71] EVELO BIOSCIENCES, INC., US  
[85] 2021-12-08  
[86] 2020-06-11 (PCT/US2020/037210)  
[87] (WO2020/252149)  
[30] US (62/860,029) 2019-06-11  
[30] US (62/860,049) 2019-06-11  
[30] US (62/979,545) 2020-02-21  
[30] US (62/991,767) 2020-03-19

[21] **3,143,028**  
[13] A1

[51] **Int.Cl. C07C 17/04 (2006.01) C07C 17/20 (2006.01) C07C 17/23 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR SYNTHESIS OF 2,3-DICHLORO-1,1,1,2-TETRAFLUOROPROPANE AND 2,3,3,3-TETRAFLUOROPROPENE**

[54] **COMPOSITIONS ET PROCEDES DE SYNTHESE DE 2,3-DICHLORO-1,1,1,2-TETRAFLUOROPROPANE ET DE 2,3,3,3-TETRAFLUOROPROPENE**

[72] SUN, XUEHUI, US  
[71] THE CHEMOURS COMPANY FC, LLC, US  
[85] 2021-12-08  
[86] 2020-07-01 (PCT/US2020/040403)  
[87] (WO2021/003207)  
[30] US (62/870,653) 2019-07-03

## PCT Applications Entering the National Phase

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[21] **3,143,029**  
[13] A1

[51] **Int.Cl. C12N 15/82 (2006.01)**  
[25] EN  
[54] **METHODS OF PRODUCING PLANTS WITH ALTERED FRUIT DEVELOPMENT AND PLANTS DERIVED THEREFROM**

[54] **METHODES DE PRODUCTION DE PLANTES A DEVELOPPEMENT MODIFIE DE FRUITS ET PLANTES DERIVEES DE CELLES-CI**

[72] CRAWFORD, BRIAN CHARLES WILDING, US  
[72] POORTEN, THOMAS J., US  
[71] PAIRWISE PLANTS SERVICES, INC., US  
[85] 2021-12-08  
[86] 2020-06-11 (PCT/US2020/037240)  
[87] (WO2020/252167)  
[30] US (62/859,992) 2019-06-11

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[21] **3,143,032**  
[13] A1

[51] **Int.Cl. A61K 38/00 (2006.01) A61P 31/00 (2006.01) C07K 11/02 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR TREATMENT OF FUNGAL INFECTIONS**

[54] **COMPOSITIONS ET METHODES POUR TRAITER DES INFECTIONS FONGIQUES**

[72] SELSTED, MICHAEL E., US  
[72] TRAN, DAT, US  
[72] SCHAAL, JUSTIN B., US  
[72] BASSO, VIRGINIA, US  
[71] SELSTED, MICHAEL E., US  
[71] TRAN, DAT, US  
[71] SCHAAL, JUSTIN B., US  
[71] BASSO, VIRGINIA, US  
[85] 2021-12-08  
[86] 2020-06-26 (PCT/US2020/039865)  
[87] (WO2020/264328)  
[30] US (62/867,000) 2019-06-26

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[21] **3,143,035**  
[13] A1

[51] **Int.Cl. C12N 5/0783 (2010.01) A61K 39/00 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **MULTI-CHAIN CHIMERIC POLYPEPTIDES AND USES THEREOF**

[54] **POLYPEPTIDES CHIMERIQUES A CHAINES MULTIPLES ET LEURS UTILISATIONS**

[72] WONG, HING C, US  
[71] HCW BIOLOGICS, INC., US  
[85] 2021-12-08  
[86] 2020-06-19 (PCT/US2020/038717)  
[87] (WO2020/257639)  
[30] US (62/864,996) 2019-06-21

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[21] **3,143,046**  
[13] A1

[51] **Int.Cl. A61F 2/16 (2006.01)**  
[25] EN  
[54] **HIGH DEFINITION AND EXTENDED DEPTH OF FIELD INTRAOCULAR LENS**

[54] **LENTILLE INTRAOCULAIRE DE HAUTE DEFINITION A PROFONDEUR DE CHAMP ETENDUE**

[72] SARVER, EDWIN J., US  
[72] SIMMS, JAMES J., US  
[71] Z OPTICS, INC., US  
[85] 2021-12-08  
[86] 2020-06-10 (PCT/US2020/037014)  
[87] (WO2020/252034)  
[30] US (62/861,120) 2019-06-13  
[30] US (62/986,115) 2020-03-06  
[30] US (62/988,802) 2020-03-12

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[21] **3,143,048**  
[13] A1

[51] **Int.Cl. A61M 25/04 (2006.01) B01L 3/02 (2006.01) B03C 1/32 (2006.01) G01R 33/12 (2006.01) G05F 5/00 (2006.01) H01F 7/02 (2006.01)**  
[25] EN  
[54] **MAGNETIC SYSTEM FOR REMOTE CONTROL OF OBJECTS IN A BIOLOGICAL LUMEN**

[54] **SYSTEME MAGNETIQUE POUR LA COMMANDE A DISTANCE D'OBJETS DANS UNE LUMIERE BIOLOGIQUE**

[72] SHPIGELMACHER, MICHAEL, US  
[72] SROMIN, ALEXANDER, IL  
[71] BIONAUT LABS LTD., IL  
[85] 2021-12-08  
[86] 2020-06-10 (PCT/US2020/037012)  
[87] (WO2020/252033)  
[30] US (62/859,824) 2019-06-11

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[21] **3,143,049**  
[13] A1

[51] **Int.Cl. B21D 26/041 (2011.01) B21D 26/047 (2011.01)**  
[25] EN  
[54] **DISPLAY DEVICE AND SHAPING DEVICE**

[54] **DISPOSITIF D'AFFICHAGE ET DISPOSITIF DE MISE EN FORME**

[72] KAN, HIROYUKI, JP  
[72] ITAGAKI, NOBORU, JP  
[72] UENO, NORIEDA, JP  
[71] SUMITOMO HEAVY INDUSTRIES, LTD., JP  
[85] 2021-12-08  
[86] 2020-08-07 (PCT/JP2020/030479)  
[87] (WO2021/029392)  
[30] JP (2019-149145) 2019-08-15



## Demandes PCT entrant en phase nationale

[21] **3,143,050**  
[13] A1

[51] **Int.Cl. E21B 43/26 (2006.01) B01D 1/00 (2006.01) C10G 7/00 (2006.01) E21B 43/16 (2006.01) F01D 15/10 (2006.01) F02C 7/236 (2006.01)**

[25] EN

[54] **INTEGRATED FUEL GAS HEATER FOR MOBILE FUEL CONDITIONING EQUIPMENT**

[54] **DISPOSITIF DE RECHAUFFEUR DE COMBUSTIBLE GAZEUX INTEGRE POUR EQUIPEMENT MOBILE DE CONDITIONNEMENT DE COMBUSTIBLE**

[72] HINDERLITER, BRANDON, US  
[72] OEHRING, JARED, US  
[71] U.S. WELL SERVICES, LLC, US  
[85] 2021-12-08  
[86] 2020-06-10 (PCT/US2020/036932)  
[87] (WO2020/251978)  
[30] US (62/859,334) 2019-06-10

[21] **3,143,052**  
[13] A1

[51] **Int.Cl. E21B 43/38 (2006.01) B01D 21/28 (2006.01) E21B 43/34 (2006.01)**

[25] EN

[54] **SAND AND SOLIDS BYPASS SEPARATOR**

[54] **SEPARATEUR A DERIVATION DE SABLE ET DE SOLIDES**

[72] RAGLIN, JOHN M., US  
[71] WELLWORX ENERGY SOLUTIONS LLC, US  
[85] 2021-12-08  
[86] 2020-06-09 (PCT/US2020/036762)  
[87] (WO2020/251921)  
[30] US (16/438,074) 2019-06-11  
[30] US (16/827,129) 2020-03-23

[21] **3,143,060**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/95 (2013.01) A61M 25/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR TRICUSPID VALVE TREATMENT**

[54] **SYSTEMES ET PROCEDES POUR LE TRAITEMENT DE LA VALVE TRICUSPIDE**

[72] LANDON, DAVID ROBERT, US  
[72] SCHEINBLUM, TAYLOR JACOB, US  
[72] BECERRA, MATTHEW MICHAEL, US  
[72] COOPER, ALEXANDER H., US  
[72] EDWARDS, JESSE ROBERT, US  
[72] LUONG, HIEU MINH, US  
[72] HAUSER, DAVID L., US  
[72] HO, PUI TONG, US  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-08  
[86] 2020-10-08 (PCT/US2020/054786)  
[87] (WO2021/080782)  
[30] US (62/925,027) 2019-10-23

[21] **3,143,065**  
[13] A1

[51] **Int.Cl. B64C 1/14 (2006.01) E06B 5/00 (2006.01)**

[25] FR

[54] **AIRCRAFT DOOR WITH VERTICAL CONTROL MECHANISM**

[54] **PORTE D'AERONEF A MECANISME DE COMMANDE VERTICAL**

[72] DUBOSC, GREGORY, FR  
[71] LATECOERE, FR  
[85] 2021-12-13  
[86] 2020-06-12 (PCT/EP2020/025275)  
[87] (WO2020/253986)  
[30] FR (FR1906436) 2019-06-15

[21] **3,143,067**  
[13] A1

[51] **Int.Cl. F16D 65/00 (2006.01) B08B 15/00 (2006.01) F16D 69/04 (2006.01)**

[25] FR

[54] **SECURING SYSTEM FOR A PART MOUNTED ON A BRAKE HEAD**

[54] **PIECE MONTEE SUR PORTE-SEMELLE**

[72] MAISTRE, ADRIEN, FR  
[71] TALLANO TECHNOLOGIE, FR  
[85] 2021-12-13  
[86] 2020-07-03 (PCT/FR2020/051179)  
[87] (WO2021/001639)  
[30] FR (19 07417) 2019-07-03

[21] **3,143,068**  
[13] A1

[51] **Int.Cl. G06Q 20/20 (2012.01) G06F 8/60 (2018.01)**

[25] FR

[54] **SERVICE APPLICATION SYSTEM FOR PAYMENT TERMINALS**

[54] **SYSTEME D'APPLICATIONS DE SERVICE POUR TERMINAUX DE PAIEMENT**

[72] BATISTA, AMILCAR, FR  
[71] BANK AND ACQUIRERS INTERNATIONAL HOLDING, FR  
[85] 2021-12-13  
[86] 2020-06-17 (PCT/FR2020/051051)  
[87] (WO2020/254761)  
[30] FR (FR1906735) 2019-06-21

## PCT Applications Entering the National Phase

[21] **3,143,069**  
[13] A1

[51] **Int.Cl. G06F 30/13 (2020.01) G06T 7/55 (2017.01) G06T 3/40 (2006.01) H04N 5/232 (2006.01)**

[25] EN

[54] **AUTOMATED GENERATION ON MOBILE DEVICES OF PANORAMA IMAGES FOR BUILDING LOCATIONS AND SUBSEQUENT USE**

[54] **GENERATION AUTOMATISEE, SUR DES DISPOSITIFS MOBILES, D'IMAGES PANORAMIQUES POUR DES EMPLACEMENTS DE BATIMENT ET LEUR UTILISATION ULTERIEURE**

[72] CIER, SEAN P., US  
[72] KANG, SING BING, US  
[72] DAWSON, MITCHELL DAVID, US  
[71] ZILLOW, INC., US  
[85] 2021-12-08  
[86] 2021-05-17 (PCT/US2021/032656)  
[87] (WO2021/247223)  
[30] US (63/035,619) 2020-06-05  
[30] US (17/243,146) 2021-04-28

[21] **3,143,070**  
[13] A1

[51] **Int.Cl. C03B 5/225 (2006.01) C03B 5/173 (2006.01)**

[25] EN

[54] **METHOD FOR REMOVING DISTURBING METALS LIKE IRON FROM GLASS**

[54] **PROCEDE D'ELIMINATION DE METAUX PERTURBATEURS COMME LE FER DANS DU VERRE**

[72] PIESTERT, OLIVER, DE  
[71] PIESTERT, OLIVER, DE  
[85] 2021-12-13  
[86] 2020-08-07 (PCT/EP2020/072244)  
[87] (WO2021/032506)  
[30] EP (19192319.2) 2019-08-19

[21] **3,143,071**  
[13] A1

[51] **Int.Cl. A61K 31/7088 (2006.01) A61K 47/30 (2006.01) A61P 27/02 (2006.01)**

[25] EN

[54] **OPHTHALMIC COMPOSITIONS COMPRISING VISCOSIFYING POLYMERS AND NUCLEIC ACIDS**

[54] **COMPOSITIONS OPHTALMIQUES COMPRENANT DES POLYMERES VISCOSIFIANTS ET DES ACIDES NUCLEIQUES**

[72] PLATENBURG, GERARDUS JOHANNES, NL  
[72] VAN MIERLO, ELISABETH LAURENTINA WILHELMINA MARIA, NL  
[72] YILMAZ-ELIS, ALIYE SEDA, NL  
[71] PROQR THERAPEUTICS II B.V., NL  
[85] 2021-12-13  
[86] 2020-07-24 (PCT/EP2020/070897)  
[87] (WO2021/018750)  
[30] EP (19188681.1) 2019-07-26  
[30] EP (19198642.1) 2019-09-20

[21] **3,143,072**  
[13] A1

[51] **Int.Cl. A01F 12/30 (2006.01) A01D 41/12 (2006.01) A01F 12/44 (2006.01)**

[25] EN

[54] **A CHAFF FEED STREAM CONDITIONING SYSTEM**

[54] **SYSTEME DE CONDITIONNEMENT DE FLUX D'ALIMENTATION EN BALLE**

[72] BERRY, NICOLAS KANE, AU  
[71] SEED TERMINATOR HOLDINGS PTY LTD, AU  
[85] 2021-12-09  
[86] 2020-03-09 (PCT/AU2020/050222)  
[87] (WO2020/176953)  
[30] AU (2019900765) 2019-03-07

[21] **3,143,073**  
[13] A1

[51] **Int.Cl. E01C 19/22 (2006.01) A47L 11/14 (2006.01) A47L 11/282 (2006.01) E04F 21/24 (2006.01) F16M 1/04 (2006.01)**

[25] EN

[54] **CONJOINING APPARATUS AND ROTARY MACHINE ASSEMBLY COMPRISING SAME**

[54] **APPAREIL DE COMBINAISON ET ENSEMBLE DE MACHINE ROTATIVE LE COMPRENANT**

[72] BUCHCIC, MARIUSZ, CA  
[71] BUCHCIC, MARIUSZ, CA  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/CA2020/050822)  
[87] (WO2020/248074)  
[30] US (62/860,404) 2019-06-12

[21] **3,143,074**  
[13] A1

[51] **Int.Cl. G01N 15/02 (2006.01) G01N 30/00 (2006.01)**

[25] EN

[54] **METHOD FOR DETERMINING AT LEAST ONE PARAMETER OF A SAMPLE COMPOSITION COMPRISING NUCLEIC ACID, SUCH AS RNA, AND OPTIONALLY PARTICLES**

[54] **PROCEDE DE DETERMINATION D'AU MOINS UN PARAMETRE D'UNE COMPOSITION D'ECHANTILLON COMPRENANT UN ACIDE NUCLEIQUE, TEL QUE DE L'ARN, ET EVENTUELLEMENT DES PARTICULES**

[72] HAAS, HEINRICH, DE  
[72] BACIC, TIJANA, DE  
[72] SCHUMACHER, JENS, DE  
[71] BIONTECH SE, DE  
[85] 2021-12-13  
[86] 2020-07-17 (PCT/EP2020/070344)  
[87] (WO2021/009368)  
[30] EP (PCT/EP2019/069342) 2019-07-18

## Demandes PCT entrant en phase nationale

[21] **3,143,076**  
[13] A1

[51] **Int.Cl. C07C 211/55 (2006.01) C07C 209/60 (2006.01) C08K 3/04 (2006.01) C08K 3/22 (2006.01) C08K 5/09 (2006.01) C08K 13/02 (2006.01) C08L 7/00 (2006.01) C08L 9/00 (2006.01)**

[25] EN

[54] **LOW-POLLUTION ANTIDEGRADANT COMPOUND AND ANTIDEGRADANT COMPOSITION AND RUBBER COMPOSITION COMPRISING THE SAME FOR TIRES**

[54] **COMPOSE ANTI-DEGRADANT A FAIBLE POLLUTION ET D'ANTI-DEGRADANT ET COMPOSITION DE CAOUTCHOUC LE COMPRENANT POUR PNEUS**

[72] GAO, YANG, CN  
[72] LI, HUI, CN  
[71] SENNICIS CO., LTD., CN  
[85] 2021-12-09  
[86] 2019-12-23 (PCT/CN2019/127506)  
[87] (WO2020/248572)  
[30] CN (201910516287.6) 2019-06-14

[21] **3,143,077**  
[13] A1

[51] **Int.Cl. H05K 1/14 (2006.01) H05K 3/36 (2006.01)**

[25] EN

[54] **PRINTED CIRCUIT BOARD ASSEMBLY AND TERMINAL**

[54] **ENSEMBLE CARTE DE CIRCUIT IMPRIME ET BORNE**

[72] TANG, HOXUN, CN  
[71] VIVO MOBILE COMMUNICATION CO., LTD., CN  
[85] 2021-12-09  
[86] 2020-04-15 (PCT/CN2020/084935)  
[87] (WO2020/259016)  
[30] CN (201910548773.6) 2019-06-24

[21] **3,143,078**  
[13] A1

[51] **Int.Cl. A61K 31/7056 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) C07D 417/14 (2006.01) C07H 19/056 (2006.01)**

[25] EN

[54] **NOVEL GALACTOSIDE INHIBITOR OF GALECTINS**

[54] **NOUVEL INHIBITEUR GALACTOSIDE DE GALECTINES**

[72] ZETTERBERG, FREDRIK, SE  
[71] GALECTO BIOTECH AB, DK  
[85] 2021-12-13  
[86] 2020-07-03 (PCT/EP2020/068834)  
[87] (WO2021/004940)  
[30] EP (19184577.5) 2019-07-05

[21] **3,143,079**  
[13] A1

[51] **Int.Cl. A61K 31/7056 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) C07H 19/04 (2006.01) C07H 19/052 (2006.01) C07H 19/24 (2006.01)**

[25] EN

[54] **NOVEL GALACTOSIDE INHIBITOR OF GALECTINS**

[54] **NOUVEL INHIBITEUR DE GALECTINES DU TYPE GALACTOSIDE**

[72] ZETTERBERG, FREDRIK, SE  
[72] PETERSON, KRISTOFFER, SE  
[71] GALECTO BIOTECH AB, DK  
[85] 2021-12-13  
[86] 2020-07-03 (PCT/EP2020/068831)  
[87] (WO2021/001538)  
[30] EP (19184150.1) 2019-07-03  
[30] EP (20159106.2) 2020-02-24  
[30] EP (20168148.3) 2020-04-06

[21] **3,143,080**  
[13] A1

[51] **Int.Cl. C09D 175/12 (2006.01) F03D 80/00 (2016.01)**

[25] EN

[54] **USE OF COATING COMPOSITIONS FOR WIND TURBINE BLADES**

[54] **UTILISATION DE COMPOSITIONS DE REVETEMENT POUR PALES D'EOLIENNE**

[72] BERNAD, PABLO LUIS, DK  
[72] KALLESØE, ERIK, DK  
[72] MEHROTRA, KUSHAGRA, DK  
[71] HEMPEL A/S, DK  
[85] 2021-12-13  
[86] 2020-06-26 (PCT/EP2020/068019)  
[87] (WO2020/260578)  
[30] EP (19183414.2) 2019-06-28  
[30] EP (20151250.6) 2020-01-10

[21] **3,143,081**  
[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6844 (2018.01) C12Q 1/689 (2018.01) C12N 1/20 (2006.01) C12Q 1/04 (2006.01)**

[25] EN

[54] **BACTERIAL DELIVERY VEHICLES COMPRISING TRACER NUCLEIC ACID SEQUENCES**

[54] **VECTEURS D'ADMINISTRATION BACTERIENS COMPRENANT DES SEQUENCES D'ACIDES NUCLEIQUES TRACEURS**

[72] STZEPOURGINSKI, IGOR, FR  
[72] GARRY, DANIEL, FR  
[71] ELIGO BIOSCIENCE, FR  
[85] 2021-12-13  
[86] 2020-06-18 (PCT/EP2020/067014)  
[87] (WO2020/254523)  
[30] US (62/863,155) 2019-06-18

## PCT Applications Entering the National Phase

[21] **3,143,083**  
[13] A1

[51] **Int.Cl. C08F 290/00 (2006.01) B33Y 10/00 (2015.01) B33Y 70/00 (2020.01) B33Y 40/20 (2020.01) C08J 3/28 (2006.01) C08L 51/08 (2006.01)**

[25] EN

[54] **A CURABLE POLYURETHANE BASED RESIN FOR USE IN ADDITIVE MANUFACTURING**

[54] **RESINE DURCISSABLE A BASE DE POLYURETHANE DESTINEE A ETRE UTILISEE DANS LA FABRICATION ADDITIVE**

[72] VERBEKE, HUGO, BE

[72] BRIERS, DAVID, BE

[72] VANROY, BRAM, BE

[72] MEYNEN, SANDRA, BE

[71] HUNTSMAN INTERNATIONAL LLC, US

[85] 2021-12-13

[86] 2020-06-11 (PCT/EP2020/066202)

[87] (WO2020/249673)

[30] EP (19180267.7) 2019-06-14

[21] **3,143,084**  
[13] A1

[51] **Int.Cl. C04B 28/14 (2006.01) B32B 13/08 (2006.01) C04B 11/00 (2006.01) C04B 24/32 (2006.01)**

[25] EN

[54] **STABILIZED GYPSUM PARTICLES**

[54] **PARTICULES DE GYPSE STABILISEES**

[72] SCHLESINGER, MAIK, DE

[72] DIETZSCH, MICHAEL, DE

[72] NIEDERMAIR, FABIAN, DE

[72] GEHRIG, UWE, DE

[72] GAEDT, TORBEN, DE

[72] HESSE, CHRISTOPH, DE

[71] BASF SE, DE

[85] 2021-12-13

[86] 2020-06-08 (PCT/EP2020/065770)

[87] (WO2020/249499)

[30] EP (19180306.3) 2019-06-14

[21] **3,143,085**  
[13] A1

[51] **Int.Cl. A44C 17/00 (2006.01) G01N 21/87 (2006.01) G01N 33/38 (2006.01)**

[25] EN

[54] **RE-IDENTIFICATION OF ROUGH GEMSTONES**

[54] **RE-IDENTIFICATION DE PIERRES PRECIEUSES BRUTES**

[72] HONG, QI HE, GB

[71] DE BEERS UK LTD, GB

[85] 2021-12-13

[86] 2020-05-21 (PCT/EP2020/064226)

[87] (WO2020/254058)

[30] GB (1908875.6) 2019-06-20

[21] **3,143,086**  
[13] A1

[51] **Int.Cl. F28F 9/26 (2006.01) B64D 33/08 (2006.01) F02C 7/08 (2006.01) F02C 7/14 (2006.01) F28D 1/02 (2006.01) F28F 7/00 (2006.01)**

[25] FR

[54] **HEAT EXCHANGER FOR COOLING AN AIRCRAFT PROPULSION ENGINE**

[54] **ECHANGEUR THERMIQUE DE REFROIDISSEMENT D'UN MOTEUR PROPULSIF D'AERONEF**

[72] BOULZAGUET, ALEXANDRE, FR

[71] SOGECLAIR SA, FR

[85] 2021-12-13

[86] 2020-06-15 (PCT/EP2020/025284)

[87] (WO2020/253990)

[30] FR (FR1906469) 2019-06-17

[21] **3,143,087**  
[13] A1

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

[25] EN

[54] **ANTIBODIES AND METHODS OF USE**

[54] **ANTICORPS ET PROCEDES D'UTILISATION**

[72] BISHT, ARNIMA, US

[72] ACKROYD, JAMES, GB

[71] OXFORD BIOTHERAPEUTICS LTD, GB

[85] 2021-12-13

[86] 2020-07-02 (PCT/GB2020/051588)

[87] (WO2021/001653)

[30] US (62/870,269) 2019-07-03

[30] US (62/965,450) 2020-01-24

[21] **3,143,088**  
[13] A1

[51] **Int.Cl. C12N 5/074 (2010.01)**

[25] EN

[54] **HETEROGENEOUS STEM CELL POPULATION, PREPARATION METHOD THEREFOR AND USE THEREOF**

[54] **POPULATION DE CELLULES SOUCHES HETEROGENES, SON PROCEDE DE PREPARATION ET SON UTILISATION**

[72] ZHAO, CHUNHUA, CN

[71] INSTITUTE OF BASIC MEDICAL SCIENCES, CHINESE ACADEMY OF MEDICAL SCIENCES, CN

[85] 2021-12-09

[86] 2020-06-18 (PCT/CN2020/096750)

[87] (WO2020/253763)

[30] CN (201910527634.5) 2019-06-18

[21] **3,143,089**  
[13] A1

[51] **Int.Cl. B64C 1/14 (2006.01) E05D 7/04 (2006.01) E06B 5/00 (2006.01)**

[25] FR

[54] **AIRCRAFT DOOR WITH ADJUSTABLE SUPPORT ARM HINGES**

[54] **PORTE D'AERONEF AVEC CHARNIERES DE BRAS DE SUPPORT AJUSTABLES**

[72] CAPRON, NICOLAS, FR

[72] DUBOSC, GREGORY, FR

[72] SALLES, JEAN BATISTE, FR

[71] LATECOERE, FR

[85] 2021-12-09

[86] 2020-06-12 (PCT/EP2020/025276)

[87] (WO2020/253987)

[30] FR (FR1906435) 2019-06-15

## Demandes PCT entrant en phase nationale

[21] **3,143,090**  
[13] A1

[51] **Int.Cl. G07F 7/06 (2006.01) B65G 25/10 (2006.01) G07F 11/24 (2006.01) G07F 11/42 (2006.01)**

[25] EN

[54] **A CONVEYOR AND A METHOD FOR A BEVERAGE CONTAINER RECYCLER**

[54] **TRANSPORTEUR ET PROCEDE POUR DISPOSITIF DE RECYCLAGE DE RECIPIENT DE BOISSON**

[72] ALMEN, KARI, FI  
[71] PURE RECYCLE OY, FI  
[85] 2021-12-09  
[86] 2020-05-12 (PCT/EP2020/063163)  
[87] (WO2020/249346)  
[30] EP (19179760.4) 2019-06-12

[21] **3,143,091**  
[13] A1

[51] **Int.Cl. B21D 22/24 (2006.01) B21D 22/28 (2006.01) B21D 51/44 (2006.01) B21D 51/50 (2006.01) B21D 22/20 (2006.01) B21D 24/16 (2006.01)**

[25] EN

[54] **A METHOD FOR FORMING A DEEP DRAW CLOSURE CAP**

[54] **PROCEDE DE FORMATION D'UN CAPUCHON DE FERMETURE PAR EMBOUTISSAGE PROFOND**

[72] HAAR, THOMAS, DE  
[71] SAETA GMBH & CO. KG, DE  
[85] 2021-12-09  
[86] 2020-05-13 (PCT/EP2020/063318)  
[87] (WO2020/249351)  
[30] EP (19180215.6) 2019-06-14

[21] **3,143,092**  
[13] A1

[51] **Int.Cl. A01C 17/00 (2006.01)**

[25] EN

[54] **METHOD FOR DETERMINING SUITABLE SPREADING SETTINGS**

[54] **PROCEDE DE DETERMINATION DE REGLAGES D'EPANDAGE APPROPRIES**

[72] STROBEL-FROSCHLE, MARKUS, DE  
[72] RAHE, FLORIAN, DE  
[71] AMAZONEN-WERKE H. DREYER SE & CO. KG, DE  
[85] 2021-12-09  
[86] 2020-05-19 (PCT/EP2020/063898)  
[87] (WO2020/254047)  
[30] DE (10 2019 116 615.2) 2019-06-19

[21] **3,143,093**  
[13] A1

[51] **Int.Cl. B27D 5/00 (2006.01)**

[25] EN

[54] **HYDROPHOBIC FLUID AND USE THEREOF**

[54] **LIQUIDE HYDROPHOBE ET SON UTILISATION**

[72] RIEPE, BERND, DE  
[71] RIEPE, BERND, DE  
[85] 2021-12-09  
[86] 2020-06-05 (PCT/EP2020/065671)  
[87] (WO2020/249484)  
[30] DE (10 2019 116 282.3) 2019-06-14

[21] **3,143,094**  
[13] A1

[51] **Int.Cl. A61K 31/223 (2006.01) A61P 11/14 (2006.01)**

[25] EN

[54] **[(1R,2S,5R)-2-ISOPROPYL-5-METHYL-CYCLOHEXANECARBONYL]-AMINO]-ACETIC ACID ISOPROPYL ESTER FOR TREATMENT OF CHRONIC COUGH**

[54] **ESTER ISOPROPYLIQUE D'ACIDE [(1R,2S,5R)-2-ISOPROPYL-5-METHYL-CYCLOHEXANECARBONYL]-AMINO]-ACETIQUE POUR TRAITER LA TOUX CHRONIQUE**

[72] POIROT, OLIVIER, CH  
[72] WOODCOCK, ASHLEY, CH  
[71] AXALBION SA, CH  
[85] 2021-12-09  
[86] 2020-06-10 (PCT/EP2020/066065)  
[87] (WO2020/249607)  
[30] GB (1908219.7) 2019-06-10

[21] **3,143,095**  
[13] A1

[51] **Int.Cl. B23K 26/08 (2014.01) B26D 5/00 (2006.01) B26D 5/06 (2006.01) B26D 5/08 (2006.01) B26F 1/38 (2006.01) B26F 3/00 (2006.01)**

[25] FR

[54] **DEVICE FOR MOVING A TREATMENT HEAD AND A TRAY**

[54] **DISPOSITIF DE DEPLACEMENT D'UNE TETE DE TRAITEMENT ET D'UN PLATEAU**

[72] DEREIMS, PHILIPPE, FR  
[71] HYDROPROCESS, FR  
[85] 2021-12-09  
[86] 2020-06-10 (PCT/EP2020/066131)  
[87] (WO2020/249636)  
[30] FR (FR1906250) 2019-06-12

[21] **3,143,096**  
[13] A1

[51] **Int.Cl. A23L 33/19 (2016.01) A23C 21/00 (2006.01) A61K 9/51 (2006.01) A61K 35/20 (2006.01) A61K 38/01 (2006.01) A61K 38/38 (2006.01) A61K 45/06 (2006.01) A61P 3/04 (2006.01) A61P 3/08 (2006.01) A61P 3/10 (2006.01)**

[25] EN

[54] **USE OF WHEY PROTEIN MICELLES FOR CONTROLLING POSTPRANDIAL GLUCOSE RESPONSE**

[54] **UTILISATION DE MICELLES DE PROTEINES DE LACTOSERUM POUR LUTTER CONTRE UNE REPONSE DE GLUCOSE POSTPRANDIAL**

[72] BOVETTO, LIONEL JEAN RENE, CH  
[72] DARIMONT-NICOLAU, CHRISTIAN, CH  
[72] EGLI, LEONIE, CH  
[72] RYTZ, ANDREAS, CH  
[71] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2021-12-09  
[86] 2020-06-11 (PCT/EP2020/066187)  
[87] (WO2020/249666)  
[30] EP (19180009.3) 2019-06-13

[21] **3,143,097**  
[13] A1

[51] **Int.Cl. C12N 5/0783 (2010.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR CANCER IMMUNOTHERAPY**

[54] **COMPOSITIONS ET METHODES POUR L'IMMUNO-CANCERTHERAPIE**

[72] LOSEY, HEATHER C., US  
[72] SUN, LEI, US  
[71] ALKERMES PHARMA IRELAND LIMITED, IE  
[85] 2021-12-09  
[86] 2020-06-11 (PCT/EP2020/066226)  
[87] (WO2020/249687)  
[30] US (62/860,182) 2019-06-11  
[30] US (62/924,356) 2019-10-22  
[30] US (62/932,160) 2019-11-07

## PCT Applications Entering the National Phase

[21] **3,143,098**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) A61K 38/20 (2006.01) A61P 35/00 (2006.01) C07K 14/55 (2006.01) C07K 14/715 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR SUBCUTANEOUS ADMINISTRATION OF CANCER IMMUNOTHERAPY**

[54] **COMPOSITIONS ET METHODES POUR L'ADMINISTRATION SOUS-CUTANEE D'UNE IMMUNOTHERAPIE ANTICANCEREUSE**

[72] LOSEY, HEATHER C., US  
[72] LOPES, JARED, US  
[72] SUN, LEI, US  
[72] WINQUIST, RAYMOND J., US  
[71] ALKERMES PHARMA IRELAND LIMITED, IE

[85] 2021-12-09  
[86] 2020-06-11 (PCT/EP2020/066234)  
[87] (WO2020/249693)  
[30] US (62/860,182) 2019-06-11  
[30] US (62/924,356) 2019-10-22  
[30] US (62/932,160) 2019-11-07

[21] **3,143,099**  
[13] A1

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

[25] EN

[54] **HYBRID OCEAN BOTTOM SEISMIC RECEIVER AND STREAMER SEISMIC DATA ACQUISITION USING WIDE TOWED SOURCES**

[54] **RECEPTEUR SISMIQUE DE FOND OCEANIQUE ET ACQUISITION DE DONNEES SISMIQUES DE FLUTE HYBRIDES A L'AIDE DE SOURCES REMORQUEES LARGES**

[72] BEITZ, MANUEL, NO  
[72] WIDMAIER, MARTIN, NO  
[72] LONG, ANDREW, AU  
[71] PGS GEOPHYSICAL AS, NO

[85] 2021-12-09  
[86] 2020-06-11 (PCT/EP2020/066244)  
[87] (WO2020/249701)  
[30] US (62/860,470) 2019-06-12  
[30] US (16/892,557) 2020-06-04

[21] **3,143,100**  
[13] A1

[51] **Int.Cl. A61K 31/713 (2006.01) A61P 9/00 (2006.01) C12N 15/00 (2006.01)**

[25] EN

[54] **TREATMENT OF HEART FAILURE IN HUMAN SUBJECTS**

[54] **TRAITEMENT DE L'INSUFFISANCE CARDIAQUE CHEZ DES SUJETS HUMAINS**

[72] THUM, THOMAS, DE  
[72] ULBRICH, CLAUDIA, DE  
[72] HAUKE, WILFRIED, DE  
[72] RUMP, STEFFEN, DE  
[72] BATKAI, SANDOR, DE  
[71] CARDIOR PHARMACEUTICALS GMBH, DE

[85] 2021-12-09  
[86] 2020-06-12 (PCT/EP2020/066273)  
[87] (WO2020/249713)  
[30] EP (19180308.9) 2019-06-14  
[30] EP (20150700.1) 2020-01-08  
[30] EP (20162110.9) 2020-03-10  
[30] EP (20175240.9) 2020-05-18

[21] **3,143,101**  
[13] A1

[51] **Int.Cl. G06Q 20/32 (2012.01) G06Q 20/34 (2012.01) G06Q 20/40 (2012.01) G06Q 30/06 (2012.01) G06F 3/0354 (2013.01) G06F 21/83 (2013.01) G06F 3/039 (2013.01) G07F 9/02 (2006.01) G07F 19/00 (2006.01) G07G 1/01 (2006.01) G09B 21/00 (2006.01)**

[25] FR

[54] **PROCEDE D'ASSISTANCE A L'UTILISATION D'UN DISPOSITIF DE TRANSACTION ELECTRONIQUE**

[54] **METHOD FOR ASSISTING THE USE OF AN ELECTRONIC TRANSACTION DEVICE**

[72] BLANC, OLIVIER, FR  
[72] CARABELLI, ANDRE, FR  
[72] PAVAGEAU, STEPHANE, FR  
[71] BANKS AND ACQUIRERS INTERNATIONAL HOLDING, FR

[85] 2021-12-09  
[86] 2020-06-12 (PCT/EP2020/066386)  
[87] (WO2020/249787)  
[30] FR (FR1906407) 2019-06-14

[21] **3,143,102**  
[13] A1

[51] **Int.Cl. A61K 31/435 (2006.01) A61P 25/00 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **SUBSTITUTED PYRAZOLO[4,3-B]PYRIDINES AND THEIR USE AS GLUN2B RECEPTOR MODULATORS**

[54] **PYRAZOLO[4,3-B]PYRIDINES SUBSTITUEES ET LEUR UTILISATION EN TANT QUE MODULATEURS DU RECEPTEUR GLUN2B**

[72] HISCOX, AFTON, CA  
[72] STENNE, BRICE, US  
[72] GELIN, CHRISTINE, US  
[72] SAMANT, ANDREW, US  
[72] WALL, JESSICA, US  
[72] LETAVIC, MICHAEL A., US  
[72] DVORAK, CURT, US  
[71] JANSSEN PHARMACEUTICA NV, BE

[85] 2021-12-09  
[86] 2020-06-12 (PCT/EP2020/066391)  
[87] (WO2020/249791)  
[30] US (62/861,674) 2019-06-14

[21] **3,143,103**  
[13] A1

[51] **Int.Cl. A61K 31/4427 (2006.01) A61P 25/00 (2006.01) C07D 413/06 (2006.01)**

[25] EN

[54] **PYRIDINE CARBAMATES AND THEIR USE AS GLUN2B RECEPTOR MODULATORS**

[54] **CARBAMATES DE PYRIDINE ET LEUR UTILISATION EN TANT QUE MODULATEURS DU RECEPTEUR GLUN2B**

[72] GELIN, CHRISTINE, US  
[72] COATE, HEATHER, US  
[72] STENNE, BRICE, US  
[72] DVORAK, CURT, US  
[71] JANSSEN PHARMACEUTICA NV, BE

[85] 2021-12-09  
[86] 2020-06-12 (PCT/EP2020/066400)  
[87] (WO2020/249799)  
[30] US (62/861,634) 2019-06-14

## Demandes PCT entrant en phase nationale

[21] **3,143,104**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/10 (2006.01) A61K 39/00 (2006.01) A61K 47/10 (2017.01) A61K 47/14 (2017.01) A61K 47/20 (2006.01) A61K 47/24 (2006.01)**

[25] EN

[54] **DISSACHARIDE FORMULATIONS FOR CONTROLLED DRUG RELEASE**

[54] **FORMULATIONS DE DISACCHARIDES POUR LA LIBERATION CONTROLEE DE MEDICAMENTS**

[72] ANDRESEN, THOMAS LARS, DK  
[72] ROSAGER HENRIKSEN, JONAS, DK  
[72] HANSEN, ANDERS ELIAS, SE  
[72] MELANDER, CARL FREDRIK, SE  
[72] SERRANO CHAVEZ, ELIZABETH, DK

[72] BRUUN, LINDA MARIA, DK  
[71] TECHNICAL UNIVERSITY OF DENMARK, DK

[85] 2021-12-09  
[86] 2020-06-12 (PCT/EP2020/066403)  
[87] (WO2020/249801)  
[30] SE (1950699-7) 2019-06-12

[21] **3,143,105**  
[13] A1

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/495 (2006.01) A61P 25/00 (2006.01)**

[25] EN

[54] **SUBSTITUTED PYRAZOLO-PYRAZINES AND THEIR USE AS GLUN2B RECEPTOR MODULATORS**

[54] **PYRAZOLO-PYRAZINES SUBSTITUEES ET LEUR UTILISATION EN TANT QUE MODULATEURS DU RECEPTEUR DE GLUN2B**

[72] DVORAK, CURT, US  
[72] COATE, HEATHER, US  
[71] JANSSEN PHARMACEUTICA NV, BE

[85] 2021-12-09  
[86] 2020-06-12 (PCT/EP2020/066405)  
[87] (WO2020/249802)  
[30] US (62/861,681) 2019-06-14

[21] **3,143,106**  
[13] A1

[51] **Int.Cl. E21B 34/02 (2006.01)**

[25] EN

[54] **A VALVE ARRANGEMENT**

[54] **AGENCEMENT DE SOUPAPE**

[72] HARESTAD, KRISTIAN, NO

[71] PETROLEUM TECHNOLOGY COMPANY AS, NO

[85] 2021-12-08  
[86] 2020-06-24 (PCT/NO2020/050178)  
[87] (WO2021/002758)  
[30] NO (20190833) 2019-07-03

[21] **3,143,107**  
[13] A1

[51] **Int.Cl. G06F 9/445 (2018.01) H04L 12/46 (2006.01) G06F 9/455 (2018.01)**

[25] EN

[54] **SYSTEMS AND METHODS PROVIDING A MULTI-CLOUD MICROSERVICES GATEWAY USING A SIDECAR PROXY**

[54] **SYSTEMES ET PROCEDES FOURNISSANT UNE PASSERELLE DE MICROSERVICES MULTI-CLOUD A L'AIDE D'UN PROXY SIDE-CAR**

[72] MESTERY, KYLE ANDREW DONALD, US

[72] TOLLET, JEROME, FR  
[72] WELLS, IAN, US

[72] AUGUSTIN, ALOYS CHRISTOPHE, FR

[71] CISCO TECHNOLOGY, INC., US

[85] 2021-12-08  
[86] 2020-06-04 (PCT/US2020/036072)  
[87] (WO2020/251828)  
[30] US (16/439,441) 2019-06-12

[21] **3,143,108**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) C07K 14/725 (2006.01) C07K 16/00 (2006.01) C07K 16/28 (2006.01) C07K 16/42 (2006.01)**

[25] EN

[54] **ULTRAMODULAR IGG3-BASED SPACER DOMAIN AND MULTI-FUNCTION SITE FOR IMPLEMENTATION IN CHIMERIC ANTIGEN RECEPTOR DESIGN**

[54] **DOMAINE ESPACEUR A BASE D'IGG3 ULTRAMODULAIRE ET SITE MULTIFONCTION POUR UNE MISE EN ŒUVRE DANS LA CONCEPTION D'UN RECEPTEUR ANTIGENIQUE CHIMERIQUE**

[72] HUDECEK, MICHAEL, DE  
[72] NERRETER, THOMAS, DE

[71] JULIUS-MAXIMILIANS-UNIVERSITAT WURZBURG, DE

[85] 2021-12-09  
[86] 2020-06-19 (PCT/EP2020/067124)  
[87] (WO2020/254591)  
[30] EP (19181237.9) 2019-06-19

[21] **3,143,109**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01) A61P 35/00 (2006.01) C07K 16/30 (2006.01)**

[25] EN

[54] **ANTHRACYCLINE DERIVATIVES DERIVES D'ANTHRACYCLINE**

[72] COTTON, GRAHAM, GB  
[72] THOM, JENNIFER, GB  
[72] TRUMPER, PAUL, GB

[71] ALMAC DISCOVERY LIMITED, GB

[85] 2021-12-09  
[86] 2020-06-19 (PCT/EP2020/067210)  
[87] (WO2020/254640)  
[30] GB (1908886.3) 2019-06-20

## PCT Applications Entering the National Phase

[21] **3,143,110**  
[13] A1

[51] **Int.Cl. A61C 8/00 (2006.01) A61B 90/00 (2016.01) A61B 17/88 (2006.01)**  
[25] EN  
[54] **DENTAL SCREW AND DENTAL FASTENING TOOL**  
[54] **VIS DENTAIRE ET OUTIL DE FIXATION DENTAIRE**  
[72] NAGEL, PATRICK, CH  
[72] CHRISTIANSEN, PIERS, CH  
[72] ETTLIN, KARIN, CH  
[71] NOBEL BIOCARE SERVICES AG, CH  
[85] 2021-12-09  
[86] 2020-06-23 (PCT/EP2020/067467)  
[87] (WO2020/260263)  
[30] EP (19182620.5) 2019-06-26

[21] **3,143,111**  
[13] A1

[51] **Int.Cl. C07D 233/86 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PREPARATION OF ENZALUTAMIDE**  
[54] **PROCEDE DE PREPARATION D'ENZALUTAMIDE**  
[72] MITAS, PETR, CZ  
[72] SMEKAL, OLDRICH, CZ  
[71] SYNTHON B.V., NL  
[85] 2021-12-09  
[86] 2020-06-25 (PCT/EP2020/067854)  
[87] (WO2020/260469)  
[30] EP (19182954.8) 2019-06-27

[21] **3,143,112**  
[13] A1

[51] **Int.Cl. A61K 31/16 (2006.01) A61P 3/00 (2006.01) C07C 327/30 (2006.01)**  
[25] EN  
[54] **SUCCINATE PRODRUG, COMPOSITIONS CONTAINING THE SUCCINATE PRODRUG AND USES THEREOF**  
[54] **PROMEDICAMENTA BASE DE SUCCINATE, COMPOSITIONS CONTENANT LE PROMEDICAMENT DE SUCCINATE ET UTILISATIONS ASSOCIEES**  
[72] HANSSON, MAGNUS JOAKIM, SE  
[72] GRONBERG, ALVAR, SE  
[72] ELMER, MATS ESKIL, SE  
[72] FARMERY, MARK RICHARD, SE  
[72] MOSS, STEVEN JAMES, GB  
[72] WEBSTER, LEE ROBERT, GB  
[72] GREGORY, MATTHEW ALAN, GB  
[71] ABLIVA AB, SE  
[85] 2021-12-09  
[86] 2020-06-18 (PCT/EP2020/066923)  
[87] (WO2020/254484)  
[30] DK (PA201970382) 2019-06-19  
[30] DK (PA201970383) 2019-06-19  
[30] DK (PA201970384) 2019-06-19

[21] **3,143,113**  
[13] A1

[51] **Int.Cl. B65D 83/48 (2006.01) B65D 83/42 (2006.01)**  
[25] FR  
[54] **VALVE FOR PRESSURISED CONTAINER**  
[54] **VALVE POUR RECIPIENT SOUS PRESSION**  
[72] BODET, HERVE, FR  
[72] GAILLARD, ERIC, FR  
[71] LINDAL FRANCE SAS, FR  
[85] 2021-12-09  
[86] 2020-07-20 (PCT/EP2020/070489)  
[87] (WO2021/018656)  
[30] FR (FR1908612) 2019-07-29

[21] **3,143,114**  
[13] A1

[51] **Int.Cl. A61H 9/00 (2006.01)**  
[25] FR  
[54] **NON-INVASIVE PULSATILE DEVICE FOR CIRCULATORY ASSISTANCE**  
[54] **DISPOSITIF D'ASSISTANCE CIRCULATOIRE PULSATILE NON INVASIF**  
[72] LE BLE, RENAN, FR  
[72] DIXMIER, MICHEL, FR  
[72] CHASTANIER, PIERRE, FR  
[72] BAILLIART, OLIVIER, FR  
[71] CARDIO INNOVATIVE SYSTEMS, FR  
[85] 2021-12-09  
[86] 2019-06-11 (PCT/FR2019/051401)  
[87] (WO2020/249875)

[21] **3,143,115**  
[13] A1

[51] **Int.Cl. C08L 39/02 (2006.01) D21H 17/34 (2006.01) D21H 17/44 (2006.01) D21H 17/45 (2006.01) D21H 21/10 (2006.01)**  
[25] EN  
[54] **PROCESS FOR MANUFACTURING PAPER OR CARDBOARD**  
[54] **PROCEDE DE FABRICATION DE PAPIER OU DE CARTON**  
[72] BARRIERE, CYRIL, FR  
[72] OLIVIER, REMI, FR  
[72] HUND, RENE, FR  
[71] SPCM SA, FR  
[85] 2021-12-09  
[86] 2020-05-07 (PCT/FR2020/050759)  
[87] (WO2020/260779)  
[30] FR (FR1907062) 2019-06-27

[21] **3,143,116**  
[13] A1

[51] **Int.Cl. A61L 27/14 (2006.01) C07K 7/00 (2006.01)**  
[25] EN  
[54] **SUPRAMOLECULAR STRUCTURES**  
[54] **STRUCTURES SUPRAMOLECULAIRES**  
[72] MIOTTO, MARTINA, GB  
[72] CONNON, CHE JOHN, GB  
[71] CELLULAREVOLUTION LIMITED, GB  
[85] 2021-12-09  
[86] 2020-06-10 (PCT/GB2020/051399)  
[87] (WO2020/249944)  
[30] GB (1908522.4) 2019-06-13



## Demandes PCT entrant en phase nationale

[21] **3,143,117**  
[13] A1

[51] **Int.Cl. C12N 15/85 (2006.01) A61K 39/12 (2006.01) C07K 14/005 (2006.01) C12N 5/10 (2006.01) C12N 15/11 (2006.01) C12N 15/33 (2006.01) C12N 15/86 (2006.01)**

[25] EN  
[54] **RNA CONSTRUCT CONSTRUCTION D'ARN**  
[72] SHATTOCK, ROBIN, GB  
[72] BLAKNEY, ANNA, GB  
[72] MCKAY, PAUL, GB  
[71] IMPERIAL COLLEGE INNOVATIONS LIMITED, GB  
[85] 2021-12-13  
[86] 2020-06-18 (PCT/GB2020/051465)  
[87] (WO2020/254804)  
[30] GB (1908729.5) 2019-06-18

[21] **3,143,118**  
[13] A1

[51] **Int.Cl. A23L 27/10 (2016.01) A23L 27/12 (2016.01) A23L 33/105 (2016.01) A61K 36/53 (2006.01) B01D 11/02 (2006.01) C11B 9/02 (2006.01)**

[25] EN  
[54] **EUTECTIC EXTRACTION OF SOLIDS EXTRACTION EUTECTIQUE DE SOLIDES**  
[72] LAGUERRE, MICHAEL, FR  
[72] BILY, ANTOINE CHARLES, FR  
[72] BIRTIC, SIMONA, FR  
[72] GERIN, CELINE, FR  
[72] LAVAUD, ALEXIS, FR  
[72] TENON, MATHIEU, FR  
[71] GIVAUDAN SA, CH  
[85] 2021-12-09  
[86] 2020-06-19 (PCT/EP2020/067104)  
[87] (WO2020/254579)  
[30] GB (1908878.0) 2019-06-20

[21] **3,143,119**  
[13] A1

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

[25] EN  
[54] **METHODS OF DETECTING AND PREDICTING BREAST CANCER METHODES DE DETECTION ET DE PREDICTION DU CANCER DU SEIN**  
[72] WIDSCHWENDTER, MARTIN, GB  
[72] BARRETT, JAMES, GB  
[71] UCL BUSINESS LTD, GB  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/GB2020/051421)  
[87] (WO2020/249962)  
[30] GB (1908591.9) 2019-06-14

[21] **3,143,120**  
[13] A1

[51] **Int.Cl. A61M 35/00 (2006.01) A61F 13/06 (2006.01) A61L 15/44 (2006.01) A61M 37/00 (2006.01)**

[25] EN  
[54] **MEDICAMENT CONTAINMENT DEVICES AND ASSOCIATED COMPOSITIONS DISPOSITIFS CONTENANT UN MEDICAMENT ET COMPOSITIONS ASSOCIEES**  
[72] REGEV, GILLY, CA  
[72] MILLER, CHRISTOPHER C., CA  
[71] SANOTIZE RESEARCH AND DEVELOPMENT CORP., CA  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/IB2020/000473)  
[87] (WO2020/250036)  
[30] US (62/860,632) 2019-06-12

[21] **3,143,121**  
[13] A1

[51] **Int.Cl. G01C 9/06 (2006.01) E21B 47/022 (2012.01)**

[25] EN  
[54] **SENSOR SYSTEM, SENSING ELEMENT AND METHODS SYSTEME DE CAPTEUR, ELEMENT DE DETECTION ET PROCEDES**  
[72] DREWETT, THOMAS ANTHONY, GB  
[72] SMITH, ANTHONY BRYN, GB  
[72] ANDREOU, DIMITRIOS, GB  
[71] SENCEIVE LTD, GB  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/GB2020/051424)  
[87] (WO2020/249965)  
[30] GB (1908596.8) 2019-06-14

[21] **3,143,123**  
[13] A1

[51] **Int.Cl. A61B 17/00 (2006.01) A61F 2/24 (2006.01)**

[25] EN  
[54] **IMPLANT-ADHERING TECHNIQUES TECHNIQUES D'ADHERENCE D'IMPLANT**  
[72] CHAPPEL-RAM, SHLOMIT, IL  
[71] VALTECH CARDIO, LTD., IL  
[85] 2021-12-09  
[86] 2020-11-29 (PCT/IB2020/061251)  
[87] (WO2021/123975)  
[30] US (62/951,995) 2019-12-20

[21] **3,143,124**  
[13] A1

[51] **Int.Cl. C07D 498/22 (2006.01) A61K 31/438 (2006.01) A61P 25/06 (2006.01)**

[25] EN  
[54] **CGRP ANTAGONIST COMPOUNDS COMPOSES ANTAGONISTES DU CGRP**  
[72] BROWN, GILES ALBERT, GB  
[72] CONGREVE, MILES STUART, GB  
[72] WATSON, STEPHEN PAUL, GB  
[72] CANSFIELD, JULIE, GB  
[72] O'BRIEN, MICHAEL ALISTAIR, GB  
[72] DEFLORIAN, FRANCESCA, GB  
[72] OTT, GREGORY R., US  
[72] SWAIN, NIGEL ALAN, GB  
[72] CANSFIELD, ANDREW DAVID, GB  
[71] HEPTARES THERAPEUTICS LIMITED, GB  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/GB2020/051429)  
[87] (WO2020/249970)  
[30] GB (1908430.0) 2019-06-12

[21] **3,143,125**  
[13] A1

[51] **Int.Cl. A01K 73/045 (2006.01)**

[25] EN  
[54] **TRAWL DOOR WITH LIFT ADJUSTING MEANS PORTE DE CHALUT AVEC MOYEN DE REGLAGE DE LEVAGE**  
[72] BAUNGAARD, GREGERS, DK  
[72] BAUNGAARD, THYGE, DK  
[71] MLD APS, DK  
[85] 2021-12-09  
[86] 2020-05-29 (PCT/IB2020/055115)  
[87] (WO2020/254896)  
[30] DK (PA 2019 00736) 2019-06-18

[21] **3,143,126**  
[13] A1

[51] **Int.Cl. E01B 2/00 (2006.01) E01B 26/00 (2006.01) H02G 9/04 (2006.01)**

[25] EN  
[54] **A COMBINED CABLE TROUGH AND WALKWAY PASSERELLE ET CHEMIN DE CABLES COMBINES**  
[72] WELLENS, STEWART, GB  
[71] TROJAN SERVICES LIMITED, GB  
[85] 2021-12-13  
[86] 2019-06-14 (PCT/GB2019/051649)  
[87] (WO2020/249921)

## PCT Applications Entering the National Phase

[21] **3,143,127**  
[13] A1

[51] **Int.Cl. A61L 27/14 (2006.01) A61F 2/30 (2006.01) C08L 23/02 (2006.01)**  
[25] EN  
[54] **DIAGNOSIS AND TREATMENT**  
[54] **DIAGNOSTIC ET TRAITEMENT**  
[72] BRAMHILL, JANE HELEN, GB  
[72] FREEMONT, ANTHONY JOHN, GB  
[72] JENNY, PHILIPPE, FR  
[71] GELMETIX LIMITED, GB  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/GB2020/051433)  
[87] (WO2020/249973)  
[30] GB (1908589.3) 2019-06-14

[21] **3,143,128**  
[13] A1

[51] **Int.Cl. B04C 3/04 (2006.01) B01D 45/12 (2006.01) B04C 3/06 (2006.01)**  
[25] EN  
[54] **CYCLONIC AIR FILTRATION EQUIPMENT**  
[54] **EQUIPEMENT DE FILTRATION D'AIR CYCLONIQUE**  
[72] BIBBY, DARREN, RICHARD, ZA  
[71] BIBBY, DARREN, RICHARD, ZA  
[85] 2021-12-09  
[86] 2021-01-20 (PCT/IB2021/050393)  
[87] (WO2021/148945)  
[30] ZA (2020/00390) 2020-01-21

[21] **3,143,129**  
[13] A1

[51] **Int.Cl. E01B 2/00 (2006.01) E01B 26/00 (2006.01) H02G 9/04 (2006.01)**  
[25] EN  
[54] **A COMBINED CABLE TROUGH AND WALKWAY**  
[54] **PASSERELLE ET CHEMIN DE CABLES COMBINES**  
[72] WELLENS, STEWART, GB  
[71] TROJAN SERVICES LIMITED, GB  
[85] 2021-12-13  
[86] 2019-06-14 (PCT/GB2019/051648)  
[87] (WO2020/249920)

[21] **3,143,130**  
[13] A1

[51] **Int.Cl. A61B 5/256 (2021.01) A61B 5/279 (2021.01) A61N 1/36 (2006.01) A61N 5/06 (2006.01) G06F 3/01 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR MOTION DAMPENING FOR BIOSIGNAL SENSING AND INFLUENCING**  
[54] **PROCEDE ET APPAREIL D'AMORTISSEMENT DE MOUVEMENT POUR LA DETECTION ET L'INFLUENCE DE BIOSIGNAUX**  
[72] TELFER, PAOLA, CA  
[72] JULIHN, COREY, CA  
[71] TELFER, PAOLA, CA  
[71] JULIHN, COREY, CA  
[71] SENS.AI INC., CA  
[85] 2021-12-09  
[86] 2020-06-10 (PCT/IB2020/055469)  
[87] (WO2020/250160)  
[30] US (62/859,698) 2019-06-10

[21] **3,143,132**  
[13] A1

[51] **Int.Cl. C07D 207/10 (2006.01) A61K 31/381 (2006.01) A61K 31/40 (2006.01) A61K 31/4192 (2006.01) A61K 31/4196 (2006.01) A61K 31/42 (2006.01) A61K 31/421 (2006.01) A61K 31/426 (2006.01) A61K 31/433 (2006.01) A61K 31/44 (2006.01) A61P 13/00 (2006.01) C07D 207/327 (2006.01) C07D 213/40 (2006.01) C07D 213/51 (2006.01) C07D 213/54 (2006.01) C07D 213/55 (2006.01) C07D 213/63 (2006.01) C07D 213/70 (2006.01) C07D 213/73 (2006.01) C07D 231/54 (2006.01) C07D 237/24 (2006.01) C07D 239/28 (2006.01) C07D 239/32 (2006.01) C07D 241/24 (2006.01) C07D 249/04 (2006.01) C07D 249/08 (2006.01) C07D 263/32 (2006.01) C07D 271/07 (2006.01) C07D 277/30 (2006.01) C07D 285/04 (2006.01) C07D 285/10 (2006.01) C07D 285/38 (2006.01) C07D 333/34 (2006.01) C07F 9/30 (2006.01)**  
[25] EN  
[54] **NOVEL NON-CODING HETEROCYCLIC AMINO ACIDS (NCHAA) AND THEIR USE AS HERBICIDES**  
[54] **NOUVEAUX ACIDES AMINES HETEROCYCLIQUES NON CODANTS (NCHAA) ET LEUR UTILISATION EN TANT QU'HERBICIDES**  
[72] KOZAK, ALEX, IL  
[72] SHAPIRO, ISRAEL, IL  
[71] FORTEPHEST LTD., IL  
[85] 2021-12-09  
[86] 2020-06-10 (PCT/IL2020/050642)  
[87] (WO2020/250223)  
[30] US (62/860,045) 2019-06-11

## Demandes PCT entrant en phase nationale

[21] **3,143,133**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 35/17 (2015.01) A61K 31/712 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **NUCLEIC ACID AGENTS MODULATING SLAMF6 ISOFORMS**

[54] **AGENTS D'ACIDE NUCLEIQUE MODULANT DES ISOFORMES DE SLAMF6**

[72] LOTEM, MICHAL, IL

[72] HAJAJ, EMMA, IL

[72] EISENBERG, GALIT, IL

[71] HADASIT MEDICAL RESEARCH SERVICES AND DEVELOPMENT LTD., IL

[85] 2021-12-09

[86] 2020-06-23 (PCT/IL2020/050697)

[87] (WO2020/261265)

[30] IL (267614) 2019-06-24

[30] US (62/882,625) 2019-08-05

[21] **3,143,134**  
[13] A1

[51] **Int.Cl. C09K 21/00 (2006.01) B27K 3/50 (2006.01) B27N 1/00 (2006.01) B27N 3/02 (2006.01) B27N 9/00 (2006.01)**

[25] EN

[54] **FIRE-RETARDANT ORIENTED STRAND BOARD (OSB)**

[54] **PANNEAU A COPEAUX ORIENTES (OSB) IGNIFUGE**

[72] JIN, LEHONG, US

[72] HUMPHREY, DAVID, AU

[72] RASSAM, GHONCHE, NZ

[72] ZIVKOVIC, OLIVERA, US

[72] ADEKUNLE, ADEGOKE, US

[72] HURLEY, JAMES, US

[72] THOMASON, SUSAN, US

[71] ARXADA, LLC, US

[85] 2021-12-09

[86] 2020-06-15 (PCT/IB2020/055566)

[87] (WO2020/250205)

[30] US (62861056) 2019-06-13

[30] US (62927273) 2019-10-29

[30] EP (20160201.8) 2020-02-28

[21] **3,143,135**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **COMBINATION CANCER IMMUNOTHERAPY**

[54] **IMMUNOTHERAPIE ANTICANCEREUSE COMBINEE**

[72] LOTEM, MICHAL, IL

[72] HAJAJ, EMMA, IL

[72] EISENBERG, GALIT, IL

[71] HADASIT MEDICAL RESEARCH SERVICES AND DEVELOPMENT LTD., IL

[85] 2021-12-09

[86] 2020-06-23 (PCT/IL2020/050698)

[87] (WO2020/261266)

[30] IL (267614) 2019-06-24

[30] US (62/882,625) 2019-08-05

[21] **3,143,136**  
[13] A1

[51] **Int.Cl. A61K 31/519 (2006.01) A61P 31/18 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **INHIBITORS OF HUMAN IMMUNODEFICIENCY VIRUS REPLICATION**

[54] **DERIVES DE PYRIDO [2,3-D] PYRIMIDINE EN TANT QU'INHIBITEURS DE LA REPLICATION DU VIRUS DE L'IMMUNODEFICIENCE HUMAINE**

[72] GILLIS, ERIC P, US

[72] IWUAGWU, CHRISTIANA, US

[71] VIIV HEALTHCARE UK (NO.5) LIMITED, GB

[85] 2021-12-09

[86] 2020-06-17 (PCT/IB2020/055653)

[87] (WO2020/254985)

[30] US (62/863,406) 2019-06-19

[21] **3,143,137**  
[13] A1

[51] **Int.Cl. A61B 17/17 (2006.01) A61F 2/40 (2006.01)**

[25] EN

[54] **A JIG FOR GUIDING PLACEMENT OF GLENOID COMPONENT OF THE IMPLANT IN SHOULDER REPLACEMENT SURGERY**

[54] **GABARIT POUR GUIDER LA MISE EN PLACE DU COMPOSANT GLENOIDIEN DE L'IMPLANT DANS UNE ARTHROPLASTIE DE L'EPAULE**

[72] SHAH, MANISH, IN

[72] DR. SHAH, MANISH, IN

[71] SHAH, MANISH, IN

[85] 2021-12-09

[86] 2019-12-10 (PCT/IN2019/050901)

[87] (WO2020/255152)

[30] IN (201921024718) 2019-06-21

[21] **3,143,140**  
[13] A1

[51] **Int.Cl. G01M 3/04 (2006.01)**

[25] EN

[54] **APPARATUS, SYSTEM AND METHOD FOR MAINTENANCE OF A STRUCTURE CARRYING A FLUID**

[54] **APPAREIL, SYSTEME ET PROCEDE D'ENTRETIEN D'UNE STRUCTURE TRANSPORTANT UN FLUIDE**

[72] HOLTE, FRODE, NO

[72] LIEN, KARSTEN, NO

[72] BRELAND, AMUND, NO

[71] PROSENCE AS, NO

[85] 2021-12-09

[86] 2020-06-11 (PCT/NO2020/050155)

[87] (WO2020/251370)

[30] NO (20190720) 2019-06-12

## PCT Applications Entering the National Phase

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[21] **3,143,141**  
[13] A1

[51] **Int.Cl. A61N 1/36 (2006.01) A61B 5/24 (2021.01) A61B 5/11 (2006.01) A61N 1/04 (2006.01)**

[25] EN

[54] **POSTURE DETERMINATION AND STIMULATION ADJUSTMENT IN A SPINAL CORD STIMULATOR SYSTEM USING SENSED STIMULATION ARTIFACTS**

[54] **AJUSTEMENT DE STIMULATION ET DETERMINATION DE POSTURE DANS UN SYSTEME DE STIMULATEUR DE MOELLE EPINIERE A L'AIDE D'ARTEFACTS DE STIMULATION DETECTES**

[72] AYDEMIR, VAROL BURAK, US  
[72] ESTELLER, ROSANA, US  
[71] BOSTON SCIENTIFIC NEUROMODULATION CORPORATION, US

[85] 2021-12-09  
[86] 2020-06-08 (PCT/US2020/036667)  
[87] (WO2020/251899)  
[30] US (62/860,627) 2019-06-12

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[21] **3,143,142**  
[13] A1

[51] **Int.Cl. A61B 5/243 (2021.01) G16H 10/60 (2018.01) G16H 50/20 (2018.01) G16H 50/30 (2018.01) A61B 5/339 (2021.01) A61B 5/35 (2021.01)**

[25] EN

[54] **HEART GRAPHIC DISPLAY SYSTEM**

[54] **SYSTEME D'AFFICHAGE GRAPHIQUE CARDIAQUE**

[72] VILLONGCO, CHRISTOPHER, US  
[71] VEKTOR MEDICAL, INC., US  
[85] 2021-12-09  
[86] 2020-06-09 (PCT/US2020/036754)  
[87] (WO2020/251918)  
[30] US (16/436,460) 2019-06-10  
[30] US (16/709,292) 2019-12-10  
[30] US (16/710,286) 2019-12-11  
[30] US (16/823,444) 2020-03-19

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[21] **3,143,143**  
[13] A1

[51] **Int.Cl. F04B 49/22 (2006.01) F04B 23/02 (2006.01) F04B 49/24 (2006.01) F04B 53/10 (2006.01)**

[25] EN

[54] **ASSEMBLY, APPARATUS AND METHOD FOR DISPENSING FLUID PRODUCTS**

[54] **ENSEMBLE, APPAREIL ET PROCEDE DE DISTRIBUTION DE PRODUITS FLUIDES**

[72] BERGAMINI, ANDREA, IT  
[72] CASALINI, GIUSEPPE, IT  
[72] THOMPSON, JOANNE SARAH, GB  
[72] D'EPENOUX, ALBAN R, CH  
[71] COROB S.P.A., IT  
[71] PPG INDUSTRIES OHIO, INC., US  
[85] 2021-12-09  
[86] 2020-06-09 (PCT/IT2020/050145)  
[87] (WO2020/250259)  
[30] IT (102019000008571) 2019-06-11

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[21] **3,143,144**  
[13] A1

[51] **Int.Cl. C08L 1/02 (2006.01) C08L 101/00 (2006.01)**

[25] EN

[54] **CELLULOSE NANOCRYSTAL-CONTAINING RESIN COMPOSITION**

[54] **COMPOSITION DE RESINE CONTENANT DES NANOCRISTAUX DE CELLULOSE**

[72] NAGAHAMA, HIDEAKI, JP  
[72] KINOSHITA, YUUKI, JP  
[71] TOYO SEIKAN GROUP HOLDINGS, LTD., JP  
[85] 2021-12-09  
[86] 2020-06-01 (PCT/JP2020/021634)  
[87] (WO2020/250738)  
[30] JP (2019-110607) 2019-06-13

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[21] **3,143,145**  
[13] A1

[51] **Int.Cl. G01N 27/14 (2006.01)**

[25] EN

[54] **SENSOR FOR COMPOSITIONS WHICH DEPOSIT UPON A SURFACE FROM A GASEOUS MATRIX**

[54] **CAPTEUR POUR COMPOSITIONS QUI SE DEPOSENT SUR UNE SURFACE A PARTIR D'UNE MATRICE GAZEUSE**

[72] SWANSON, MEGHAN E., US  
[72] SANTORO, JR., DANIEL D., US  
[72] BROWN, MICHAEL ALVIN, US  
[72] ZANELLA, SR., MARK FLORI, US  
[71] MSA TECHNOLOGY, LLC, US  
[85] 2021-12-09  
[86] 2020-06-09 (PCT/US2020/036773)  
[87] (WO2020/251925)  
[30] US (16/437,615) 2019-06-11

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[21] **3,143,146**  
[13] A1

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

[25] EN

[54] **POWER OUTAGE AND RESTORATION DETECTION FOR MULTI-METER NODES IN A MESH NETWORK**

[54] **DETECTION DE COUPURE ET RETABLISSEMENT DE COURANT POUR NŒUDS A COMPTEURS MULTIPLES DANS UN RESEAU MAILLE**

[72] GUPTA, MUNISH, IN  
[72] GOUTAM, HEMANT, IN  
[72] KULKARNI, RUSHIKESH, US  
[72] MARTINS, VINICIUS, BR  
[71] LANDIS+GYR INNOVATIONS, INC., US  
[85] 2021-12-09  
[86] 2019-06-10 (PCT/US2019/036291)  
[87] (WO2020/251527)

## Demandes PCT entrant en phase nationale

[21] **3,143,147**  
[13] A1

[51] **Int.Cl. A01N 43/90 (2006.01) A01N 47/02 (2006.01) A01P 3/00 (2006.01) A01P 7/02 (2006.01) A01P 7/04 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **AGRICULTURAL AND HORTICULTURAL CHEMICAL AGENT HAVING NOVEL IMIDAZOPYRIDINE-2-CARBOXAMIDE DERIVATIVE AS ACTIVE INGREDIENT**

[54] **AGENT CHIMIQUE AGRICOLE ET HORTICOLE DONT L'INGREDIENT ACTIF EST UN NOUVEAU DERIVE D'IMIDAZOPYRIDINE-2-CARBOXAMIDE**

[72] OYAMA, KATSUAKI, JP  
[72] OJIMA, KOHEI, JP  
[72] ARAKI, KOICHI, JP  
[72] MORISHITA, SAKI, JP  
[72] FUKUCHI, TOSHIKI, JP  
[71] AGRO-KANESHO CO., LTD., JP  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/JP2020/023192)  
[87] (WO2020/251013)  
[30] JP (2019-110238) 2019-06-13

[21] **3,143,148**  
[13] A1

[51] **Int.Cl. B29C 45/76 (2006.01) B29C 45/17 (2006.01) B29C 45/28 (2006.01) B29C 45/77 (2006.01)**

[25] EN

[54] **FLOW CONTROL OF AN INJECTION MOLDING SYSTEM**

[54] **REGULATION DE DEBIT D'UN SYSTEME DE MOULAGE PAR INJECTION**

[72] JOERG, ANTON, DE  
[72] GREB, SCOTT, US  
[72] STRIEGEL, CHRISTIAN, DE  
[71] INCOE CORPORATION, US  
[85] 2021-12-09  
[86] 2020-06-09 (PCT/US2020/036774)  
[87] (WO2020/256999)  
[30] US (16/444,677) 2019-06-18

[21] **3,143,149**  
[13] A1

[51] **Int.Cl. E02F 3/14 (2006.01) E02F 3/40 (2006.01) E02F 9/28 (2006.01)**

[25] EN

[54] **TORQUE ELEMENT AND SYSTEM FOR ABSORBING SHEAR FORCES IN A BOLT CONNECTION FOR CONNECTING A BUCKET ELEMENT IN A LOADING MACHINE BUCKET**

[54] **ELEMENT DE COUPLE ET SYSTEME PERMETTANT D'ABSORBER DES FORCES DE CISAILLEMENT DANS UNE LIAISON PAR BOULONNAGE POUR RELIER UN ELEMENT DE GODET D'UN GODET DE CHARGEUSE**

[72] TIME, EYVIND, NO  
[71] KOMATSU K VX LLC NUF, NO  
[85] 2021-12-09  
[86] 2020-06-11 (PCT/NO2020/050153)  
[87] (WO2020/251369)  
[30] NO (20190714) 2019-06-11

[21] **3,143,150**  
[13] A1

[51] **Int.Cl. G01N 27/14 (2006.01)**

[25] EN

[54] **GAS SENSOR WITH SEPARATE CONTAMINANT DETECTION ELEMENT**

[54] **CAPTEUR DE GAZ AVEC ELEMENT DE DETECTION DE CONTAMINANT SEPRE**

[72] SWANSON, MEGHAN E., US  
[72] SANTORO, JR., DANIEL D., US  
[72] BROWN, MICHAEL ALVIN, US  
[72] ZANELLA, SR., MARK FLORI, US  
[72] DETKA, CHRISTOPHER S., US  
[71] MSA TECHNOLOGY, LLC, US  
[85] 2021-12-09  
[86] 2020-06-09 (PCT/US2020/036784)  
[87] (WO2020/251931)  
[30] US (16/437,487) 2019-06-11

[21] **3,143,152**  
[13] A1

[51] **Int.Cl. H01M 10/613 (2014.01)**

[25] EN

[54] **ORGANIC HEAT TRANSFER SYSTEM, METHOD AND FLUID**

[54] **SYSTEME, PROCEDE ET FLUIDE DE TRANSFERT DE CHALEUR ORGANIQUE**

[72] SHORT, AMY L., US  
[72] SAMMUT, ALEXANDER, US  
[72] JAYNE, DOUGLAS T., US  
[72] RITZ, RYAN, US  
[71] THE LUBRIZOL CORPORATION, US  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/US2020/037392)  
[87] (WO2020/252235)  
[30] US (62/860,441) 2019-06-12

[21] **3,143,153**  
[13] A1

[51] **Int.Cl. G01N 27/404 (2006.01) G01N 33/00 (2006.01)**

[25] EN

[54] **INTERROGATION OF CAPILLARY-LIMITED SENSORS**

[54] **INTERROGATION DE CAPTEURS A LIMITATION CAPILLAIRE**

[72] SCHEFFLER, TOWNER BENNETT, US  
[71] MSA TECHNOLOGY, LLC, US  
[85] 2021-12-09  
[86] 2020-06-09 (PCT/US2020/036789)  
[87] (WO2020/251934)  
[30] US (16/437,743) 2019-06-11

[21] **3,143,154**  
[13] A1

[51] **Int.Cl. C12N 5/00 (2006.01) C12N 5/16 (2006.01) C12N 15/85 (2006.01)**

[25] EN

[54] **CELL LINES FOR HIGH LEVEL PRODUCTION OF PROTEIN-BASED PHARMACEUTICALS**

[54] **LIGNEES CELLULAIRES POUR LA PRODUCTION DE HAUT NIVEAU DE PRODUITS PHARMACEUTIQUES A BASE DE PROTEINES**

[72] FORMAN, LAWRENCE, US  
[71] CHO PLUS INC., US  
[85] 2021-12-09  
[86] 2019-06-10 (PCT/US2019/036379)  
[87] (WO2020/251537)

## PCT Applications Entering the National Phase

[21] **3,143,155**  
[13] A1

[51] **Int.Cl. A61B 5/097 (2006.01) A61B 5/08 (2006.01)**  
[25] EN  
[54] **A COLLECTION DEVICE FOR EXHALED BREATH**  
[54] **DISPOSITIF DE COLLECTE D'AIR EXPIRE**  
[72] FUNCH-NIELSEN, HELLE, DK  
[71] EXHALATION TECHNOLOGY LIMITED, GB  
[85] 2021-12-08  
[86] 2020-06-19 (PCT/GB2020/051487)  
[87] (WO2020/254819)  
[30] GB (1908784.0) 2019-06-19

[21] **3,143,156**  
[13] A1

[51] **Int.Cl. A61K 31/55 (2006.01) A61P 35/00 (2006.01) C07D 223/16 (2006.01) C07D 401/12 (2006.01) C07D 401/14 (2006.01) C07D 403/12 (2006.01) C07H 15/00 (2006.01)**  
[25] EN  
[54] **MACROMOLECULE-SUPPORTED AMINOBENZAZEPINE COMPOUNDS**  
[54] **COMPOSES D'AMINOBENZAZEPINE A SUPPORT MACROMOLECULAIRE**  
[72] ACKERMAN, SHELLEY ERIN, US  
[72] ALONSO, MICHAEL N., US  
[72] KUDIRKA, ROMAS, US  
[72] LEE, ARTHUR, US  
[72] SAFINA, BRIAN, US  
[72] ZHOU, MATTHEW, US  
[71] BOLT BIOTHERAPEUTICS, INC., US  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/US2020/037423)  
[87] (WO2020/252254)  
[30] US (62/861,117) 2019-06-13  
[30] US (62/861,139) 2019-06-13  
[30] US (62/963,884) 2020-01-21

[21] **3,143,157**  
[13] A1

[51] **Int.Cl. C12N 15/82 (2006.01) C12N 15/90 (2006.01)**  
[25] EN  
[54] **IDENTIFICATION OF RESISTANCE GENES FROM WILD RELATIVES OF BANANA AND THEIR USES IN CONTROLLING PANAMA DISEASE**  
[54] **IDENTIFICATION DE GENES DE RESISTANCE A PARTIR DE PARENTS SAUVAGES DE BANANE ET LEURS UTILISATIONS DANS LA LUTTE CONTRE LA MALADIE DE PANAMA**  
[72] MESSIER, WALTER, US  
[71] EG CROP SCIENCE, INC., US  
[85] 2021-12-09  
[86] 2020-06-09 (PCT/US2020/036828)  
[87] (WO2020/263561)  
[30] US (62/866,872) 2019-06-26  
[30] US (62/912,010) 2019-10-07

[21] **3,143,158**  
[13] A1

[51] **Int.Cl. G21C 17/04 (2006.01) G01T 1/24 (2006.01) G21C 17/10 (2006.01) H01L 31/108 (2006.01) H01L 31/118 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM TO DETECT AND LOCATE THE IN-CORE POSITION OF FUEL BUNDLES WITH CLADDING PERFORATIONS IN CANDU-STYLE NUCLEAR REACTORS**  
[54] **PROCEDE ET SYSTEME POUR DETECTER ET LOCALISER LA POSITION DE FAISCEAUX DE COMBUSTIBLE MUNIS DE PERFORATIONS DE GAINAGE DANS UN CŒUR DE REACTEUR NUCLEAIRE DE TYPE CANDU**  
[72] HEIBEL, MICHAEL D., US  
[72] ARNDT, JEFFREY L., US  
[71] WESTINGHOUSE ELECTRIC COMPANY LLC, US  
[85] 2021-12-09  
[86] 2020-06-10 (PCT/US2020/036960)  
[87] (WO2020/251995)  
[30] US (16/439,061) 2019-06-12

[21] **3,143,160**  
[13] A1

[51] **Int.Cl. H04L 12/12 (2006.01) H04L 61/30 (2022.01) H04L 12/40 (2006.01)**  
[25] EN  
[54] **MODBUS SYSTEM HAVING ACTUAL AND VIRTUAL SLAVE ADDRESSES AND SLAVE SENSORS**  
[54] **SYSTEME MODBUS AYANT DES ADRESSES ESCLAVES REELLES ET VIRTUELLES, ET CAPTEURS ESCLAVES**  
[72] FAYFIELD, ROBERT T., US  
[72] RUE, MARK RICHARD, US  
[71] BANNER ENGINEERING CORP., US  
[85] 2021-12-09  
[86] 2020-06-04 (PCT/US2020/036020)  
[87] (WO2020/251824)  
[30] US (16/436,672) 2019-06-10

[21] **3,143,161**  
[13] A1

[51] **Int.Cl. H01H 9/38 (2006.01) H01H 33/12 (2006.01) H01H 1/04 (2006.01) H01H 1/26 (2006.01) H01H 50/04 (2006.01)**  
[25] EN  
[54] **PROGRESSIVELY CONTACTING SWITCH**  
[54] **COMMUTATEUR A MISE EN CONTACT PROGRESSIVE**  
[72] BOUDREAU, FRANK J. JR., US  
[72] KRAUS, MATT E., US  
[71] LANDIS+GYR INNOVATIONS, INC., US  
[85] 2021-12-09  
[86] 2020-06-05 (PCT/US2020/036403)  
[87] (WO2020/251856)  
[30] US (16/438,713) 2019-06-12

## Demandes PCT entrant en phase nationale

[21] **3,143,163**  
[13] A1

[51] **Int.Cl. A61K 31/138 (2006.01) A61K 31/192 (2006.01) A61K 31/40 (2006.01)**

[25] EN

[54] **SWELL1-LRRC8 COMPLEX MODULATORS**

[54] **MODULATEURS DU COMPLEXE SWELL1-LRRC8**

[72] SAH, RAJAN, US

[72] KERNS, ROBERT, US

[72] CHHEDA, PRATIK, US

[71] WASHINGTON UNIVERSITY, US

[71] UNIVERSITY OF IOWA RESEARCH FOUNDATION, US

[85] 2021-12-09

[86] 2020-06-10 (PCT/US2020/037022)

[87] (WO2020/252041)

[30] US (62/859,499) 2019-06-10

[30] US (62/963,988) 2020-01-21

[30] US (62/982,531) 2020-02-27

[21] **3,143,164**  
[13] A1

[51] **Int.Cl. A01N 1/02 (2006.01)**

[25] EN

[54] **WET PRESERVATION OF TISSUE CONSERVATION HUMIDE DE TISSU**

[72] SADIK, MINDY E., US

[71] AXOGEN CORPORATION, US

[85] 2021-12-09

[86] 2020-06-10 (PCT/US2020/037056)

[87] (WO2020/252068)

[30] US (62/860,019) 2019-06-11

[21] **3,143,165**  
[13] A1

[51] **Int.Cl. B62H 3/08 (2006.01) B62H 3/00 (2006.01)**

[25] EN

[54] **SUPPORT STAND FOR TWO-WHEELED VEHICLE**

[54] **ETRIER POUR VEHICULE A DEUX ROUES**

[72] DEMERS, GUY, CA

[71] DEMERS, GUY, CA

[85] 2021-12-09

[86] 2020-07-14 (PCT/CA2020/000086)

[87] (WO2021/012032)

[30] GB (1910420.7) 2019-07-19

[21] **3,143,167**  
[13] A1

[51] **Int.Cl. C07K 16/30 (2006.01)**

[25] EN

[54] **METHODS OF PRODUCING AN ANTI-ALPHA.4.BETA.7 ANTIBODY**

[54] **PROCEDES DE PRODUCTION D'UN ANTICORPS ANTI-ALPHA.4.BETA.7**

[72] AMELI, DEBRA, US

[72] CARTER, SUSAN R., US

[72] DOLAN, MICHAEL E., US

[72] HILO, NICOLE, US

[72] KUNDU, AMITAVA, US

[72] MILLER, AMY, US

[72] PARKS, GEORGE, US

[72] PALEY, OLGA, US

[72] BHATIA, PARAS, US

[71] TAKEDA PHARMACEUTICAL COMPANY LIMITED, JP

[85] 2021-12-09

[86] 2020-06-10 (PCT/US2020/037059)

[87] (WO2020/252069)

[30] US (62/859,494) 2019-06-10

[21] **3,143,169**  
[13] A1

[51] **Int.Cl. A61P 1/04 (2006.01) A61P 37/00 (2006.01) A61P 43/00 (2006.01) G01N 33/00 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **ANTIBODY PURIFICATION METHODS AND COMPOSITIONS THEREOF**

[54] **PROCEDES DE PURIFICATION D'ANTICORPS ET COMPOSITIONS ASSOCIEES**

[72] PARKS, GEORGE, US

[72] SCHUELKE, NORBERT, US

[72] DOLAN, MICHAEL E., US

[72] OPPENHEIM, SHELDON F., US

[72] KURT, LUTFIYE, US

[71] TAKEDA PHARMACEUTICAL COMPANY LIMITED, JP

[85] 2021-12-09

[86] 2020-06-10 (PCT/US2020/037069)

[87] (WO2020/252072)

[30] US (62/859,580) 2019-06-10

[21] **3,143,170**  
[13] A1

[25] EN

[54] **INTENT BASED APPLICATION FABRIC**

[54] **MATRICE D'APPLICATION BASEE SUR L'INTENTION**

[72] SUNDARARAJAN, BALAJI, US

[72] VALLURI, VAMSIDHAR, US

[72] BALASUBRAMANIAN, CHANDRAMOULI, US

[72] OSWAL, ANAND, US

[72] SINGH, RAM DULAR, US

[71] CISCO TECHNOLOGY, INC., US

[85] 2021-12-09

[86] 2020-06-11 (PCT/US2020/037124)

[87] (WO2020/252096)

[30] US (62/860,577) 2019-06-12

[30] US (16/702,272) 2019-12-03

[21] **3,143,172**  
[13] A1

[51] **Int.Cl. G06N 99/00 (2019.01) G06N 3/08 (2006.01) G06T 7/00 (2017.01)**

[25] EN

[54] **DEEP-LEARNING MODELS FOR IMAGE PROCESSING**

[54] **MODELES D'APPRENTISSAGE PROFOND POUR TRAITEMENT D'IMAGE**

[72] GALEOTTI, JOHN, US

[72] MATHAI, TEJAS SUDHARSHAN, US

[71] CARNEGIE MELLON UNIVERSITY, US

[85] 2021-12-09

[86] 2020-06-12 (PCT/US2020/037427)

[87] (WO2020/252256)

[30] US (62/860,392) 2019-06-12

## PCT Applications Entering the National Phase

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[21] **3,143,173**  
[13] A1

[51] **Int.Cl. G06N 3/02 (2006.01) G06T 5/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR REMOVING NOISE AND/OR ARTIFACTS FROM AN OCT IMAGE USING A GENERATIVE ADVERSARIAL NETWORK**

[54] **SYSTEME ET PROCEDE POUR ELIMINER LE BRUIT ET/OU LES ARTEFACTS A PARTIR D'UNE IMAGE DE TOMOGRAPHIE PAR COHERENCE OPTIQUE (OCT) A L'AIDE D'UN RESEAU ANTAGONISTE GENERATIF**

[72] GALEOTTI, JOHN, US

[72] MATHAI, TEJAS SUDHARSHAN, US

[72] OUYANG, JIAHONG, US

[71] CARNEGIE MELLON UNIVERSITY, US

[85] 2021-12-09

[86] 2020-06-12 (PCT/US2020/037446)

[87] (WO2020/252271)

[30] US (62/860,415) 2019-06-12

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[21] **3,143,175**  
[13] A1

[51] **Int.Cl. A61B 3/00 (2006.01) A61B 3/14 (2006.01) A61F 9/007 (2006.01) G06F 3/01 (2006.01)**

[25] EN

[54] **SCENE CAMERA SYSTEMS AND METHODS FOR VITREORETINAL SURGERY**

[54] **SYSTEMES DE CAMERA DE SCENE ET PROCEDES DE CHIRURGIE VITREO-RETINIENNE**

[72] CHARLES, STEVEN T., US

[71] ALCON INC., CH

[85] 2021-12-13

[86] 2020-07-28 (PCT/IB2020/057124)

[87] (WO2021/024095)

[30] US (62/883,298) 2019-08-06

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[21] **3,143,176**  
[13] A1

[51] **Int.Cl. A61K 35/36 (2015.01) C12N 5/0797 (2010.01) C12N 5/02 (2006.01)**

[25] EN

[54] **ENHANCEMENT OF FIBROBLAST THERAPEUTIC ACTIVITY BY RNA**

[54] **AMELIORATION DE L'ACTIVITE THERAPEUTIQUE DES FIBROBLASTES PAR L'ARN**

[72] O'HEERON, PETE, US

[72] ICHIM, THOMAS, US

[71] FIGENE, LLC, US

[85] 2021-12-09

[86] 2020-06-12 (PCT/US2020/037467)

[87] (WO2020/252287)

[30] US (62/860,252) 2019-06-12

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[21] **3,143,177**  
[13] A1

[51] **Int.Cl. A61M 25/01 (2006.01) A61M 25/09 (2006.01) A61M 25/06 (2006.01)**

[25] EN

[54] **LOW-PROFILE STEERABLE CATHETER**

[54] **CATHETER ORIENTABLE A FAIBLE ENCOMBREMENT**

[72] KEIDAR, YARON, IL

[71] VALTECH CARDIO, LTD., IL

[85] 2021-12-13

[86] 2020-08-25 (PCT/IL2020/050926)

[87] (WO2021/038560)

[30] US (62/893,093) 2019-08-28

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[21] **3,143,179**  
[13] A1

[51] **Int.Cl. B60Q 1/26 (2006.01) G05D 1/00 (2006.01)**

[25] EN

[54] **TECHNIQUES FOR VOLUMETRIC ESTIMATION**

[54] **TECHNIQUES D'ESTIMATION VOLUMETRIQUE**

[72] THEVERAPPERUMA, LALIN, US

[72] HALDER, BIBHRAJIT, US

[72] BALASUBRAMANIAN, KOUSHIK, IN

[71] SAFEAI, INC., US

[85] 2021-12-13

[86] 2019-12-05 (PCT/US2019/064776)

[87] (WO2020/256771)

[30] US (62/862,633) 2019-06-17

[30] US (62/863,211) 2019-06-18

[30] US (16/657,921) 2019-10-18

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[21] **3,143,181**  
[13] A1

[51] **Int.Cl. G06T 7/30 (2017.01) A61B 8/14 (2006.01) A61B 17/42 (2006.01) G06N 3/08 (2006.01)**

[25] EN

[54] **ADAPTIVE IMAGE PROCESSING METHOD AND SYSTEM IN ASSISTED REPRODUCTIVE TECHNOLOGIES**

[54] **PROCEDE ET SYSTEME DE TRAITEMENT D'IMAGE ADAPTATIVE DANS DES TECHNOLOGIES DE REPRODUCTION ASSISTEE**

[72] SCHNORR, JOHN ANTHONY, US

[71] CYCLE CLARITY, LLC, US

[85] 2021-12-13

[86] 2020-05-12 (PCT/US2020/032544)

[87] (WO2020/251714)

[30] US (16/442,418) 2019-06-14

[30] US (16/442,423) 2019-06-14

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[21] **3,143,182**  
[13] A1

[51] **Int.Cl. F16J 15/34 (2006.01)**

[25] EN

[54] **TORQUE RESISTANT SEAL**

[54] **JOINT D'ETANCHEITE RESISTANT AU COUPLE**

[72] PLOUSE, LOREENA S., US

[72] CRUNKLETON, KENNETH L., US

[72] TURCZYN, DENNIS M., US

[72] COPPLE, BENJAMIN J., US

[71] CATERPILLAR INC., US

[85] 2021-12-13

[86] 2020-05-18 (PCT/US2020/033347)

[87] (WO2020/263454)

[30] US (16/452,210) 2019-06-25

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[21] **3,143,184**  
[13] A1

[51] **Int.Cl. G06Q 30/00 (2012.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR TRACKING EARNED REWARDS FOR ONLINE TRANSACTION**

[54] **SYSTEME ET PROCEDE DE SUIVI DE RECOMPENSES GAGNEES POUR UNE TRANSACTION EN LIGNE**

[72] LAL, RANJAN, US

[72] BOODMAN, BRIAN D., US

[72] PATACCHIOLA, ERIC, US

[71] CAPITAL INTELLECT, INC., US

[85] 2021-12-13

[86] 2020-06-02 (PCT/US2020/035734)

[87] (WO2020/251804)

[30] US (62/861,104) 2019-06-13

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## Demandes PCT entrant en phase nationale

[21] **3,143,185**  
[13] A1

[51] **Int.Cl. C07C 4/04 (2006.01) C07C 4/06 (2006.01) C07C 5/333 (2006.01) C07C 7/00 (2006.01) C07C 7/04 (2006.01) C07C 7/167 (2006.01)**

[25] EN

[54] **METHODS FOR OPERATING INTEGRATED CHEMICAL PROCESSING SYSTEMS FOR PRODUCING OLEFINS**

[54] **PROCEDES DE FONCTIONNEMENT DE SYSTEMES INTEGRES DE TRAITEMENT CHIMIQUE POUR LA PRODUCTION D'OLEFINES**

[72] LUO, LIN, US  
[72] WANG, HANGYAO, US  
[72] LIU, YU, US  
[72] FISH, BARRY B., US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2021-12-13  
[86] 2020-06-08 (PCT/US2020/036582)  
[87] (WO2020/263544)  
[30] US (62/865,597) 2019-06-24

[21] **3,143,186**  
[13] A1

[51] **Int.Cl. C07C 4/04 (2006.01) C07C 5/333 (2006.01) C07C 7/00 (2006.01) C07C 7/04 (2006.01) C07C 7/167 (2006.01)**

[25] EN

[54] **METHODS FOR OPERATING ACETYLENE HYDROGENATION UNITS DURING INTEGRATION OF CHEMICAL PROCESSING SYSTEMS FOR PRODUCING OLEFINS**

[54] **PROCEDES POUR LE FONCTIONNEMENT D'UNITES D'HYDROGENATION D'ACETYLENE PENDANT L'INTEGRATION DE SYSTEMES DE TRAITEMENT CHIMIQUE POUR LA PRODUCTION D'OLEFINES**

[72] WANG, HANGYAO, US  
[72] LUO, LIN, US  
[72] LIU, YU, US  
[72] PRETZ, MATTHEW T., US  
[72] MALEK, ANDRZEJ, US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2021-12-13  
[86] 2020-06-08 (PCT/US2020/036590)  
[87] (WO2020/263546)  
[30] US (62/865,583) 2019-06-24

[21] **3,143,187**  
[13] A1

[51] **Int.Cl. C07C 5/09 (2006.01) C07C 5/333 (2006.01) C07C 5/42 (2006.01) C07C 7/167 (2006.01) C07C 9/06 (2006.01) C10G 9/36 (2006.01) C10G 11/00 (2006.01) C10G 45/32 (2006.01) C10G 51/04 (2006.01) C10G 69/06 (2006.01) C10G 70/02 (2006.01)**

[25] EN

[54] **METHODS FOR OPERATING ACETYLENE HYDROGENATION UNITS IN INTEGRATED STEAM CRACKING AND FLUIDIZED CATALYTIC DEHYDROGENATION SYSTEMS**

[54] **PROCEDES PERMETTANT DE FAIRE FONCTIONNER DES UNITES D'HYDROGENATION D'ACETYLENE DANS DES SYSTEMES INTEGRES DE VAPOCRAQUAGE ET DE DESHYDROGENATION CATALYTIQUE A LIT FLUIDISE**

[72] LUO, LIN, US  
[72] WANG, HANGYAO, US  
[72] LIU, YU, US  
[72] PRETZ, MATTHEW T., US  
[72] MALEK, ANDRZEJ, US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2021-12-13  
[86] 2020-06-08 (PCT/US2020/036586)  
[87] (WO2020/263545)  
[30] US (62/865,594) 2019-06-24

[21] **3,143,188**  
[13] A1

[51] **Int.Cl. A61K 31/497 (2006.01) C07D 231/56 (2006.01) C07D 235/08 (2006.01)**

[25] EN

[54] **HDAC3 CATALYTIC INHIBITOR DEVELOPMENT AND USES THEREOF**

[54] **DEVELOPPEMENT D'INHIBITEURS CATALYTIQUES DE HDAC3 ET LEURS UTILISATIONS**

[72] LI, DEYAO, US  
[72] PARK, PAUL, US  
[72] QI, JUN, US  
[72] WU, LEI, US  
[71] DANA-FARBER CANCER INSTITUTE, INC., US  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/US2020/037510)  
[87] (WO2020/252323)  
[30] US (62/860,927) 2019-06-13

[21] **3,143,189**  
[13] A1

[51] **Int.Cl. G08C 17/02 (2006.01) H04L 12/28 (2006.01) H04Q 9/00 (2006.01)**

[25] EN

[54] **SMART WALL-PLATE SYSTEM**

[54] **SYSTEME DE PLAQUE MURALE INTELLIGENT**

[72] ARD, AARON, US  
[72] SHURTE, JAMES, US  
[72] IDE, JESSE, US  
[72] GUMINA, RICHARD, US  
[71] LEVITON MANUFACTURING CO., INC., US  
[85] 2021-12-13  
[86] 2020-06-09 (PCT/US2020/036765)  
[87] (WO2020/251922)  
[30] US (62/861,449) 2019-06-14

[21] **3,143,190**  
[13] A1

[51] **Int.Cl. A61H 3/00 (2006.01) A61G 7/10 (2006.01)**

[25] EN

[54] **GAIT TRAINER FOR TRAINING OF NEUROMUSCULAR FUNCTIONS**

[54] **APPAREIL D'ENTRAINEMENT A LA MARCHE SERVANT A L'ENTRAINEMENT DE FONCTIONS NEUROMUSCULAIRES**

[72] UBYS, LAURYNAS, DK  
[72] ANDERSEN, JENS K., DK  
[72] STENSGAARD, STINE H, DK  
[72] RATHKE, MORTEN, DK  
[71] V. GULDMANN A/S, DK  
[85] 2021-12-02  
[86] 2020-06-15 (PCT/DK2020/050169)  
[87] (WO2020/249177)  
[30] DK (PA 2019 70372) 2019-06-13

## PCT Applications Entering the National Phase

[21] **3,143,192**  
[13] A1

[51] **Int.Cl. G16H 30/40 (2018.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR LABELING ULTRASOUND DATA**  
[54] **SYSTEME ET PROCEDE POUR ETIQUETER DES DONNEES ULTRASONORES**  
[72] GALEOTTI, JOHN, US  
[72] MATHAI, TEJAS SUDHARSHAN, US  
[72] LI, JIAYUAN, US  
[72] RODRIGUEZ, RICARDO LUIS, US  
[71] CARNEGIE MELLON UNIVERSITY, US  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/US2020/037519)  
[87] (WO2020/252330)

[21] **3,143,193**  
[13] A1

[51] **Int.Cl. A61H 37/00 (2006.01) A61H 15/00 (2006.01)**  
[25] EN  
[54] **PRESSURE RELEASE AND MASSAGE TOOL**  
[54] **OUTIL DE MASSAGE ET DE RELACHEMENT DE PRESSION**  
[72] KOTH, CHRISTINE ANNETTE, US  
[71] KOTH, CHRISTINE ANNETTE, US  
[85] 2021-12-13  
[86] 2020-06-10 (PCT/US2020/037089)  
[87] (WO2020/252089)  
[30] US (62/860,222) 2019-06-11  
[30] US (16/850,801) 2020-04-16

[21] **3,143,194**  
[13] A1

[51] **Int.Cl. A01G 13/00 (2006.01) A01G 7/00 (2006.01) A01G 9/18 (2006.01) A01G 9/20 (2006.01) A01G 9/24 (2006.01)**  
[25] EN  
[54] **PHENOTYPIC HORTICULTURE SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES D'HORTICULTURE PHENOTYPIQUE**  
[72] KNOWLES, KEVIN, US  
[71] PRECISION PROCESS SYSTEMS LLC, US  
[85] 2021-09-27  
[86] 2020-03-30 (PCT/US2020/025845)  
[87] (WO2020/198753)  
[30] US (62/825,451) 2019-03-28

[21] **3,143,195**  
[13] A1

[51] **Int.Cl. B01D 27/08 (2006.01) B01D 35/30 (2006.01)**  
[25] EN  
[54] **FILTER ELEMENT**  
[54] **ELEMENT FILTRE**  
[72] STAMEY, WILLIE LUTHER, US  
[72] ROLL, MARK A., US  
[71] MANN+HUMMEL FILTRATION TECHNOLOGY US LLC, US  
[85] 2021-12-13  
[86] 2020-06-12 (PCT/US2020/037470)  
[87] (WO2020/252289)  
[30] US (16/442,222) 2019-06-14

[21] **3,143,196**  
[13] A1

[51] **Int.Cl. C07D 235/04 (2006.01) A61K 31/4184 (2006.01)**  
[25] EN  
[54] **ACETYL-COA SYNTHETASE 2 (ACSS2) INHIBITORS AND METHODS USING SAME**  
[54] **INHIBITEURS DE L'ACETYL-COA SYNTHETASE 2 (ACSS2) ET LEURS PROCEDES D'UTILISATION**  
[72] SCHUG, ZACHARY, US  
[72] SALVINO, JOSEPH, US  
[71] THE WISTAR INSTITUTE, US  
[85] 2021-12-09  
[86] 2020-06-12 (PCT/US2020/037626)  
[87] (WO2020/252407)  
[30] US (62/860,691) 2019-06-12

[21] **3,143,197**  
[13] A1

[51] **Int.Cl. A47J 43/07 (2006.01) A47J 19/00 (2006.01) A47J 43/046 (2006.01) A47J 47/02 (2006.01)**  
[25] EN  
[54] **VACUUM FOOD PROCESSING SYSTEM**  
[54] **SYSTEME DE TRAITEMENT D'ALIMENTS SOUS VIDE**  
[72] BANNISTER, SAM WILLIAM, GB  
[72] TING, MICHAEL, US  
[72] FOGARASI, KRISTOF BENEDICT, US  
[72] O'LOUGHLIN, NICHOLAS MICHAEL, CN  
[71] SHARKNINJA OPERATING LLC, US  
[85] 2021-12-13  
[86] 2020-06-12 (PCT/US2020/037484)  
[87] (WO2020/252301)  
[30] US (62/861,812) 2019-06-14

[21] **3,143,198**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01) C12N 5/0783 (2010.01) A61P 31/18 (2006.01)**  
[25] EN  
[54] **ACTIVATED LYMPHOCYTIC CELLS AND METHODS OF USING THE SAME TO TREAT CANCER AND INFECTIOUS CONDITIONS**  
[54] **CELLULES LYMPHOCYTAIRES ACTIVEES ET LEURS METHODES D'UTILISATION POUR TRAITER LE CANCER ET DES ETATS INFECTIEUX**  
[72] GUMRUKCU, SERHAT, US  
[71] G TECH BIO LLC, US  
[85] 2021-12-09  
[86] 2020-06-15 (PCT/US2020/037704)  
[87] (WO2020/252441)  
[30] US (62/861,487) 2019-06-14

[21] **3,143,199**  
[13] A1

[51] **Int.Cl. G16H 20/10 (2018.01)**  
[25] EN  
[54] **METHODS OF TREATING PROSTATE CANCER BASED ON MOLECULAR SUBTYPES**  
[54] **METHODES DE TRAITEMENT DU CANCER DE LA PROSTATE SUR LA BASE DE SOUS-TYPES MOLECULAIRES**  
[72] CLEMENTE, AGUILAR, US  
[72] GORMLEY, MICHAEL, US  
[72] THOMAS, SHIBU, US  
[71] JANSSEN PHARMACEUTICA NV, BE  
[85] 2021-12-08  
[86] 2020-01-30 (PCT/IB2020/050762)  
[87] (WO2020/157704)  
[30] US (62/799,036) 2019-01-30  
[30] US (62/799,037) 2019-01-30  
[30] US (62/801,609) 2019-02-05  
[30] US (62/801,610) 2019-02-05  
[30] US (62/824,968) 2019-03-27  
[30] US (62/825,001) 2019-03-27  
[30] US (62/938,318) 2019-11-20

## Demandes PCT entrant en phase nationale

[21] **3,143,200**  
[13] A1

[51] **Int.Cl. A61B 46/10 (2016.01) A61B 34/30 (2016.01) A61B 34/37 (2016.01)**

[25] EN

[54] **STERILE BARRIER SYSTEMS AND METHODS FOR ROBOTIC SURGERY SYSTEMS**

[54] **SYSTEMES DE BARRIERE STERILE ET PROCEDES POUR SYSTEMES DE CHIRURGIE ROBOTIQUE**

[72] GENOVA, PERRY A., CA  
[72] WALTERS, CHAD CLAYTON, US  
[72] LAUT, MICHAEL EDWARD, US  
[72] BOCKMANN, STEVEN WAYNE, US  
[72] HUNT, TIMOTHY BRANDON, US  
[72] PAEZ, MANUEL, US  
[72] SANKHOLKAR, SACHIN A., CA  
[71] TITAN MEDICAL INC., CA  
[85] 2021-12-09  
[86] 2020-06-16 (PCT/US2020/037951)  
[87] (WO2020/263630)  
[30] US (16/453,910) 2019-06-26  
[30] US (16/453,930) 2019-06-26  
[30] US (16/453,933) 2019-06-26  
[30] US (16/453,939) 2019-06-26  
[30] US (16/453,948) 2019-06-26

[21] **3,143,201**  
[13] A1

[51] **Int.Cl. A61B 5/1455 (2006.01) A61B 5/01 (2006.01) A61B 5/024 (2006.01) G08B 21/02 (2006.01) H04R 1/10 (2006.01)**

[25] EN

[54] **WEARABLE EARPIECE OXYGEN MONITOR**

[54] **DISPOSITIF DE SURVEILLANCE D'OXYGENE D'ECOUTEUR PORTABLE**

[72] FERNANDO, SHAVINI, US  
[71] OXIWEAR, INC., US  
[85] 2021-12-09  
[86] 2020-06-17 (PCT/US2020/038146)  
[87] (WO2020/257291)  
[30] US (62/862,316) 2019-06-17

[21] **3,143,202**  
[13] A1

[51] **Int.Cl. A61F 5/445 (2006.01) A61F 5/44 (2006.01)**

[25] EN

[54] **LEAKAGE DETECTION SYSTEM FOR OSTOMY APPLIANCE**

[54] **SYSTEME DE DETECTION DE FUITE POUR APPAREILLAGE STOMIQUE**

[72] CARLSSON, JONAS P., US  
[72] PARK, RYAN S., US  
[72] MUSINSKY, STEPHANIE, US  
[72] LIDDLE, SCOTT E., US  
[72] MATTHEWS, KYLE A., US  
[72] NOLAN, MICHAEL P., US  
[72] LATTANZI, LAUREN M., US  
[72] SMITH, ANTHONY B., US  
[72] AUGUSTYN, CHRISTINA, US  
[71] HOLLISTER INCORPORATED, US  
[85] 2021-12-09  
[86] 2020-06-15 (PCT/US2020/037744)  
[87] (WO2020/252458)  
[30] US (62/861,508) 2019-06-14  
[30] US (63/028,008) 2020-05-21  
[30] US (63/029,053) 2020-05-22

[21] **3,143,203**  
[13] A1

[51] **Int.Cl. A61K 31/33 (2006.01) A61K 9/14 (2006.01) A61K 9/20 (2006.01) A61K 9/48 (2006.01) A61K 31/05 (2006.01) A61K 31/335 (2006.01) A61K 31/35 (2006.01) A61P 25/02 (2006.01) A61P 25/14 (2006.01) A61P 25/24 (2006.01) A61P 25/32 (2006.01)**

[25] EN

[54] **FORMULATIONS OF DIHYDROMYRICETIN AND A PERMEABILIZER**

[54] **FORMULATIONS DE DIHYDROMYRICETINE ET D'UN AGENT DE PERMEABILISATION**

[72] PRUD'HOMME, ROBERT K., US  
[72] CAGGIANO, NICHOLAS, US  
[72] TIAN, CHANG, US  
[71] CHEERS HEALTH INC., US  
[71] THE TRUSTEES OF PRINCETON UNIVERSITY, US  
[85] 2021-12-13  
[86] 2020-06-12 (PCT/US2020/037542)  
[87] (WO2020/252346)  
[30] US (62/861,895) 2019-06-14

[21] **3,143,204**  
[13] A1

[51] **Int.Cl. B01D 19/00 (2006.01) C01B 32/50 (2017.01) C01B 32/55 (2017.01) C01B 32/60 (2017.01) B01D 53/34 (2006.01) B01D 53/74 (2006.01) B01D 53/75 (2006.01) B01D 63/16 (2006.01)**

[25] EN

[54] **ALKALINE CATION ENRICHMENT AND WATER ELECTROLYSIS TO PROVIDE CO2 MINERALIZATION AND GLOBAL-SCALE CARBON MANAGEMENT**

[54] **ENRICHISSEMENT DE CATIONS ALCALINS ET ELECTROLYSE DE L'EAU POUR FOURNIR UNE MINERALISATION DE CO2 ET UNE GESTION DE CARBONE A L'ECHELLE MONDIALE**

[72] SANT, GAURAV, US  
[72] LA PLANTE, ERIKA CALLAGON, US  
[72] WANG, JINGBO, US  
[72] JASSBY, DAVID, US  
[72] SIMONETTI, DANTE, US  
[72] ALTURKI, ABDULAZIZ, US  
[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US  
[85] 2021-12-13  
[86] 2020-06-12 (PCT/US2020/037629)  
[87] (WO2021/061213)  
[30] US (62/861,848) 2019-06-14

[21] **3,143,205**  
[13] A1

[51] **Int.Cl. A61N 1/36 (2006.01) A61N 1/02 (2006.01) A61N 1/05 (2006.01)**

[25] EN

[54] **METHODS AND DEVICES FOR IMPROVING SENSORY PERCEPTION BY TONIC VAGUS NERVE STIMULATION**

[54] **METHODES ET DISPOSITIFS POUR AMELIORER LA PERCEPTION SENSORIELLE PAR STIMULATION TONIQUE DU NERF VAGUE**

[72] WANG, QI, US  
[72] RODENKIRCH, CHARLES, US  
[71] THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, US  
[85] 2021-12-13  
[86] 2020-06-14 (PCT/US2020/037660)  
[87] (WO2020/252428)  
[30] US (62/861,715) 2019-06-14

## PCT Applications Entering the National Phase

[21] **3,143,206**  
[13] A1

[51] **Int.Cl. A61L 27/36 (2006.01)**  
[25] EN  
[54] **BIOPROSTHETIC TISSUE PREPARATION**  
[54] **PREPARATION DE TISSU BIOPROTHETIQUE**  
[72] TIAN, BIN, US  
[72] DE LA FUENTE, ANGELA B., US  
[72] WRIGHT, GREGORY A., US  
[72] HAN, JINGJIA, US  
[72] SHANG, HAO, US  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-13  
[86] 2020-12-08 (PCT/US2020/063728)  
[87] (WO2021/118964)  
[30] US (62/945,721) 2019-12-09

[21] **3,143,207**  
[13] A1

[51] **Int.Cl. A61J 1/05 (2006.01) B01L 3/00 (2006.01) G01N 1/00 (2006.01) G01N 1/10 (2006.01)**  
[25] EN  
[54] **SAMPLE COLLECTION SYSTEM INCLUDING VALVE AND PLUG ASSEMBLIES**  
[54] **SYSTEME DE COLLECTE D'ECHANTILLON COMPRENANT DES ENSEMBLES DE VANNE ET BOUCHON**  
[72] WILLIAMS, KEVIN, US  
[72] JOHNSON, NEIL, US  
[71] SPECTRUM SOLUTIONS, LLC, US  
[85] 2021-12-13  
[86] 2020-06-20 (PCT/US2020/038858)  
[87] (WO2020/257741)  
[30] US (62/864,500) 2019-06-20  
[30] US (16/906,830) 2020-06-19

[21] **3,143,208**  
[13] A1

[51] **Int.Cl. A63C 5/02 (2006.01) A63C 9/00 (2012.01)**  
[25] EN  
[54] **FOLDING SKI**  
[54] **SKI PLIANT**  
[72] AVGUSTIN, VINKO, SI  
[72] HROVAT, ANDREJ, SI  
[71] ELAN, D.O.O., SI  
[85] 2021-12-08  
[86] 2020-05-26 (PCT/IB2020/054959)  
[87] (WO2020/254893)  
[30] SI (P-201900119) 2019-06-18

[21] **3,143,209**  
[13] A1

[51] **Int.Cl. G08B 13/14 (2006.01) G08B 21/02 (2006.01)**  
[25] EN  
[54] **AN ELECTRIC LOCK**  
[54] **VERROU ELECTRIQUE**  
[72] BARRETT, CLINT, GB  
[71] BARRETT, CLINT, GB  
[85] 2021-12-08  
[86] 2020-06-18 (PCT/IB2020/055687)  
[87] (WO2020/255003)  
[30] GB (1908713.9) 2019-06-18

[21] **3,143,210**  
[13] A1

[51] **Int.Cl. A61K 47/55 (2017.01) A61K 31/5025 (2006.01) A61K 31/513 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **HSP90-BINDING CONJUGATES AND COMBINATION THERAPIES THEREOF**  
[54] **CONJUGUES DE LIAISON A LA HSP90 ET POLYTHERAPIES ASSOCIEES**  
[72] BLOSS, JEFFREY, US  
[72] PERINO, SAMANTHA, US  
[72] QUINN, JAMES M., US  
[72] WHALEN, KERRY, US  
[72] WOOSTER, RICHARD, US  
[72] KRIKSCIUKAITE, KRISTINA, US  
[72] MEI, LAURA E., US  
[72] BILODEAU, MARK T., US  
[71] TARVEDA THERAPEUTICS, INC., US  
[85] 2021-12-13  
[86] 2020-06-24 (PCT/US2020/039261)  
[87] (WO2020/263907)  
[30] US (62/866,140) 2019-06-25  
[30] US (62/899,777) 2019-09-13  
[30] US (63/035,048) 2020-06-05

[21] **3,143,211**  
[13] A1

[51] **Int.Cl. C12N 15/13 (2006.01) C07K 16/18 (2006.01) C07K 16/28 (2006.01) C07K 16/46 (2006.01)**  
[25] EN  
[54] **ILIRAP BINDING PROTEINS**  
[54] **PROTEINES DE LIAISON A L'ILIRAP**  
[72] EMERY, JOHN G., US  
[72] FEI, QI, CN  
[72] GONG, SHIYONG, CN  
[72] KUMAR, SANJAY, US  
[72] REN, FANG, CN  
[72] YANG, TEDDY, CN  
[72] YANG, HUA, CN  
[71] GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED, GB  
[85] 2021-12-08  
[86] 2020-06-22 (PCT/IB2020/055887)  
[87] (WO2020/261097)  
[30] CN (PCT/CN2019/093114) 2019-06-26

[21] **3,143,212**  
[13] A1

[51] **Int.Cl. A61C 13/08 (2006.01) A61C 5/77 (2017.01) A61C 8/00 (2006.01) A61C 13/10 (2006.01)**  
[25] EN  
[54] **DENTAL COMPONENTS AND METHODS TO ALIGN DENTAL COMPONENTS**  
[54] **ELEMENTS DENTAIRE ET PROCEDES D'ALIGNEMENT D'ELEMENTS DENTAIRE**  
[72] WEITZEL, JORG, DE  
[72] WEBER, URS, CH  
[72] UNAL, IBRAHIM, CH  
[72] SIEGFRIED, MARCEL, CH  
[71] NOBEL BIOCARE SERVICES AG, CH  
[85] 2021-12-08  
[86] 2020-06-23 (PCT/EP2020/067504)  
[87] (WO2020/260283)  
[30] EP (19182292.3) 2019-06-25

## Demandes PCT entrant en phase nationale

[21] **3,143,213**  
[13] A1

[51] **Int.Cl. A61M 1/36 (2006.01)**  
[25] EN  
[54] **BIOLOGICAL FLUID TREATMENT SYSTEMS**  
[54] **SYSTEMES DE TRAITEMENT DE FLUIDES BIOLOGIQUES**  
[72] CHURCH, DANIEL, US  
[72] ISON, LLOYD, US  
[72] STERN, MARC, US  
[71] CERUS CORPORATION, US  
[85] 2021-12-13  
[86] 2020-06-22 (PCT/US2020/039011)  
[87] (WO2020/263759)  
[30] US (62/865,207) 2019-06-22  
[30] US (62/869,544) 2019-07-01  
[30] US (62/986,593) 2020-03-06

[21] **3,143,214**  
[13] A1

[51] **Int.Cl. B01D 9/00 (2006.01) C30B 7/00 (2006.01) C30B 29/54 (2006.01)**  
[25] EN  
[54] **CRYSTALLISATION OF CHEMICAL MOLECULES**  
[54] **CRISTALLISATION DE MOLECULES CHIMIQUES**  
[72] HALL, MICHAEL, GB  
[72] PROBERT, MICHAEL, GB  
[72] TYLER, ANDREW, GB  
[71] UNIVERSITY OF NEWCASTLE UPON TYNE, GB  
[85] 2021-12-08  
[86] 2020-06-11 (PCT/GB2020/051409)  
[87] (WO2020/249951)  
[30] GB (1908349.2) 2019-06-11

[21] **3,143,215**  
[13] A1

[51] **Int.Cl. A61B 17/86 (2006.01) A61B 17/80 (2006.01)**  
[25] EN  
[54] **DEFORMABLE THREADED LOCKING STRUCTURES, AND RELATED SYSTEMS AND METHODS**  
[54] **STRUCTURES DE VERROUILLAGE FILETEES DEFORMABLES ET SYSTEMES ET PROCEDES ASSOCIES**  
[72] OBERLI, JOEL, CH  
[72] AEBI, THIS, CH  
[72] ROCCI, MIRKO, CH  
[72] MENZE, JOHANNA F., CH  
[72] GHAMMAR, SAID, CH  
[71] DEPUY SYNTHES PRODUCTS, INC., US  
[85] 2021-12-08  
[86] 2020-05-08 (PCT/IB2020/054383)  
[87] (WO2020/250052)  
[30] US (16/437,105) 2019-06-11

[21] **3,143,216**  
[13] A1

[51] **Int.Cl. G06Q 50/10 (2012.01) G16Y 40/20 (2020.01)**  
[25] EN  
[54] **ANALYZING MARKS IN VISUALIZATIONS BASED ON DATASET CHARACTERISTICS**  
[54] **ANALYSE DE MARQUES DANS DES VISUALISATIONS SUR LA BASE DE CARACTERISTIQUES DE JEU DE DONNEES**  
[72] NENNINGER, BRIAN WILLIAM, US  
[72] THOMPSON, MADELEINE BRADLEY, US  
[72] TIBBETTS, RICHARD SINGLETON, US  
[72] SILVERSTEIN, ALEXANDER GARDNER, US  
[71] TABLEAU SOFTWARE, LLC, US  
[85] 2021-12-09  
[86] 2020-06-17 (PCT/US2020/038157)  
[87] (WO2020/257295)  
[30] US (62/862,349) 2019-06-17  
[30] US (16/903,967) 2020-06-17

[21] **3,143,217**  
[13] A1

[51] **Int.Cl. H04W 52/02 (2009.01)**  
[25] EN  
[54] **MECHANISM FOR HANDLING PDCCH SKIPPING AND WAKE UP SIGNALING**  
[54] **MECANISME DE GESTION D'UN SAUT DE PDCCH ET D'UNE SIGNALISATION DE REVEIL**  
[72] KOSKINEN, JUSSI-PEKKA, FI  
[72] WU, CHUNLI, CN  
[72] TURTIMEN, SAMULI, FI  
[71] NOKIA TECHNOLOGIES OY, FI  
[85] 2021-12-10  
[86] 2019-06-12 (PCT/CN2019/090854)  
[87] (WO2020/248153)

[21] **3,143,218**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) C07K 14/54 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **ANTIBODY-INTERLEUKIN FUSION PROTEIN AND METHODS OF USE**  
[54] **PROTEINE DE FUSION ANTICORPS-INTERLEUKINE ET PROCEDES D'UTILISATION**  
[72] YANG, LAN, CN  
[72] YU, GUOLIANG, US  
[72] SHI, QIAN, CN  
[72] FEI, ZHONGWEI, CN  
[72] MA, BIAO, CN  
[71] APOLLOMICS INC. (HANGZHOU), CN  
[85] 2021-12-10  
[86] 2020-06-10 (PCT/CN2020/095354)  
[87] (WO2020/249003)  
[30] CN (PCT/CN2019/090494) 2019-06-10

[21] **3,143,219**  
[13] A1

[51] **Int.Cl. G02B 6/38 (2006.01)**  
[25] EN  
[54] **OPTICAL FIBER CONNECTOR**  
[54] **CONNECTEUR DE FIBRES OPTIQUES**  
[72] LEESON, KIM, GB  
[71] PPC BROADBAND FIBER LTD., GB  
[85] 2021-12-10  
[86] 2020-06-12 (PCT/IB2020/000476)  
[87] (WO2020/250038)  
[30] US (62/860,283) 2019-06-12

## PCT Applications Entering the National Phase

[21] **3,143,220**  
[13] A1

[51] **Int.Cl. A47J 31/44 (2006.01) A47J 31/24 (2006.01) A47J 31/36 (2006.01)**  
[25] EN  
[54] **MOTORIZED BREWING UNIT**  
[54] **UNITE D'INFUSION MOTORISEE**  
[72] ROTTA, DENIS, IT  
[72] MOLINARO, GABRIELE, IT  
[71] LUIGI LAVAZZA S.P.A., IT  
[85] 2021-12-10  
[86] 2020-06-10 (PCT/IB2020/055431)  
[87] (WO2020/250134)  
[30] IT (102019000008844) 2019-06-13

[21] **3,143,221**  
[13] A1

[51] **Int.Cl. C07K 16/18 (2006.01) A61K 39/00 (2006.01) A61P 35/00 (2006.01) C12N 15/13 (2006.01) G01N 33/574 (2006.01)**  
[25] EN  
[54] **NOVEL ANTIBODIES SPECIFIC FOR CTHRC1 AND USE THEREOF**  
[54] **NOUVEAUX ANTICORPS SPECIFIQUES DE CTHRC1 ET LEUR UTILISATION**  
[72] KOH, SANG SEOK, KR  
[72] KANG, MIN KYUNG, KR  
[72] PARK, SO YEON, SG  
[71] PRESTIGE BIOPHARMA PTE. LTD., SG  
[85] 2021-12-10  
[86] 2020-06-15 (PCT/IB2020/055561)  
[87] (WO2020/250204)  
[30] KR (10-2019-0070048) 2019-06-13

[21] **3,143,222**  
[13] A1

[51] **Int.Cl. C10M 159/22 (2006.01)**  
[25] EN  
[54] **MIXTURE CONTAINING CALIXARENES, PROCESS FOR THE PRODUCTION THEREOF AND USE THEREOF FOR PREPARING DETERGENT COMPOSITIONS FOR LUBRICANTS**  
[54] **MELANGE CONTENANT DES CALIXARENES, SON PROCEDE DE PRODUCTION ET SON UTILISATION POUR LA PREPARATION DE COMPOSITIONS DETERGENTES POUR LUBRIFIANTS**  
[72] NOTARI, MARCELLO, IT  
[72] ASSANELLI, GIULIO, IT  
[72] CASNATI, ALESSANDRO, IT  
[72] SANSONE, FRANCESCO, IT  
[72] MAGINI, ANDREA, IT  
[71] ENI S.P.A., IT  
[85] 2021-12-10  
[86] 2020-06-26 (PCT/IB2020/056083)  
[87] (WO2020/261217)  
[30] IT (102019000010092) 2019-06-26

[21] **3,143,223**  
[13] A1

[51] **Int.Cl. F04D 29/10 (2006.01) F16J 15/3204 (2016.01) F04D 29/12 (2006.01) F16J 15/18 (2006.01) F16J 15/34 (2006.01)**  
[25] EN  
[54] **SEAL**  
[54] **JOINT D'ETANCHEITE**  
[72] LODERER, PAVOL, GB  
[72] LOCKE, MATTHEW, GB  
[72] CLARENCE, PAUL, GB  
[72] BERNARDO JUNIOR, WILSON, CL  
[71] WEIR MINERALS EUROPE LIMITED, GB  
[85] 2021-12-10  
[86] 2020-07-03 (PCT/IB2020/056299)  
[87] (WO2021/005477)  
[30] GB (1909807.8) 2019-07-09

[21] **3,143,224**  
[13] A1

[51] **Int.Cl. G01N 1/00 (2006.01)**  
[25] EN  
[54] **OIL RESIDUE PROTECTION IN OIL-ENCAPSULATED DIGITAL MICROFLUIDICS**  
[54] **PROTECTION CONTRE LES RESIDUS D'HUILE DANS UN RESEAU MICROFLUIDIQUE NUMERIQUE ENCAPSULE DANS L'HUILE**  
[72] BRASSARD, DANIEL, CA  
[72] MALIC, LIDIJA, CA  
[72] MORTON, KEITH, CA  
[72] VERES, TEODOR, CA  
[71] NATIONAL RESEARCH COUNCIL OF CANADA, CA  
[85] 2021-12-10  
[86] 2020-07-09 (PCT/IB2020/056483)  
[87] (WO2021/005560)  
[30] US (62/872,374) 2019-07-10

[21] **3,143,225**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61B 17/068 (2006.01)**  
[25] EN  
[54] **ANCHOR CHANNEL TIP**  
[54] **POINTE DE CANAL D'ANCRAGE**  
[72] IFLAH, EHUD, IL  
[72] SHEPS, TAL, IL  
[72] BRAUON, HAIM, IL  
[72] PEER, AMIT, IL  
[71] VALTECH CARDIO, LTD., IL  
[85] 2021-12-10  
[86] 2020-08-25 (PCT/IL2020/050925)  
[87] (WO2021/038559)  
[30] US (62/894,517) 2019-08-30

[21] **3,143,226**  
[13] A1

[51] **Int.Cl. H04W 72/04 (2009.01) H04W 92/18 (2009.01)**  
[25] EN  
[54] **TERMINAL AND COMMUNICATION METHOD**  
[54] **TERMINAL ET PROCEDE DE COMMUNICATION**  
[72] YOSHIOKA, SHOHEI, JP  
[72] NAGATA, SATOSHI, JP  
[72] WANG, YANRU, CN  
[71] NTT DOCOMO, INC., JP  
[85] 2021-12-10  
[86] 2019-07-08 (PCT/JP2019/027059)  
[87] (WO2021/005696)

## Demandes PCT entrant en phase nationale

<p style="text-align: center;">[21] <b>3,143,227</b> [13] A1</p> <p>[51] <b>Int.Cl. G06N 99/00 (2019.01) H01L 39/22 (2006.01) H04J 14/00 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>PHOTONIC QUANTUM COMPUTER ARCHITECTURE</b></p> <p>[54] <b>ARCHITECTURE D'ORDINATEUR QUANTIQUE PHOTONIQUE</b></p> <p>[72] NICKERSON, NAOMI, US</p> <p>[72] PALOMO, HECTOR BOMBIN, US</p> <p>[71] PSIQUANTUM, CORP., US</p> <p>[85] 2021-12-09</p> <p>[86] 2020-06-22 (PCT/US2020/038962)</p> <p>[87] (WO2020/257772)</p> <p>[30] US (62/865,058) 2019-06-21</p> <p>[30] US (62/926,383) 2019-10-25</p> <p>[30] US (63/006,590) 2020-04-07</p>	<p style="text-align: center;">[21] <b>3,143,229</b> [13] A1</p> <p>[51] <b>Int.Cl. E21B 33/124 (2006.01) E21B 34/06 (2006.01) E21B 43/14 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>WELL TREATMENT WITH BARRIER HAVING PLUG IN PLACE</b></p> <p>[54] <b>TRAITEMENT DE Puits AVEC BARRIERE AYANT UN BOUCHON EN PLACE</b></p> <p>[72] MCFARLIN, NICHOLAS, W., US</p> <p>[72] BACSIK, RYAN R., US</p> <p>[72] MHASKAR, NAUMAN H., US</p> <p>[71] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US</p> <p>[85] 2021-12-09</p> <p>[86] 2020-06-23 (PCT/US2020/039075)</p> <p>[87] (WO2021/007024)</p> <p>[30] US (62/872,828) 2019-07-11</p>	<p style="text-align: center;">[21] <b>3,143,231</b> [13] A1</p> <p>[51] <b>Int.Cl. G06F 9/50 (2006.01) G06F 9/38 (2018.01) G06F 13/36 (2006.01) G06F 15/16 (2006.01) G06F 15/80 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>SYSTEM, METHOD AND COMPUTER-ACCESSIBLE MEDIUM FOR A DOMAIN DECOMPOSITION AWARE PROCESSOR ASSIGNMENT IN MULTICORE PROCESSING SYSTEM(S)</b></p> <p>[54] <b>SYSTEME, PROCEDE ET SUPPORT ACCESSIBLE PAR ORDINATEUR POUR UNE ATTRIBUTION DE PROCESSEUR SENSIBLE A LA DECOMPOSITION DE DOMAINE DANS UN OU PLUSIEURS SYSTEMES DE TRAITEMENT MULTICORE</b></p> <p>[72] MARCHAND, BENOIT, AE</p> <p>[71] NEW YORK UNIVERSITY, US</p> <p>[85] 2021-12-10</p> <p>[86] 2020-06-05 (PCT/US2020/036331)</p> <p>[87] (WO2020/251850)</p> <p>[30] US (62/860,480) 2019-06-12</p> <p>[30] US (62/947,375) 2019-12-12</p>
<p style="text-align: center;">[21] <b>3,143,228</b> [13] A1</p> <p>[51] <b>Int.Cl. G16H 20/30 (2018.01) G06T 7/70 (2017.01) G06N 20/00 (2019.01) A61B 5/11 (2006.01) A63B 71/06 (2006.01) G06K 9/00 (2022.01)</b></p> <p>[25] EN</p> <p>[54] <b>METHOD AND SYSTEM FOR MEASURING AND ANALYZING BODY MOVEMENT, POSITIONING AND POSTURE</b></p> <p>[54] <b>PROCEDE ET SYSTEME DE MESURE ET D'ANALYSE DE MOUVEMENT, DE POSITIONNEMENT ET DE POSTURE DU CORPS</b></p> <p>[72] NIRI, AMIN, CA</p> <p>[72] GILL, CONNOR, CA</p> <p>[72] GHARAT, AMOL, CA</p> <p>[71] FLEX ARTIFICIAL INTELLIGENCE INC., CA</p> <p>[85] 2021-12-10</p> <p>[86] 2020-06-19 (PCT/CA2020/050865)</p> <p>[87] (WO2020/252599)</p> <p>[30] US (62/865,052) 2019-06-21</p>	<p style="text-align: center;">[21] <b>3,143,230</b> [13] A1</p> <p>[51] <b>Int.Cl. C09K 8/467 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>CEMENT COMPOSITIONS AND METHODS</b></p> <p>[54] <b>COMPOSITIONS DE CIMENT ET PROCEDES</b></p> <p>[72] GAO, YAN, US</p> <p>[72] PERRONI, DOMINIC VINCENT, US</p> <p>[72] MEDVEDEV, ANATOLY VLADIMIROVICH, US</p> <p>[72] YAKOVLEV, ANDREY VLADIMIROVICH, US</p> <p>[71] SCHLUMBERGER CANADA LIMITED, CA</p> <p>[85] 2021-12-09</p> <p>[86] 2020-06-26 (PCT/US2020/039811)</p> <p>[87] (WO2020/264288)</p> <p>[30] US (62/868,024) 2019-06-28</p>	<p style="text-align: center;">[21] <b>3,143,232</b> [13] A1</p> <p>[51] <b>Int.Cl. G08G 1/0968 (2006.01) H04W 4/44 (2018.01)</b></p> <p>[25] EN</p> <p>[54] <b>DISTRIBUTED TRAFFIC MANAGEMENT SYSTEM WITH DYNAMIC END-TO-END ROUTING</b></p> <p>[54] <b>SYSTEME DE GESTION DE TRAFIC DISTRIBUE A ROUTAGE DYNAMIQUE DE BOUT EN BOUT</b></p> <p>[72] FAROOQ, BILAL, CA</p> <p>[72] DJAVADIAN, SHADI, CA</p> <p>[71] FAROOQ, BILAL, CA</p> <p>[71] DJAVADIAN, SHADI, CA</p> <p>[85] 2021-12-10</p> <p>[86] 2020-06-24 (PCT/CA2020/050875)</p> <p>[87] (WO2020/257926)</p> <p>[30] US (62/865,725) 2019-06-24</p>

## PCT Applications Entering the National Phase

[21] **3,143,233**  
[13] A1

[51] **Int.Cl. A61K 8/19 (2006.01) A61K 8/21 (2006.01) A61K 8/24 (2006.01) A61Q 11/00 (2006.01)**

[25] EN

[54] **ORAL CARE COMPOSITIONS AND METHODS**

[54] **COMPOSITIONS ET PROCEDES DE SOINS BUCCAUX**

[72] ZHANG, SHAOYI, US

[72] TANG, SAIDE, US

[72] MYERS, CARL, US

[72] XU, GUOFENG, US

[71] COLGATE-PALMOLIVE COMPANY, US

[85] 2021-12-10

[86] 2020-04-06 (PCT/US2020/026844)

[87] (WO2021/002910)

[30] US (62/869,394) 2019-07-01

[21] **3,143,234**  
[13] A1

[51] **Int.Cl. B60W 30/14 (2006.01) B60W 20/12 (2016.01) B60W 30/08 (2012.01) B60W 40/08 (2012.01) B60W 40/12 (2012.01) B60W 50/08 (2020.01)**

[25] EN

[54] **INTELLIGENT TRANSPORTATION SYSTEMS**

[54] **SYSTEMES DE TRANSPORT INTELLIGENTS**

[72] CELLA, CHARLES HOWARD, US

[71] STRONG FORCE INTELLECTUAL CAPITAL, LLC, US

[85] 2021-12-10

[86] 2019-09-30 (PCT/US2019/053857)

[87] (WO2020/069517)

[30] US (62/739,335) 2018-09-30

[21] **3,143,235**  
[13] A1

[51] **Int.Cl. H05H 1/24 (2006.01) A61L 2/20 (2006.01)**

[25] EN

[54] **ELECTRODE ASSEMBLY, DIELECTRIC BARRIER DISCHARGE SYSTEM AND USE THEREOF**

[54] **ENSEMBLE ELECTRODE, SYSTEME DE DECHARGE A BARRIERE DIELECTRIQUE ET UTILISATION ASSOCIEE**

[72] HOCHWALT, MARK A., US

[71] NANOGUARD TECHNOLOGIES, LLC, US

[85] 2021-12-10

[86] 2020-06-09 (PCT/US2020/036833)

[87] (WO2020/251951)

[30] US (16/442,380) 2019-06-14

[21] **3,143,236**  
[13] A1

[51] **Int.Cl. A61M 37/00 (2006.01) A61N 1/04 (2006.01) A61N 1/30 (2006.01)**

[25] EN

[54] **NEEDLE ASSEMBLY, SKIN STIMULATOR INCLUDING THE SAME, AND MANUFACTURING METHOD THEREOF**

[54] **ENSEMBLE D'AIGUILLES, STIMULATEUR ETAN LE PROCEDE DE FABRICATION**

[72] NA, JONGJU, KR

[72] LEE, HEEYOUNG, KR

[72] SHIN, DONGKEUN, KR

[71] VIOL CO., LTD., KR

[85] 2021-12-10

[86] 2020-05-22 (PCT/KR2020/006727)

[87] (WO2020/251188)

[30] KR (10-2019-0068966) 2019-06-11

[21] **3,143,237**  
[13] A1

[51] **Int.Cl. H01J 27/20 (2006.01) H01J 49/06 (2006.01) H01J 49/14 (2006.01)**

[25] EN

[54] **IONIZATION SOURCES AND METHODS AND SYSTEMS USING THEM**

[54] **SOURCES D'IONISATION ET PROCEDES ET SYSTEMES LES UTILISANT**

[72] PATKIN, ADAM, US

[71] PERKINELMER HEALTH SCIENCES, INC., US

[85] 2021-12-10

[86] 2020-06-10 (PCT/US2020/036968)

[87] (WO2020/252002)

[30] US (16/438,342) 2019-06-11

[21] **3,143,238**  
[13] A1

[51] **Int.Cl. E21B 33/12 (2006.01) E21B 33/127 (2006.01) E21B 43/12 (2006.01)**

[25] EN

[54] **EXPANDABLE METAL GAS LIFT MANDREL PLUG**

[54] **BOUCHON DE MANDRIN D'EXTRACTION AU GAZ METALLIQUE EXPANSIBLE**

[72] EVERS, RUTGER, US

[71] HALLIBURTON ENERGY SERVICES, INC., US

[85] 2021-12-10

[86] 2019-08-06 (PCT/US2019/045301)

[87] (WO2021/025689)



## Demandes PCT entrant en phase nationale

[21] **3,143,239**  
[13] A1

[51] **Int.Cl. A23L 7/122 (2016.01) A23P 30/25 (2016.01) A21D 13/37 (2017.01) A21D 13/38 (2017.01) A23D 7/005 (2006.01) A23G 3/34 (2006.01)**

[25] EN

[54] **LIPID-BASED FOOD FILLING SUITABLE FOR HIGH-TEMPERATURE, HIGH-PRESSURE COOKING CO-EXTRUSION**

[54] **GARNITURE ALIMENTAIRE A BASE DE LIPIDE APPROPRIEE A LA CO-EXTRUSION PAR CUISSON A HAUTE TEMPERATURE ET HAUTE PRESSION**

[72] BAKHTINA, ASYA, US  
[72] BEAVER, MICHELLE, US  
[72] CHRISTIANSEN, KELLY, US  
[72] HONG, YEONG-CHING ALBERT, US  
[72] SMITH, JOSHUA, US  
[72] YANG, LIYI, US  
[71] INTERCONTINENTAL GREAT BRANDS LLC, US  
[85] 2021-12-09  
[86] 2020-06-26 (PCT/US2020/039882)  
[87] (WO2021/007050)  
[30] US (16/506,239) 2019-07-09

[21] **3,143,240**  
[13] A1

[51] **Int.Cl. H04N 19/124 (2014.01) H04N 19/186 (2014.01) H04N 19/70 (2014.01)**

[25] EN

[54] **IMAGE DECODING METHOD AND DEVICE THEREFOR**

[54] **PROCEDE DE DECODAGE D'IMAGE ET DISPOSITIF ASSOCIE**

[72] PALURI, SEETHAL, KR  
[72] KIM, SEUNGHWAN, KR  
[72] ZHAO, JIE, KR  
[71] LG ELECTRONICS INC., KR  
[85] 2021-12-10  
[86] 2020-06-11 (PCT/KR2020/007561)  
[87] (WO2020/251269)  
[30] US (62/860,233) 2019-06-11

[21] **3,143,241**  
[13] A1

[51] **Int.Cl. A01H 5/00 (2018.01) A01K 67/027 (2006.01) A61K 39/395 (2006.01) A61K 45/00 (2006.01) A61P 11/00 (2006.01) C07K 16/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR AUTOMATED SINGLE CELL PROCESSING AND ANALYSES**

[54] **SYSTEME ET PROCEDE DE TRAITEMENT AUTOMATIQUE DE CELLULES INDIVIDUELLES ET ANALYSES**

[72] HANDIQUE, KALYAN, US  
[71] BIO-RAD LABORATORIES, INC., US  
[85] 2021-12-10  
[86] 2020-06-02 (PCT/US2020/035704)  
[87] (WO2020/251802)  
[30] US (62/861,826) 2019-06-14  
[30] US (62/907,791) 2019-09-30

[21] **3,143,242**  
[13] A1

[51] **Int.Cl. C07K 16/46 (2006.01) A61K 39/00 (2006.01) A61P 25/28 (2006.01) C07K 16/18 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **BISPECIFIC ANTIBODY AGAINST A-SYN/IGF1R AND USE THEREOF**

[54] **ANTICORPS BISPECIFIQUE DIRIGE CONTRE A-SYN/IGF1R ET UTILISATION ASSOCIEE**

[72] AN, SUNGWON, KR  
[72] AHN, JINHYUNG, KR  
[72] SUNG, BYUNGJE, KR  
[72] KIM, DONGIN, KR  
[72] SONG, DAEHAE, KR  
[72] EOM, JAEHYUN, KR  
[72] SON, YONG-GYU, KR  
[72] PARK, KYUNGJIN, KR  
[72] KIM, JUHEE, KR  
[72] JUNG, JINWON, KR  
[72] LEE, BORA, KR  
[72] YUN, HYESU, KR  
[71] ABL BIO INC., KR  
[85] 2021-12-10  
[86] 2020-06-15 (PCT/KR2020/007704)  
[87] (WO2020/251316)  
[30] KR (10-2019-0071057) 2019-06-14

[21] **3,143,243**  
[13] A1

[51] **Int.Cl. B62D 55/135 (2006.01) B62D 55/13 (2006.01) B62D 55/32 (2006.01) F16H 55/12 (2006.01) B62D 55/00 (2006.01)**

[25] EN

[54] **ARRANGEMENT OF A DRIVE WHEEL FOR AN ENDLESS TRACK OF A TRACKED VEHICLE**

[54] **AGENCEMENT D'UNE ROUE MOTRICE POUR UNE COURROIE SANS FIN D'UN VEHICULE A CHENILLES**

[72] SODERSTROM, GUSTAV, SE  
[71] BAE SYSTEMS HAGGLUNDS AKTIEBOLAG, SE  
[85] 2021-12-10  
[86] 2020-06-04 (PCT/SE2020/050566)  
[87] (WO2020/251449)  
[30] SE (1950722-7) 2019-06-14

[21] **3,143,244**  
[13] A1

[51] **Int.Cl. C04B 28/10 (2006.01) C04B 7/345 (2006.01)**

[25] EN

[54] **CURABLE FORMULATIONS FOR STRUCTURAL AND NON-STRUCTURAL APPLICATIONS**

[54] **FORMULATIONS DURCISSABLES POUR DES APPLICATIONS STRUCTURALES ET NON STRUCTURALES**

[72] LUKKARILA, MARK R., US  
[72] MACDONALD, KEVIN A., US  
[72] MARSHALL, SAM F., US  
[72] SPENCER, MATTHEW D., US  
[71] MSB GLOBAL, INC., US  
[85] 2021-12-10  
[86] 2020-06-09 (PCT/US2020/036848)  
[87] (WO2020/251955)  
[30] US (62/859,741) 2019-06-11  
[30] US (62/938,307) 2019-11-20  
[30] US (16/831,748) 2020-03-26

## PCT Applications Entering the National Phase

[21] **3,143,245**  
[13] A1

[51] **Int.Cl. H04R 5/02 (2006.01)**  
[25] EN  
[54] **INTEGRATED AUDIOVISUAL SYSTEM**  
[54] **SYSTEME AUDIOVISUEL INTEGRE**  
[72] HOCKMAN, ERIK, US  
[72] LUTHWAITE, ALEX, US  
[72] HANNA, EMAD YACOUB, DE  
[71] MSG ENTERTAINMENT GROUP, LLC., US  
[71] HOLOPLOT GMBH, DE  
[85] 2021-12-10  
[86] 2020-06-10 (PCT/US2020/037049)  
[87] (WO2020/252063)  
[30] US (62/859,930) 2019-06-11

[21] **3,143,246**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61K 9/00 (2006.01) A61K 9/19 (2006.01) A61K 39/00 (2006.01) A61K 47/18 (2017.01) A61K 47/26 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **CELL CULTURE METHODS AND COMPOSITIONS FOR ANTIBODY PRODUCTION**  
[54] **PROCEDES DE CULTURE CELLULAIRE ET COMPOSITIONS POUR LA PRODUCTION D'ANTICORPS**  
[72] GOWTHAM, YOGENDER KUMAR, US  
[72] LAY, SOKHA SUSAN, US  
[72] SCARFO, EDMUND G, US  
[72] VISHWANATHAN, NANDITA, CH  
[71] TAKEDA PHARMACEUTICAL COMPANY LIMITED, JP  
[85] 2021-12-10  
[86] 2020-06-10 (PCT/US2020/037080)  
[87] (WO2020/252082)  
[30] US (62/859,563) 2019-06-10  
[30] US (62/859,596) 2019-06-10

[21] **3,143,247**  
[13] A1

[51] **Int.Cl. G06F 3/06 (2006.01)**  
[25] EN  
[54] **AUTOMATICALLY DEPLOYED INFORMATION TECHNOLOGY (IT) SYSTEM AND METHOD WITH ENHANCED SECURITY**  
[54] **SYSTEME ET PROCEDE DES TECHNOLOGIES DE L'INFORMATION (IT) DEPLOYES AUTOMATIQUEMENT A SECURITE AMELIOREE**  
[72] SCHMITT, PARKER JOHN, US  
[72] RICHARDSON, SEAN MICHAEL, US  
[72] SEMMEL, NEIL BENJAMIN, US  
[72] SPRY, CAMERON TYLER, US  
[72] OSAR, ARIANNA, US  
[71] NET-THUNDER, LLC, US  
[85] 2021-12-10  
[86] 2020-06-10 (PCT/US2020/037087)  
[87] (WO2020/252088)  
[30] US (62/860,148) 2019-06-11

[21] **3,143,248**  
[13] A1

[51] **Int.Cl. C07K 16/30 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR TREATING CANCER**  
[54] **COMPOSITIONS ET METHODES DE TRAITEMENT DU CANCER**  
[72] FRIEDMAN, KEVIN, US  
[71] 2SEVENTY BIO, INC., US  
[85] 2021-12-10  
[86] 2020-06-11 (PCT/US2020/037145)  
[87] (WO2020/252110)  
[30] US (62/861,838) 2019-06-14  
[30] US (62/991,314) 2020-03-18

[21] **3,143,249**  
[13] A1

[51] **Int.Cl. G08B 3/10 (2006.01) H04W 4/029 (2018.01) A61C 19/02 (2006.01) G01S 13/87 (2006.01) G08B 13/24 (2006.01)**  
[25] EN  
[54] **CASE FOR DENTAL APPLIANCES**  
[54] **ETUI POUR APPAREILS DENTAIRE**  
[72] CHAPMAN, JOSH, US  
[72] LACEY, BRITTANY, US  
[71] SDC U.S. SMILEPAY SPV, US  
[85] 2021-12-10  
[86] 2020-06-11 (PCT/US2020/037156)  
[87] (WO2020/252117)  
[30] US (16/438,767) 2019-06-12

[21] **3,143,250**  
[13] A1

[51] **Int.Cl. G01N 27/26 (2006.01) A61B 5/145 (2006.01) G01N 27/27 (2006.01) G01N 33/483 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD OF MEASUREMENT AND CALIBRATION OF ANALYTE TESTING**  
[54] **SYSTEME ET PROCEDE DE MESURE ET D'ETALONNAGE DE TEST D'ANALYTE**  
[72] SAMPRONI, JENNIFER, US  
[71] SIEMENS HEALTHCARE DIAGNOSTICS INC., US  
[85] 2021-12-10  
[86] 2020-06-05 (PCT/US2020/036312)  
[87] (WO2020/251848)  
[30] US (62/860,487) 2019-06-12

[21] **3,143,251**  
[13] A1

[51] **Int.Cl. A61N 1/05 (2006.01) A61N 1/36 (2006.01) A61N 1/372 (2006.01)**  
[25] EN  
[54] **SPINAL CORD STIMULATION SYSTEM DETERMINING OPTIMAL SUB-PERCEPTION THERAPY BY USING NEURAL DOSE**  
[54] **SYSTEME DE STIMULATION DE LA MOELLE EPINIERE DETERMINANT UNE THERAPIE DE SOUS-PERCEPTION OPTIMALE A L'AIDE D'UNE DOSE NEURONALE**  
[72] HUERTAS FERNANDEZ, ISMAEL, ES  
[72] DOAN, QUE T., US  
[72] MOFFITT, MICHAEL A., US  
[71] BOSTON SCIENTIFIC NEUROMODULATION CORPORATION, US  
[85] 2021-12-09  
[86] 2020-07-01 (PCT/US2020/040529)  
[87] (WO2021/003290)  
[30] US (16/460,640) 2019-07-02  
[30] US (16/460,655) 2019-07-02  
[30] US (16/657,560) 2019-10-18  
[30] US (16/738,786) 2020-01-09  
[30] US (62/986,365) 2020-03-06

## Demandes PCT entrant en phase nationale

[21] **3,143,252**  
[13] A1

[51] **Int.Cl. B25J 9/16 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR OBJECT SHAPE IDENTIFICATION AND POSE MEASUREMENT USING MULTI-FINGERED HAND**  
[54] **SYSTEME ET PROCEDE D'IDENTIFICATION DE FORME ET DE MESURE DE POSE D'UN OBJET A L'AIDE D'UNE MAIN A PLUSIEURS DOIGTS**  
[72] TANG, CHINPEI, US  
[72] ZAK, ALEXANDER, US  
[71] MAGNA INTERNATIONAL INC., CA  
[85] 2021-12-10  
[86] 2020-06-11 (PCT/US2020/037165)  
[87] (WO2020/252122)  
[30] US (62/859,894) 2019-06-11

[21] **3,143,253**  
[13] A1

[51] **Int.Cl. B32B 3/12 (2006.01) B29C 45/14 (2006.01) B29C 45/16 (2006.01) B32B 3/08 (2006.01) B32B 7/12 (2006.01) B62D 25/00 (2006.01) B62D 29/00 (2006.01)**  
[25] EN  
[54] **COMPOSITE MATERIAL VEHICLE COMPONENT CONSTRUCT**  
[54] **CONSTRUCTION DE PIECE DE VEHICULE EN MATERIAU COMPOSITE**  
[72] FORAN, HUGH, US  
[72] PLAUMAN, MATTHEW, US  
[72] FREEMAN-GIBB, EVAN, US  
[72] DURHAM, PATRICK, US  
[71] TEIJIN AUTOMOTIVE TECHNOLOGIES, INC., US  
[85] 2021-12-10  
[86] 2020-06-11 (PCT/US2020/037167)  
[87] (WO2020/252124)  
[30] US (62/859,796) 2019-06-11

[21] **3,143,254**  
[13] A1

[51] **Int.Cl. B32B 3/12 (2006.01) B32B 3/08 (2006.01) B32B 7/12 (2006.01) B60R 13/02 (2006.01)**  
[25] EN  
[54] **COMPOSITE MATERIAL VEHICLE COMPONENT CONSTRUCT**  
[54] **CONSTRUCTION DE PIECE DE VEHICULE EN MATERIAU COMPOSITE**  
[72] FORAN, HUGH, US  
[72] PLAUMAN, MATTHEW, US  
[72] FREEMAN-GIBB, EVAN, US  
[72] DURHAM, PATRICK, US  
[71] TEIJIN AUTOMOTIVE TECHNOLOGIES, INC., US  
[85] 2021-12-10  
[86] 2020-06-11 (PCT/US2020/037172)  
[87] (WO2020/252127)  
[30] US (62/859,819) 2019-06-11

[21] **3,143,256**  
[13] A1

[51] **Int.Cl. E21B 47/18 (2012.01) E21B 47/24 (2012.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR ATTACHING A POPPET TO AN ELECTROMECHANICAL ACTUATOR APPARATUS**  
[54] **SYSTEME ET PROCEDE DE FIXATION D'UN CHAMPIGNON A UN APPAREIL D'ACTIONNEMENT ELECTROMECHANIQUE**  
[72] SEGURA, PEDRO R., US  
[71] BENCH TREE GROUP, LLC, US  
[85] 2021-12-10  
[86] 2020-06-11 (PCT/US2020/037256)  
[87] (WO2020/252177)  
[30] US (62/859,980) 2019-06-11

[21] **3,143,257**  
[13] A1

[51] **Int.Cl. A61K 39/39 (2006.01) A61K 35/761 (2015.01) A61K 39/395 (2006.01) A61K 48/00 (2006.01)**  
[25] EN  
[54] **VIRAL VECTOR THERAPY THERAPIE PAR VECTEURS VIRAUX**  
[72] FRANCOIS, CEDRIC, US  
[72] SCHEIBLER, LUKAS, US  
[71] APELLIS PHARMACEUTICALS, INC., US  
[85] 2021-12-09  
[86] 2020-07-02 (PCT/US2020/040741)  
[87] (WO2021/007111)  
[30] US (62/871,058) 2019-07-05  
[30] US (62/871,700) 2019-07-08  
[30] US (62/875,925) 2019-07-18  
[30] US (62/935,569) 2019-11-14

[21] **3,143,258**  
[13] A1

[51] **Int.Cl. A61B 17/072 (2006.01) A61B 17/068 (2006.01) A61B 17/11 (2006.01) A61B 90/30 (2016.01) A61B 17/29 (2006.01)**  
[25] EN  
[54] **SYSTEMS, DEVICES, AND RELATED METHODS FOR FASTENING TISSUE**  
[54] **SYSTEMES, DISPOSITIFS ET METHODES ASSOCIEES PERMETTANT DE FIXER UN TISSU**  
[72] BELKHAYAT, NORA, US  
[72] WALES, RYAN V., US  
[72] SMITH, PAUL, US  
[72] REID, CONOR, US  
[72] GRAY, JEFF, US  
[71] BOSTON SCIENTIFIC SCIMED, INC., US  
[85] 2021-12-09  
[86] 2020-07-06 (PCT/US2020/040907)  
[87] (WO2021/007164)  
[30] US (62/872,290) 2019-07-10

## PCT Applications Entering the National Phase

[21] **3,143,259**  
[13] A1

[51] **Int.Cl. B65D 5/42 (2006.01) B65D 5/02 (2006.01) B65D 5/54 (2006.01) B65D 5/70 (2006.01) B65D 71/40 (2006.01)**

[25] EN

[54] **CARTON WITH ATTACHMENT FEATURES**

[54] **CARTON COMPRENANT DES ELEMENTS DE FIXATION**

[72] FORD, COLIN P., US

[71] GRAPHIC PACKAGING INTERNATIONAL, LLC, US

[85] 2021-12-09

[86] 2020-07-17 (PCT/US2020/042441)

[87] (WO2021/011839)

[30] US (62/875,698) 2019-07-18

[21] **3,143,260**  
[13] A1

[51] **Int.Cl. A61M 25/00 (2006.01) A61F 2/958 (2013.01) A61F 2/962 (2013.01) A61B 5/0215 (2006.01) A61M 25/10 (2013.01)**

[25] EN

[54] **INTRA-AORTIC BALLOON PUMP CATHETER AND SHEATH SEAL ASSEMBLY**

[54] **CATHETER A POMPE A BALLONNET INTRA-AORTIQUE ET ENSEMBLE JOINT DE GAINE**

[72] WALTERS, DANIEL A., US

[72] SCHWARZ, GARY VICTOR, US

[72] HAIN, MATTHEW, US

[72] SAVINO, VITO S., US

[71] DATASCOPE CORP., US

[85] 2021-12-10

[86] 2020-06-11 (PCT/US2020/037315)

[87] (WO2020/252211)

[30] US (62/861,465) 2019-06-14

[30] US (62/862,544) 2019-06-17

[21] **3,143,261**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 19/02 (2006.01) A61P 37/06 (2006.01) C07K 16/28 (2006.01) C07K 16/46 (2006.01)**

[25] EN

[54] **MODIFIED DOSAGE OF SUBCUTANEOUS TOCILIZUMAB FOR RHEUMATOID ARTHRITIS**

[54] **DOSAGE MODIFIE DE TOCILIZUMAB SOUS-CUTANE POUR LA POLYARTHRITE RHUMATOIDE**

[72] CHEN, CHIEH-I, US

[72] WEI, WENHUI, US

[71] SANOFI BIOTECHNOLOGY, FR

[71] CHEN, CHIEH-I, US

[71] WEI, WENHUI, US

[71] REGENERON PHARMACEUTICALS, INC., US

[85] 2021-12-10

[86] 2020-06-11 (PCT/US2020/037325)

[87] (WO2020/252214)

[30] US (62/860,611) 2019-06-12

[30] EP (20305192.5) 2020-02-27

[21] **3,143,262**  
[13] A1

[51] **Int.Cl. C12N 9/24 (2006.01) C07K 16/00 (2006.01) C12N 9/96 (2006.01) C12N 15/56 (2006.01) C12N 15/62 (2006.01) C12P 21/00 (2006.01) C12P 21/08 (2006.01) C07K 19/00 (2006.01)**

[25] EN

[54] **FUSION PROTEIN FOR REMODELING ANTIBODY GLYCOFORM**

[54] **PROTEINE DE FUSION POUR LE REMODELAGE DE LA GLYCOFORME D'ANTICORPS**

[72] CHU, KUO-CHING, TW

[72] HUANG, LIN-YA, TW

[72] ZENG, YI-FANG, TW

[71] CHO PHARMA, INC., TW

[85] 2021-12-09

[86] 2020-08-05 (PCT/US2020/045054)

[87] (WO2021/026264)

[30] US (62/882,729) 2019-08-05

[21] **3,143,263**  
[13] A1

[51] **Int.Cl. D04H 1/4218 (2012.01) D04H 1/587 (2012.01) D04H 1/732 (2012.01) D04H 1/64 (2012.01) E04B 7/00 (2006.01)**

[25] EN

[54] **WALKABLE FACER MATS FOR ROOF INSULATION**

[54] **TAPIS DE PAREMENT SUR LESQUELS IL EST POSSIBLE DE MARCHER POUR ISOLATION DE TOIT**

[72] TJADEN, HENDRIK J., NL

[72] VERSCHUT, CORNELIS, NL

[71] OWENS CORNING INTELLECTUAL CAPITAL, LLC, US

[85] 2021-12-10

[86] 2020-06-12 (PCT/US2020/037346)

[87] (WO2020/252220)

[30] EP (19180110.9) 2019-06-13

[21] **3,143,264**  
[13] A1

[51] **Int.Cl. A61K 31/496 (2006.01) A61K 31/58 (2006.01) A61K 47/02 (2006.01)**

[25] EN

[54] **LONG-ACTING TOPICAL FORMULATION AND METHOD OF USE THEREOF**

[54] **FORMULATION TOPIQUE A ACTION PROLONGEE ET SON PROCEDE D'UTILISATION**

[72] HEPLER, DOUGLAS, US

[72] PAULSEN, NEIL E., US

[72] DANIEL, MICHAEL S., US

[72] DEMPSEY, GAIL L., US

[71] PIEDMONT ANIMAL HEALTH INC., US

[85] 2021-12-10

[86] 2020-06-12 (PCT/US2020/037444)

[87] (WO2020/252269)

[30] US (62/861,621) 2019-06-14

## Demandes PCT entrant en phase nationale

[21] **3,143,265**  
[13] A1

[51] **Int.Cl. A61C 13/00 (2006.01) B33Y 70/00 (2020.01) B33Y 80/00 (2015.01) B29C 64/40 (2017.01) A61C 13/01 (2006.01) A61C 13/10 (2006.01)**

[25] EN

[54] **ADDITIVELY MANUFACTURED DENTURE BASE WITH BRACING BODY**

[54] **BASE DE PROTHESE DENTAIRE FABRIQUEE DE MANIERE ADDITIVE AVEC CORPS DE RENFORCEMENT**

[72] HASAN, MD ABU, US

[71] DENTSPLY SIRONA INC., US

[85] 2021-12-10

[86] 2020-06-12 (PCT/US2020/037450)

[87] (WO2020/257073)

[30] US (62/862,221) 2019-06-17

[21] **3,143,266**  
[13] A1

[51] **Int.Cl. C22B 7/00 (2006.01) C25C 1/18 (2006.01) H01M 10/54 (2006.01) H01M 10/08 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR AQUEOUS RECOVERY OF LEAD FROM LEAD ACID BATTERIES WITH REDUCED ELECTROLYTE DEMAND**

[54] **SYSTEMES ET PROCEDES POUR RECUPERATION AQUEUSE DE PLOMB DE BATTERIES AU PLOMB-ACIDE A DEMANDE D'ELECTROLYTE REDUITE**

[72] MOHANTA, SAMARESH, US

[72] HUFFORD, JOSHUA, US

[71] AQUA METALS INC., US

[85] 2021-12-10

[86] 2020-06-12 (PCT/US2020/037539)

[87] (WO2020/252343)

[30] US (62/860,928) 2019-06-13

[21] **3,143,267**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/958 (2013.01)**

[25] EN

[54] **BLOW MOLDED BALLOON SHOULDER ASSEMBLY FOR A TRANSCATHETER DELIVERY DEVICE**

[54] **ENSEMBLE EPAULEMENT DE BALLONNET MOULE PAR SOUFFLAGE POUR DISPOSITIF DE POSE PAR TRANSCATHETER**

[72] ZHU, YIDONG M., US

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2021-12-09

[86] 2020-10-14 (PCT/US2020/055520)

[87] (WO2021/086608)

[30] US (62/928,951) 2019-10-31

[21] **3,143,268**  
[13] A1

[51] **Int.Cl. A61K 39/02 (2006.01) C12N 15/63 (2006.01) C12N 15/74 (2006.01)**

[25] EN

[54] **BIOLOGICALLY CONTAINED BACTERIA AND USES THEREOF**

[54] **BACTERIES CONFINEES BIOLOGIQUEMENT ET UTILISATIONS DE CES DERNIERES**

[72] WHITAKER, WESTON ROBERT, US

[72] DELOACHE, WILLIAM CAIN, US

[72] RUSS IV, ZACHARY NICHOLAS, US

[72] SHEPHERD, ELIZABETH JOY STANLEY, US

[72] POPOV, LAUREN, US

[71] NOVOME BIOTECHNOLOGIES, INC., US

[85] 2021-12-10

[86] 2020-06-12 (PCT/US2020/037571)

[87] (WO2020/252370)

[30] US (62/861,181) 2019-06-13

[21] **3,143,269**  
[13] A1

[51] **Int.Cl. A61K 38/04 (2006.01) A61K 38/12 (2006.01) A61K 38/14 (2006.01) C07K 7/62 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR THE TREATMENT OF HUMAN IMMUNODEFICIENCY VIRUS**

[54] **COMPOSITIONS ET PROCEDES POUR LE TRAITEMENT DU VIRUS DE L'IMMUNODEFICIENCE HUMAINE**

[72] BORCHARDT, ALLEN, US

[72] BRADY, THOMAS P., US

[72] CHEN, ZHI-YONG, US

[72] DO, QUYEN-QUYEN THUY, US

[72] JIANG, WANLONG, US

[72] TARI, LESLIE W., US

[71] CIDARA THERAPEUTICS, INC., US

[85] 2021-12-10

[86] 2020-06-12 (PCT/US2020/037601)

[87] (WO2020/252393)

[30] US (62/861,148) 2019-06-13

[30] US (62/897,952) 2019-09-09

[30] US (62/973,790) 2019-10-25

[30] US (62/959,557) 2020-01-10

[30] US (62/970,549) 2020-02-05

[30] US (62/984,557) 2020-03-03

[21] **3,143,270**  
[13] A1

[51] **Int.Cl. A01N 59/00 (2006.01) A61L 2/18 (2006.01) C02F 1/76 (2006.01)**

[25] EN

[54] **COMPOSITIONS, KITS, METHODS AND USES FOR PREVENTING MICROBIAL GROWTH**

[54] **COMPOSITIONS, KITS, PROCEDES ET UTILISATIONS POUR PREVENIR LA CROISSANCE MICROBIENNE**

[72] ALIMI, HOJABR, US

[72] PRASAD, SRIDHAR GOVINDA, US

[72] SINHA, SANTOSH C., US

[71] COLLIDION, INC., US

[85] 2021-12-10

[86] 2020-06-14 (PCT/US2020/037665)

[87] (WO2020/252433)

[30] US (62/861,987) 2019-06-14

[30] US (62/977,090) 2020-02-14

## PCT Applications Entering the National Phase

[21] **3,143,271**  
[13] A1

[51] **Int.Cl. C07K 19/00 (2006.01) A61K 35/12 (2015.01) A61K 38/18 (2006.01) C07K 14/705 (2006.01) C07K 14/715 (2006.01) C07K 14/725 (2006.01) C12N 5/10 (2006.01) C12N 15/62 (2006.01)**

[25] EN  
[54] **TGF-.BETA. RECEPTORS AND METHODS OF USE**  
[54] **RECEPTEURS DE TGF-S ET LEURS METHODES D'UTILISATION**

[72] WYMAN, SARAH, US  
[72] EMTAGE, PETER, US  
[72] ROMAIN, GABRIELLE, US  
[71] KITE PHARMA, INC., US  
[85] 2021-12-09  
[86] 2020-06-19 (PCT/US2020/070157)  
[87] (WO2020/257823)  
[30] US (62/865,063) 2019-06-21  
[30] US (62/951,217) 2019-12-20

[21] **3,143,272**  
[13] A1

[51] **Int.Cl. B63B 34/56 (2020.01) B63B 32/10 (2020.01) B63B 32/30 (2020.01)**

[25] EN  
[54] **WATER SKI**  
[54] **SKI NAUTIQUE**

[72] PETER, LORENZ ROLAND, AT  
[71] PETER, LORENZ ROLAND, AT  
[85] 2021-12-10  
[86] 2020-03-25 (PCT/AT2020/060130)  
[87] (WO2020/257832)  
[30] AT (A50562/2019) 2019-06-25

[21] **3,143,273**  
[13] A1

[51] **Int.Cl. C22B 11/08 (2006.01) C22B 1/02 (2006.01) C22B 3/06 (2006.01) C22B 11/12 (2006.01) G01N 31/12 (2006.01) G01N 33/24 (2006.01)**

[25] EN  
[54] **PROCESSING GOLD-CONTAINING ORES**  
[54] **TRAITEMENT DE MINERAIS AURIFERES**

[72] O'CALLAGHAN, JOHN, AU  
[71] NEWCREST MINING LIMITED, AU  
[85] 2021-12-10  
[86] 2020-07-02 (PCT/AU2020/050692)  
[87] (WO2021/003521)  
[30] AU (2019902382) 2019-07-05

[21] **3,143,274**  
[13] A1

[51] **Int.Cl. F16L 55/00 (2006.01) B29C 65/00 (2006.01) F15B 15/00 (2006.01) F16L 25/00 (2006.01) F16L 47/03 (2006.01) G05B 19/042 (2006.01)**

[25] EN  
[54] **PIPE JOINT APPLICATOR AND METHOD FOR PRODUCING A JOINT**  
[54] **APPLICATEUR DE RACCORDEMENTS TUBULAIRES ET PROCEDE DE FABRICATION D'UN RACCORDEMENT**

[72] WUST, THEODOR, CH  
[71] SWISS TECH INNOVATION AG, CH  
[85] 2021-12-10  
[86] 2020-06-12 (PCT/EP2020/025281)  
[87] (WO2020/249265)  
[30] DE (20 2019 116 326.9) 2019-06-14

[21] **3,143,275**  
[13] A1

[51] **Int.Cl. C12Q 1/06 (2006.01) C12N 5/071 (2010.01) C12N 5/0783 (2010.01) C12M 1/00 (2006.01) C12M 1/34 (2006.01) C12M 1/36 (2006.01) C12Q 1/02 (2006.01)**

[25] EN  
[54] **IMPROVEMENTS IN AND RELATING TO THE MONITORING OF CELL EXPANSION**  
[54] **PERFECTIONNEMENTS APPORTES OU SE RAPPORTANT A LA SURVEILLANCE DE LA MULTIPLICATION CELLULAIRE**

[72] GOODWIN, PAUL C, US  
[72] BOWLES, PAUL ANTHONY, CA  
[72] IYER, ROHIN, CA  
[72] GRATICH, YARDEN, CA  
[72] MCCARTNEY, MITCH M, US  
[72] YAMAGUCHI, MEI S, US  
[72] DAVIS, CRISTINA E, US  
[71] GLOBAL LIFE SCIENCES SOLUTIONS OPERATIONS UK LTD, GB  
[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US  
[85] 2021-12-10  
[86] 2020-06-09 (PCT/EP2020/065927)  
[87] (WO2020/249544)  
[30] US (16/441,883) 2019-06-14

[21] **3,143,276**  
[13] A1

[51] **Int.Cl. A61K 31/437 (2006.01) A61P 25/00 (2006.01) C07D 471/04 (2006.01)**

[25] EN  
[54] **SUBSTITUTED HETEROAROMATIC PYRAZOLO-PYRIDINES AND THEIR USE AS GLUN2B RECEPTOR MODULATORS**  
[54] **PYRAZOLO-PYRIDINES HETEROAROMATIQUES SUBSTITUEES ET LEUR UTILISATION EN TANT QUE MODULATEURS DU RECEPTEUR GLUN2B**

[72] HISCOX, AFTON, CA  
[72] STENNE, BRICE, US  
[72] CHROVIAN, CHRISTA, US  
[72] GELIN, CHRISTINE, US  
[72] SAMANT, ANDREW, US  
[72] LETAVIC, MICHAEL A., US  
[72] DVORAK, CURT, US  
[71] JANSSEN PHARMACEUTICA NV, BE  
[85] 2021-12-10  
[86] 2020-06-12 (PCT/EP2020/066384)  
[87] (WO2020/249785)  
[30] US (62/861,665) 2019-06-14  
[30] PK (349/2020) 2020-06-03

[21] **3,143,277**  
[13] A1

[51] **Int.Cl. C08J 7/04 (2020.01) C09D 5/16 (2006.01) C23C 16/513 (2006.01) H01J 37/32 (2006.01)**

[25] EN  
[54] **ANTIMICROBIAL AND/OR ANTIVIRAL POLYMER SURFACES**  
[54] **SURFACES POLYMERES ANTI-MICROBIENNES ET/OU ANTI-VIRALES**

[72] WALLQUIST, OLOF, CH  
[72] DABBOUS, RAPHAEL, CH  
[72] KONRADI, RUPERT, US  
[72] VERHEYDE, BERT, BE  
[72] VANHULSEL, ANNICK, BE  
[71] MOLECULAR PLASMA GROUP S.A., LU  
[85] 2021-12-10  
[86] 2020-06-18 (PCT/EP2020/066963)  
[87] (WO2020/254497)  
[30] EP (19180910.2) 2019-06-18

## Demandes PCT entrant en phase nationale

[21] **3,143,278**  
[13] A1

[51] **Int.Cl. A61K 47/50 (2017.01) A61K 47/56 (2017.01) A61K 47/60 (2017.01) A61K 47/69 (2017.01) A61P 35/00 (2006.01)**

[25] EN

[54] **TYROSINE KINASE INHIBITOR CONJUGATES**

[54] **CONJUGUES INHIBITEUR DE TYROSINE KINASE**

[72] BISEK, NICOLA, DE

[72] WEISBROD, SAMUEL, DE

[71] ASCENDIS PHARMA ONCOLOGY DIVISION A/S, DK

[85] 2021-12-10

[86] 2020-06-19 (PCT/EP2020/067155)

[87] (WO2020/254609)

[30] EP (19181798.0) 2019-06-21

[30] EP (20150239.0) 2020-01-03

[21] **3,143,279**  
[13] A1

[51] **Int.Cl. A61K 47/50 (2017.01) A61K 47/56 (2017.01) A61K 47/61 (2017.01) A61K 47/68 (2017.01) A61K 47/69 (2017.01) A61P 35/00 (2006.01)**

[25] EN

[54] **ANTI-CTLA4 CONJUGATES**

[54] **CONJUGUES ANTI-CTLA4**

[72] KNAPPE, THOMAS, DE

[72] STARK, SEBASTIAN, DE

[72] LAUFER, BURKHARDT, DE

[72] NOWAK, SARAH, DE

[72] KITYK, ROMAN, DE

[72] ZYDZIAK, NICOLAS, DE

[71] ASCENDIS PHARMA ONCOLOGY DIVISION A/S, DK

[85] 2021-12-10

[86] 2020-06-19 (PCT/EP2020/067157)

[87] (WO2020/254611)

[30] EP (19181807.9) 2019-06-21

[30] EP (20150235.8) 2020-01-03

[21] **3,143,280**  
[13] A1

[51] **Int.Cl. C07D 471/04 (2006.01) A61K 9/20 (2006.01) A61K 9/48 (2006.01) A61K 31/4985 (2006.01) A61P 25/00 (2006.01) A61P 25/28 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) C07D 519/00 (2006.01)**

[25] EN

[54] **HETEROCYCLIC MONOACYLGLYCEROL LIPASE (MAGL) INHIBITORS**

[54] **INHIBITEURS HETEROCYCLIQUES DE MONOACYLGLYCEROL LIPASE (MAGL)**

[72] BENZ, JOERG, CH

[72] GREYER, UWE, CH

[72] HORNSPERGER, BENOIT, CH

[72] KROLL, CARSTEN, CH

[72] KUHN, BERND, CH

[72] O'HARA, FIONN, CH

[72] RICHTER, HANS, CH

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

[85] 2021-12-10

[86] 2020-06-30 (PCT/EP2020/068320)

[87] (WO2021/001330)

[30] EP (19184218.6) 2019-07-03

[21] **3,143,281**  
[13] A1

[51] **Int.Cl. B23K 11/04 (2006.01) E01B 11/46 (2006.01) E01B 29/46 (2006.01)**

[25] EN

[54] **WELDING UNIT FOR WELDING RAILS OF A TRACK**

[54] **GROUPE DE SOUDAGE DESTINE AU SOUDAGE DE RAILS D'UNE VOIE**

[72] BAUER, ANDREAS, AT

[72] OLLINGER, MARKUS, AT

[72] STEINER, RONALD, AT

[71] PLASSER & THEURER EXPORT VON BAHNBAUMASCHINEN GESELLSCHAFT M.B.H., AT

[85] 2021-12-10

[86] 2020-06-30 (PCT/EP2020/068321)

[87] (WO2021/018497)

[30] AT (A 265/2019) 2019-07-31

[21] **3,143,282**  
[13] A1

[51] **Int.Cl. G05B 19/042 (2006.01)**

[25] EN

[54] **GLAZING SENSOR**

[54] **CAPTEUR DE VITRAGE**

[72] COLLIGNON, MAXIME, BE

[72] ISERENTANT, ARNAUD, BE

[72] AYOUB, PATRICK, BE

[71] AGC GLASS EUROPE, BE

[85] 2021-12-10

[86] 2020-07-16 (PCT/EP2020/070089)

[87] (WO2021/013673)

[30] EP (19187269.6) 2019-07-19

[21] **3,143,283**  
[13] A1

[51] **Int.Cl. A01K 75/02 (2006.01) A01K 91/06 (2006.01)**

[25] EN

[54] **SUBSEA LIGHT EMISSION**

[54] **EMISSION SOUS-MARINE DE LUMIERE**

[72] DASAN, ARAN KUMAR, GB

[72] OGBORNE, STEVEN, GB

[72] WATSON, DANIEL NICHOLAS, GB

[71] SAFETYNET TECHNOLOGIES, GB

[85] 2021-12-10

[86] 2019-06-17 (PCT/GB2019/051669)

[87] (WO2019/239156)

[30] GB (1809883.0) 2018-06-15

[21] **3,143,284**  
[13] A1

[51] **Int.Cl. C07D 498/22 (2006.01) A61K 31/438 (2006.01) A61P 25/06 (2006.01)**

[25] EN

[54] **CGRP ANTAGONIST COMPOUNDS**

[54] **COMPOSES ANTAGONISTES DE CGRP**

[72] BROWN, GILES ALBERT, GB

[72] CONGREVE, MILES STUART, GB

[72] WATSON, STEPHEN PAUL, GB

[72] CANSFIELD, JULIE, GB

[72] O'BRIEN, MICHAEL ALISTAIR, GB

[72] DEFLORIAN, FRANCESCA, GB

[72] OTT, GREGORY R., US

[72] SWAIN, NIGEL ALAN, GB

[72] CANSFIELD, ANDREW DAVID, GB

[72] CHRISTOPHER, JOHN ANDREW, GB

[72] BORTOLATO, ANDREA, GB

[71] HEPTARES THERAPEUTICS LIMITED, GB

[85] 2021-12-10

[86] 2020-06-12 (PCT/GB2020/051428)

[87] (WO2020/249969)

[30] GB (1908420.1) 2019-06-12

## PCT Applications Entering the National Phase

[21] **3,143,285**  
[13] A1

[51] **Int.Cl. A61B 5/11 (2006.01) A61B 5/06 (2006.01)**  
[25] EN  
[54] **TREMOR STABILISATION APPARATUS**  
[54] **APPAREIL DE STABILISATION DE TREMBLEMENTS**  
[72] ONG, JOON FAIL, GB  
[72] KOH, BENJAMIN, GB  
[72] BAXTER, ELLIOTT, GB  
[72] IBRAHIM, YOUSSEF, GB  
[72] KNIGHT, STEPHEN, GB  
[72] DE PANISSE PASSIS, PAUL, GB  
[71] GYROGEAR LIMITED, GB  
[85] 2021-12-10  
[86] 2020-06-12 (PCT/GB2020/051435)  
[87] (WO2020/249975)  
[30] GB (1908448.2) 2019-06-12

[21] **3,143,286**  
[13] A1

[51] **Int.Cl. C12Q 1/6897 (2018.01) C12N 15/10 (2006.01) C12N 15/85 (2006.01) C12Q 1/68 (2018.01)**  
[25] EN  
[54] **NOVEL CONSTRUCT**  
[54] **NOUVELLE CONSTRUCTION**  
[72] RAJENDRA, EESON, GB  
[72] ROBINSON, HELEN, GB  
[71] ARTIOS PHARMA LIMITED, GB  
[85] 2021-12-10  
[86] 2020-07-01 (PCT/GB2020/051575)  
[87] (WO2021/001647)  
[30] GB (1909439.0) 2019-07-01

[21] **3,143,287**  
[13] A1

[51] **Int.Cl. B01J 23/42 (2006.01) B01J 23/644 (2006.01) B01J 23/75 (2006.01) B01J 23/89 (2006.01) B01J 37/08 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR HIGH TEMPERATURE SYNTHESIS OF SINGLE ATOM DISPERSIONS AND MULTI-ATOM DISPERSIONS**  
[54] **SYSTEMES ET PROCEDES DE SYNTHESE A HAUTE TEMPERATURE DE DISPERSIONS A ATOME UNIQUE ET DE DISPERSIONS A ATOMES MULTIPLES**  
[72] HU, LIANGBIN, US  
[72] YAO, YONGGANG, US  
[71] UNIVERSITY OF MARYLAND, COLLEGE PARK, US  
[85] 2021-12-10  
[86] 2020-06-14 (PCT/US2020/037668)  
[87] (WO2020/252435)  
[30] US (62/861,639) 2019-06-14

[21] **3,143,288**  
[13] A1

[51] **Int.Cl. H02K 1/24 (2006.01) H02K 16/02 (2006.01)**  
[25] EN  
[54] **SWITCHED RELUCTANCE MACHINES WITHOUT PERMANENT MAGNETS**  
[54] **MACHINES A RELUCTANCE COMMUTEES SANS AIMANTS PERMANENTS**  
[72] POPOV, ANDREI, US  
[72] VAN STEENBURG, MICHAEL, US  
[72] HUNSTABLE, FRED E., US  
[71] LINEAR LABS, INC., US  
[85] 2021-12-10  
[86] 2020-06-26 (PCT/US2020/039926)  
[87] (WO2020/264374)  
[30] US (62/867,189) 2019-06-26

[21] **3,143,289**  
[13] A1

[51] **Int.Cl. B01D 17/04 (2006.01) C02F 1/00 (2006.01) C10G 31/08 (2006.01)**  
[25] EN  
[54] **COMPOSITION AND METHOD FOR IMPROVED DESALTER BRINE QUALITY**  
[54] **COMPOSITION ET PROCEDE PERMETTANT D'AMELIORER LA QUALITE DE SAUMURE D'UN DESSALINATEUR**  
[72] GONZALEZ, JAVIER, US  
[72] DION, MICHAEL, US  
[72] PEREZ-DIAZ, PETER L., US  
[71] BL TECHNOLOGIES, INC., US  
[85] 2021-12-10  
[86] 2020-07-08 (PCT/US2020/041101)  
[87] (WO2021/029988)  
[30] US (62/887,036) 2019-08-15

[21] **3,143,290**  
[13] A1

[51] **Int.Cl. C09K 5/12 (2006.01)**  
[25] EN  
[54] **SODIUM VAPORIZER AND METHOD FOR USE OF SODIUM VAPORIZER**  
[54] **VAPORISATEUR DE SODIUM ET PROCEDE D'UTILISATION D'UN VAPORISATEUR DE SODIUM**  
[72] REGAN, CHRISTOPHER M., US  
[72] WILCOX, JACOB, US  
[71] TERRAPOWER, LLC, US  
[85] 2021-12-10  
[86] 2020-07-21 (PCT/US2020/042905)  
[87] (WO2021/040911)  
[30] US (62/891,244) 2019-08-23

[21] **3,143,291**  
[13] A1

[51] **Int.Cl. E21B 47/125 (2012.01) H01R 13/05 (2006.01)**  
[25] EN  
[54] **HIGH PRESSURE ELECTRICAL CONNECTOR CABLE FOR OIL AND GAS APPLICATIONS**  
[54] **CABLE DE CONNEXION ELECTRIQUE HAUTE PRESSION POUR APPLICATIONS PETROLIERES ET GAZIERES**  
[72] GISSLER, ROBERT WILLIAM, US  
[71] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2021-12-10  
[86] 2020-09-03 (PCT/US2020/049128)  
[87] (WO2021/066994)  
[30] US (62/908,279) 2019-09-30



## Demandes PCT entrant en phase nationale

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[21] **3,143,292**  
[13] A1  
[51] **Int.Cl. B66C 15/04 (2006.01) B66C 13/04 (2006.01) B66C 13/08 (2006.01) B66C 13/48 (2006.01) B66C 19/00 (2006.01)**  
[25] EN  
[54] **CRANE RISK LOGIC APPARATUS AND SYSTEM AND METHOD FOR USE OF SAME**  
[54] **APPAREIL LOGIQUE DE RISQUE DE GRUE AINSI QUE SYSTEME ET PROCEDE POUR SON UTILISATION**  
[72] WIETHORN, JIM D., US  
[71] WIETHORN, JIM D., US  
[85] 2021-12-10  
[86] 2020-07-28 (PCT/US2020/043883)  
[87] (WO2021/021812)  
[30] US (62/879,928) 2019-07-29

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[21] **3,143,293**  
[13] A1  
[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/844 (2013.01)**  
[25] EN  
[54] **PROSTHETIC HEART VALVES**  
[54] **VALVES CARDIAQUES PROTHETIQUES**  
[72] NIR, NOAM, IL  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-10  
[86] 2020-08-24 (PCT/US2020/047593)  
[87] (WO2021/041294)  
[30] US (62/893,621) 2019-08-29

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[21] **3,143,294**  
[13] A1  
[51] **Int.Cl. A61K 31/047 (2006.01) A61K 31/192 (2006.01) A61K 31/194 (2006.01)**  
[25] EN  
[54] **FUNCTIONALIZED LONG-CHAIN HYDROCARBON MONO- AND DICARBOXYLIC ACIDS USEFUL FOR THE PREVENTION OR TREATMENT OF DISEASE**  
[54] **ACIDES MONOCARBOXYLIQUES ET DICARBOXYLIQUES D'HYDROCARBURE A CHAINE LONGUE FONCTIONALISES UTILES POUR LA PREVENTION OU LE TRAITEMENT D'UNE MALADIE**  
[72] ONICIU, DANIELA CARMEN, US  
[71] ESPERVITA THERAPEUTICS, INC., US  
[85] 2021-12-10  
[86] 2020-07-23 (PCT/US2020/043274)  
[87] (WO2021/021563)  
[30] US (62/878,852) 2019-07-26  
[30] US (62/901,739) 2019-09-17

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[21] **3,143,296**  
[13] A1  
[51] **Int.Cl. A61F 2/24 (2006.01) D03D 1/00 (2006.01)**  
[25] EN  
[54] **SKIRT ASSEMBLY FOR IMPLANTABLE PROSTHETIC VALVE**  
[54] **ENSEMBLE JUPE POUR VALVE PROTHETIQUE IMPLANTABLE**  
[72] BUKIN, MICHAEL, IL  
[72] LEVI, TAMIR S., IL  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-10  
[86] 2020-10-29 (PCT/US2020/057846)  
[87] (WO2021/091754)  
[30] US (62/931,304) 2019-11-06

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[21] **3,143,297**  
[13] A1  
[51] **Int.Cl. A61B 17/04 (2006.01) A61B 90/92 (2016.01) A61B 90/94 (2016.01) G09B 23/28 (2006.01)**  
[25] EN  
[54] **SURGICAL SUTURE TENSIONING AND LABELING**  
[54] **TENSION ET ETIQUETAGE DE SUTURES CHIRURGICALES**  
[72] CORTEZ, FELINO V., JR., US  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-10  
[86] 2020-11-30 (PCT/US2020/062589)  
[87] (WO2021/113173)  
[30] US (62/944,967) 2019-12-06

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[21] **3,143,298**  
[13] A1  
[51] **Int.Cl. G06K 9/00 (2022.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR RECOGNIZING AND READING A CODED IDENTIFICATION TAG FROM VIDEO IMAGERY**  
[54] **PROCEDES ET SYSTEMES DE RECONNAISSANCE ET DE LECTURE D'UNE ETIQUETTE D'IDENTIFICATION CODEE A PARTIR D'IMAGERIE VIDEO**  
[72] SON, DIHN TIEN, VN  
[71] VAAS INTERNATIONAL HOLDINGS, INC., US  
[85] 2021-12-10  
[86] 2020-07-01 (PCT/US2020/040404)  
[87] (WO2021/007081)  
[30] US (16/504,137) 2019-07-05

## PCT Applications Entering the National Phase

[21] **3,143,299**  
[13] A1

[51] **Int.Cl. C08H 7/00 (2011.01) C08H 8/00 (2010.01) C08G 65/40 (2006.01) C08J 3/24 (2006.01)**

[25] EN

[54] **PHENOL-CONTAINING POLYESTER MULTIPHASE POLYMER BLEND MATERIALS**

[54] **MATERIAUX MELANGES DE POLYMERES A PLUSIEURS PHASES COMPRENANT UN POLYESTER ET CONTENANT DU PHENOL**

[72] BOVA, ANTHONY S., US

[72] NASKAR, AMIT K., US

[71] UT-BATTELLE, LLC, US

[71] UNIVERSITY OF TENNESSEE RESEARCH FOUNDATION, US

[85] 2021-12-10

[86] 2020-06-25 (PCT/US2020/039556)

[87] (WO2020/264114)

[30] US (62/867,321) 2019-06-27

[21] **3,143,300**  
[13] A1

[51] **Int.Cl. A61L 27/44 (2006.01) A61L 27/04 (2006.01) A61L 27/18 (2006.01)**

[25] EN

[54] **HYBRID ANNULOPLASTY RING**

[54] **ANNEAU D'ANNULOPLASTIE HYBRIDE**

[72] MIRAKI, MANOUCHEHR A., US

[72] HAN, JINGJIA, US

[72] TIAN, BIN, US

[72] DA LA FUENTE, ANGELA, B., US

[72] GUI, LIQIONG, US

[72] SHANG, HAO, US

[72] HOANG, LIEN HOUNG THI, US

[72] DO, VICKY HONG, US

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2021-12-10

[86] 2020-12-11 (PCT/US2020/064443)

[87] (WO2021/119391)

[30] US (62/947,454) 2019-12-12

[21] **3,143,301**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/95 (2013.01)**

[25] EN

[54] **DELIVERY APPARATUS AND METHODS FOR IMPLANTING PROSTHETIC HEART VALVES**

[54] **APPEIL DE POSE ET PROCEDES D'IMPLANTATION DE VALVES CARDIAQUES PROTHETIQUES**

[72] COHEN, OREN, IL

[72] SAAR, TOMER, IL

[72] SCHWARCZ, ELAZAR LEVI, IL

[72] WITZMAN, OFIR, IL

[72] ATIAS, EITAN, IL

[72] MILLER, NOAM, IL

[72] GOLDBERG, ERAN, IL

[72] NEUMANN, YAIR A., IL

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2021-12-10

[86] 2020-12-03 (PCT/US2020/063104)

[87] (WO2021/113507)

[30] US (62/945,039) 2019-12-06

[21] **3,143,302**  
[13] A1

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

[25] EN

[54] **VALVE HOLDER ASSEMBLY WITH SUTURE LOOPING PROTECTION**

[54] **ENSEMBLE PORTE-VALVULE AVEC PROTECTION DE BOUCLE DE SUTURE**

[72] CHANG, DA-YU, US

[72] MUNNELLY, AMY E., US

[72] HUYNH, VAN, US

[72] CONKLIN, BRIAN S., US

[72] VAN ECHTEN, SOOJI, US

[72] REED, KURT KELLY, US

[72] SALL, AMANDA GRACE, US

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2021-12-10

[86] 2020-12-14 (PCT/US2020/064895)

[87] (WO2021/126778)

[30] US (62/948,744) 2019-12-16

[21] **3,143,303**  
[13] A1

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

[25] EN

[54] **HEART VALVE SEALING DEVICES AND DELIVERY DEVICES THEREFOR**

[54] **DISPOSITIFS D'ETANCHEITE DE VALVE CARDIAQUE ET DISPOSITIFS DE MISE EN PLACE ASSOCIES**

[72] MA, MINH T., US

[72] DELGADO, SERGIO, US

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2021-12-10

[86] 2020-12-16 (PCT/US2020/065383)

[87] (WO2021/133614)

[30] US (62/953,098) 2019-12-23

[21] **3,143,304**  
[13] A1

[51] **Int.Cl. A61N 1/02 (2006.01) A61N 5/00 (2006.01) A61N 5/06 (2006.01)**

[25] EN

[54] **EXTERNAL AUDITORY CANAL PHOTOBIO-MODULATION DEVICE**

[54] **DISPOSITIF DE PHOTOBIO-MODULATION DE CANAL AUDITIF EXTERNE**

[72] BROWN, CHRISTOPHER R., US

[72] VOLZ, MARK T., US

[71] INNOVATIVE HEALTH SOLUTIONS, INC., US

[85] 2021-12-10

[86] 2020-06-23 (PCT/US2020/039040)

[87] (WO2020/263767)

[30] US (62/866,763) 2019-06-26

## Demandes PCT entrant en phase nationale

[21] **3,143,305**  
[13] A1

[51] **Int.Cl. G16H 30/40 (2018.01) G06T 7/12 (2017.01) G06T 7/13 (2017.01) G06T 7/149 (2017.01) A61B 8/13 (2006.01) G06T 7/20 (2017.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR VESSEL SEGMENTATION**

[54] **SYSTEME ET PROCEDE DE SEGMENTATION VASCULAIRE**

[72] MATHAI, TEJAS SUDHARSHAN, US

[72] GALEOTTI, JOHN, US

[72] GORANTLA, VIJAY SARADHI, US

[71] CARNEGIE MELLON UNIVERSITY, US

[71] UNIVERSITY OF PITTSBURGH - OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION, US

[85] 2021-12-10

[86] 2020-06-12 (PCT/US2020/037495)

[87] (WO2021/006991)

[30] US (62/860,381) 2019-06-12

[21] **3,143,306**  
[13] A1

[51] **Int.Cl. B60K 1/04 (2019.01) B60R 7/04 (2006.01) B62D 23/00 (2006.01)**

[25] EN

[54] **SIDE-BY-SIDE ALL-TERRAIN VEHICLE**

[54] **VEHICULE TOUT-TERRAIN COTE A COTE**

[72] WANG, RONGHUA, CN

[72] FAN, GE, CN

[71] SEGWAY TECHNOLOGY CO., LTD., CN

[85] 2021-12-13

[86] 2019-12-20 (PCT/CN2019/127165)

[87] (WO2020/248569)

[30] CN (201920890363.5) 2019-06-13

[21] **3,143,307**  
[13] A1

[51] **Int.Cl. H04L 12/16 (2006.01) H04L 51/216 (2022.01) H04L 9/08 (2006.01)**

[25] EN

[54] **PROVISION OF REMOTE APPLICATION ACTION FEED CARDS**

[54] **FOURNITURE DE CARTES D'ALIMENTATION A ACTION D'APPLICATION A DISTANCE**

[72] XU, SAI, US

[72] WANG, YIMING, US

[71] CITRIX SYSTEMS, INC., US

[85] 2021-12-13

[86] 2020-06-10 (PCT/CN2020/095262)

[87] (WO2021/248342)

[21] **3,143,308**  
[13] A1

[51] **Int.Cl. C08B 37/02 (2006.01) A61K 31/716 (2006.01) A61P 35/00 (2006.01) A61P 37/04 (2006.01) C08B 37/18 (2006.01)**

[25] EN

[54] **APPLICATION OF GLUCAN IN PREPARATION OF DRUG**

[54] **APPLICATION DE GLUCANE DANS LA PREPARATION D'UN MEDICAMENT**

[72] YANG, JINBO, CN

[72] YU, GUANGLI, CN

[72] SONG, QIAOLING, CN

[72] WU, LIJUAN, CN

[72] ZHAO, JUN, CN

[72] LV, YOUJING, CN

[72] ZHAO, CHENYANG, CN

[72] GUAN, HUASHI, CN

[71] CP PHARMACEUTICAL QINGDAO CO., LTD., CN

[71] MARINE BIOMEDICAL RESEARCH INSTITUTE OF QINGDAO CO., LTD., CN

[85] 2021-12-13

[86] 2020-06-15 (PCT/CN2020/096223)

[87] (WO2020/249132)

[30] CN (201910512814.6) 2019-06-13

[21] **3,143,309**  
[13] A1

[51] **Int.Cl. C08L 23/14 (2006.01) C08J 5/18 (2006.01)**

[25] EN

[54] **SOFT PROPYLENE COPOLYMER COMPOSITION**

[54] **COMPOSITION DE COPOLYMERE DE PROPYLENE DOUX**

[72] DEFOER, JOHAN, BE

[72] KNAEPEN, MARC, BE

[71] BOREALIS AG, AT

[85] 2021-12-13

[86] 2020-06-15 (PCT/EP2020/066486)

[87] (WO2021/004727)

[30] EP (19184753.2) 2019-07-05

[21] **3,143,310**  
[13] A1

[51] **Int.Cl. B23K 9/095 (2006.01) B23K 9/32 (2006.01)**

[25] EN

[54] **DEVICE FOR THERMALLY JOINING AT LEAST ONE WORKPIECE, COMPRISING A TORCH AND AN EXTRACTION UNIT**

[54] **DISPOSITIF POUR L'ASSEMBLAGE THERMIQUE D'AU MOINS UNE PIECE, POURVU D'UN BRULEUR ET D'UN DISPOSITIF D'ASPIRATION**

[72] ROSE, SASCHA, DE

[71] ALEXANDER BINZEL SCHWEISSTECHNIK GMBH & CO. KG, DE

[85] 2021-12-13

[86] 2020-07-07 (PCT/EP2020/069120)

[87] (WO2021/008944)

[30] DE (10 2019 119 341.9) 2019-07-17

[21] **3,143,311**  
[13] A1

[51] **Int.Cl. G01P 3/36 (2006.01) B05B 7/14 (2006.01) B05D 1/12 (2006.01) C23C 24/04 (2006.01) G01P 3/38 (2006.01) G01P 3/40 (2006.01) G01P 3/68 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR MONITORING A FLOW FIELD OF A PARTICLE JET**

[54] **PROCEDE ET APPAREIL DE SURVEILLANCE DE CHAMP D'ECOULEMENT D'UN JET DE PARTICULES**

[72] LARJO, JUSSI PEKKA, FI

[71] OSEIR OY, FI

[85] 2021-12-13

[86] 2020-06-11 (PCT/FI2020/050408)

[87] (WO2020/260754)

[30] FI (20195557) 2019-06-24

## PCT Applications Entering the National Phase

[21] **3,143,312**  
[13] A1

[51] **Int.Cl. C10B 53/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR CONVERSION OF UNSORTED SOLID WASTES**  
[54] **SYSTEMES ET PROCEDES DE CONVERSION DE DECHETS SOLIDES NON TRIES**  
[72] TENG, WAI MUN, CA  
[72] TENG, WEI, MUN, CA  
[72] COGSWELL, SEBASTIAN, CA  
[72] JIN, SONG, US  
[72] FALLGREN, PAUL, US  
[71] TENG, WAI MUN, CA  
[85] 2021-12-13  
[86] 2020-09-09 (PCT/IB2020/000720)  
[87] (WO2021/048614)  
[30] US (62/897,739) 2019-09-09

[21] **3,143,313**  
[13] A1

[51] **Int.Cl. D06P 1/00 (2006.01) D06P 1/34 (2006.01) D06P 1/39 (2006.01) D06P 1/62 (2006.01) D06P 1/645 (2006.01) D06P 1/649 (2006.01) D06P 1/651 (2006.01) D06P 1/653 (2006.01) D06P 1/655 (2006.01) D06P 1/673 (2006.01) D06P 3/16 (2006.01)**  
[25] EN  
[54] **PROCESS FOR DYEING ANIMAL TEXTILE FIBERS COMPRISING THE USE OF PURIFIED SYNTHETIC FOOD DYES**  
[54] **PROCEDE DE TEINTURE DE FIBRES TEXTILES ANIMALES COMPRENANT L'UTILISATION DE COLORANTS ALIMENTAIRES SYNTHETIQUES PURIFIES**  
[72] BAZZANO, NERIO, IT  
[71] VEBACHEM S.R.L.S., IT  
[85] 2021-12-13  
[86] 2020-06-17 (PCT/IB2020/055645)  
[87] (WO2020/254979)  
[30] IT (102019000009348) 2019-06-18

[21] **3,143,314**  
[13] A1

[51] **Int.Cl. A61B 46/10 (2016.01) A61B 34/20 (2016.01) A61B 90/50 (2016.01) A61B 17/29 (2006.01)**  
[25] EN  
[54] **STERILE BARRIERS AND SENSOR SETS FOR A MEDICAL DEVICE**  
[54] **BARRIERES STERILES ET ENSEMBLES DE CAPTEURS POUR UN DISPOSITIF MEDICAL**  
[72] SHOLEV, MORDEHAI, IL  
[72] ELIHAY, LIRAN, IL  
[72] TEIBLUM, OREN, IL  
[72] MESHORER, ITAI, IL  
[72] KAUFMAN, ASSAF, IL  
[72] KORMAN, TAL, IL  
[72] VITENBERG, GIL, IL  
[72] MASHIACH, EYTAN, IL  
[71] HUMAN XTENSIONS LTD., IL  
[85] 2021-12-13  
[86] 2020-06-30 (PCT/IL2020/050728)  
[87] (WO2021/001822)  
[30] US (62/868,940) 2019-06-30

[21] **3,143,315**  
[13] A1

[51] **Int.Cl. G01J 1/00 (2006.01) B23K 26/70 (2014.01) B23K 1/005 (2006.01)**  
[25] EN  
[54] **METHOD FOR DETERMINING LASER IRRADIATION STATE**  
[54] **PROCEDE PERMETTANT DE DETERMINER UN ETAT D'IRRADIATION LASER**  
[72] WAKISAKA TAISEI, JP  
[72] AKIYAMA TAKESHI, JP  
[71] HONDA MOTOR CO., LTD., JP  
[85] 2021-12-13  
[86] 2020-06-09 (PCT/JP2020/022663)  
[87] (WO2020/250882)  
[30] JP (2019-110024) 2019-06-13

[21] **3,143,316**  
[13] A1

[51] **Int.Cl. A61J 1/05 (2006.01) C03C 17/245 (2006.01) C03C 23/00 (2006.01)**  
[25] EN  
[54] **COATING FILM-ATTACHED GLASS, PRODUCTION METHOD THEREFOR, AND MODIFIED GLASS SUBSTRATE**  
[54] **VERRE A FILM DE REVETEMENT FIXE, SON PROCEDE DE PRODUCTION, ET SUBSTRAT EN VERRE MODIFIE**  
[72] WADA, MASAMICHI, JP  
[72] ISHIKAWA, ATSUSHI, JP  
[71] NIPRO CORPORATION, JP  
[85] 2021-12-13  
[86] 2020-06-12 (PCT/JP2020/023185)  
[87] (WO2020/251009)  
[30] JP (2019-110916) 2019-06-14

[21] **3,143,317**  
[13] A1

[51] **Int.Cl. A61K 31/7088 (2006.01) A61K 35/12 (2015.01) A61K 38/16 (2006.01) A61K 39/12 (2006.01) A61P 31/20 (2006.01) A61P 35/00 (2006.01) C07K 14/025 (2006.01) C07K 19/00 (2006.01) C12N 5/10 (2006.01) C12N 15/37 (2006.01) C12N 15/62 (2006.01) C12N 15/63 (2006.01)**  
[25] EN  
[54] **CELL CAPABLE OF ACTIVATING IMMUNE SYSTEM, AND PHARMACEUTICAL COMPOSITION CONTAINING SAID CELL**  
[54] **CELLULE CAPABLE D'ACTIVER LE SYSTEME IMMUNITAIRE, ET COMPOSITION PHARMACEUTIQUE CONTENANT LADITE CELLULE**  
[72] FUJII, SHINICHIRO, JP  
[72] SHIMIZU, KANAKO, JP  
[71] RIKEN, JP  
[85] 2021-12-13  
[86] 2020-06-12 (PCT/JP2020/023197)  
[87] (WO2020/251014)  
[30] JP (2019-110834) 2019-06-14

## Demandes PCT entrant en phase nationale

[21] **3,143,318**  
[13] A1

[51] **Int.Cl. A61K 35/74 (2015.01) A23K 10/16 (2016.01) A23K 10/18 (2016.01) A23K 20/142 (2016.01) A23L 33/135 (2016.01) A23L 33/175 (2016.01) A61K 31/198 (2006.01) A61P 1/00 (2006.01) A61P 1/04 (2006.01) A61P 31/04 (2006.01) C12N 1/20 (2006.01) C12P 13/08 (2006.01)**

[25] EN

[54] **COMPOSITION FOR PREVENTING, TREATING, OR IMPROVING GASTROINTESTINAL DISEASES COMPRISING STRAIN OF GENUS CORYNEBACTERIUM AND CULTURE THEREOF**

[54] **COMPOSITION POUR PREVENIR, TRAITER OU SOULAGER DES MALADIES GASTRO-INTESTINALES COMPRENANT UNE SOUCHE DU GENRE CORYNEBACTERIUM ET LA CULTURE DE CELLE-CI**

[72] KIM, YANG-SU, KR  
[72] LEE, NAHUM, KR  
[72] HONG, YOUNG GI, KR  
[71] CJ CHEILJEDANG CORPORATION, KR

[85] 2021-12-13  
[86] 2020-06-02 (PCT/KR2020/007169)  
[87] (WO2020/251208)

[21] **3,143,319**  
[13] A1

[51] **Int.Cl. C12N 9/02 (2006.01) C12N 15/79 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **METHODS AND COMPOSITIONS FOR CONFERRING AND/OR ENHANCING HERBICIDE TOLERANCE USING PROTOPORPHYRINOGEN IX OXIDASE OF VARIOUS CYANOBACTERIA OR VARIANT THEREOF**

[54] **PROCEDES ET COMPOSITIONS PERMETTANT DE CONFERER ET/OU AMELIORER LA TOLERANCE AUX HERBICIDES A L'AIDE DE PROTOPORPHYRINOGENE IX OXYDASE DE DIVERSES CYANOBACTERIES OU D'UN VARIANT A SSOIE**

[72] SUNG, SOON-KEE, KR  
[72] AHN, YOUNG OCK, KR  
[72] WOO, JOO YONG, KR  
[72] YOON, JOONSEON, KR  
[72] KIM, HANUL, KR  
[72] HONG, MYOUNG-KI, KR  
[72] PARK, JOONGHYUK, KR  
[71] FARMHANNONG CO., LTD., KR

[85] 2021-12-13  
[86] 2020-06-12 (PCT/KR2020/007679)  
[87] (WO2020/251313)  
[30] KR (10-2019-0071028) 2019-06-14

[21] **3,143,320**  
[13] A1

[51] **Int.Cl. A61B 17/02 (2006.01) A61B 10/02 (2006.01) A61B 17/34 (2006.01) A61M 27/00 (2006.01)**

[25] EN

[54] **SKULL PORTAL DEVICE FOR CRANIAL ACCESS**

[54] **DISPOSITIF DE PORTAIL CRANIEN POUR ACCES CRANIEN**

[72] KELLY, JOHN, CA  
[72] FLETCHER, FRANK, CA  
[72] ARTINDALE, JAMES, CA  
[71] SURGITECH LTD., CA

[85] 2021-12-13  
[86] 2020-06-12 (PCT/CA2020/050813)  
[87] (WO2020/248067)  
[30] US (62/861,071) 2019-06-13

[21] **3,143,321**  
[13] A1

[51] **Int.Cl. B05D 3/06 (2006.01) A61L 27/34 (2006.01) B29C 35/08 (2006.01) C08J 7/16 (2006.01) C08J 7/18 (2006.01)**

[25] EN

[54] **COATED DEVICES AND RELATED METHODS**

[54] **DISPOSITIFS REVETUS ET PROCEDES ASSOCIES**

[72] DUDNYK, VYACHESLAV, CA  
[72] DITIZIO, VALERIO, CA  
[71] COVALON TECHNOLOGIES INC., CA

[85] 2021-12-13  
[86] 2020-06-12 (PCT/CA2020/050819)  
[87] (WO2020/248072)  
[30] US (62/861,995) 2019-06-14

[21] **3,143,322**  
[13] A1

[51] **Int.Cl. A01J 5/007 (2006.01) G01N 33/04 (2006.01)**

[25] EN

[54] **A CONTROL UNIT AND A CONFIGURATION TAG OF A MILK ANALYSIS APPARATUS**

[54] **UNITE DE COMMANDE ET ETIQUETTE DE CONFIGURATION D'UN APPAREIL D'ANALYSE DE LAIT**

[72] DALLERUP RASMUSSEN, CLAUS, SE  
[72] SLAABY, JOHN, SE  
[71] DELAVAL HOLDING AB, SE

[85] 2021-12-13  
[86] 2020-06-09 (PCT/SE2020/050582)  
[87] (WO2020/251456)  
[30] SE (1950715-1) 2019-06-14

## PCT Applications Entering the National Phase

[21] **3,143,323**  
[13] A1

[51] **Int.Cl. A01J 5/007 (2006.01) G01N 33/04 (2006.01)**  
[25] EN  
[54] **A CONTROL UNIT AND A CASSETTE INSERTABLE IN A MILK ANALYSIS APPARATUS**  
[54] **UNITE DE COMMANDE ET CASSETTE INSERABLE DANS UN APPAREIL D'ANALYSE DE LAIT**  
[72] DALLERUP RASMUSSEN, CLAUS, SE  
[72] SLAABY, JOHN, SE  
[71] DELAVAL HOLDING AB, SE  
[85] 2021-12-13  
[86] 2020-06-09 (PCT/SE2020/050583)  
[87] (WO2020/251457)  
[30] SE (1950716-9) 2019-06-14

[21] **3,143,324**  
[13] A1

[51] **Int.Cl. A61M 25/01 (2006.01) A61B 8/12 (2006.01) A61B 8/14 (2006.01) A61M 25/09 (2006.01) A61M 25/10 (2013.01)**  
[25] EN  
[54] **INTRACARDIAC DELIVERY CATHETER AND METHOD OF USE**  
[54] **CATHETER DE POSE INTRACARDIAQUE ET PROCEDE D'UTILISATION**  
[72] PANETTA, CARMELO J., US  
[72] HAARSTAD, PHILIP J., US  
[71] LCMEDICAL LLC, US  
[85] 2021-12-13  
[86] 2020-06-13 (PCT/US2020/037642)  
[87] (WO2020/252416)  
[30] US (62/861,906) 2019-06-14  
[30] US (63/007,792) 2020-04-09

[21] **3,143,325**  
[13] A1

[51] **Int.Cl. B23K 9/26 (2006.01) B23K 9/32 (2006.01)**  
[25] EN  
[54] **TIP DRESSING INSTALLATION SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE D'INSTALLATION DE DRESSAGE DE POINTE**  
[72] GRAVEL, SYLVAIN, CA  
[72] LIVINGSTON, GARY, CA  
[71] MAGNA INTERNATIONAL INC., CA  
[85] 2021-12-13  
[86] 2020-06-18 (PCT/CA2020/050842)  
[87] (WO2020/252578)  
[30] US (62/862,778) 2019-06-18

[21] **3,143,326**  
[13] A1

[51] **Int.Cl. C23F 17/00 (2006.01) C23G 1/00 (2006.01) C25D 11/16 (2006.01) C25D 11/24 (2006.01) C25F 3/20 (2006.01)**  
[25] EN  
[54] **NANO-POROUS ANODIC ALUMINUM OXIDE MEMBRANE FOR HEALTHCARE AND BIOTECHNOLOGY**  
[54] **MEMBRANE D'OXYDE D'ALUMINIUM ANODIQUE NANO-POREUSE DE SOINS DE SANTE ET DE BIOTECHNOLOGIE**  
[72] BLANCO, MARIO, US  
[71] NANOPEC, INC., US  
[85] 2021-12-13  
[86] 2020-06-15 (PCT/US2020/037684)  
[87] (WO2020/257092)  
[30] US (16/442,608) 2019-06-17

[21] **3,143,327**  
[13] A1

[51] **Int.Cl. A61K 35/76 (2015.01) A61K 38/16 (2006.01) A61K 38/43 (2006.01) C12N 5/10 (2006.01) C12N 15/52 (2006.01) C12N 15/79 (2006.01)**  
[25] EN  
[54] **ENGINEERED HUMAN- ENDOGENOUS VIRUS-LIKE PARTICLES AND METHODS OF USE THEREOF FOR DELIVERY TO CELLS**  
[54] **PSEUDO-PARTICULES VIRALES ENDOGENES HUMAINES GENETIQUEMENT MODIFIEES ET LEURS METHODES D'UTILISATION EN VUE D'UNE ADMINISTRATION A DES CELLULES**  
[72] JOUNG, J. KEITH, US  
[72] CABECEIRAS, PETER, US  
[71] THE GENERAL HOSPITAL CORPORATION, US  
[85] 2021-12-13  
[86] 2020-06-15 (PCT/US2020/037740)  
[87] (WO2020/252455)  
[30] US (62/861,186) 2019-06-13

[21] **3,143,328**  
[13] A1

[51] **Int.Cl. F21S 8/02 (2006.01) E01F 9/20 (2016.01) E01F 9/582 (2016.01) F21S 4/28 (2016.01) E01F 9/00 (2016.01) F21V 17/10 (2006.01)**  
[25] EN  
[54] **CAST IN-GROUND LIGHTING ASSEMBLY**  
[54] **ENSEMBLE D'ECLAIRAGE COULE DANS LE SOL**  
[72] ST. IVES, LAURENCE ROBERT, US  
[71] ST. IVES, LAURENCE ROBERT, US  
[71] ORGANIC LIGHTING SYSTEMS, INC., US  
[85] 2021-12-13  
[86] 2020-06-03 (PCT/US2020/035943)  
[87] (WO2020/251822)  
[30] US (16/440,020) 2019-06-13

[21] **3,143,329**  
[13] A1

[51] **Int.Cl. E21B 34/16 (2006.01) E21B 34/00 (2006.01) E21B 41/00 (2006.01) F16K 17/04 (2006.01) F16K 17/10 (2006.01) F16K 17/168 (2006.01)**  
[25] EN  
[54] **VALVES AND CONTROL SYSTEMS FOR PRESSURE EQUALIZATION AND DE-ENERGIZATION**  
[54] **SOUPAPES ET SYSTEMES DE COMMANDE POUR EGALISATION DE PRESSION ET DESEXCITATION**  
[72] FINK, DANIEL, US  
[72] DALE, CLAYTON, US  
[71] THE E3 COMPANY, LLC, US  
[85] 2021-12-13  
[86] 2020-06-15 (PCT/US2020/037774)  
[87] (WO2020/252466)  
[30] US (62/861,647) 2019-06-14

## Demandes PCT entrant en phase nationale

[21] **3,143,330**  
[13] A1

[51] **Int.Cl. C12N 15/11 (2006.01) C12N 15/90 (2006.01)**

[25] EN

[54] **REAGENTS AND METHODS FOR REPLICATION, TRANSCRIPTION, AND TRANSLATION IN SEMI-SYNTHETIC ORGANISMS**

[54] **REACTIFS ET PROCÉDES DE REPLICATION, DE TRANSCRIPTION ET DE TRADUCTION DANS DES ORGANISMES SEMI-SYNTHÉTIQUES**

[72] ROMESBERG, FLOYD E., US

[72] DIEN, VIVIAN T., US

[72] FELDMAN, AARON W., US

[72] KARADEEMA, REBEKAH J., US

[72] LI, LINGJUN, US

[72] LEDBETTER, MICHAEL P., US

[72] ZHOU, ANNE XIAOZHOU, US

[71] THE SCRIPPS RESEARCH INSTITUTE, US

[85] 2021-12-13

[86] 2020-06-12 (PCT/US2020/037437)

[87] (WO2020/252262)

[30] US (62/861,901) 2019-06-14

[21] **3,143,331**  
[13] A1

[51] **Int.Cl. H04R 25/00 (2006.01)**

[25] EN

[54] **HEARING ENHANCEMENT AND PROTECTION DEVICE**

[54] **DISPOSITIF D'AMÉLIORATION ET DE PROTECTION DE L'AUDITION**

[72] DICKINSON, WILLIAM, US

[72] GNEWIKOW, DAVID, US

[71] SOUNDTRACK OUTDOORS, LLC, US

[85] 2021-12-13

[86] 2020-06-15 (PCT/US2020/037784)

[87] (WO2020/252473)

[30] US (62/860,867) 2019-06-13

[21] **3,143,332**  
[13] A1

[51] **Int.Cl. C12N 5/074 (2010.01) C12N 5/00 (2006.01)**

[25] EN

[54] **METHODS FOR THE PRODUCTION OF MULTIPLE LINEAGES FROM INDUCED PLURIPOTENT STEM CELLS USING CHARGED SURFACES**

[54] **PROCÉDES DE PRODUCTION DE LIGNÉES MULTIPLES À PARTIR DE CELLULES SOUCHES PLURIPOTENTES INDUITES À L'AIDE DE SURFACES CHARGÉES**

[72] RAJESH, DEEPIKA, US

[72] MUNN, CHRISTIE, US

[72] BURTON, SARAH, US

[72] GOEDLAND, MADELYN, US

[72] MCLACHAN, MICHAEL, US

[72] MUSINSKY, ABBEY, US

[72] KIM, KWI HYE, US

[72] HANCOCK, MICHAEL, US

[72] OHSHIMA, MAKIKO, US

[72] STROUSE, ANNE, US

[72] DICKERSON, SARAH, US

[71] FUJIFILM CELLULAR DYNAMICS, INC., US

[71] FUJIFILM HOLDINGS AMERICA CORPORATION, US

[85] 2021-12-13

[86] 2020-06-15 (PCT/US2020/037790)

[87] (WO2020/252477)

[30] US (62/861,640) 2019-06-14

[30] US (62/865,806) 2019-06-24

[30] US (63/038,564) 2020-06-12

[21] **3,143,333**  
[13] A1

[51] **Int.Cl. C08L 23/04 (2006.01) C08J 3/24 (2006.01) C08K 5/14 (2006.01) C08K 5/36 (2006.01) C08K 5/50 (2006.01) C08K 5/5399 (2006.01) C09D 123/04 (2006.01) H01B 3/44 (2006.01)**

[25] EN

[54] **ETHYLENE-BASED POLYMER COMPOSITION CONTAINING A TRIORGANOAMINOPHOSPHINE**

[54] **COMPOSITION POLYMERÉ À BASE D'ÉTHYLENE CONTENANT UNE TRIORGANOAMINOPHOSPHINE**

[72] CHAUDHARY, BHARAT I., US

[72] COGEN, JEFFREY M., US

[72] LIOTTA, CHARLES, US

[72] SARNGADHARAN, SARATH CHAND, IN

[72] POLLET, PAMELA, US

[71] DOW GLOBAL TECHNOLOGIES LLC, US

[71] GEORGIA TECH RESEARCH CORPORATION, US

[85] 2021-12-13

[86] 2020-06-16 (PCT/US2020/037931)

[87] (WO2020/263626)

[30] US (62/866,128) 2019-06-25

[21] **3,143,334**  
[13] A1

[51] **Int.Cl. C07D 207/327 (2006.01)**

[25] EN

[54] **GLYCOLATE OXIDASE INHIBITORS FOR THE TREATMENT OF DISEASE**

[54] **INHIBITEURS DE GLYCOLATE OXYDASE POUR LE TRAITEMENT D'UNE MALADIE**

[72] WANG, BING, US

[72] CRAWFORD, BRETT E., US

[72] BHAGWAT, SHRIPAD, US

[72] BAI, XIAOMEI, US

[71] BIOMARIN PHARMACEUTICAL INC., US

[85] 2021-12-13

[86] 2020-06-18 (PCT/US2020/038480)

[87] (WO2020/257487)

[30] US (62/863,786) 2019-06-19

## PCT Applications Entering the National Phase

[21] **3,143,335**  
[13] A1

[51] **Int.Cl. C22C 38/08 (2006.01) C22C 38/42 (2006.01) C22C 38/44 (2006.01) C22C 38/46 (2006.01) C22C 38/48 (2006.01) C22C 38/50 (2006.01) F04B 9/02 (2006.01) F04B 53/10 (2006.01) F04B 53/16 (2006.01)**

[25] EN

[54] **WEAR AND CORROSION RESISTANT STEEL COMPOSITIONS AND HIGH PRESSURE PUMPS AND PUMP COMPONENTS COMPRISED THEREOF**

[54] **COMPOSITIONS D'ACIER RESISTANTES A L'USURE ET A LA CORROSION ET POMPES A HAUTE PRESSION ET COMPOSANTS DE POMPE CONSTITUES DE CELLES-CI**

[72] BAYYOUK, JACOB, US  
[72] PEARSON, ALASTAIR SCOTT, US  
[72] HIPPENSTIEL, FRANK, US  
[72] MULLER, MICHAEL, US  
[71] SPM OIL & GAS INC., US  
[85] 2021-12-13  
[86] 2020-06-18 (PCT/US2020/038518)  
[87] (WO2020/257515)  
[30] US (62/864,932) 2019-06-21

[21] **3,143,336**  
[13] A1

[51] **Int.Cl. B29C 64/106 (2017.01) B29D 99/00 (2010.01) B33Y 10/00 (2015.01) B33Y 30/00 (2015.01) B33Y 80/00 (2015.01) B29C 64/194 (2017.01) B29C 64/209 (2017.01) B29C 64/295 (2017.01) B29C 48/395 (2019.01) B29C 48/525 (2019.01) B29C 48/56 (2019.01) B29C 48/60 (2019.01) B29C 48/72 (2019.01) B29C 48/76 (2019.01) B29C 48/80 (2019.01)**

[25] EN

[54] **3D-PRINTER SYSTEM AND 3D-PRINTING METHOD OF AN ELASTOMERICALLY DEFORMABLE RUBBER BODY, IN PARTICULAR A RUBBER SEAL**

[54] **SYSTEME D'IMPRIMANTE 3D ET PROCEDE D'IMPRESSION 3D D'UN CORPS EN CAOUTCHOUC ELASTIQUEMENT DEFORMABLE, EN PARTICULIER UN JOINT EN CAOUTCHOUC**

[72] GERADA, IVAN, MT  
[72] HIGNETT, MARTIN, MT  
[71] TRELLEBORG SEALING SOLUTIONS GERMANY GMBH, DE  
[85] 2021-12-10  
[86] 2019-06-11 (PCT/EP2019/065171)  
[87] (WO2020/249189)

[21] **3,143,337**  
[13] A1

[51] **Int.Cl. B09B 3/00 (2022.01)**

[25] EN

[54] **BREAKDOWN OF SOLID WASTE IN CARDBOARD MANUFACTURING**

[54] **DECOMPOSITION DE DECHETS SOLIDES DANS LA FABRICATION DE CARTON**

[72] LITERSKI, GEOFFREY, AU  
[72] CAMPBELL, DAVID, AU  
[71] ECOCHEM AUSTRALIA PTY LTD, AU  
[85] 2021-12-14  
[86] 2019-06-17 (PCT/AU2019/050622)  
[87] (WO2019/237159)  
[30] AU (2018204325) 2018-06-15

[21] **3,143,338**  
[13] A1

[51] **Int.Cl. A61K 31/352 (2006.01) A61K 9/06 (2006.01) A61K 31/05 (2006.01) A61P 31/04 (2006.01)**

[25] EN

[54] **ANTIBACTERIAL DOSAGE REGIME USING CANNABINOIDS**

[54] **REGIME POSOLOGIQUE ANTIBACTERIEN UTILISANT DES CANNABINOIDES**

[72] CALLAHAN, MATTHEW, US  
[72] THURN, MICHAEL, AU  
[71] BOTANIX PHARMACEUTICALS LIMITED, AU  
[85] 2021-12-14  
[86] 2020-06-17 (PCT/AU2020/050607)  
[87] (WO2020/252522)  
[30] AU (2019902124) 2019-06-18

[21] **3,143,339**  
[13] A1

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

[25] EN

[54] **PATIENT SELECTION FOR ENHANCEMENT OF ANTI-TUMOR IMMUNITY IN CANCER PATIENTS**

[54] **SELECTION DE PATIENT POUR L'AMELIORATION DE L'IMMUNITE ANTITUMORALE CHEZ DES PATIENTS ATTEINTS D'UN CANCER**

[72] ROBERTS, PATRICK JOSEPH, US  
[72] LAI, ANNE, US  
[72] SORRENTINO, JESSICA, US  
[71] G1 THERAPEUTICS, INC., US  
[85] 2021-12-13  
[86] 2020-06-18 (PCT/US2020/038557)  
[87] (WO2020/257536)  
[30] US (62/863,153) 2019-06-18  
[30] US (62/907,375) 2019-09-27

[21] **3,143,340**  
[13] A1

[51] **Int.Cl. B65G 11/16 (2006.01) B02C 17/22 (2006.01) B65D 90/04 (2006.01) F16B 1/00 (2006.01)**

[25] EN

[54] **WEAR LINER**

[54] **REVETEMENT D'USURE**

[72] MOLESWORTH, DAVID, AU  
[72] MINTO, JUSTIN, AU  
[71] ELASTOTEC PTY LIMITED, AU  
[85] 2021-12-14  
[86] 2020-06-18 (PCT/AU2020/050614)  
[87] (WO2020/252528)  
[30] AU (2019902116) 2019-06-18



## Demandes PCT entrant en phase nationale

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[21] **3,143,341**  
[13] A1

[51] **Int.Cl. G01M 3/00 (2006.01) G01N 33/00 (2006.01) G08B 21/12 (2006.01) G05D 1/02 (2020.01)**

[25] EN

[54] **GAS EMISSION MONITORING AND DETECTION**

[54] **SURVEILLANCE ET DETECTION D'EMISSION DE GAZ**

[72] ALKADI, NASR, US

[72] MOHAMMED, AMMAR ABDILGHANIE, US

[72] JOSHI, MAHENDRA, US

[72] ZOGHBI, BILAL, US

[72] DI FILIPPO, VALERIA, US

[72] KAZEMPOOR, PEJMAN, US

[72] ZHANG, JIANMIN, US

[71] BAKER HUGHES OILFIELD OPERATIONS LLC, US

[85] 2021-12-13

[86] 2020-06-19 (PCT/US2020/038603)

[87] (WO2020/263693)

[30] US (62/866,733) 2019-06-26

[30] US (62/874,755) 2019-07-16

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[21] **3,143,342**  
[13] A1

[51] **Int.Cl. F26B 17/12 (2006.01) F26B 17/14 (2006.01) F26B 17/16 (2006.01) F26B 21/06 (2006.01) F26B 23/10 (2006.01)**

[25] EN

[54] **THERMAL PROCESSING OF BULK SOLIDS**

[54] **TRAITEMENT THERMIQUE DE SOLIDES EN VRAC**

[72] MARINITSCH, GERALD, AT

[72] CASTELLANO GASSO, FRANCISCO JOSE, ES

[72] RICHARD, CAROLINE, CA

[71] SOLEX THERMAL SCIENCE INC., CA

[85] 2021-12-14

[86] 2019-07-19 (PCT/CA2019/051003)

[87] (WO2021/012031)

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[21] **3,143,343**  
[13] A1

[51] **Int.Cl. A23L 33/175 (2016.01) A23L 29/00 (2016.01) A23L 33/10 (2016.01) A23L 33/105 (2016.01) A23L 2/52 (2006.01) A23L 2/66 (2006.01) A61K 9/08 (2006.01) A61K 31/522 (2006.01) A61K 47/18 (2017.01) A61P 25/26 (2006.01) C07C 229/36 (2006.01) C07D 473/12 (2006.01)**

[25] EN

[54] **STIMULANT COMPOSITION AND PROCESS FOR MAKING SAME**

[54] **COMPOSITION STIMULANTE ET PROCEDE POUR LA PREPARER**

[72] KHOUIDER, MOHAND, CA

[72] WEINERMAN, CHAIM, CA

[71] NHANCE NEUROTECHNOLOGIES INC., CA

[85] 2021-12-14

[86] 2020-04-22 (PCT/CA2020/050529)

[87] (WO2020/248042)

[30] US (62/861,718) 2019-06-14

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[21] **3,143,344**  
[13] A1

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

[25] EN

[54] **LOW PROFILE PROSTHETIC MITRAL VALVE**

[54] **VALVE MITRALE PROTHETIQUE A PROFIL BAS**

[72] FUNG, ERIC SOUN-SANG, CA

[72] WONG, KAREN TSOEK-JI, CA

[72] BEN-ABRAHAM, EPHRAIM, US

[71] NEOVASC TIARA INC., CA

[85] 2021-12-13

[86] 2020-06-19 (PCT/US2020/038726)

[87] (WO2020/257643)

[30] US (62/864,008) 2019-06-20

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[21] **3,143,345**  
[13] A1

[51] **Int.Cl. G01J 5/0804 (2022.01)**

[25] EN

[54] **PASSIVE INFRARED SENSOR SYSTEMS AND METHODS**

[54] **PROCEDES ET SYSTEMES A CAPTEURS INFRAROUGES PASSIFS**

[72] WANG, YA, US

[72] WU, LIBO, US

[72] CHEN, ZHANGJIE, US

[71] THE TEXAS A&M UNIVERSITY SYSTEM, US

[85] 2021-12-13

[86] 2020-06-19 (PCT/US2020/038751)

[87] (WO2020/257661)

[30] US (62/880,058) 2019-07-29

[30] US (62/863,808) 2019-06-19

[30] US (62/863,842) 2019-06-19

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[21] **3,143,347**  
[13] A1

[51] **Int.Cl. F16G 11/02 (2006.01) B25B 5/14 (2006.01) B64D 1/00 (2006.01) B66D 1/48 (2006.01) B66D 1/60 (2006.01) F16G 11/10 (2006.01) G01S 7/521 (2006.01) G10K 11/00 (2006.01)**

[25] EN

[54] **DEVICE FOR LOCKING AN OBJECT ALONG A CABLE**

[54] **DISPOSITIF DE VERROUILLAGE D'UN OBJET LE LONG D'UN CABLE**

[72] THOMAS, PHILIPPE, FR

[72] WARNAN, FRANCOIS, FR

[71] THALES, FR

[85] 2021-12-10

[86] 2020-06-11 (PCT/EP2020/066162)

[87] (WO2020/249655)

[30] FR (FR1906285) 2019-06-13

## PCT Applications Entering the National Phase

[21] **3,143,348**  
[13] A1

[51] **Int.Cl. G06Q 50/16 (2012.01) G06Q 50/18 (2012.01) G06F 16/27 (2019.01) G06F 16/93 (2019.01)**

[25] EN

[54] **BLOCKCHAIN BASED REAL ESTATE REGISTRY**

[54] **REGISTRE DE BIENS IMMOBILIERS BASE SUR UNE CHAINE DE BLOCS**

[72] CAMERON, IRENE, CA  
[72] CAMERON, CONNER, CA  
[72] SULTAN, KARIM ALEXANDER, CA  
[72] RUHI, UMAR, CA  
[71] ARROWHEAD DEVELOPMENT COMPANY LTD., CA  
[85] 2021-12-14  
[86] 2020-06-11 (PCT/CA2020/050797)  
[87] (WO2020/248054)  
[30] US (62/861,804) 2019-06-14

[21] **3,143,349**  
[13] A1

[51] **Int.Cl. C07H 19/11 (2006.01) A61K 31/7072 (2006.01) A61P 1/16 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **CYCLIC DEOXYRIBONUCLEOTIDE COMPOUNDS**

[54] **COMPOSES DESOXYRIBONUCLEOTIDIQUES CYCLIQUES**

[72] ZHI, LIN, US  
[71] NUCORION PHARMACEUTICALS, INC., US  
[85] 2021-12-08  
[86] 2020-07-15 (PCT/US2020/042187)  
[87] (WO2021/011692)  
[30] US (62/875,190) 2019-07-17

[21] **3,143,350**  
[13] A1

[51] **Int.Cl. C07D 401/10 (2006.01) A61K 31/4709 (2006.01) A61K 31/5025 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01) C07D 403/10 (2006.01) C07D 413/10 (2006.01) C07D 417/10 (2006.01) C07D 487/04 (2006.01) C07D 513/04 (2006.01)**

[25] EN

[54] **SMALL MOLECULE INHIBITORS OF NF-KB INDUCING KINASE**

[54] **INHIBITEURS A PETITE MOLECULE DE KINASE INDUISANT NF-KB**

[72] BARBAY, J. KENT, US  
[72] CHAI, WENYING, US  
[72] ECCLES, WENDY, US  
[72] HACK, MICHAEL D., US  
[72] HERRMANN, AARON T., US  
[72] JONES, WILLIAM M., US  
[72] KRAWCZUK, PAUL J., US  
[72] KREUTTER, KEVIN D., US  
[72] LEBSACK, ALEC D., US  
[72] PIPPEL, DANIEL J., US  
[72] ROVIRA, ALEXANDER R., US  
[72] WOLIN, RONALD L., US  
[71] JANSSEN PHARMACEUTICA NV, BE  
[85] 2021-11-29  
[86] 2020-05-29 (PCT/EP2020/065024)  
[87] (WO2020/239999)  
[30] US (62/855,144) 2019-05-31  
[30] US (62/907,833) 2019-09-30

[21] **3,143,351**  
[13] A1

[51] **Int.Cl. G16B 20/00 (2019.01) G16B 25/10 (2019.01) G16B 40/20 (2019.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR BIOREMEDIATION OF POLLUTANTS**

[54] **SYSTEME ET PROCEDE POUR POUR LA BIOREMEDIATION DE POLLUANTS**

[72] ANAND, SWADHA, IN  
[72] MERCHANT, MITALI, IN  
[72] MOHAPATRA, ANWESHA, IN  
[72] MANDE, SHARMILA SHEKHAR, IN  
[72] BHATT, VINEET, IN  
[72] SAMPATH, PREETHI ALAGARAI, IN  
[71] TATA CONSULTANCY SERVICES, IN  
[85] 2021-10-12  
[86] 2020-04-11 (PCT/IN2020/050346)  
[87] (WO2020/208657)  
[30] IN (201921014894) 2019-04-12

[21] **3,143,352**  
[13] A1

[51] **Int.Cl. A61K 9/10 (2006.01) A61K 31/4174 (2006.01) A61K 31/438 (2006.01) A61K 31/506 (2006.01) A61K 31/517 (2006.01) A61K 31/565 (2006.01) A61K 47/10 (2017.01) A61K 47/28 (2006.01) A61K 47/30 (2006.01) A61K 47/42 (2017.01) C07D 233/62 (2006.01) C07D 239/94 (2006.01) C07D 401/14 (2006.01) C07D 403/12 (2006.01) C07D 491/107 (2006.01)**

[25] EN

[54] **STABLE COLLOIDAL DRUG AGGREGATES AND METHODS OF MANUFACTURE AND USE THEREOF**

[54] **AGREGATS DE MEDICAMENT COLLOIDAUX STABLES ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION**

[72] SHOICHET, MOLLY S., CA  
[72] GANESH, AHIL N., CA  
[72] DONNERS, ERIC N., CA  
[72] SHOICHET, BRIAN K., US  
[72] TOROSYAN, HAYARPI, US  
[71] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA  
[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US  
[85] 2021-12-14  
[86] 2020-06-18 (PCT/CA2020/050845)  
[87] (WO2020/252581)  
[30] GB (1908716.2) 2019-06-18

[21] **3,143,353**  
[13] A1

[51] **Int.Cl. C10G 32/02 (2006.01) B01D 3/00 (2006.01) B01D 61/00 (2006.01) C02F 1/469 (2006.01) C07C 29/76 (2006.01) C07C 31/20 (2006.01) C10G 31/09 (2006.01) C10G 31/11 (2006.01)**

[25] EN

[54] **PROCESS FOR RECOVERY OF HYDRATE INHIBITORS**

[54] **PROCEDE DE RECUPERATION D'INHIBITEURS D'HYDRATE**

[72] TROFIMUK, TERRANCE JOHN LARRY, CA  
[72] DOMANKO, DANIEL JOHN, CA  
[71] VME CANADA LTD., CA  
[85] 2021-12-14  
[86] 2020-06-12 (PCT/CA2020/050812)  
[87] (WO2020/248066)  
[30] US (62/861,568) 2019-06-14

## Demandes PCT entrant en phase nationale

[21] **3,143,355**  
[13] A1

[51] **Int.Cl. C21D 9/573 (2006.01) C21D 1/613 (2006.01) C21D 1/62 (2006.01) C21D 9/63 (2006.01) F27D 9/00 (2006.01)**

[25] EN

[54] **COOLING DEVICE FOR BLOWING GAS ONTO A SURFACE OF A TRAVELING STRIP**

[54] **DISPOSITIF DE REFROIDISSEMENT POUR SOUFFLER UN GAZ SUR UNE SURFACE D'UNE BANDE MOBILE**

[72] DUBOIS, MICHEL, BE  
[72] BOYER, MICHEL, FR  
[71] JOHN COCKERILL S.A., BE  
[85] 2021-12-14  
[86] 2019-12-20 (PCT/EP2019/086751)  
[87] (WO2021/004651)  
[30] EP (19185623.6) 2019-07-11

[21] **3,143,357**  
[13] A1

[51] **Int.Cl. C07C 1/28 (2006.01) C07C 13/605 (2006.01)**

[25] EN

[54] **METHOD FOR CONTINUOUS SYNTHESIS OF PROPELLANE COMPOUNDS**

[54] **PROCEDE DE SYNTHESE EN CONTINU DE COMPOSES DE PROPELLANE**

[72] HONG, HAO, US  
[72] ZHANG, ENXUAN, CN  
[72] LU, JIANGPING, CN  
[72] WEI, FULIANG, CN  
[72] YANG, SIHANG, CN  
[71] JINLIN ASYMCHEM LABORATORIES CO., LTD., CN  
[85] 2021-12-14  
[86] 2019-06-18 (PCT/CN2019/091732)  
[87] (WO2020/252661)

[21] **3,143,359**  
[13] A1

[51] **Int.Cl. C25C 3/10 (2006.01) C25C 3/12 (2006.01) C25C 7/02 (2006.01) C25C 7/06 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR OPERATING AN ELECTROLYTIC CELL**

[54] **APPAREIL ET PROCEDE D'UTILISATION D'UNE CELLULE ELECTROLYTIQUE**

[72] PETITJEAN, BRUNO, FR  
[72] NOIZET, ALAIN, FR  
[72] BARDET, BENOIT, FR  
[71] ELYSIS LIMITED PARTNERSHIP, CA  
[85] 2021-12-14  
[86] 2020-08-27 (PCT/CA2020/051173)  
[87] (WO2021/035356)  
[30] US (62/892,722) 2019-08-28

[21] **3,143,356**  
[13] A1

[51] **Int.Cl. B07C 5/14 (2006.01) B27B 31/00 (2006.01)**

[25] EN

[54] **LUMBER BIN SORTER**

[54] **TRIEUSE A CASES POUR BOIS D'UVRE**

[72] ST-PIERRE, ISABELLE, CA  
[72] ST-PIERRE, JEAN-MICHEL, CA  
[72] ST-PIERRE, JOELLE, CA  
[72] ST-PIERRE, MICHEL, CA  
[71] NOVILCO INC., CA  
[85] 2021-12-14  
[86] 2020-07-03 (PCT/CA2020/050928)  
[87] (WO2021/003562)  
[30] US (62/870,982) 2019-07-05

[21] **3,143,358**  
[13] A1

[51] **Int.Cl. E04C 2/288 (2006.01) E04C 2/38 (2006.01)**

[25] EN

[54] **REINFORCED STRUCTURAL INSULATION PANEL WITH CORNER BLOCKS**

[54] **PANNEAU D'ISOLATION STRUCTURAL RENFORCE A BLOCS D'ANGLE**

[72] DOMBOWSKY, BENEDICT JOHN, CA  
[72] DOMBOWSKY, MICHAEL ANTHONY, CA  
[71] NEXII BUILDING SOLUTIONS INC., CA  
[85] 2021-12-14  
[86] 2020-06-12 (PCT/CA2020/051032)  
[87] (WO2020/248081)  
[30] US (16/442,292) 2019-06-14

[21] **3,143,360**  
[13] A1

[51] **Int.Cl. H01L 23/36 (2006.01) H01L 39/00 (2006.01)**

[25] EN

[54] **THERMALIZATION STRUCTURE FOR DEVICES COOLED TO CRYOGENIC TEMPERATURE**

[54] **STRUCTURE DE THERMALISATION POUR DISPOSITIFS REFROIDIS A TEMPERATURE CRYOGENIQUE**

[72] LEWANDOWSKI, ERIC PETER, US  
[72] WEBB, BUCKNELL, US  
[72] HERTZBERG, JARED BARNEY, US  
[72] SANDBERG, MARTIN, US  
[72] JINKA, OBLESH, US  
[71] INTERNATIONAL BUSINESS MACHINES CORPORATION, US  
[85] 2021-12-14  
[86] 2020-05-13 (PCT/EP2020/063358)  
[87] (WO2020/254040)  
[30] US (16/447,017) 2019-06-20

## PCT Applications Entering the National Phase

[21] **3,143,361**  
[13] A1

[51] **Int.Cl. A61B 10/06 (2006.01) A61B 10/04 (2006.01) A61B 17/28 (2006.01) A61B 18/04 (2006.01)**

[25] EN

[54] **SAMPLING DEVICE AND SAMPLING SYSTEM**

[54] **DISPOSITIF D'ECHANTILLONNAGE ET SYSTEME D'ECHANTILLONNAGE**

[72] TAM, CHI CHUN TERENCE, CN

[71] YUEN, MAE ANN MICHELE, CN

[85] 2021-12-14

[86] 2020-06-12 (PCT/CN2020/095842)

[87] (WO2020/249089)

[30] HK (19125288.1) 2019-06-14

[30] HK (32019000095.2) 2019-12-19

[21] **3,143,362**  
[13] A1

[51] **Int.Cl. H04L 9/00 (2022.01)**

[25] EN

[54] **HOMOMORPHIC ENCRYPTION WITH APPLICATIONS TO PRIVATE INFORMATION RETRIEVAL**

[54] **CHIFFREMENT HOMOMORPHIQUE AVEC DES APPLICATIONS POUR LA RECUPERATION D'INFORMATIONS PRIVEES**

[72] GENTRY, CRAIG BROADWELL, US

[72] HALEVI, SHAI, US

[71] INTERNATIONAL BUSINESS MACHINES CORPORATION, US

[85] 2021-12-14

[86] 2020-06-15 (PCT/EP2020/066490)

[87] (WO2020/254248)

[30] US (16/444,278) 2019-06-18

[30] US (16/444,540) 2019-06-18

[21] **3,143,363**  
[13] A1

[51] **Int.Cl. G06N 10/40 (2022.01) G06N 10/70 (2022.01) H01L 27/18 (2006.01)**

[25] EN

[54] **SUPERCONDUCTING INTERPOSER FOR THE TRANSMISSION OF QUANTUM INFORMATION FOR QUANTUM ERROR CORRECTION**

[54] **INTERPOSEUR SUPRACONDUCTEUR POUR LA TRANSMISSION D'INFORMATIONS QUANTIQUES POUR LA CORRECTION D'ERREUR QUANTIQUE**

[72] BRONN, NICHOLAS, US

[72] BOGORIN, DANIELA, US

[72] GUMANN, PATRYK, US

[72] HART, SEAN, US

[72] OLIVADESE, SALVATORE, US

[71] INTERNATIONAL BUSINESS MACHINES CORPORATION, US

[85] 2021-12-14

[86] 2020-05-21 (PCT/EP2020/064208)

[87] (WO2020/254055)

[30] US (16/443,603) 2019-06-17

[21] **3,143,364**  
[13] A1

[51] **Int.Cl. C08B 37/02 (2006.01) A23L 33/26 (2016.01) A61K 31/716 (2006.01) A61P 35/00 (2006.01) A61P 37/04 (2006.01)**

[25] EN

[54] **.BETA.-GLUCAN COMPOSITION AND USE THEREFOR**

[54] **COMPOSITION DE .BETA.-GLUCANE ET SON UTILISATION**

[72] YU, GUANGLI, CN

[72] LV, YOUJING, CN

[72] QU, XIANJUN, CN

[72] ZHAO, CHENYANG, CN

[72] HAO, JIEJIE, CN

[72] LI, QUANCAI, CN

[72] ZHAO, XIA, CN

[72] HU, TING, CN

[72] GUAN, HUASHI, CN

[71] CP PHARMACEUTICAL QINGDAO CO., LTD., CN

[71] MARINE BIOMEDICAL RESEARCH INSTITUTE OF QINGDAO CO., LTD., CN

[85] 2021-12-14

[86] 2020-06-15 (PCT/CN2020/096224)

[87] (WO2020/249133)

[30] CN (201910526252.0) 2019-06-14

[21] **3,143,365**  
[13] A1

[51] **Int.Cl. F25D 11/00 (2006.01) A47J 41/00 (2006.01) B65D 81/18 (2006.01) F25B 21/02 (2006.01)**

[25] EN

[54] **PORTABLE COOLER**

[54] **REFROIDISSEUR PORTABLE**

[72] ALEXANDER, CLAYTON, US

[72] LEITH, DAREN JOHN, US

[72] TIMPERI, MIKKO JUHANI, US

[72] WAKEHAM, CHRISTOPHER THOMAS, US

[72] MULINTI, RAHUL, US

[72] EMMERT, JACOB WILLIAM, US

[72] GURNEY, PAUL THOMAS, US

[71] EMBER TECHNOLOGIES, INC., US

[85] 2021-12-13

[86] 2020-06-19 (PCT/US2020/038765)

[87] (WO2020/263710)

[30] US (62/866,398) 2019-06-25

[30] US (62/887,453) 2019-08-15

[30] US (62/955,696) 2019-12-31

[30] US (62/970,029) 2020-02-04

[21] **3,143,366**  
[13] A1

[51] **Int.Cl. C08J 3/205 (2006.01) B01F 33/71 (2022.01) C08K 5/42 (2006.01) C08L 23/00 (2006.01)**

[25] EN

[54] **METHOD OF MAKING A HOMOGENEOUS MIXTURE OF POLYOLEFIN AND LIQUID ORGANIC ACID**

[54] **PROCEDE DE FABRICATION D'UN MELANGE HOMOGENE DE POLYOLEFINE ET D'ACIDE ORGANIQUE LIQUIDE**

[72] GOU, QIAN, US

[72] DUNCHUS, NEIL W., US

[72] LI, DACHAO, US

[72] PARKER, MICHAEL J., US

[71] DOW GLOBAL TECHNOLOGIES LLC, US

[85] 2021-12-13

[86] 2020-06-22 (PCT/US2020/038882)

[87] (WO2020/263721)

[30] US (62/867,262) 2019-06-27

## Demandes PCT entrant en phase nationale

[21] **3,143,367**  
[13] A1

[51] **Int.Cl. C07D 403/12 (2006.01) A61K 31/416 (2006.01) A61P 35/00 (2006.01) C07D 231/56 (2006.01) C07D 401/06 (2006.01) C07D 401/14 (2006.01)**

[25] EN

[54] **INDAZOLE DERIVATIVE, PREPARATION METHOD THEREFOR, AND PHARMACEUTICAL APPLICATION THEREOF**

[54] **DERIVE D'INDAZOLE, SON PROCEDE DE PREPARATION ET SON APPLICATION PHARMACEUTIQUE**

[72] FAN, XING, CN  
[72] YANG, FANGLONG, CN  
[72] YAN, JINGJING, CN  
[72] WU, XIAO, CN  
[72] HE, FENG, CN  
[72] TAO, WEIKANG, CN  
[71] JIANGSU HENGRUI MEDICINE CO., LTD., CN  
[71] SHANGHAI HENGRUI PHARMACEUTICAL CO., LTD., CN  
[85] 2021-12-14  
[86] 2020-06-18 (PCT/CN2020/096744)  
[87] (WO2020/253762)  
[30] CN (201910530981.3) 2019-06-19

[21] **3,143,368**  
[13] A1

[51] **Int.Cl. C08G 77/04 (2006.01) C08G 77/08 (2006.01) C08L 83/04 (2006.01) C09D 183/04 (2006.01) C09K 3/10 (2006.01) E04D 11/02 (2006.01)**

[25] EN

[54] **VULCANISABLE SILICONE COMPOSITIONS**

[54] **COMPOSITIONS DE SILICONE VULCANISABLES**

[72] REPOLLET-PEDROSA, MILTON H., US  
[72] SEITZ, AARON, US  
[72] GORDON, GLENN, US  
[72] BRASSEUR, MICHAEL, US  
[72] GATHMAN, JUSTIN, US  
[72] SZEWCZYK, JANAH C., US  
[71] DOW SILICONES CORPORATION, US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2021-12-13  
[86] 2020-06-23 (PCT/US2020/039034)  
[87] (WO2020/263762)  
[30] US (62/867,458) 2019-06-27

[21] **3,143,369**  
[13] A1

[51] **Int.Cl. A24F 40/70 (2020.01) A24F 40/10 (2020.01) A24F 40/42 (2020.01)**

[25] EN

[54] **METHOD AND MOUNTING FRAME FOR MANUFACTURING A VAPORIZER UNIT FOR AN INHALER**

[54] **PROCEDE ET OSSATURE DE MONTAGE POUR FABRIQUER UN MODULE EVAPORATEUR POUR UN INHALATEUR**

[72] ROMMING, NIKLAS, DE  
[72] CORNILS, LASSE, DE  
[72] JAKLIN, JAN, DE  
[72] MULLER, THOMAS, DE  
[71] HAUNI MASCHINENBAU GMBH, DE  
[85] 2021-12-14  
[86] 2020-06-16 (PCT/EP2020/066601)  
[87] (WO2020/254307)  
[30] DE (10 2019 116 450.8) 2019-06-18

[21] **3,143,371**  
[13] A1

[25] EN

[54] **SIGNALING STORM BLOCKING METHOD, APPARATUS, AND DEVICE, AND STORAGE MEDIUM**

[54] **METHODE, APPAREIL ET DISPOSITIF DE BLOCAGE DE TEMPETE DE SIGNAUX ET SUPPORT DE STOCKAGE**

[72] CAI, YUDONG, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2021-12-14  
[86] 2020-08-22 (PCT/CN2020/110662)  
[87] (WO2021/043012)  
[30] CN (201910829015.1) 2019-09-03

[21] **3,143,372**  
[13] A1

[51] **Int.Cl. C08G 77/04 (2006.01) C08G 77/08 (2006.01) C08L 83/04 (2006.01) C09D 183/04 (2006.01) C09K 3/10 (2006.01) D06N 3/12 (2006.01) E04D 11/02 (2006.01)**

[25] EN

[54] **ROOM TEMPERATURE VULCANISABLE SILICONE COMPOSITIONS**

[54] **COMPOSITIONS DE SILICONE VULCANISABLES A TEMPERATURE AMBIANTE**

[72] SEITZ, AARON, US  
[72] REPOLLET-PEDROSA, MILTON H., US  
[72] NESBITT, ROCHELLE, US  
[72] GORDON, GLENN, US  
[71] DOW SILICONES CORPORATION, US  
[85] 2021-12-13  
[86] 2020-06-23 (PCT/US2020/039035)  
[87] (WO2020/263763)  
[30] US (62/867,494) 2019-06-27

[21] **3,143,373**  
[13] A1

[51] **Int.Cl. A61K 9/14 (2006.01)**

[25] EN

[54] **SSTR-TARGETED CONJUGATES AND FORMULATIONS THEREOF**

[54] **CONJUGUES CIBLANT SSTR ET FORMULATIONS ASSOCIEES**

[72] ZHOROV, EUGENE, US  
[72] SEARS, CHRISTOPHER, US  
[72] BLOSS, JEFFREY, US  
[72] WOOSTER, RICHARD, US  
[72] KRIKSCIUKAITE, KRISTINA, US  
[71] TARVEDA THERAPEUTICS, INC., US  
[85] 2021-12-13  
[86] 2020-06-24 (PCT/US2020/039260)  
[87] (WO2020/263906)  
[30] US (62/866,134) 2019-06-25

## PCT Applications Entering the National Phase

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[21] **3,143,374**  
[13] A1

[51] **Int.Cl. H02J 7/00 (2006.01)**  
[25] EN  
[54] **BATTERY MANAGEMENT SYSTEM FOR PARALLEL CHARGING OF BATTERY MODULES**  
[54] **SYSTEME DE GESTION DE BATTERIE PERMETTANT UNE CHARGE PARALLELE DE MODULES DE BATTERIE**  
[72] THORSOE, JAN, DK  
[71] NILFISK A/S, DK  
[85] 2021-12-14  
[86] 2020-06-11 (PCT/DK2020/050168)  
[87] (WO2020/259769)  
[30] EP (19181936.6) 2019-06-24

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[21] **3,143,375**  
[13] A1

[51] **Int.Cl. E21B 33/12 (2006.01) C08K 3/013 (2018.01) C08L 45/00 (2006.01) C08L 75/04 (2006.01) E21B 29/02 (2006.01) E21B 43/26 (2006.01)**  
[25] EN  
[54] **DISINTEGRABLE DOWNHOLE TOOLS AND METHOD OF USE**  
[54] **OUTILS DE FOND DE TROU APTES A SE DESINTEGRER ET PROCEDE D'UTILISATION**  
[72] XU, YINGQING, US  
[72] HUANG, XIAOBIN, US  
[71] BAKER HUGHES OILFIELD OPERATIONS LLC, US  
[85] 2021-12-13  
[86] 2020-06-24 (PCT/US2020/039299)  
[87] (WO2020/263933)  
[30] US (16/451,474) 2019-06-25

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[21] **3,143,376**  
[13] A1

[51] **Int.Cl. F25J 1/02 (2006.01) F25B 11/02 (2006.01)**  
[25] EN  
[54] **PLANT AND METHOD FOR LIQUEFYING GAS**  
[54] **INSTALLATION ET PROCEDE DE LIQUEFACTION DE GAZ**  
[72] BARJHOUX, PIERRE, FR  
[72] DURAND, FABIEN, FR  
[72] DELCAYRE, FRANCK, FR  
[71] L'AIR LIQUIDE SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, FR  
[85] 2021-12-14  
[86] 2020-06-08 (PCT/EP2020/065778)  
[87] (WO2020/259990)  
[30] FR (FR1907021) 2019-06-27

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[21] **3,143,377**  
[13] A1

[51] **Int.Cl. G06N 10/40 (2022.01)**  
[25] EN  
[54] **SUPERCONDUCTING INTERPOSER FOR OPTICAL TRANSDUCTION OF QUANTUM INFORMATION**  
[54] **INTERPOSEUR SUPRACONDUCTEUR POUR LA TRANSDUCTION OPTIQUE D'INFORMATIONS QUANTIQUES**  
[72] BRONN, NICHOLAS TORLEIV, US  
[72] BOGORIN, DANIELA FLORENTINA, US  
[72] GUMANN, PATRYK, US  
[72] HART, SEAN, US  
[72] OLIVADESE, SALVATORE BERNARDO, US  
[72] ORCUTT, JASON, US  
[71] INTERNATIONAL BUSINESS MACHINES CORPORATION, US  
[85] 2021-12-14  
[86] 2020-06-23 (PCT/EP2020/067450)  
[87] (WO2020/260251)  
[30] US (16/455,043) 2019-06-27

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[21] **3,143,378**  
[13] A1

[51] **Int.Cl. G01N 29/02 (2006.01) G01N 1/28 (2006.01) G01N 1/38 (2006.01) G01N 33/483 (2006.01)**  
[25] EN  
[54] **EXTERNAL SONICATION**  
[54] **TRAITEMENT PAR ULTRASONS EXTERNE**  
[72] GALEN, PETER, US  
[72] BLEDSÖE, JAMES DAREN, US  
[72] WIKANDER, JERED, US  
[72] GOSS, STEVEN M., US  
[71] HEMEX HEALTH, INC., US  
[85] 2021-12-13  
[86] 2020-06-25 (PCT/US2020/039623)  
[87] (WO2020/264162)  
[30] US (62/866,468) 2019-06-25

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[21] **3,143,379**  
[13] A1

[51] **Int.Cl. G01R 31/08 (2020.01)**  
[25] EN  
[54] **SYSTEM FOR DETERMINING ELECTRIC PARAMETERS OF AN ELECTRIC POWER GRID**  
[54] **SYSTEME DE DETERMINATION DE PARAMETRES ELECTRIQUES D'UN RESEAU ELECTRIQUE**  
[72] BERRY, BRIAN, GB  
[72] VENTOLA, MIKA, GB  
[72] GHEORGHE, DANIEL, GB  
[72] PELTOLA, TIMO, GB  
[72] ALAKONTIOLA, JUKKA, GB  
[71] REACTIVE TECHNOLOGIES LIMITED, GB  
[85] 2021-12-14  
[86] 2020-06-09 (PCT/EP2020/065896)  
[87] (WO2020/260003)  
[30] EP (19182247.7) 2019-06-25

## Demandes PCT entrant en phase nationale

[21] **3,143,380**  
[13] A1

[51] **Int.Cl. A47J 31/44 (2006.01) A47J 43/12 (2006.01) F16L 37/26 (2006.01)**

[25] EN

[54] **BEVERAGE PREPARATION MACHINES AND METHODS OF CONNECTING STEAM WANDS THERETO**

[54] **MACHINES DE PREPARATION DE BOISSON ET PROCEDES DE RACCORDEMENT DE BECS A VAPEUR A CELLES-CI**

[72] HANSEN, NICHOLAS, GB

[72] WOODALL, HARRISON LLOYD, GB

[72] PLEVNIK, MARKO, GB

[71] KONINKLIJKE DOUWE EGBERTS B.V., NL

[85] 2021-12-14

[86] 2020-06-10 (PCT/EP2020/066090)

[87] (WO2020/249615)

[30] GB (1908557.0) 2019-06-14

[21] **3,143,381**  
[13] A1

[51] **Int.Cl. C12N 1/19 (2006.01) C07K 14/37 (2006.01) C12N 1/18 (2006.01) C12N 9/00 (2006.01) C12N 15/31 (2006.01) C12P 7/06 (2006.01)**

[25] EN

[54] **MICROORGANISMS WITH IMPROVED NITROGEN TRANSPORT FOR ETHANOL PRODUCTION**

[54] **MICRO-ORGANISMES A TRANSPORT D'AZOTE AMELIORE POUR LA PRODUCTION D'ETHANOL**

[72] ELLIOTT, SARAH SCHULTHEIS, US

[72] YAZDI, HAMID RISMANI, US

[72] HARRIS, PAUL VINCENT, US

[72] CATLETT, MICHAEL GLENN, US

[71] NOVOZYMES A/S, DK

[85] 2021-12-13

[86] 2020-07-16 (PCT/US2020/042384)

[87] (WO2021/021458)

[30] US (62/879,307) 2019-07-26

[21] **3,143,382**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/95 (2013.01)**

[25] EN

[54] **MODIFIED PROSTHETIC HEART VALVE STENT**

[54] **STENT DE VALVULE CARDIAQUE PROTHETIQUE MODIFIE**

[72] PINTOR, RAFAEL, US

[72] UPPALAPATI, SAI PRASAD, US

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2021-12-13

[86] 2020-09-24 (PCT/US2020/052496)

[87] (WO2021/061987)

[30] US (62/907,476) 2019-09-27

[21] **3,143,383**  
[13] A1

[51] **Int.Cl. H04L 9/08 (2006.01) H04L 9/32 (2006.01)**

[25] EN

[54] **CRYPTOGRAPHIC KEY ORCHESTRATION BETWEEN TRUSTED CONTAINERS IN A MULTI-NODE CLUSTER**

[54] **ORCHESTRATION DE CLE CRYPTOGRAPHIQUE ENTRE DES CONTENEURS DE CONFIANCE DANS UN GROUPE MULTI-NŌDS**

[72] RODRIGUEZ, EDUARDO, US

[72] KARNATI, PRATHEEK, US

[72] BOJJIREDDY, KARUNAKAR, US

[71] INTERNATIONAL BUSINESS MACHINES CORPORATION, US

[85] 2021-12-14

[86] 2020-06-10 (PCT/EP2020/066133)

[87] (WO2020/260026)

[30] US (16/449,904) 2019-06-24

[21] **3,143,385**  
[13] A1

[51] **Int.Cl. E21B 41/00 (2006.01) E21B 47/07 (2012.01) E21B 47/00 (2012.01)**

[25] EN

[54] **DOWNHOLE TOOL**

[54] **OUTIL DE FOND DE TROU**

[72] TILL, LAWRENCE, GB

[72] BOURNE, SUZANNAH, GB

[71] NEMEIN LIMITED, GB

[85] 2021-12-14

[86] 2020-06-23 (PCT/EP2020/067454)

[87] (WO2020/260254)

[30] GB (1909016.6) 2019-06-24

[21] **3,143,386**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/844 (2013.01) A61F 2/82 (2013.01)**

[25] EN

[54] **PROSTHETIC HEART VALVE HAVING LOCKING FEATURE**

[54] **VALVE CARDIAQUE PROTHETIQUE AYANT UN ELEMENT DE VERROUILLAGE**

[72] NEUMANN, YAIR A., IL

[72] COHEN, OREN, IL

[72] PERLMUTTER, KHEN, IL

[72] ATIAS, EITAN, IL

[72] MILLER, NOAM, IL

[72] GOLDBERG, ERAN, IL

[72] DVORSKY, ANATOLY, IL

[72] LEVI, TAMIR S., IL

[72] YUSHTEIN, HAIM, IL

[72] GARMAHI, DANNY M., IL

[72] YOHANAN, ZIV, IL

[72] BUKIN, MICHAEL, IL

[72] NIR, NOAM, IL

[72] SHERMAN, ELENA, IL

[72] SAGI, GIDEON, IL

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2021-12-13

[86] 2020-10-28 (PCT/US2020/057691)

[87] (WO2021/086933)

[30] US (62/928,291) 2019-10-30

[30] US (62/950,005) 2019-12-18

[30] US (62/981,666) 2020-02-26

[30] US (63/013,912) 2020-04-22

[30] US (63/026,267) 2020-05-18

[21] **3,143,387**  
[13] A1

[51] **Int.Cl. C08L 23/14 (2006.01) C08J 5/18 (2006.01)**

[25] EN

[54] **SOFT PROPYLENE COPOLYMER COMPOSITION**

[54] **COMPOSITION DE COPOLYMERE DE PROPYLENE**

[72] DEFOER, JOHAN, BE

[72] KNAEPEN, MARC, BE

[71] BOREALIS AG, AT

[85] 2021-12-13

[86] 2020-06-15 (PCT/EP2020/066496)

[87] (WO2021/004728)

[30] EP (19184754.0) 2019-07-05

## PCT Applications Entering the National Phase

[21] **3,143,388**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) A61K 38/28 (2006.01) A61P 3/10 (2006.01) A61P 5/50 (2006.01)**

[25] EN

[54] **COMPOSITIONS FOR USE IN THE TREATMENT OF INSULIN DEFICIENCY CONDITIONS**

[54] **COMPOSITIONS DESTINEES A ETRE UTILISEES DANS LE TRAITEMENT D'ETATS DE CARENCE EN INSULINE**

[72] COPPARI, ROBERTO, CH

[72] RAMADORI, GIORGIO, CH

[72] MIKROPOULOU, DESPOINA, FR

[71] UNIVERSITE DE GENEVE, CH

[85] 2021-12-14

[86] 2020-06-12 (PCT/EP2020/066371)

[87] (WO2020/260043)

[30] EP (19183317.7) 2019-06-28

[21] **3,143,390**  
[13] A1

[51] **Int.Cl. B21J 15/02 (2006.01) B23K 11/00 (2006.01) B23K 11/18 (2006.01) B23P 19/06 (2006.01) B25B 27/00 (2006.01) B29C 65/00 (2006.01) F16B 37/06 (2006.01)**

[25] FR

[54] **HOLLOW WELDING PIN FOR ASSEMBLING TWO DIFFERENT MATERIALS**

[54] **PION A SOUDER CREUX POUR ASSEMBLAGE DE DEUX MATERIAUX DIFFERENTS**

[72] MERCS, DAVID, FR

[72] SALLERIN, MAXIME, FR

[71] LISI AUTOMOTIVE, FR

[85] 2021-12-14

[86] 2020-06-19 (PCT/FR2020/000188)

[87] (WO2020/254735)

[30] FR (FR1906672) 2019-06-20

[30] FR (FR2006389) 2020-06-18

[21] **3,143,394**  
[13] A1

[51] **Int.Cl. C02F 1/52 (2006.01) C02F 1/00 (2006.01)**

[25] FR

[54] **TABLETS, METHODS AND DEVICES FOR TREATING CONTAMINATED WATER**

[54] **COMPRIMES, PROCEDES ET APPAREILS POUR LE TRAITEMENT D'EAU CONTAMINEE**

[72] BERRAK, ABDERRAZAK, CA

[72] BOUREGA, ABDELAZIZ, CA

[72] PARE, MATHIEU, CA

[72] MARTEL, PATRICK, CA

[71] 121352 CANADA INC. (TECHNOSUB), CA

[85] 2021-12-10

[86] 2020-06-11 (PCT/CA2020/050798)

[87] (WO2020/248055)

[30] CA (3,046,577) 2019-06-13

[21] **3,143,389**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/01 (2006.01) A61B 5/021 (2006.01) A61B 5/026 (2006.01) A61F 2/24 (2006.01)**

[25] EN

[54] **PROSTHETIC HEART VALVE MONITORING ASSEMBLY AND SYSTEM**

[54] **ENSEMBLE ET SYSTEME DE SURVEILLANCE DE VALVE CARDIAQUE PROTHETIQUE**

[72] GOLDBERG, ERAN, IL

[72] NIR, NOAM, IL

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2021-12-13

[86] 2020-12-03 (PCT/US2020/063020)

[87] (WO2021/113449)

[30] US (62/945,022) 2019-12-06

[21] **3,143,392**  
[13] A1

[51] **Int.Cl. H01F 5/00 (2006.01) H05B 6/10 (2006.01) H05B 6/36 (2006.01)**

[25] EN

[54] **INDUCTOR**

[54] **INDUCTEUR**

[72] WHITE, JULIAN DARRYN, GB

[72] HORROD, MARTIN DANIEL, GB

[72] ABI AOUN, WALID, GB

[72] WOODMAN, THOMAS ALEXANDER JOHN, GB

[71] NICOVENTURES TRADING LIMITED, GB

[85] 2021-12-14

[86] 2020-06-23 (PCT/EP2020/067558)

[87] (WO2020/260318)

[30] GB (1909338.4) 2019-06-28

[21] **3,143,395**  
[13] A1

[51] **Int.Cl. H04H 60/33 (2009.01) H04N 21/258 (2011.01) H04N 21/442 (2011.01) H04W 4/30 (2018.01)**

[25] EN

[54] **METHODS AND APPARATUS TO IDENTIFY USER PRESENCE TO A METER**

[54] **PROCEDES ET APPAREIL POUR IDENTIFIER LA PRESENCE D'UN UTILISATEUR A L'INTENTION D'UN COMPTEUR**

[72] WATTS, DAVID, US

[71] THE NIELSEN COMPANY (US), LLC, US

[85] 2021-12-09

[86] 2020-06-11 (PCT/US2020/037262)

[87] (WO2020/252181)

[30] US (16/437,993) 2019-06-11

[21] **3,143,393**  
[13] A1

[51] **Int.Cl. A01N 63/23 (2020.01) A01N 63/50 (2020.01) A01P 7/04 (2006.01) C12N 1/20 (2006.01)**

[25] EN

[54] **BACILLUS THURINGIENSIS STRAIN**

[54] **SOUCHE DE BACILLUS THURINGIENSIS**

[72] CABALLERO SANCHEZ, JAVIER, ES

[71] BIOINSECTIS S.L., ES

[85] 2021-12-14

[86] 2020-06-14 (PCT/EP2020/066418)

[87] (WO2020/249811)

[30] EP (19382497.6) 2019-06-14



## Demandes PCT entrant en phase nationale

[21] **3,143,396**  
[13] A1

[51] **Int.Cl. G06N 10/00 (2022.01) H01L 27/18 (2006.01) H01L 39/22 (2006.01) H01L 39/24 (2006.01)**

[25] EN

[54] **FABRICATING TRANSMON QUBIT FLIP-CHIP STRUCTURES FOR QUANTUM COMPUTING DEVICES**

[54] **FABRICATION DE STRUCTURES DE PUCE RETOURNEE DE BITS QUANTIQUES TRANSMON POUR DISPOSITIFS INFORMATIQUES QUANTIQUES**

[72] CHOW, JERRY, US

[72] ROSENBLATT, SAMI, US

[71] INTERNATIONAL BUSINESS MACHINES CORPORATION, US

[85] 2021-12-14

[86] 2020-06-15 (PCT/EP2020/066437)

[87] (WO2020/254226)

[30] US (16/445,764) 2019-06-19

[21] **3,143,398**  
[13] A1

[51] **Int.Cl. A23J 3/14 (2006.01) A23J 3/16 (2006.01) A23J 3/18 (2006.01) A23J 3/22 (2006.01) A23J 3/26 (2006.01)**

[25] EN

[54] **GROUND MEAT ANALOGUE PRODUCT**

[54] **PRODUIT ANALOGUE A LA VIANDE HACHEE**

[72] DREHER, JOHANNES, DE

[72] HUBER, SANDRA, DE

[72] PIBAROT, PATRICK, CH

[72] RAY, JOYDEEP, CH

[72] SCHMITT, CHRISTOPHE JOSEPH ETIENNE, CH

[72] WEISS, JOCHEN, DE

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

[85] 2021-12-14

[86] 2020-07-10 (PCT/EP2020/069548)

[87] (WO2021/009043)

[30] EP (19186158.2) 2019-07-12

[21] **3,143,401**  
[13] A1

[51] **Int.Cl. B01J 23/755 (2006.01) B01J 31/02 (2006.01) C01B 13/32 (2006.01)**

[25] EN

[54] **NICKEL OXIDE CATALYTIC FILM, METHOD FOR OBTAINING THE SAME, AND USES THEREOF**

[54] **PELLICULE CATALYTIQUE D'OXYDE DE NICKEL, METHODE D'OBTENTION ET UTILISATIONS CONNEXES**

[72] ABARGUES LOPEZ, RAFAEL, ES

[72] NOGUERA, JAUME, ES

[72] MARTINEZ PASTOR, JUAN P., ES

[72] GIMENEZ JULIA, SIXTO, ES

[72] GARCIA TECEDOR, MIGUEL, ES

[72] RODRIGUEZ-CANTO, PEDRO J., ES

[71] UNIVERSITAT DE VALENCIA, ES

[71] UNIVERSITAT JAUME I, ES

[85] 2021-12-14

[86] 2020-06-16 (PCT/ES2020/070390)

[87] (WO2020/254705)

[30] ES (P201930558) 2019-06-19

[21] **3,143,397**  
[13] A1

[51] **Int.Cl. C01B 32/00 (2017.01) C01B 32/05 (2017.01) C09C 1/56 (2006.01)**

[25] EN

[54] **PROCESSING AND PURIFICATION OF CARBONACEOUS MATERIALS**

[54] **TRAITEMENT ET PURIFICATION DE MATERIAUX CARBONES**

[72] KAISER, CHRISTIAN, DE

[72] THOME, VOLKER, DE

[72] SEIFERT, SEVERIN, DE

[72] DITTRICH, SEBASTIAN, DE

[71] FRAUNHOFER-GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE

[85] 2021-12-14

[86] 2020-07-08 (PCT/EP2020/069292)

[87] (WO2021/005124)

[30] DE (10 2019 210 217.4) 2019-07-10

[21] **3,143,399**  
[13] A1

[51] **Int.Cl. C01G 53/00 (2006.01)**

[25] EN

[54] **PARTICULATE MATERIAL, METHOD FOR ITS MANUFACTURE AND USE**

[54] **MATERIAU PARTICULAIRE, SON PROCEDE DE FABRICATION ET SON UTILISATION**

[72] KIM, YOUNG JIN, US

[72] SIOSS, JAMES A., US

[72] TEUFL, TOBIAS MAXIMILIAN, DE

[72] LAMPERT, JORDAN K., US

[71] BASF SE, DE

[85] 2021-12-14

[86] 2020-08-20 (PCT/EP2020/073366)

[87] (WO2021/037678)

[30] EP (19194088.1) 2019-08-28

[21] **3,143,402**  
[13] A1

[51] **Int.Cl. C07C 67/29 (2006.01)**

[25] EN

[54] **METHOD FOR PRODUCING GLYCEROL MONO(METH)ACRYLATE**

[54] **PROCEDE DE PRODUCTION DE MONO(METH)ACRYLATE DE GLYCEROL**

[72] BESTGEN, SEBASTIAN, DE

[72] CASPARI, MAIK, DE

[72] SCHUTZ, THORBEN, DE

[72] BLEITH, TIM, DE

[71] EVONIK OPERATIONS GMBH, DE

[85] 2021-12-14

[86] 2020-06-18 (PCT/EP2020/066865)

[87] (WO2020/254460)

[30] EP (19181573.7) 2019-06-21

## PCT Applications Entering the National Phase

[21] **3,143,403**  
[13] A1

[51] **Int.Cl. A23L 7/10 (2016.01) A23L 13/50 (2016.01) A23P 20/10 (2016.01) A23J 3/18 (2006.01) A23J 3/30 (2006.01)**

[25] EN

[54] **HYDROLYZED GLUTEN-BASED DUSTER COMPOSITION FOR DEEP FRIED FOOD**

[54] **COMPOSITION DE FARINAGE A BASE DE GLUTEN HYDROLYSE POUR ALIMENTS FRITS**

[72] ITO, GOICHI, JP  
[72] HORI, SAYAKA, JP  
[71] ROQUETTE FRERES, FR  
[85] 2021-12-14  
[86] 2020-06-18 (PCT/EP2020/067029)  
[87] (WO2020/260139)  
[30] EP (19305864.1) 2019-06-27

[21] **3,143,404**  
[13] A1

[51] **Int.Cl. A61K 31/713 (2006.01) C12N 15/113 (2010.01) A61P 3/06 (2006.01)**

[25] EN

[54] **APOLIPOPROTEIN B ANTAGONIST**

[54] **ANTAGONISTE DE L'APOLIPOPROTEINE B**

[72] KHAN, MICHAEL, GB  
[72] MITCHELL, DANIEL, GB  
[71] ARGONAUTE RNA LIMITED, GB  
[85] 2021-12-14  
[86] 2020-06-30 (PCT/GB2020/051573)  
[87] (WO2021/001646)  
[30] GB (1909500.9) 2019-07-02  
[30] GB (1910526.1) 2019-07-23  
[30] GB (2000906.4) 2020-01-22

[21] **3,143,405**  
[13] A1

[25] EN

[54] **AUTOMATIC MONITORING OF SMELT FLOW EXITING A RECOVERY BOILER**

[54] **SURVEILLANCE AUTOMATIQUE D'UN FLUX DE FUSION SORTANT D'UNE CHAUDIERE DE RECUPERATION**

[72] LAPPALAINEN, HEIKKI, FI  
[71] ANDRITZ OY, FI  
[85] 2021-12-14  
[86] 2020-06-25 (PCT/FI2020/050455)  
[87] (WO2020/260761)  
[30] FI (20195579) 2019-06-28

[21] **3,143,406**  
[13] A1

[51] **Int.Cl. A63B 67/14 (2006.01) A63F 7/00 (2006.01)**

[25] EN

[54] **SHUFFLEBOARD BOARD ARRANGEMENT**

[54] **AGENCEMENT DE PALET DE JEU DE PALETS**

[72] BARHAM, PAUL, GB  
[72] MOORE, STEPHEN, GB  
[72] DALE, JASON, GB  
[71] ELECTRIC SHUFFLE IP LIMITED, GB  
[85] 2021-12-14  
[86] 2020-01-29 (PCT/GB2020/050205)  
[87] (WO2020/183122)  
[30] GB (1903129.3) 2019-03-08

[21] **3,143,407**  
[13] A1

[51] **Int.Cl. G01N 29/14 (2006.01) G01N 29/46 (2006.01)**

[25] EN

[54] **IDENTIFYING LIQUID RHEOLOGICAL PROPERTIES FROM ACOUSTIC SIGNALS**

[54] **IDENTIFICATION DE PROPRIETES RHEOLOGIQUES DE LIQUIDES A PARTIR DE SIGNAUX ACOUSTIQUES**

[72] ALBERINI, FEDERICO, GB  
[72] HEFFT, DANIEL INGO, GB  
[72] FORTE, GIUSEPPE, GB  
[71] THE UNIVERSITY OF BIRMINGHAM, GB  
[85] 2021-12-14  
[86] 2020-06-26 (PCT/GB2020/051548)  
[87] (WO2020/260889)  
[30] GB (1909291.5) 2019-06-28

[21] **3,143,408**  
[13] A1

[51] **Int.Cl. G10L 19/008 (2013.01)**

[25] EN

[54] **PARAMETER ENCODING AND DECODING**

[54] **CODAGE ET DECODAGE DE PARAMETRES**

[72] BOUTHEON, ALEXANDRE, DE  
[72] FUCHS, GUILLAUME, DE  
[72] MULTRUS, MARKUS, DE  
[72] KUCH, FABIAN, DE  
[72] THIERGART, OLIVER, DE  
[72] BAYER, STEFAN, DE  
[72] DISCH, SASCHA, DE  
[72] HERRE, JURGEN, DE  
[71] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2021-12-14  
[86] 2020-06-15 (PCT/EP2020/066456)  
[87] (WO2020/249815)  
[30] EP (19180385.7) 2019-06-14

[21] **3,143,409**  
[13] A1

[51] **Int.Cl. C12N 15/82 (2006.01)**

[25] EN

[54] **INCREASING WATER USE EFFICIENCY IN PLANTS**

[54] **AMELIORATION DE L'EFFICACITE D'UTILISATION DE L'EAU DANS DES PLANTES**

[72] LAWSON, TRACY, GB  
[72] UAUY, CRISTOBAL, GB  
[72] SIMMONDS, JAMES, GB  
[71] UNIVERSITY OF ESSEX ENTERPRISES LIMITED, GB  
[85] 2021-12-14  
[86] 2020-06-26 (PCT/GB2020/051550)  
[87] (WO2020/260890)  
[30] GB (1909299.8) 2019-06-28

## Demandes PCT entrant en phase nationale

[21] **3,143,410**  
[13] A1

[51] **Int.Cl. H02J 3/38 (2006.01) H02J 3/48 (2006.01) H02J 3/50 (2006.01) H02J 3/28 (2006.01)**

[25] EN

[54] **METHOD FOR FEEDING IN ELECTRICAL POWER BY MEANS OF A WIND FARM**

[54] **METHODE D'ALIMENTATION ELECTRIQUE AU MOYEN D'UN PARC EOLIEN**

[72] QUITMANN, ECKARD, DE  
[71] WOBLEN PROPERTIES GMBH, DE  
[85] 2021-12-14  
[86] 2020-06-25 (PCT/EP2020/067909)  
[87] (WO2020/260504)  
[30] DE (10 2019 117 169.5) 2019-06-26

[21] **3,143,411**  
[13] A1

[51] **Int.Cl. A01H 6/82 (2018.01) A01H 5/12 (2018.01) C12N 15/82 (2006.01)**

[25] EN

[54] **METHOD FOR MODULATING THE ALKALOID CONTENT OF A TOBACCO PLANT**

[54] **PROCEDE DE MODULATION DE LA TENEUR EN ALCALOIDE D'UN PLANT DE TABAC**

[72] BEN KHALED, SARA, GB  
[72] ANASTACIO DE ABREU E LIMA, FRANCISCO, GB  
[71] BRITISH AMERICAN TOBACCO (INVESTMENTS) LIMITED, GB  
[85] 2021-12-14  
[86] 2020-07-03 (PCT/GB2020/051602)  
[87] (WO2021/001658)  
[30] GB (1909562.9) 2019-07-03

[21] **3,143,413**  
[13] A1

[51] **Int.Cl. C12N 15/82 (2006.01) C12N 9/00 (2006.01) C12P 5/00 (2006.01) C12P 19/18 (2006.01)**

[25] EN

[54] **TRANSFERASE ENZYMES**

[54] **ENZYMES TRANSFERASES**

[72] OSBOURN, ANNE, GB  
[72] REED, JAMES, GB  
[72] ORME, ANASTASIA, GB  
[72] LOUVEAU, THOMAS, GB  
[71] PLANT BIOSCIENCE LIMITED, GB  
[85] 2021-12-14  
[86] 2020-06-25 (PCT/EP2020/067866)  
[87] (WO2020/260475)  
[30] GB (1909104.0) 2019-06-25

[21] **3,143,414**  
[13] A1

[51] **Int.Cl. A61F 5/445 (2006.01) A61F 5/44 (2006.01) A61F 13/42 (2006.01)**

[25] EN

[54] **RESISTANCE SENSOR FOR IDENTIFYING LEAK LOCATIONS IN OSTOMY SYSTEM**

[54] **CAPTEUR DE RESISTANCE POUR CERNER LES EMBLEMES DE FUITE DANS UN SYSTEME DE STOMIE**

[72] CARLSSON, JONAS P., US  
[72] LIDDLE, SCOTT E., US  
[72] MATTHEWS, KYLE A., US  
[71] HOLLISTER INCORPORATED, US  
[85] 2021-12-20  
[86] 2021-07-12 (PCT/US2021/041283)  
[87] (3143414)  
[30] US (63/052,132) 2020-07-15

[21] **3,143,415**  
[13] A1

[51] **Int.Cl. C07K 14/415 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **METHOD FOR MODIFYING ALKALOID CONTENT IN PLANTS**

[54] **PROCEDE SERVANT A MODIFIER LA TENEUR EN ALCALOIDES D'UNE PLANTE**

[72] BEN KHALED, SARA, GB  
[72] ANASTACIO DE ABREU E LIMA, FRANCISCO, GB  
[71] BRITISH AMERICAN TOBACCO (INVESTMENTS) LIMITED, GB  
[85] 2021-12-14  
[86] 2020-07-03 (PCT/GB2020/051603)  
[87] (WO2021/001659)  
[30] GB (1909563.7) 2019-07-03

[21] **3,143,416**  
[13] A1

[51] **Int.Cl. H04B 10/116 (2013.01) B65G 1/02 (2006.01) B65G 1/04 (2006.01) B66F 9/06 (2006.01) G05D 1/02 (2020.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR LIGHT COMMUNICATION IN A STORAGE SYSTEM**

[54] **SYSTEME ET PROCEDE DE COMMUNICATION LUMINEUSE DANS UN SYSTEME DE STOCKAGE**

[72] KORGE-HARAJUVET, GEIR, NO  
[71] AUTOSTORE TECHNOLOGY AS, NO  
[85] 2021-12-14  
[86] 2020-06-25 (PCT/EP2020/067924)  
[87] (WO2020/260516)  
[30] NO (20190813) 2019-06-28

[21] **3,143,417**  
[13] A1

[51] **Int.Cl. A61K 31/5415 (2006.01) A61P 25/28 (2006.01)**

[25] EN

[54] **METHYLTHIONIUM AS ENHANCERS OF THE COGNITIVE FUNCTION**

[54] **METHYLTHIONIUM UTILISE COMME SUBSTANCE AMELIORANT LA FONCTION COGNITIVE**

[72] HARRINGTON, CHARLES ROBERT, GB  
[72] RIEDEL, GERNOT, GB  
[72] KLEIN, JOCHEN, DE  
[72] SCHWAB, KARIMA, DE  
[72] WISCHIK, CLAUDE MICHEL, GB  
[71] WISTA LABORATORIES LTD., SG  
[85] 2021-12-14  
[86] 2020-06-29 (PCT/EP2020/068229)  
[87] (WO2021/001306)  
[30] GB (1909454.9) 2019-07-01

## PCT Applications Entering the National Phase

[21] **3,143,418**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 39/12 (2006.01) A61K 39/395 (2006.01) A61P 31/20 (2006.01)**

[25] EN

[54] **COMBINATION OF HEPATITIS B VIRUS (HBV) VACCINES AND HBV-TARGETING RNAI**

[54] **COMBINAISON DE VACCINS CONTRE LE VIRUS DE L'HEPATITE B (VHB) ET D'ARNI CIBLANT LE VIRUS DE L'HEPATITE B**

[72] HORTON, HELEN, BE

[72] DE CREUS, AN MARTINE M, BE

[72] BERKE, JAN MARTIN, BE

[71] JANSSEN SCIENCES IRELAND UNLIMITED COMPANY, IE

[85] 2021-12-14

[86] 2020-06-18 (PCT/IB2020/055696)

[87] (WO2020/255007)

[30] US (62/862,754) 2019-06-18

[21] **3,143,419**  
[13] A1

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

[25] EN

[54] **P2X7 RECEPTOR TARGETED THERAPY**

[54] **THERAPIE CIBLANT LE RECEPTEUR P2X7**

[72] MCNULTY, SHAUN, GB

[72] LARA, ROMAIN, GB

[72] OLIPHANT, CHRIS, GB

[72] GILBERT, SIMON, GB

[72] LLESHI, ERMIRA, GB

[71] BIOSCEPTRE (AUST) PTY LTD, AU

[85] 2021-12-14

[86] 2020-07-24 (PCT/GB2020/051791)

[87] (WO2021/019222)

[30] AU (2019902672) 2019-07-26

[21] **3,143,421**  
[13] A1

[51] **Int.Cl. A61K 35/76 (2015.01) A61K 39/12 (2006.01) A61P 31/20 (2006.01)**

[25] EN

[54] **ARENAVIRUS VECTORS FOR HEPATITIS B VIRUS (HBV) VACCINES AND USES THEREOF**

[54] **VECTEURS D'ARENAVIRUS POUR VACCINS CONTRE LE VIRUS DE L'HEPATITE B (VHB) ET UTILISATIONS ASSOCIEES**

[72] HORTON, HELEN, BE

[72] BODEN, DANIEL, BE

[71] JANSSEN SCIENCES IRELAND UNLIMITED COMPANY, IE

[85] 2021-12-14

[86] 2020-06-18 (PCT/IB2020/055719)

[87] (WO2020/255023)

[30] US (62/862,813) 2019-06-18

[21] **3,143,422**  
[13] A1

[51] **Int.Cl. A01G 31/06 (2006.01)**

[25] EN

[54] **SYSTEM FOR CULTIVATING PLANTS AND OPERATION METHOD THEREOF**

[54] **SYSTEME DE CULTURE DE PLANTES ET PROCEDE DE FONCTIONNEMENT ASSOCIE**

[72] ALESSIO, ANDREA, IT

[72] MODESTO, DANIELE, IT

[71] ZERO SRL, IT

[85] 2021-12-14

[86] 2020-06-19 (PCT/IB2020/055798)

[87] (WO2020/255074)

[30] IT (102019000009603) 2019-06-20

[21] **3,143,423**  
[13] A1

[51] **Int.Cl. G01N 1/22 (2006.01) G01N 1/24 (2006.01) G01N 7/16 (2006.01) G01N 33/24 (2006.01)**

[25] EN

[54] **A DEVICE FOR DETERMINING A VOLUME OF GAS IN A SAMPLE**

[54] **DISPOSITIF DE DETERMINATION D'UN VOLUME DE GAZ DANS UN ECHANTILLON**

[72] COUCHOU-MEILLOT, GILLES, FR

[72] POCHITALOFF-HUVALE, PAUL, FR

[71] TOTALENERGIES SE, FR

[85] 2021-12-14

[86] 2019-07-08 (PCT/IB2019/000804)

[87] (WO2021/005393)

[21] **3,143,424**  
[13] A1

[51] **Int.Cl. B65B 51/04 (2006.01) B65C 7/00 (2006.01)**

[25] EN

[54] **SYSTEM FOR SEMI-AUTOMATICALLY CLOSING FLEXIBLE CONTAINERS**

[54] **SYSTEME DE FERMETURE SEMI-AUTOMATIQUE DE RECIPIENTS SOUPLES**

[72] ZANELLA, MARIA TERESA, IT

[72] ZANELLA, SIVLIA, IT

[71] COMI PAK ENGINEERING S.R.L. UNIPERSONALE, IT

[85] 2021-12-14

[86] 2020-06-19 (PCT/IB2020/055787)

[87] (WO2020/255064)

[30] IT (102019000009780) 2019-06-21

[21] **3,143,426**  
[13] A1

[51] **Int.Cl. C07C 29/74 (2006.01) C07C 27/02 (2006.01) C07C 31/04 (2006.01) C07C 31/08 (2006.01) C07C 31/20 (2006.01) C07C 63/26 (2006.01) C08J 11/24 (2006.01)**

[25] EN

[54] **PROCESS FOR RECOVERING AND REUSING DEPOLYMERIZATION CATALYST**

[54] **PROCEDE DE RECUPERATION ET DE REUTILISATION D'UN CATALYSEUR DE DEPOLYMERISATION**

[72] ESSADDAM, FARES, CA

[72] ZARROUGUI, RAMZI, CA

[72] ESSADDAM, HATEM, CA

[71] 9449710 CANADA INC., CA

[85] 2021-12-14

[86] 2020-03-18 (PCT/IB2020/000192)

[87] (WO2020/188354)

[30] US (62/821,264) 2019-03-20

## Demandes PCT entrant en phase nationale

[21] <b>3,143,427</b> [13] A1	[21] <b>3,143,429</b> [13] A1	[21] <b>3,143,431</b> [13] A1
<p>[51] <b>Int.Cl. E21D 11/00 (2006.01) B21F 15/06 (2006.01) B21F 27/00 (2006.01) B21F 27/08 (2006.01) E01F 7/00 (2006.01) E01F 7/04 (2006.01) E02D 17/00 (2006.01) E02D 17/20 (2006.01) E21D 11/14 (2006.01) E21D 11/15 (2006.01) E21D 19/00 (2006.01) F16G 11/00 (2006.01) F16G 11/02 (2006.01) F16G 11/12 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>PANEL SYSTEM FOR ROCKBURST OR LANDSLIDE CONTAINMENT IN MINING TUNNELS AND ROAD WORKS CONSISTING OF A FRAME ATTACHED TO A STRAP MESH WHOSE NODES ARE LINKED BY CONNECTING BUCKLES; A ND INSTALLATION PROCEDURE</b></p> <p>[54] <b>SYSTEME DE PANNEAU POUR LA PREVENTION D'EXPLOSIONS DE ROCHES OU DE GLISSEMENTS DE TERRAIN DANS DES TUNNELS MINIERES ET OUVRAGES ROUTIERS, FORME D'UN BATI SOLIDAIRE D'UN RESEAU DE BANDES DONT DES NOEUDS SONT UNIS PAR DES BOUCLES DE RACCORD; ET PROCEDE D'INSTALLATION</b></p> <p>[72] ROJAS UBILLA, JOSE ALBERTO, CL</p> <p>[71] GARIBALDI S.A., CL</p> <p>[85] 2021-12-10</p> <p>[86] 2019-06-28 (PCT/CL2019/050053)</p> <p>[87] (WO2020/248083)</p> <p>[30] CL (1602-2019) 2019-06-11</p>	<p>[51] <b>Int.Cl. C05F 11/00 (2006.01) C05F 15/00 (2006.01) C05G 3/00 (2020.01) C05G 5/00 (2020.01) C08L 1/02 (2006.01) C09K 17/32 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>CONCENTRATED AQUEOUS SUSPENSION OF MICROFIBRILLATED CELLULOSE COMPRISING SALTS FOR PLANT NUTRITION</b></p> <p>[54] <b>SUSPENSION AQUEUSE CONCENTREE DE CELLULOSE MICROFIBRILLEE COMPRENANT DES SELS POUR LA NUTRITION DES PLANTES</b></p> <p>[72] CASALINS CUNADO, AGUSTIN CARLOS, AR</p> <p>[71] TOTAL GROW LLC, US</p> <p>[85] 2021-12-14</p> <p>[86] 2020-05-21 (PCT/IB2020/054847)</p> <p>[87] (WO2020/254891)</p> <p>[30] US (16/442,561) 2019-06-17</p>	<p>[51] <b>Int.Cl. A61K 9/20 (2006.01) A61K 9/28 (2006.01) A61K 31/44 (2006.01) A61K 47/14 (2017.01) A61K 47/32 (2006.01) A61K 47/36 (2006.01) A61P 11/00 (2006.01) A61P 11/06 (2006.01) A61P 11/10 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>FORMULATIONS OF (S)-3-AMINO-6-METHOXY-N-(3,3,3-TRIFLUORO-2-HYDROXY-2-METHYLPROPYL)-5-(TRIFLUOROMETHYL)PICOLINA MIDE</b></p> <p>[54] <b>FORMULATIONS DE (S)-3-AMINO-6-METHOXY-N-(3,3,3-TRIFLUORO-2-HYDROXY-2-METHYLPROPYL)-5-(TRIFLUOROMETHYL)PICOLINA MIDE</b></p> <p>[72] DUBEY, VIVEK, IN</p> <p>[72] LOWALEKAR, ROHIT, IN</p> <p>[72] SANTOS, PAULO, CH</p> <p>[72] THOMA, HUBERT, CH</p> <p>[72] TIAN, XIANBIN, US</p> <p>[71] NOVARTIS AG, CH</p> <p>[85] 2021-12-14</p> <p>[86] 2020-07-15 (PCT/IB2020/056661)</p> <p>[87] (WO2021/009695)</p> <p>[30] IN (201911028435) 2019-07-15</p> <p>[30] IN (202011023329) 2020-06-03</p>
	[21] <b>3,143,430</b> [13] A1	
	<p>[51] <b>Int.Cl. A61K 31/555 (2006.01) A61K 41/00 (2020.01) A61P 31/00 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>SMALL CATIONIC ORTHO-5,15-DI-HETEROARYL-PORPHYRINS DERIVATIVES AND THEIR APPLICATIONS IN PHOTOINACTIVATION OF MICROORGANISMS</b></p> <p>[54] <b>PETITS DERIVES CATIONIQUES D'ORTHO-5,15-DI-HETEROARYL-PORPHYRINES ET LEURS APPLICATIONS DANS LA PHOTOINACTIVATION DE MICRO-ORGANISMES</b></p> <p>[72] MIGUENS PEREIRA, MARIA, PT</p> <p>[72] DUARTE JORGE DA SILVA, GABRIELA CONCEICAO, PT</p> <p>[72] DA SILVA ARNAUT MOREIRA, LUIS GUILERME, PT</p> <p>[72] DOS SANTOS VINAGREIRO, CAROLINA, PT</p> <p>[72] BLANCO, KATE CRISTINA, BR</p> <p>[72] SALVADOR BAGNATO, VANDERLEI, BR</p> <p>[72] MAYUMI INADA, NATALIA, BR</p> <p>[71] UNIVERSIDADE DE COIMBRA, PT</p> <p>[85] 2021-12-14</p> <p>[86] 2020-06-15 (PCT/IB2020/055584)</p> <p>[87] (WO2020/250207)</p> <p>[30] PT (115581) 2019-06-14</p>	[21] <b>3,143,432</b> [13] A1
		<p>[51] <b>Int.Cl. A61B 3/10 (2006.01) A61B 3/13 (2006.01) A61F 9/007 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>ADAPTIVE OPTICS SYSTEMS AND METHODS FOR VITREORETINAL SURGERY</b></p> <p>[54] <b>SYSTEMES OPTIQUES ADAPTATIFS ET PROCEDES DE CHIRURGIE VITREO-RETINIENNE</b></p> <p>[72] CHARLES, STEVEN T., US</p> <p>[71] ALCON INC., CH</p> <p>[85] 2021-12-14</p> <p>[86] 2020-07-28 (PCT/IB2020/057123)</p> <p>[87] (WO2021/024094)</p> <p>[30] US (62/883,293) 2019-08-06</p>

## PCT Applications Entering the National Phase

[21] **3,143,434**  
[13] A1

[51] **Int.Cl. F25D 3/10 (2006.01) F25D 31/00 (2006.01) F28D 21/00 (2006.01) H01L 23/367 (2006.01)**

[25] EN

[54] **CRYOGENIC PACKAGING FOR THERMALIZATION OF LOW TEMPERATURE DEVICES**

[54] **EMBALLAGE CRYOGENIQUE POUR THERMALISATION DE DISPOSITIFS A BASSE TEMPERATURE**

[72] JINKA, OBLESH, US

[72] OLIVADESE, SALVATORE BERNARDO, US

[72] HART, SEAN, US

[72] BRONN, NICHOLAS TORLEIV, US

[72] CHOW, JERRY, US

[72] BRINK, MARKUS, US

[72] GUMANN, PATRYK, US

[72] BOGORIN, DANIELA FLORENTINA, US

[71] INTERNATIONAL BUSINESS MACHINES CORPORATION, US

[85] 2021-12-14

[86] 2020-06-19 (PCT/EP2020/067132)

[87] (WO2020/254596)

[30] US (16/445,470) 2019-06-19

[21] **3,143,435**  
[13] A1

[51] **Int.Cl. A61K 47/56 (2017.01) A61K 47/60 (2017.01) A61K 47/69 (2017.01)**

[25] EN

[54] **CONJUGATES OF AN ELECTRON-DONATING NITROGEN OR TERTIARY AMINE COMPRISING COMPOUNDS**

[54] **CONJUGUES D'AZOTE DONNEUR D'ELECTRONS OU DE COMPOSES COMPRENANT UNE AMINE TERTIAIRE**

[72] BISEK, NICOLA, DE

[72] WEISBROD, SAMUEL, DE

[71] ASCENDIS PHARMA A/S, DK

[85] 2021-12-14

[86] 2020-06-19 (PCT/EP2020/067148)

[87] (WO2020/254602)

[30] EP (19181791.5) 2019-06-21

[21] **3,143,436**  
[13] A1

[51] **Int.Cl. A61K 47/54 (2017.01) A61K 47/60 (2017.01) A61K 47/64 (2017.01) A61K 47/69 (2017.01) A61K 31/416 (2006.01) A61P 35/00 (2006.01) C07D 231/06 (2006.01) C07D 401/06 (2006.01) C07D 403/06 (2006.01)**

[25] EN

[54] **CONJUGATES OF .PI-ELECTRON-PAIR-DONATING HETEROAROMATIC NITROGEN-COMPRISING COMPOUNDS**

[54] **CONJUGUES DE COMPOSES AZOTES HETEROAROMATIQUES DONNEURS DE PAIRES D'ELECTRONS P**

[72] BISEK, NICOLA, DE

[72] WEISBROD, SAMUEL, DE

[71] ASCENDIS PHARMA A/S, DK

[85] 2021-12-14

[86] 2020-06-19 (PCT/EP2020/067149)

[87] (WO2020/254603)

[30] EP (19181790.7) 2019-06-21

[21] **3,143,442**  
[13] A1

[51] **Int.Cl. A61K 47/60 (2017.01) A61K 47/69 (2017.01)**

[25] EN

[54] **CONJUGATES OF HETEROAROMATIC NITROGEN-COMPRISING COMPOUNDS**

[54] **CONJUGUES DE COMPOSES HETEROAROMATIQUES CONTENANT DE L'AZOTE**

[72] BISEK, NICOLA, DE

[72] WEISBROD, SAMUEL, DE

[71] ASCENDIS PHARMA A/S, DK

[85] 2021-12-14

[86] 2020-06-19 (PCT/EP2020/067152)

[87] (WO2020/254606)

[30] EP (19181795.6) 2019-06-21

[21] **3,143,443**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/127 (2006.01) A61K 31/704 (2006.01)**

[25] EN

[54] **LIPOSOMAL DOXORUBICIN FORMULATION, METHOD FOR PRODUCING A LIPOSOMAL DOXORUBICIN FORMULATION AND USE OF A LIPOSOMAL DOXORUBICIN FORMULATION AS A MEDICAMENT**

[54] **FORMULATION LIPOSOMALE DE DOXORUBICINE, PROCEDE DE PRODUCTION D'UNE FORMULATION LIPOSOMALE DE DOXORUBICINE ET UTILISATION D'UNE FORMULATION LIPOSOMALE DE DOXORUBICINE EN TANT QUE MEDICAMENT**

[72] HALBHERR, STEFAN JONATHAN, CH

[72] HALBHERR, PASCAL, CH

[72] MATHIEU, CHRISTOPH, CH

[72] BUSCHOR, PATRICK, CH

[71] INNOMEDICA HOLDING AG, CH

[85] 2021-12-14

[86] 2020-06-19 (PCT/EP2020/067196)

[87] (WO2020/254633)

[30] EP (19181524.0) 2019-06-20

[21] **3,143,445**  
[13] A1

[51] **Int.Cl. A23N 12/08 (2006.01) A23N 12/12 (2006.01)**

[25] EN

[54] **SYSTEM FOR ROASTING COFFEE BEANS**

[54] **SYSTEME DE TORREFACTION DE GRAINS DE CAFE**

[72] MOREND, JOEL, CH

[72] CECCAROLI, STEFANO, CH

[72] DUBIEF, FLAVIEN FLORENT, CH

[72] DEGREEF, THOMAS, BE

[72] VAN DYCK, BEN, BE

[72] LEMMENS, RIEN DENISE M., BE

[72] CELIS, MICHIEL ALEXANDER, BE

[72] VAN BAVINCHOVE, CHRISTOPHE, BE

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

[85] 2021-12-14

[86] 2020-06-19 (PCT/EP2020/067201)

[87] (WO2020/254635)

[30] EP (19181452.4) 2019-06-20

[30] EP (19216237.8) 2019-12-13

## Demandes PCT entrant en phase nationale

[21] **3,143,446**  
[13] A1

[51] **Int.Cl. G05B 19/418 (2006.01)**  
[25] EN  
[54] **METHOD FOR AUTOMATED TEXTILE PRODUCTION**  
[54] **PROCEDE DE PRODUCTION TEXTILE AUTOMATISEE**  
[72] POULSEN, TRINE YOUNG  
STOFBERG, DK  
[71] RODINIA APS, DK  
[85] 2021-12-14  
[86] 2020-06-19 (PCT/EP2020/067222)  
[87] (WO2020/254646)  
[30] EP (19181861.6) 2019-06-21

[21] **3,143,447**  
[13] A1

[51] **Int.Cl. B26D 5/00 (2006.01) D06H 7/24 (2006.01) G05B 19/042 (2006.01) G05B 19/18 (2006.01)**  
[25] EN  
[54] **METHOD FOR GENERATING INSTRUCTIONS FOR AN AUTOMATED TEXTILE CUTTER**  
[54] **PROCEDE DE GENERATION D'INSTRUCTIONS POUR UN DISPOSITIF DE COUPE TEXTILE AUTOMATISE**  
[72] POULSEN, TRINE YOUNG  
STOFBERG, DK  
[71] RODINIA APS, DK  
[85] 2021-12-14  
[86] 2020-06-19 (PCT/EP2020/067224)  
[87] (WO2020/254647)  
[30] EP (19181859.0) 2019-06-21

[21] **3,143,450**  
[13] A1

[51] **Int.Cl. A61K 31/198 (2006.01) A61K 31/05 (2006.01) A61K 31/121 (2006.01) A61K 31/132 (2006.01) A61K 31/155 (2006.01) A61K 31/19 (2006.01) A61K 31/352 (2006.01) A61K 31/436 (2006.01) A61K 31/4745 (2006.01) A61K 31/52 (2006.01) A61K 45/06 (2006.01) A61P 21/06 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS TO POTENTIATE MUSCULOSKELETAL EFFECT OF ONE OR MORE ANABOLIC AMINO ACIDS**  
[54] **COMPOSITIONS ET PROCEDES POUR POTENTIALISER L'EFFET MUSCULO-SQUELETTIQUE D'UN OU DE PLUSIEURS ACIDES AMINES ANABOLIQUES**  
[72] FEIGE, JEROME, CH  
[72] GUT, PHILIPP, CH  
[72] CIVILETTO, GABRIELE, CH  
[72] BOUTRY, CLAIRE, CH  
[71] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2021-12-14  
[86] 2020-06-19 (PCT/EP2020/067251)  
[87] (WO2020/254664)  
[30] EP (19181529.9) 2019-06-20

[21] **3,143,452**  
[13] A1

[51] **Int.Cl. G21G 1/02 (2006.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING ACTINIUM-225 FROM RADIUM-226**  
[54] **PROCEDE DE PRODUCTION D'ACTINIUM-225 A PARTIR DE RADIUM-226**  
[72] DE GROOT, SANDER, NL  
[72] BAKKER, KLAAS, NL  
[72] ASQUITH, NICOLA, NL  
[71] NUCLEAR RESEARCH AND CONSULTANCY GROUP, NL  
[85] 2021-12-14  
[86] 2020-06-22 (PCT/EP2020/067352)  
[87] (WO2020/254689)  
[30] EP (19181711.3) 2019-06-21

[21] **3,143,453**  
[13] A1

[51] **Int.Cl. B41K 3/44 (2006.01) B41K 3/62 (2006.01)**  
[25] EN  
[54] **STAMPING TOOL ACCESSORY AND STAMPING TOOL ASSEMBLY INCLUDING THE SAME**  
[54] **ACCESSOIRE D'OUTIL D'ESTAMPAGE ET ENSEMBLE OUTIL D'ESTAMPAGE LE COMPRENANT**  
[72] GESSNER, ELIZABETH A., US  
[71] GESSNER, ELIZABETH A., US  
[85] 2021-12-14  
[86] 2019-12-23 (PCT/US2019/068378)  
[87] (WO2020/251624)  
[30] US (16/442,421) 2019-06-14

[21] **3,143,455**  
[13] A1

[51] **Int.Cl. H01Q 3/40 (2006.01) H01Q 5/45 (2015.01) H01Q 1/28 (2006.01) H01Q 3/20 (2006.01) H01Q 15/24 (2006.01) H01Q 19/17 (2006.01) H01Q 19/19 (2006.01) H01Q 21/06 (2006.01) H04B 7/185 (2006.01)**  
[25] EN  
[54] **IMAGING REFLECTOR ANTENNA SYSTEM**  
[54] **SYSTEME D'ANTENNE A REFLECTEUR D'IMAGERIE**  
[72] RAO, SUDHAKAR K., US  
[71] NORTHROP GRUMMAN SYSTEMS CORPORATION, US  
[85] 2021-12-14  
[86] 2020-04-13 (PCT/US2020/027902)  
[87] (WO2021/006936)  
[30] US (16/504,984) 2019-07-08

## PCT Applications Entering the National Phase

[21] **3,143,457**  
[13] A1

[51] **Int.Cl. H01Q 3/40 (2006.01) H01Q 5/45 (2015.01) H01Q 1/28 (2006.01) H01Q 3/20 (2006.01) H01Q 15/24 (2006.01) H01Q 19/17 (2006.01) H01Q 19/19 (2006.01) H01Q 21/06 (2006.01) H04B 7/185 (2006.01)**

[25] EN  
[54] **IMAGING REFLECTOR ANTENNA SYSTEM AND METHOD**  
[54] **SYSTEME D'ANTENNE A REFLECTEUR D'IMAGERIE ET PROCEDE**

[72] RAO, SUDHAKAR K., US  
[71] NORTHROP GRUMMAN SYSTEMS CORPORATION, US

[85] 2021-12-14  
[86] 2020-04-13 (PCT/US2020/027905)  
[87] (WO2021/006937)  
[30] US (16/504,984) 2019-07-08  
[30] US (16/697,755) 2019-11-27

[21] **3,143,459**  
[13] A1

[51] **Int.Cl. G06F 21/57 (2013.01) G06F 21/53 (2013.01) G06F 21/79 (2013.01) G06F 12/14 (2006.01)**

[25] EN  
[54] **USING SECURE MEMORY ENCLAVES FROM THE CONTEXT OF PROCESS CONTAINERS**  
[54] **UTILISATION D'ENCLAVES DE MEMOIRE SECURISEES A PARTIR DU CONTEXTE DE CONTENEURS DE PROCESSUS**

[72] RENKE, MAXWELL CHRISTOPHER, US  
[72] STARK, TAYLOR JAMES, US  
[72] SCHULTZ, BENJAMIN M., US  
[72] VISWANATHAN, GIRIDHAR, US  
[72] SMITH, FREDERICK JUSTUS, US  
[72] THOMAS, DEEPU CHANDY, US  
[72] PULAPAKA, HARI R., US  
[72] GUO, AMBER TIANQI, US  
[71] MICROSOFT TECHNOLOGY LICENSING, LLC, US

[85] 2021-12-14  
[86] 2020-06-08 (PCT/US2020/036575)  
[87] (WO2021/006973)  
[30] US (62/872,233) 2019-07-09  
[30] US (16/565,271) 2019-09-09

[21] **3,143,460**  
[13] A1

[25] EN  
[54] **PLUG AND PLAY AT SITES USING TLOC-EXTENSION**  
[54] **TECHNOLOGIE PLUG AND PLAY AU NIVEAU DE SITES A L'AIDE D'UNE EXTENSION TLOC**

[72] DEV, KAPIL, US  
[72] CARREL, DAVID MARK, US  
[71] CISCO TECHNOLOGY, INC., US

[85] 2021-12-14  
[86] 2020-06-09 (PCT/US2020/036733)  
[87] (WO2020/263552)  
[30] US (62/865,720) 2019-06-24  
[30] US (16/682,797) 2019-11-13

[21] **3,143,462**  
[13] A1

[51] **Int.Cl. A61K 38/08 (2019.01) C07K 7/06 (2006.01)**

[25] EN  
[54] **COMPOSITIONS AND METHODS FOR INHIBITING THE BINDING OF PLASMA IGG AUTOANTIBODIES TO SEROTONIN 2A RECEPTOR**  
[54] **COMPOSITIONS ET METHODES POUR INHIBER LA LIAISON D'AUTOANTICORPS IGG PLASMATIQUES AU RECEPTEUR DE LA SEROTONINE 2A**

[72] ZIMERING, MARK B., US  
[71] UNITED STATES GOVERNMENT AS REPRESENTED BY THE DEPARTMENT OF VETERANS AFFAIRS, US

[85] 2021-12-14  
[86] 2020-06-10 (PCT/US2020/036792)  
[87] (WO2020/251936)  
[30] US (62/861,595) 2019-06-14  
[30] US (63/004,107) 2020-04-02

[21] **3,143,463**  
[13] A1

[51] **Int.Cl. C07D 217/16 (2006.01) C07C 309/30 (2006.01) C07D 263/20 (2006.01) C07D 498/04 (2006.01)**

[25] EN  
[54] **PROCESSES AND INTERMEDIATES FOR THE PREPARATION OF 2-(2,6-DICHLOROPHENYL)-1-[(1S,3R)-3-(HYDROXYMETHYL)-5-(3-HYDROXY-3-METHYLBUTYL)-1-METHYL-3,4-DIHYDROISOQUINOLIN-2(1H)-YL]ETHENONE**

[54] **PROCEDES ET INTERMEDIAIRES POUR LA PREPARATION DE 2-(2,6-DICHLOROPHENYLE))-1-[(1S,3R)-3-(HYDROXYMETHYL)-5-(3-HYDROXY-3-METHYLBUTYL)-1-METHYL-3,4-DIHYDROISOQUINOLIN-2(1H)-YL]ETHENONE**

[72] COLE, KEVIN PAUL, US  
[72] KALLMAN, NEIL JOHN, US  
[72] MAGNUS, NICHOLAS ANDREW, US  
[71] ELI LILLY AND COMPANY, US

[85] 2021-12-14  
[86] 2020-06-11 (PCT/US2020/037186)  
[87] (WO2020/257043)  
[30] US (62/862,805) 2019-06-18

[21] **3,143,465**  
[13] A1

[51] **Int.Cl. A61B 5/1473 (2006.01) A61M 5/158 (2006.01)**

[25] EN  
[54] **MECHANICAL COUPLING OF AN ANALYTE-SELECTIVE SENSOR AND AN INFUSION SYSTEM**  
[54] **COUPLAGE MECANIQUE D'UN CAPTEUR SELECTIF D'ANALYTE ET D'UN SYSTEME DE PERFUSION**

[72] WINDMILLER, JOSHUA, US  
[72] TANGNEY, JARED, US  
[72] PEYSER, THOMAS ARNOLD, US  
[71] BIOLINQ INCORPORATED, US

[85] 2021-12-14  
[86] 2020-06-12 (PCT/US2020/037379)  
[87] (WO2020/257069)  
[30] US (62/862,658) 2019-06-17  
[30] US (16/899,541) 2020-06-11



## Demandes PCT entrant en phase nationale

[21] **3,143,469**  
[13] A1

[51] **Int.Cl. G07F 17/32 (2006.01)**  
[25] EN  
[54] **METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR INTERACTIVE SPORTS GAME**

[54] **PROCEDE, SYSTEME ET PRODUIT PROGRAMME D'ORDINATEUR POUR JEU DE SPORT INTERACTIF**

[72] HUKU, CASEY ALEXANDER, US  
[71] ADRENALINEIP, US  
[85] 2021-12-14  
[86] 2020-05-22 (PCT/US2020/034241)  
[87] (WO2020/251742)  
[30] US (16/441,516) 2019-06-14

[21] **3,143,470**  
[13] A1

[51] **Int.Cl. A61F 9/007 (2006.01) A61B 17/3205 (2006.01)**

[25] EN  
[54] **OPHTHALMIC SURGICAL INSTRUMENTS AND SNARES THEREOF**

[54] **INSTRUMENTS CHIRURGICAUX OPHTHALMIQUES ET ANSES ASSOCIEES**

[72] MACKOOL, RICHARD, US  
[72] SMITH, CHRISTOPHER DEAN, US  
[72] BLAIN, MAXIME, US  
[71] MACKOOL, RICHARD, US  
[85] 2021-12-14  
[86] 2020-06-02 (PCT/US2020/035656)  
[87] (WO2020/263509)  
[30] US (16/449,811) 2019-06-24  
[30] US (16/700,330) 2019-12-02

[21] **3,143,483**  
[13] A1

[51] **Int.Cl. C07K 14/435 (2006.01) A61K 9/00 (2006.01) C12N 1/20 (2006.01) C12N 15/70 (2006.01) D01D 5/10 (2006.01) D01D 5/38 (2006.01) D01F 4/00 (2006.01) D01F 6/88 (2006.01)**

[25] EN  
[54] **PROKARYOTIC EXPRESSION SYSTEM AND METHODS OF USING THE SAME**

[54] **SYSTEME D'EXPRESSION PROCARYOTE ET PROCEDES D'UTILISATION DE CELUI-CI**

[72] IDELSON, GREGORY, IL  
[71] SEEVIX MATERIAL SCIENCES LTD., IL  
[85] 2021-12-14  
[86] 2020-07-05 (PCT/IL2020/050752)  
[87] (WO2021/001840)  
[30] US (62/870,750) 2019-07-04

[21] **3,143,484**  
[13] A1

[51] **Int.Cl. G06Q 50/02 (2012.01) A01G 7/00 (2006.01) A01M 1/00 (2006.01)**

[25] EN  
[54] **INFORMATION PROCESSING DEVICE AND METHOD**

[54] **DISPOSITIF ET PROCEDE DE TRAITEMENT D'INFORMATIONS**

[72] ITO, SATOSHI, JP  
[71] BAYER CROPSCIENCE K.K., JP  
[85] 2021-12-14  
[86] 2020-05-29 (PCT/JP2020/021366)  
[87] (WO2020/255677)  
[30] JP (2019-111698) 2019-06-17

[21] **3,143,485**  
[13] A1

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

[25] EN  
[54] **INFORMATION PROCESSING DEVICE AND METHOD**

[54] **DISPOSITIF ET PROCEDE DE TRAITEMENT D'INFORMATIONS**

[72] ITO, SATOSHI, JP  
[72] VICTORIA, SMART, JP  
[72] BANSAL, MEHUL, DE  
[71] BAYER CROPSCIENCE K.K., JP  
[85] 2021-12-14  
[86] 2020-05-29 (PCT/JP2020/021367)  
[87] (WO2020/255678)  
[30] JP (2019-111699) 2019-06-17

[21] **3,143,486**  
[13] A1

[51] **Int.Cl. A61K 9/127 (2006.01) A61K 31/357 (2006.01) A61K 39/395 (2006.01) A61K 45/00 (2006.01) A61P 35/00 (2006.01)**

[25] EN  
[54] **PHARMACEUTICAL COMPOSITION FOR TREATING TUMOR**

[54] **COMPOSITION PHARMACEUTIQUE POUR LE TRAITEMENT DE TUMEURS**

[72] SEMBA, TARO, JP  
[72] FUNAHASHI, YASUHIRO, JP  
[72] SUZUKI, TAKUYA, JP  
[71] EISAI R&D MANAGEMENT CO., LTD., JP  
[71] ONO PHARMACEUTICAL CO., LTD., JP  
[85] 2021-12-14  
[86] 2020-07-27 (PCT/JP2020/028663)  
[87] (WO2021/020336)  
[30] JP (2019-138041) 2019-07-26  
[30] US (16/835,719) 2020-03-31

[21] **3,143,487**  
[13] A1

[51] **Int.Cl. H04W 68/02 (2009.01) H04W 88/06 (2009.01) H04W 76/28 (2018.01)**

[25] EN  
[54] **PAGING METHOD FOR WTRU WITH MULTIPLE USIMS**

[54] **PROCEDE DE RADIOMESSAGERIE POUR WTRU A MULTIPLES USIMS**

[72] BRUSILOVSKY, ALEC, US  
[72] SHI, XIAOYAN, CA  
[72] WANG, GUANZHOU, CA  
[72] AHMAD, SAAD, CA  
[72] FERDI, SAMIR, CA  
[72] AGHILI, BEHROUZ, US  
[72] OLVERA-HERNANDEZ, ULISES, CA  
[71] IDAC HOLDINGS, INC., US  
[85] 2021-12-14  
[86] 2020-06-16 (PCT/US2020/037913)  
[87] (WO2020/257187)  
[30] US (62/862,450) 2019-06-17  
[30] US (62/910,145) 2019-10-03  
[30] US (62/932,246) 2019-11-07

## PCT Applications Entering the National Phase

[21] **3,143,488**  
[13] A1

[51] **Int.Cl. A01M 7/00 (2006.01) B05B 7/00 (2006.01) B05B 7/08 (2006.01) B05B 7/24 (2006.01)**

[25] EN  
[54] **MIST SPRAYER APPARATUS**  
[54] **APPAREIL PULVERISATEUR DE BRUME**

[72] RECKER, DEREK JORDAN, US  
[72] MERRITT, MATTHEW DAVID, US  
[72] VAUGHAN, JOHN HUBERT, IV, US  
[72] ROSCUP, MARK ALBERT, US  
[72] NICOLIA, JEFFREY DAVID, US  
[71] OMS INVESTMENTS, INC., US  
[85] 2021-12-14  
[86] 2020-06-16 (PCT/US2020/037912)  
[87] (WO2020/257186)  
[30] US (62/862,339) 2019-06-17  
[30] US (62/979,760) 2020-02-21

[21] **3,143,489**  
[13] A1

[51] **Int.Cl. A61K 31/506 (2006.01) A61P 35/00 (2006.01) C07D 239/48 (2006.01) C07D 401/12 (2006.01) C07D 401/14 (2006.01) C07D 403/12 (2006.01) C07D 403/14 (2006.01)**

[25] EN  
[54] **AMINOPYRIMIDINE AMIDE AUTOPHAGY INHIBITORS AND METHODS OF USE THEREOF**  
[54] **INHIBITEURS DE L'AUTOPHAGIE A BASE D'AMIDE D'AMINOPYRIMIDINE ET LEURS PROCEDES D'UTILISATION**

[72] FLYNN, DANIEL L., US  
[72] AHN, YU MI, US  
[72] CALDWELL, TIMOTHY, US  
[72] VOGETI, LAKSHMINARAYANA, US  
[71] DECIPHERA PHARMACEUTICALS, LLC, US  
[85] 2021-12-14  
[86] 2020-06-16 (PCT/US2020/037906)  
[87] (WO2020/257180)  
[30] US (62/862,470) 2019-06-17  
[30] US (62/862,469) 2019-06-17  
[30] US (62/911,739) 2019-10-07  
[30] US (62/911,740) 2019-10-07

[21] **3,143,490**  
[13] A1

[51] **Int.Cl. A61K 31/4439 (2006.01) A61K 31/506 (2006.01) A61P 3/10 (2006.01) A61P 9/00 (2006.01) A61P 13/12 (2006.01) C07D 401/14 (2006.01) C07D 403/14 (2006.01)**

[25] EN  
[54] **DISUBSTITUTED PYRAZOLE COMPOUNDS AS KETOHEXOKINASE INHIBITORS**  
[54] **COMPOSES PYRAZOLE DISUBSTITUES UTILISES EN TANT QU'INHIBITEURS DE CETOHEXOKINASE**

[72] COATES, DAVID ANDREW, US  
[72] DURHAM, TIMOTHY BARRETT, US  
[72] JOHNSTON, RICHARD DUANE, US  
[72] MASSEY, STEVEN MARC, US  
[72] SPINAZZE, PATRICK GIANPIETRO, US  
[72] STACK, DOUGLAS RICHARD, US  
[72] TOTH, JAMES LEE, US  
[71] ELI LILLY AND COMPANY, US  
[85] 2021-12-14  
[86] 2020-06-16 (PCT/US2020/037894)  
[87] (WO2020/257171)  
[30] US (62/862,382) 2019-06-17  
[30] US (62/975,887) 2020-02-13

[21] **3,143,491**  
[13] A1

[51] **Int.Cl. B65D 53/00 (2006.01) B65D 81/24 (2006.01) C07D 215/02 (2006.01)**

[25] EN  
[54] **PROTECTION OF OXYGEN SENSITIVE COMPOUNDS**  
[54] **PROTECTION DE COMPOSES SENSIBLES A L'OXYGENE**

[72] DEFESCHE, FRED, US  
[72] MIREJOVSKY, DORLA, US  
[72] SUN, SHANGHUI, US  
[71] BELOTECA, INC., US  
[85] 2021-12-14  
[86] 2020-06-16 (PCT/US2020/037835)  
[87] (WO2020/257134)  
[30] US (62/862,620) 2019-06-17  
[30] US (62/986,507) 2020-03-06

[21] **3,143,492**  
[13] A1

[51] **Int.Cl. C08G 18/61 (2006.01) C08G 77/26 (2006.01) C08L 77/00 (2006.01) C08L 83/08 (2006.01) C09D 183/08 (2006.01) C09K 3/14 (2006.01)**

[25] EN  
[54] **SINGLE-COMPONENT POLYSILOXANE NON-SKID / NON-SLIP COATINGS**  
[54] **REVETEMENTS ANTIDERAPANTS/ANTIGLISSE A BASE DE POLYSILOXANE A UN SEUL COMPOSANT**

[72] IEZZI, ERICK B., US  
[71] THE GOVERNMENT OF THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY OF THE NAVY, US  
[85] 2021-12-14  
[86] 2020-06-15 (PCT/US2020/037825)  
[87] (WO2020/252490)  
[30] US (62/861,490) 2019-06-14  
[30] US (16/733,268) 2020-01-03

[21] **3,143,493**  
[13] A1

[51] **Int.Cl. G06N 99/00 (2019.01) G06N 10/00 (2022.01)**

[25] EN  
[54] **INFORMATION PROCESSING DEVICE AND INFORMATION PROCESSING SYSTEM**  
[54] **DISPOSITIF DE TRAITEMENT D'INFORMATIONS ET SYSTEME DE TRAITEMENT D'INFORMATIONS**

[72] IWASAKI, MOTOKAZU, JP  
[71] KABUSHIKI KAISHA TOSHIBA, JP  
[71] TOSHIBA DIGITAL SOLUTIONS CORPORATION, JP  
[85] 2021-12-14  
[86] 2020-06-10 (PCT/JP2020/022931)  
[87] (WO2020/255839)  
[30] JP (2019-112311) 2019-06-17

## Demandes PCT entrant en phase nationale

[21] **3,143,494**  
[13] A1

[51] **Int.Cl. B82Y 30/00 (2011.01) C08B 15/04 (2006.01) C08L 1/02 (2006.01) C08L 101/02 (2006.01) C08L 101/06 (2006.01)**

[25] EN  
[54] **MIXED SUSPENSION**  
[54] **MELANGE LIQUIDE**  
[72] NAKAYAMA, TAKESHI, JP  
[72] MATSUMOTO, MAKOTO, JP  
[72] SATO, SHINJI, JP  
[71] NIPPON PAPER INDUSTRIES CO., LTD., JP

[85] 2021-12-14  
[86] 2020-06-17 (PCT/JP2020/023667)  
[87] (WO2021/002194)  
[30] JP (2019-124096) 2019-07-03  
[30] JP (2020-010469) 2020-01-27

[21] **3,143,495**  
[13] A1

[51] **Int.Cl. A61K 31/7052 (2006.01) C07H 19/14 (2006.01)**

[25] EN  
[54] **2,4,7-SUBSTITUTED-7-DEAZA-2'-DEOXY-2'-FLUOROARABINOSYL NUCLEOSIDE AND NUCLEOTIDE PRO-DRUGS AND USES THEREOF**  
[54] **PROMEDICAMENTS NUCLEOSIDIQUES ET NUCLEOTIDIQUES 2,4,7-SUBSTITUES-7-DEAZA -2'-DESOXY-2'-FLUOROARABINOSYLE ET LEURS UTILISATIONS**  
[72] MOUKHA-CHAFIQ, OMAR, US  
[72] BRATTON, LARRY D., US  
[72] AUGELLI-SZAFRAN, CORINNE E., US  
[72] SUTO, MARK J., US  
[71] SOUTHERN RESEARCH INSTITUTE, US

[85] 2021-12-14  
[86] 2020-06-12 (PCT/US2020/037588)  
[87] (WO2020/252380)  
[30] US (62/861,837) 2019-06-14

[21] **3,143,496**  
[13] A1

[51] **Int.Cl. C07D 473/40 (2006.01) A61K 31/52 (2006.01) A61P 9/00 (2006.01) A61P 25/00 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01) C07H 19/16 (2006.01)**

[25] EN  
[54] **ECTONUCLEOTIDASE INHIBITORS AND METHODS OF USE THEREOF**  
[54] **INHIBITEURS D'ECTONUCLEOTIDASES ET LEURS PROCEDES D'UTILISATION**  
[72] CHEN, LIJING, US  
[72] BILLEDEAU, ROLAND JOSEPH, US  
[72] LI, JIM, US  
[72] STANTON, TIMOTHY FRIEND, US  
[71] CALITHERA BIOSCIENCES, INC., US

[85] 2021-12-14  
[86] 2020-06-18 (PCT/US2020/038395)  
[87] (WO2020/257429)  
[30] US (62/864,031) 2019-06-20

[21] **3,143,497**  
[13] A1

[51] **Int.Cl. E21B 43/26 (2006.01) E21B 43/267 (2006.01)**

[25] EN  
[54] **SMART MANIFOLD**  
[54] **ORGUE INTELLIGENT**  
[72] BOLT, TRAVIS LEE, US  
[71] NATIONAL OILWELL VARCO, L.P., US

[85] 2021-12-14  
[86] 2020-06-30 (PCT/US2020/040336)  
[87] (WO2021/003178)  
[30] US (62/869,455) 2019-07-01

[21] **3,143,498**  
[13] A1

[51] **Int.Cl. A61K 39/02 (2006.01) A61K 39/08 (2006.01) A61P 31/04 (2006.01)**

[25] EN  
[54] **BACTERIA-ENGINEERED TO ELICIT ANTIGEN-SPECIFIC T-CELLS**  
[54] **BACTERIES CONCUES POUR OBTENIR DES LYMPHOCYTES T SPECIFIQUES A UN ANTIGENE**  
[72] FISCHBACH, MICHAEL A., US  
[72] NAGASHIMA, KAZUKI, US  
[72] CHEN, YIYIN E., US  
[71] CHAN ZUCKERBERG BIOHUB, INC., US

[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US

[85] 2021-12-14  
[86] 2020-06-18 (PCT/US2020/038526)  
[87] (WO2020/257519)  
[30] US (62/863,594) 2019-06-19  
[30] US (63/033,811) 2020-06-02

[21] **3,143,499**  
[13] A1

[51] **Int.Cl. G11B 27/00 (2006.01) H04N 7/01 (2006.01)**

[25] EN  
[54] **FRAME RATE CONVERSION**  
[54] **CONVERSION DE FREQUENCE DE TRAMES**  
[72] ZHENG, WEIGUO, US  
[72] CHING, REX YIK CHUN, US  
[71] NETFLIX, INC., US

[85] 2021-12-14  
[86] 2020-08-06 (PCT/US2020/045290)  
[87] (WO2021/026396)  
[30] US (16/536,302) 2019-08-08

## PCT Applications Entering the National Phase

[21] **3,143,500**  
[13] A1

[51] **Int.Cl. A01M 1/00 (2006.01) A01M 7/00 (2006.01) B05B 1/30 (2006.01) B05B 12/00 (2018.01) B05B 12/08 (2006.01) F16K 1/00 (2006.01) F16K 31/04 (2006.01) F16K 37/00 (2006.01) B05B 15/658 (2018.01)**

[25] EN  
[54] **PRESSURE-BASED FLOW METER FOR A SPRAY NOZZLE**  
[54] **DEBITMETRE BASE SUR LA PRESSION POUR BUSE DE PULVERISATION**

[72] BREMER, MARSHALL T., US  
[72] WOOD, DANIEL R., JR., US  
[71] INTELLIGENT AGRICULTURAL SOLUTIONS LLC, US  
[85] 2021-12-14  
[86] 2020-06-19 (PCT/US2020/038700)  
[87] (WO2020/257628)  
[30] US (62/864,042) 2019-06-20

[21] **3,143,501**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/95 (2013.01)**

[25] EN  
[54] **DEVICES AND METHODS FOR PROSTHETIC VALVE DIAMETER ESTIMATION**  
[54] **DISPOSITIFS ET PROCEDES D'ESTIMATION DE DIAMETRE DE VALVULE PROTHETIQUE**

[72] COHEN, OREN, IL  
[72] SCHWARCZ, ELAZAR LEVI, IL  
[72] WITZMAN, OFIR, IL  
[72] ATIAS, EITAN, IL  
[72] MILLER, NOAM, IL  
[72] SAAR, TOMER, IL  
[72] AXELROD MANELA, NOA, IL  
[72] GOLDBERG, ERAN, IL  
[72] REICH, TAL, IL  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-14  
[86] 2020-10-27 (PCT/US2020/057502)  
[87] (WO2021/086836)  
[30] US (62/928,320) 2019-10-30

[21] **3,143,502**  
[13] A1

[51] **Int.Cl. C01B 32/158 (2017.01) C01B 32/182 (2017.01) D01D 1/02 (2006.01)**

[25] EN  
[54] **GRAPHENE/GRAPHENE OXIDE CORE/SHELL PARTICULATES AND METHODS OF MAKING AND USING THE SAME**  
[54] **PARTICULES COEUR/COQUILLE DE GRAPHENE/OXYDE DE GRAPHENE ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION**

[72] BOSSMANN, STEFAN H, US  
[72] SORENSEN, CHRISTOPHER, US  
[72] COVARRUBIAS, JOSE, US  
[72] KALUBOWILAGE, MADUMALI, US  
[72] NEPAL, ARJUN, US  
[71] KANSAS STATE UNIVERSITY RESEARCH FOUNDATION, US  
[85] 2021-12-14  
[86] 2020-06-17 (PCT/US2020/038055)  
[87] (WO2020/257229)  
[30] US (62/862,251) 2019-06-17  
[30] US (62/935,438) 2019-11-14  
[30] US (63/016,637) 2020-04-28

[21] **3,143,504**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/11 (2006.01) A61F 5/37 (2006.01) G08B 21/02 (2006.01)**

[25] EN  
[54] **INTEGRATED BELT AND SENSOR FOR ALARM FOR PATIENT FURNITURE**  
[54] **COURROIE INTEGREE ET CAPTEUR D'ALARME POUR MOBILIER DE PATIENT**

[72] CARR, ROY SEIZO, US  
[72] BEKKER, ALEXANDER, US  
[72] MCCARTHY, SAMANTHA, US  
[72] MASSI, SHAYNA, US  
[72] HUDSON, BETH, US  
[72] JOHNSON, BRITTANY, US  
[72] YOUNG, BRIAN, US  
[71] TIDI PRODUCTS, LLC, US  
[85] 2021-12-14  
[86] 2020-06-17 (PCT/US2020/038080)  
[87] (WO2020/257244)  
[30] US (16/443,389) 2019-06-17

[21] **3,143,505**  
[13] A1

[51] **Int.Cl. H04N 21/25 (2011.01) G06Q 30/02 (2012.01) G06F 16/738 (2019.01) G06F 16/95 (2019.01)**

[25] EN  
[54] **AUTOMATED CONTENT GENERATION AND DELIVERY**  
[54] **GENERATION ET DISTRIBUTION DE CONTENU AUTOMATISEES**

[72] MCCARTY, MICHAEL, US  
[72] MACK, CARLA, US  
[71] ROVI GUIDES, INC., US  
[85] 2021-12-14  
[86] 2020-08-27 (PCT/US2020/048187)  
[87] (WO2021/041665)  
[30] US (16/553,337) 2019-08-28

[21] **3,143,506**  
[13] A1

[51] **Int.Cl. C12N 15/52 (2006.01)**

[25] EN  
[54] **ENHANCED PLATFORMS FOR UNNATURAL AMINO ACID INCORPORATION IN MAMMALIAN CELLS**  
[54] **PLATES-FORMES AMELIOREES POUR L'INCORPORATION D'ACIDES AMINES NON NATURELS DANS DES CELLULES DE MAMMIFERE**

[72] CHATTERJEE, ABHISHEK, US  
[72] KELEMEN, RACHEL E., US  
[72] JEWEL, DELILAH, US  
[71] TRUSTEES OF BOSTON COLLEGE, US  
[85] 2021-12-14  
[86] 2020-06-19 (PCT/US2020/038766)  
[87] (WO2020/257668)  
[30] US (62/864,570) 2019-06-21

## Demandes PCT entrant en phase nationale

[21] **3,143,507**  
[13] A1

[51] **Int.Cl. A61K 47/54 (2017.01) A61K 31/45 (2006.01) A61K 31/454 (2006.01)**

[25] EN

[54] **SMALL MOLECULE TARGET BROMO/ACETYL PROTEINS AND USES THEREOF**

[54] **PROTEINES BROMO/ACETYLE CIBLES A PETITES MOLECULES ET LEURS UTILISATIONS**

[72] QI, JUN, US  
[72] LI, DEYAO, US  
[72] WIMALASENA, VIRANGIKA K., US  
[72] PARK, PAUL, US  
[71] DANA-FARBER CANCER INSTITUTE, INC., US

[85] 2021-12-14  
[86] 2020-06-17 (PCT/US2020/038130)  
[87] (WO2020/257278)  
[30] US (62/862,879) 2019-06-18

[21] **3,143,509**  
[13] A1

[51] **Int.Cl. C07J 63/00 (2006.01) A61K 31/58 (2006.01) A61P 25/24 (2006.01) C07J 43/00 (2006.01) C07J 61/00 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR TREATING CNS DISORDERS**

[54] **COMPOSITIONS ET METHODES DE TRAITEMENT DE TROUBLES DU SNC**

[72] SALITURO, FRANCESCO G., US  
[72] BLANCO-PILLADO, MARIA JESUS, US  
[72] MORNINGSTAR, MARSHALL LEE, US

[71] SAGE THERAPEUTICS, INC., US

[85] 2021-12-14  
[86] 2020-06-29 (PCT/US2020/040153)  
[87] (WO2020/264509)  
[30] US (62/867,618) 2019-06-27

[21] **3,143,512**  
[13] A1

[51] **Int.Cl. A23L 21/10 (2016.01) A23L 29/206 (2016.01) A23L 29/30 (2016.01)**

[25] EN

[54] **FRUIT PREPS AND OTHER SWEET SAUCES COMPRISING SUGAR REDUCTION SOLUTIONS AND STARCH**

[54] **PREPARATIONS A BASE DE FRUITS ET AUTRES SAUCES SUCREES COMPRENANT DES SOLUTIONS DE REDUCTION DE LA TENEUR EN SUCRE ET DE L'AMIDON**

[72] ICOZ, DIDEM, US  
[71] CORN PRODUCTS DEVELOPMENT, INC., US

[85] 2021-12-14  
[86] 2020-06-24 (PCT/US2020/039377)  
[87] (WO2020/263992)  
[30] US (62/868,817) 2019-06-28

[21] **3,143,508**  
[13] A1

[51] **Int.Cl. A61K 31/381 (2006.01) A61K 31/397 (2006.01) A61K 31/4025 (2006.01)**

[25] EN

[54] **HCK DEGRADERS AND USES THEREOF**

[54] **AGENTS DE DEGRADATION DE HCK ET LEURS UTILISATIONS**

[72] GRAY, NATHANAEL S., US  
[72] BUHRLAGE, SARA JEAN, US  
[72] TAN, LI, CN  
[72] TREON, STEVEN P., US  
[72] WANG, JINHUA, US  
[72] YANG, GUANG, US  
[71] DANA-FARBER CANCER INSTITUTE, INC., US

[85] 2021-12-14  
[86] 2020-06-24 (PCT/US2020/039304)  
[87] (WO2020/263935)  
[30] US (62/865,780) 2019-06-24

[21] **3,143,511**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/95 (2013.01)**

[25] EN

[54] **REAL TIME MEASUREMENTS OF PHYSIOLOGICAL PARAMETERS ASSOCIATED WITH HEART VALVE REPLACEMENT**

[54] **MESURES EN TEMPS REEL DE PARAMETRES PHYSIOLOGIQUES ASSOCIES A UN REMPLACEMENT DE VALVULE CARDIAQUE**

[72] GOLDBERT, ERAN, IL  
[72] LEVI, TAMIR S., IL  
[72] MAIMON, DAVID, IL  
[72] COHEN, OREN, IL  
[72] THOMAS, MARTYN RHYS, US  
[72] SAAR, TOMER, IL  
[72] SCHWARCZ, ELAZAR LEVI, IL  
[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2021-12-14  
[86] 2020-10-30 (PCT/US2020/058106)  
[87] (WO2021/087196)  
[30] US (62/928,925) 2019-10-31

[21] **3,143,513**  
[13] A1

[51] **Int.Cl. C07K 16/30 (2006.01) A61K 47/55 (2017.01)**

[25] EN

[54] **CD38-BINDING AGENTS AND USES THEREOF**

[54] **AGENT DE LIAISON A CD38 ET UTILISATIONS ASSOCIEES**

[72] RASTELLI, LUCA, US  
[72] WELSCH, MATTHEW ERNEST, US  
[72] BUNIN, ANNA, US  
[72] ROSSI, ANN MARIE K., US  
[72] BERBASOVA, TETYANA, US  
[71] KLEO PHARMACEUTICALS, INC., US

[85] 2021-12-14  
[86] 2020-06-24 (PCT/US2020/039466)  
[87] (WO2021/003050)  
[30] US (62/870,633) 2019-07-03  
[30] US (62/951,765) 2019-12-20

## PCT Applications Entering the National Phase

[21] <b>3,143,515</b> [13] A1	[21] <b>3,143,517</b> [13] A1	[21] <b>3,143,519</b> [13] A1
[51] <b>Int.Cl. B29C 64/129 (2017.01) B29C 64/241 (2017.01) B29C 64/264 (2017.01) B29C 64/277 (2017.01) B33Y 40/20 (2020.01)</b>	[51] <b>Int.Cl. A23G 9/04 (2006.01) A23G 9/16 (2006.01) A23G 9/20 (2006.01) A23G 9/22 (2006.01) A23G 9/28 (2006.01) A23L 3/24 (2006.01) F25D 31/00 (2006.01)</b>	[51] <b>Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/46 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>3D PRINTER PRINT HEAD SYSTEM WITH CURING MODULE ON ROTATION PLATFORM</b>	[54] <b>SYSTEMS AND METHODS FOR STORING AND DISPENSING FOOD WITH CHAMBERS ADJOINED BY A HEAT TRANSFER COMPOUND</b>	[54] <b>CD3 ANTIGEN BINDING FRAGMENTS AND COMPOSITIONS COMPRISING SAME</b>
[54] <b>SYSTEME DE TETE D'IMPRESSION D'IMPRIMANTE 3D DOTE D'UN MODULE DE DURCISSEMENT SUR PLATEFORME DE ROTATION</b>	[54] <b>SYSTEMES ET PROCEDES DE STOCKAGE ET DE DISTRIBUTION D'ALIMENTS AVEC DES CHAMBRES CONTIGUES PAR UN COMPOSE DE TRANSFERT DE CHALEUR</b>	[54] <b>FRAGMENTS DE LIAISON A L'ANTIGENE CD3 ET COMPOSITIONS LES COMPRENANT</b>
[72] BELORUSTSEV, SERGEI, US	[72] MCCUTCHAN, JAMES I., US	[72] SCHELLENBERGER, VOLKER, US
[72] SERGEEVICH, TRUSHIN ALEKSANDR, US	[71] TAYLOR COMMERCIAL FOODSERVICE, LLC, US	[72] KUHN, PHILIPP, DE
[72] DUBOV, ALEKSEI, US	[85] 2021-12-14	[72] FRENZEL, ANDRE, DE
[72] STARODUBTSEV, DMITRII, US	[86] 2020-06-25 (PCT/US2020/039571)	[72] MACCANN, DARRAGH, GB
[72] SOLONITSYN, SLAVA, US	[87] (WO2020/264127)	[72] MCCLORY, JAMES, GB
[71] MIGHTY BUILDINGS, INC., US	[30] US (62/868,150) 2019-06-28	[71] AMUNIX PHARMCEUTICALS, INC., US
[85] 2021-12-14		[85] 2021-12-14
[86] 2020-06-25 (PCT/US2020/039519)		[86] 2020-06-25 (PCT/US2020/039673)
[87] (WO2020/264094)		[87] (WO2020/264200)
[30] US (16/452,354) 2019-06-25		[30] US (62/866,746) 2019-06-26
		[30] US (63/041,059) 2020-06-18
[21] <b>3,143,516</b> [13] A1	[21] <b>3,143,518</b> [13] A1	[21] <b>3,143,521</b> [13] A1
[51] <b>Int.Cl. H01F 27/02 (2006.01) H01F 27/36 (2006.01) H01F 38/14 (2006.01)</b>	[51] <b>Int.Cl. A61K 8/19 (2006.01) A61K 8/97 (2017.01) A61K 33/38 (2006.01) A61K 36/886 (2006.01) A61Q 17/00 (2006.01) A61Q 19/10 (2006.01)</b>	[51] <b>Int.Cl. G10L 15/22 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>SHIELDING OF ELECTRONICS FROM MAGNETIC FIELDS</b>	[54] <b>COMPOSITIONS AND METHODS FOR THE ANTISEPTIC CLEANSING AND BIOFILMS TREATMENT OF MAMMALIAN TISSUE</b>	[54] <b>SYSTEMS AND METHODS FOR PROVIDING VOICE COMMAND RECOMMENDATIONS</b>
[54] <b>BLINDAGE D'ELECTRONIQUE CONTRE DES CHAMPS MAGNETIQUES</b>	[54] <b>COMPOSITIONS ET METHODES DE TRAITEMENT ANTISEPTIQUE DE BIOFILMS SUR UN TISSU DE MAMMIFERE</b>	[54] <b>SYSTEMES ET PROCEDES DE FOURNITURE DE RECOMMANDATIONS DE COMMANDE VOCALE</b>
[72] KYAW, PHYO AUNG, US	[72] WOODY, STEPHEN T., US	[72] ROBERT JOSE, JEFFRY COPPS, IN
[72] STEIN, AARON, US	[71] AVADIM HEALTH IP, INC., US	[72] AHER, ANKUR, IN
[72] SULLIVAN, CHARLES, US	[85] 2021-12-10	[71] ROVI GUIDES, INC., US
[71] RESONANT LINK, INC, US	[86] 2020-06-12 (PCT/US2020/037635)	[85] 2021-12-14
[85] 2021-12-14	[87] (WO2020/252411)	[86] 2020-12-09 (PCT/US2020/064048)
[86] 2020-11-18 (PCT/US2020/061085)	[30] US (62/860,727) 2019-06-12	[87] (WO2021/119150)
[87] (WO2021/102019)		[30] US (16/709,734) 2019-12-10
[30] US (62/939,151) 2019-11-22		

## Demandes PCT entrant en phase nationale

[21] **3,143,522**  
[13] A1

[51] **Int.Cl. C07K 16/30 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01) C07K 16/32 (2006.01) C07K 16/46 (2006.01)**

[25] EN

[54] **EGFR ANTIGEN BINDING FRAGMENTS AND COMPOSITIONS COMPRISING SAME**

[54] **FRAGMENTS DE LIAISON A L'ANTIGENE EGFR ET COMPOSITIONS LES COMPRENANT**

[72] SCHELLENBERGER, VOLKER, US

[72] MACCANN, DARRAGH, GB

[72] MCCLORY, JAMES, GB

[72] KUHN, PHILLIPP, DE

[72] FRENZEL, ANDRE, DE

[71] AMUNIX PHARMACEUTICALS, INC., US

[85] 2021-12-14

[86] 2020-06-25 (PCT/US2020/039682)

[87] (WO2020/264208)

[30] US (62/866,749) 2019-06-26

[30] US (63/043,486) 2020-06-24

[21] **3,143,523**  
[13] A1

[51] **Int.Cl. A61K 31/131 (2006.01) A61K 31/132 (2006.01) A61K 31/194 (2006.01)**

[25] EN

[54] **COMBINATION TREATMENTS FOR CENTRAL NERVOUS SYSTEM DISORDERS**

[54] **TRAITEMENTS COMBINES POUR TROUBLES DU SYSTEME NERVEUX CENTRAL**

[72] SISTI, NICHOLAS, US

[71] PHILERA NEW ZEALAND LTD., NZ

[85] 2021-12-14

[86] 2020-06-17 (PCT/US2020/038131)

[87] (WO2020/257279)

[30] US (62/862,415) 2019-06-17

[21] **3,143,524**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61P 25/06 (2006.01) C07K 16/18 (2006.01) C07K 16/46 (2006.01)**

[25] EN

[54] **ANTI-CGRP RECEPTOR/ANTI-PAC1 RECEPTOR BISPECIFIC ANTIGEN BINDING PROTEINS**

[54] **PROTEINES DE LIAISON A L'ANTIGENE BISPECIFIQUES ANTI-RECEPTEUR PAC1/ANTI-RECEPTEUR CGRP**

[72] CHEN, IRWIN, US

[72] CHONG, SU, US

[72] GARGES, FERNANDO, US

[72] MICHAELS, MARK LEO, US

[72] MOHR, CHRISTOPHER, US

[72] WALKER, KENNETH WILLIAM, US

[72] WANG, ZHULUN, US

[72] AGRAWAL, NEERAJ JAGDISH, US

[72] FUCHSLOCHER, BRYNA, US

[72] GRAHAM, KEVIN, US

[72] HAMBURGER, AGNES EVA, US

[72] PIPER, DEREK E., US

[72] XU, CEN, US

[71] AMGEN INC., US

[85] 2021-12-14

[86] 2020-06-26 (PCT/US2020/039940)

[87] (WO2020/264384)

[30] US (62/868,557) 2019-06-28

[21] **3,143,525**  
[13] A1

[51] **Int.Cl. A61K 31/4245 (2006.01) A61P 11/00 (2006.01) A61P 35/00 (2006.01) C07D 401/12 (2006.01) C07D 401/14 (2006.01) C07D 471/04 (2006.01) C07D 487/04 (2006.01) C07D 491/04 (2006.01) C07D 495/04 (2006.01) C07D 519/00 (2006.01)**

[25] EN

[54] **HETEROCYCLIC KINASE INHIBITORS AND PRODUCTS AND USES THEREOF**

[54] **INHIBITEURS DE KINASE HETEROCYCLIQUES, PRODUITS ET UTILISATIONS ASSOCIES**

[72] LOPEZ, LUIS, US

[72] COBURN, CRAIG, US

[72] ROWBOTTOM, MARTIN W., US

[72] BOTROUS, IRINY, US

[72] KASEM, MICHELLE, US

[71] GB002, INC., US

[85] 2021-12-14

[86] 2020-06-26 (PCT/US2020/039981)

[87] (WO2020/264420)

[30] US (62/868,735) 2019-06-28

[21] **3,143,526**  
[13] A1

[51] **Int.Cl. H01H 9/50 (2006.01)**

[25] EN

[54] **ELECTRONIC ACCESS CONTROL SYSTEM AND METHOD FOR ARC FLASH PREVENTION**

[54] **SYSTEME DE COMMANDE D'ACCES ELECTRONIQUE ET PROCEDE DE PREVENTION D'ECLAIRS D'ARC ELECTRIQUE**

[72] TRAPANI, MATTHEW FRANK, US

[72] KRUTZ-SABOL, STACEY LEE, US

[71] SECURITY ENHANCEMENT SYSTEMS, LLC, US

[85] 2021-12-14

[86] 2020-06-17 (PCT/US2020/038197)

[87] (WO2020/257321)

[30] US (62/862,532) 2019-06-17

[21] **3,143,527**  
[13] A1

[51] **Int.Cl. C12N 9/26 (2006.01) C12N 9/28 (2006.01) C12N 9/30 (2006.01) C12N 9/34 (2006.01) C12N 9/36 (2006.01) C12N 9/42 (2006.01) C12N 9/52 (2006.01) C12N 9/58 (2006.01) C12N 15/62 (2006.01) C12P 7/10 (2006.01) C12P 21/02 (2006.01)**

[25] EN

[54] **FUSION PROTEINS FOR IMPROVED ENZYME EXPRESSION**

[54] **PROTEINES DE FUSION POUR UNE EXPRESSION ENZYMATIQUE AMELIOREE**

[72] OSBORN, JUDILEE, US

[72] TASSONE, MONICA, US

[71] NOVOZYMES A/S, DK

[85] 2021-12-14

[86] 2020-07-24 (PCT/US2020/043432)

[87] (WO2021/025872)

[30] US (62/883,519) 2019-08-06

## PCT Applications Entering the National Phase

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[21] **3,143,528**  
[13] A1

[51] **Int.Cl. G21G 1/02 (2006.01) B32B 15/00 (2006.01) G21C 3/06 (2006.01) G21G 1/10 (2006.01) G21K 5/08 (2006.01) H05H 6/00 (2006.01)**

[25] EN

[54] **FISSILE TARGET MATERIALS AND METHODS FOR PROCESSING FISSILE TARGET MATERIALS**

[54] **MATIERES CIBLES FISSILES ET PROCEDES DE TRAITEMENT DE MATIERES CIBLES FISSILES**

[72] MORRISON, SAMUEL S., US

[72] HUBBARD, LANCE R., US

[72] UHNAK, NICOLAS, US

[72] MCNAMARA, BRUCE K., US

[72] HALL, GABRIEL B., US

[71] BATTELLE MEMORIAL INSTITUTE, US

[85] 2021-12-14

[86] 2020-07-31 (PCT/US2020/044543)

[87] (WO2021/022179)

[30] US (62/880,746) 2019-07-31

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[21] **3,143,530**  
[13] A1

[51] **Int.Cl. F42D 1/00 (2006.01) F42D 3/04 (2006.01)**

[25] EN

[54] **IMPROVING BLAST PATTERNS**

[54] **AMELIORATION DE MODELES DE COUP DE MINE**

[72] TREAT, NEIL DAVID, US

[72] HUNT, THOMAS PETER, US

[72] GONCHARUK, ARTEM, US

[72] DAVIS, KAREN, US

[72] SAHNEY, VIKRAM NEAL, US

[71] X DEVELOPMENT LLC, US

[85] 2021-12-14

[86] 2020-08-12 (PCT/US2020/046019)

[87] (WO2021/030497)

[30] US (62/887,259) 2019-08-15

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[21] **3,143,531**  
[13] A1

[51] **Int.Cl. H01H 13/83 (2006.01)**

[25] EN

[54] **LOW PROFILE SWITCH PANEL ASSEMBLY**

[54] **ENSEMBLE PANNEAU DE COMMUTATION A FAIBLE PROFIL**

[72] EMERSON, ALAN L., US

[71] IDD AEROSPACE CORPORATION, US

[85] 2021-12-14

[86] 2020-08-24 (PCT/US2020/047661)

[87] (WO2021/041328)

[30] US (62/892,739) 2019-08-28

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[21] **3,143,534**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61F 2/95 (2013.01)**

[25] EN

[54] **EXPANDABLE TRANSITION ELEMENT FOR A TRANSCATHETER DELIVERY DEVICE**

[54] **ELEMENT DE TRANSITION EXPANSIBLE POUR DISPOSITIF DE POSE PAR CATHETER**

[72] COHEN, OREN, IL

[72] SAAR, TOMER, IL

[72] LEVI, TAMIR S., IL

[72] NEUMANN, YAIR A., IL

[72] MAIMON, DAVID, IL

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2021-12-14

[86] 2020-10-14 (PCT/US2020/055546)

[87] (WO2021/086611)

[30] US (62/928,973) 2019-10-31

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[21] **3,143,535**  
[13] A1

[51] **Int.Cl. A61N 5/06 (2006.01) F21S 4/22 (2016.01) H05B 47/10 (2020.01) H05B 47/155 (2020.01) H05B 47/165 (2020.01) F21V 15/015 (2006.01)**

[25] EN

[54] **LIGHT THERAPY SYSTEMS AND METHODS**

[54] **SYSTEMES ET PROCEDES DE LUMINOTHERAPIE**

[72] JOHNSON, PATRICK LAMBERTH, US

[71] BIOPHOTAS, INC., US

[85] 2021-12-14

[86] 2020-06-12 (PCT/US2020/037586)

[87] (WO2020/252379)

[30] US (62/861,894) 2019-06-14

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[21] **3,143,537**  
[13] A1

[51] **Int.Cl. A61B 5/145 (2006.01) A61M 5/142 (2006.01) A61M 5/158 (2006.01) A61M 5/172 (2006.01) A61M 31/00 (2006.01) A61M 37/00 (2006.01)**

[25] EN

[54] **INFUSION DEVICE FOR CONTINUOUS GLUCOSE MONITORING**

[54] **DISPOSITIF DE PERFUSION POUR SURVEILLANCE CONTINUE DU GLUCOSE**

[72] CARGILL, ROBERT S., US

[72] REID, SOLOMON, US

[72] BENWARE, SHEILA, US

[72] KNUTSEN, CHAD, US

[72] GREENBERG, ANDREW, US

[72] SEIDL, THOMAS, US

[72] WARD, WILLIAM KENNETH, US

[71] PACIFIC DIABETES TECHNOLOGIES INC., US

[85] 2021-12-14

[86] 2020-06-12 (PCT/US2020/037511)

[87] (WO2020/252324)

[30] US (62/861,940) 2019-06-14

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[21] **3,143,538**  
[13] A1

[51] **Int.Cl. H04N 19/105 (2014.01) H04N 19/109 (2014.01) H04N 19/132 (2014.01) H04N 19/137 (2014.01) H04N 19/176 (2014.01) H04N 19/527 (2014.01) H04N 19/70 (2014.01)**

[25] EN

[54] **IMAGE DECODING METHOD AND DEVICE FOR DERIVING WEIGHT INDEX INFORMATION FOR GENERATION OF PREDICTION SAMPLE**

[54] **PROCEDE ET DISPOSITIF DE DECODAGE D'IMAGE POUR LA DERIVATION D'INFORMATIONS D'INDICE DE PONDERATION POUR LA PRODUCTION D'ECHANTILLON DE PREDICTION**

[72] PARK, NAERI, KR

[72] NAM, JUNGHAK, KR

[72] JANG, HYEONGMOON, KR

[71] LG ELECTRONICS INC., KR

[85] 2021-12-14

[86] 2020-06-10 (PCT/KR2020/007521)

[87] (WO2020/251257)

[30] US (62/861,986) 2019-06-14



## Demandes PCT entrant en phase nationale

[21] **3,143,540**  
[13] A1

[51] **Int.Cl. B65G 47/61 (2006.01) B05B 13/02 (2006.01) B65G 19/02 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR MOVING ITEMS ALONG A RAIL**  
[54] **APPAREIL POUR DEPLACER DES ARTICLES LE LONG D'UN RAIL**  
[72] GUSTAFSON, CHRIS ORM, US  
[72] LAMKE, DARIK DWAIN, US  
[71] KANNEGIESSER ETECH, US  
[85] 2021-12-14  
[86] 2020-06-12 (PCT/US2020/037505)  
[87] (WO2020/252318)  
[30] US (62/861,564) 2019-06-14

[21] **3,143,542**  
[13] A1

[51] **Int.Cl. A23L 27/30 (2016.01) A23L 2/385 (2006.01) A23L 2/60 (2006.01)**  
[25] EN  
[54] **STABILIZED LIQUID CONCENTRATE COMPOSITION**  
[54] **COMPOSITION DE CONCENTRE LIQUIDE STABILISEE**  
[72] QUINLAN, MARY ELIZABETH, GB  
[72] TIEDEMANN, SVEN, DE  
[72] SIEGFELD, CHUN JENNY, DE  
[71] TATE & LYLE INGREDIENTS AMERICAS LLC, US  
[85] 2021-12-16  
[86] 2020-06-18 (PCT/GB2020/051481)  
[87] (WO2020/254815)  
[30] GB (1908813.7) 2019-06-19

[21] **3,143,543**  
[13] A1

[51] **Int.Cl. B01D 45/08 (2006.01) B01J 8/18 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR RECOVERING ENTRAINED PARTICLES FROM AN EXHAUST GAS STREAM**  
[54] **SYSTEME DE RECUPERATION DE PARTICULES ENTRAINEES A PARTIR D'UN FLUX DE GAZ D'ECHAPPEMENT**  
[72] KIM, HOWARD TAERY, US  
[71] X ENERGY, LLC, US  
[85] 2021-12-14  
[86] 2020-06-12 (PCT/US2020/037465)  
[87] (WO2020/252285)  
[30] US (16/442,156) 2019-06-14

[21] **3,143,545**  
[13] A1

[51] **Int.Cl. A61K 31/56 (2006.01) A61K 31/58 (2006.01) A61P 25/00 (2006.01) C07J 43/00 (2006.01) C07J 63/00 (2006.01) C07J 1/00 (2006.01) C07J 7/00 (2006.01) C07J 9/00 (2006.01) C07J 17/00 (2006.01) C07J 21/00 (2006.01) C07J 41/00 (2006.01)**  
[25] EN  
[54] **COMPOUNDS FOR TREATING CNS DISORDERS**  
[54] **COMPOSES POUR LE TRAITEMENT DE TROUBLES DU SYSTEME NERVEUX CENTRAL**  
[72] BLANCO-PILLADO, MARIA JESUS, US  
[72] SALITURO, FRANCESCO G., US  
[72] MORNINGSTART, MARSHALL LEE, US  
[71] SAGE THERAPEUTICS, INC., US  
[85] 2021-12-14  
[86] 2020-06-29 (PCT/US2020/040164)  
[87] (WO2020/264512)  
[30] US (62/867,695) 2019-06-27  
[30] US (62/867,734) 2019-06-27  
[30] US (62/867,736) 2019-06-27

[21] **3,143,546**  
[13] A1

[51] **Int.Cl. H04N 19/105 (2014.01) H04N 19/109 (2014.01) H04N 19/132 (2014.01) H04N 19/137 (2014.01) H04N 19/176 (2014.01) H04N 19/527 (2014.01) H04N 19/573 (2014.01) H04N 19/70 (2014.01)**  
[25] EN  
[54] **IMAGE DECODING METHOD FOR DERIVING WEIGHT INDEX INFORMATION FOR BIPREDICTION, AND DEVICE FOR SAME**  
[54] **PROCEDE DE DECODAGE D'IMAGE SERVANT A DEDUIRE DES INFORMATIONS D'INDICE DE POIDS POUR UNE BIPREDICTION, ET DISPOSITIF ASSOCIE**  
[72] PARK, NAERI, KR  
[72] NAM, JUNGHAK, KR  
[72] JANG, HYEONGMOON, KR  
[71] LG ELECTRONICS INC., KR  
[85] 2021-12-14  
[86] 2020-06-10 (PCT/KR2020/007523)  
[87] (WO2020/251259)  
[30] US (62/861,989) 2019-06-14

[21] **3,143,547**  
[13] A1

[51] **Int.Cl. G06K 9/62 (2022.01)**  
[25] EN  
[54] **EXTRACTION OF GENEALOGY DATA FROM OBITUARIES**  
[54] **EXTRACTION DE DONNEES GENEALOGIQUES A PARTIR D'UNE RUBRIQUE NECROLOGIQUE**  
[72] ANDERSON, CAROL MYRICK, US  
[72] BIERNER, GANN, US  
[72] CRONE, PHILIP THEODORE, US  
[72] FOLKMAN, TYLER, US  
[71] ANCESTRY.COM OPERATIONS INC., US  
[85] 2021-12-14  
[86] 2020-07-15 (PCT/US2020/042045)  
[87] (WO2021/011598)  
[30] US (62/874,689) 2019-07-16  
[30] US (16/928,903) 2020-07-14

[21] **3,143,548**  
[13] A1

[51] **Int.Cl. C07C 5/333 (2006.01)**  
[25] EN  
[54] **METHODS FOR FORMING LIGHT OLEFINS THAT INCLUDE USE OF COOLED PRODUCT AS A RECYCLED QUENCH STREAM**  
[54] **PROCEDES DE FORMATION D'OLEFINES LEGERES CONSISTANT A UTILISER UN PRODUIT REFROIDI EN TANT QUE COURANT D'EXTINCTION RECYCLE**  
[72] PRETZ, MATTHEW T., US  
[72] WANG, HANGYAO, US  
[72] PLAUCK, ANTHONY, US  
[72] MCNEELEY, ADAM M., US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2021-12-14  
[86] 2020-06-12 (PCT/US2020/037420)  
[87] (WO2020/263599)  
[30] US (62/868,340) 2019-06-28

## PCT Applications Entering the National Phase

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[21] **3,143,549**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **PROSTHETIC HEART VALVE LEAFLET ASSEMBLIES AND METHODS OF ASSEMBLING**  
[54] **ENSEMBLES FEUILLETS DE VALVULE CARDIAQUE PROTHETIQUE ET PROCEDES D'ASSEMBLAGE**  
[72] NIR, NOAM, IL  
[72] BUKIN, MICHAEL, IL  
[72] SHERMAN, ELENA, IL  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2021-12-14  
[86] 2020-10-27 (PCT/US2020/057527)  
[87] (WO2021/086850)  
[30] US (62/928,993) 2019-10-31

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[21] **3,143,550**  
[13] A1

[51] **Int.Cl. B01D 53/047 (2006.01)**  
[25] EN  
[54] **ENERGY EFFICIENT VPSA SYSTEM WITH DIRECT DRIVE HIGH SPEED CENTRIFUGAL COMPRESSORS**  
[54] **SYSTEME VPSA A RENDEMENT ENERGETIQUE EFFICACE AVEC COMPRESSEURS CENTRIFUGES A VITESSE ELEVEE A ENTRAINEMENT DIRECT**  
[72] ROSINSKI, ANDREW C., US  
[72] STUCKERT, NICHOLAS R., US  
[72] LUO, YANG, US  
[71] PRAXAIR TECHNOLOGY, INC., US  
[85] 2021-12-14  
[86] 2020-11-05 (PCT/US2020/059095)  
[87] (WO2021/096754)  
[30] US (62/935,937) 2019-11-15

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[21] **3,143,551**  
[13] A1

[51] **Int.Cl. B05B 15/58 (2018.01) A01M 7/00 (2006.01) B05B 1/30 (2006.01) B05B 12/08 (2006.01) F16K 31/00 (2006.01) F16K 37/00 (2006.01)**  
[25] EN  
[54] **HYDRAULIC SPRAY NOZZLE**  
[54] **BUSE DE PULVERISATION HYDRAULIQUE**  
[72] MAURER, GARRETT, US  
[72] WOOD, JR., DANIEL R., US  
[71] INTELLIGENT AGRICULTURAL SOLUTIONS LLC, US  
[85] 2021-12-14  
[86] 2020-06-12 (PCT/US2020/037401)  
[87] (WO2020/252239)  
[30] US (62/861,816) 2019-06-14

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[21] **3,143,552**  
[13] A1

[51] **Int.Cl. B26B 21/00 (2006.01) B26B 21/60 (2006.01)**  
[25] EN  
[54] **RAZORS AND RAZOR CARTRIDGES**  
[54] **RASOIRS ET CARTOUCHES DE RASOIR**  
[72] SKROBIS, KENNETH JAMES, US  
[72] MAZIARZ, JOHN LAWRENCE, US  
[72] DEPUYDT, JOSEPH ALLAN, US  
[72] JOLLEY, WILLIAM OWEN, US  
[71] THE GILLETTE COMPANY LLC, US  
[85] 2021-12-14  
[86] 2020-07-30 (PCT/US2020/070327)  
[87] (WO2021/022300)  
[30] US (62/881,193) 2019-07-31

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[21] **3,143,553**  
[13] A1

[51] **Int.Cl. H02J 50/12 (2016.01)**  
[25] EN  
[54] **RESONANT LC STRUCTURE WITH STANDALONE CAPACITORS**  
[54] **STRUCTURE LC RESONANTE A CONDENSATEURS AUTONOMES**  
[72] STEIN, AARON, US  
[72] KYAW, PHYO AUNG, US  
[71] RESONANT LINK, INC, US  
[85] 2021-12-14  
[86] 2021-01-27 (PCT/US2021/015260)  
[87] (WO2021/154836)  
[30] US (62/967,482) 2020-01-29

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[21] **3,143,555**  
[13] A1

[51] **Int.Cl. A61K 38/22 (2006.01) A61K 38/08 (2019.01) A61K 38/10 (2006.01) A61P 25/02 (2006.01) A61P 25/04 (2006.01)**  
[25] EN  
[54] **PEPTIDES AND USES THEREOF**  
[54] **PEPTIDES ET LEURS UTILISATIONS**  
[72] GEARING, ANDREW, AU  
[71] LATERAL IP PTY LTD, AU  
[85] 2021-12-15  
[86] 2020-07-08 (PCT/AU2020/050713)  
[87] (WO2021/003531)  
[30] AU (2019902437) 2019-07-09

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[21] **3,143,556**  
[13] A1

[51] **Int.Cl. H04N 19/573 (2014.01) H04N 19/132 (2014.01) H04N 19/159 (2014.01) H04N 19/176 (2014.01) H04N 19/52 (2014.01) H04N 19/70 (2014.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR IMAGE CODING USING MOTION VECTOR DIFFERENCES**  
[54] **PROCEDE ET DISPOSITIF DE CODAGE D'IMAGE AU MOYEN DE DIFFERENCES DE VECTEURS DE MOUVEMENT**  
[72] PARK, NAERI, KR  
[72] NAM, JUNGHAK, KR  
[72] JANG, HYEONGMOON, KR  
[71] LG ELECTRONICS INC., KR  
[85] 2021-12-14  
[86] 2020-06-15 (PCT/KR2020/007718)  
[87] (WO2020/251324)  
[30] US (62/861,982) 2019-06-14

## Demandes PCT entrant en phase nationale

[21] **3,143,557**  
[13] A1

[51] **Int.Cl. A61K 31/16 (2006.01) A61K 31/12 (2006.01) A61P 17/02 (2006.01) A61P 29/00 (2006.01)**

[25] EN

[54] **EXTERNAL USE COMPOSITION COMPRISING PAEONOL AND PANTHENOL OR PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF AS ACTIVE INGREDIENTS**

[54] **COMPOSITION A USAGE EXTERNE COMPRENANT DU PAEONOL ET DU PANTHENOL OU DES SELS PHARMACEUTIQUEMENT ACCEPTABLES DE CEUX-CI EN TANT QUE SUBSTANCES ACTIVES**

[72] YOON, CHANG KEUN, KR  
[72] KIM, HONG GYUM, KR  
[71] GENTRIBIO INC., KR  
[85] 2021-12-14  
[86] 2020-12-02 (PCT/KR2020/017469)  
[87] (WO2021/125632)  
[30] KR (10-2019-0167889) 2019-12-16

[21] **3,143,558**  
[13] A1

[51] **Int.Cl. A01J 5/007 (2006.01) A01J 7/02 (2006.01) G01N 33/04 (2006.01)**

[25] EN

[54] **A CONTROL UNIT AND A LIQUID CONTAINER INSERTABLE IN A MILK ANALYSIS APPARATUS**

[54] **UNITE DE COMMANDE ET RECIPIENT DE LIQUIDE POUVANT ETRE INSERE DANS UN APPAREIL D'ANALYSE DE LAIT**

[72] DALLERUP RASMUSSEN, CLAUS, SE  
[72] SLAABY, JOHN, SE  
[71] DELAVAL HOLDING AB, SE  
[85] 2021-12-14  
[86] 2020-06-09 (PCT/SE2020/050585)  
[87] (WO2020/251459)  
[30] SE (1950718-5) 2019-06-14

[21] **3,143,559**  
[13] A1

[51] **Int.Cl. G01N 21/84 (2006.01) G01N 33/558 (2006.01) G01N 33/74 (2006.01)**

[25] EN

[54] **SYSTEM FOR DETERMINING VALIDITY OF A LATERAL FLOW TEST RESULT**

[54] **SYSTEME DE DETERMINATION DE LA VALIDITE D'UN RESULTAT DE TEST A ECOULEMENT LATERAL**

[72] DALLERUP RASMUSSEN, CLAUS, SE  
[72] TRIER HALD, JONAS, SE  
[71] DELAVAL HOLDING AB, SE  
[85] 2021-12-14  
[86] 2020-06-09 (PCT/SE2020/050586)  
[87] (WO2020/251460)  
[30] SE (1950719-3) 2019-06-14

[21] **3,143,565**  
[13] A1

[51] **Int.Cl. A61M 25/01 (2006.01) A61L 29/00 (2006.01) A61L 29/08 (2006.01) A61L 29/12 (2006.01) A61L 29/14 (2006.01) A61M 25/00 (2006.01) A61M 25/16 (2006.01)**

[25] EN

[54] **CATHETER CONSTRUCTION**

[54] **CONSTRUCTION DE CATHETER**

[72] MARTIN, BRIAN B., US  
[71] MADURO DISCOVERY, LLC, US  
[85] 2021-12-14  
[86] 2020-06-15 (PCT/US2020/037808)  
[87] (WO2020/257125)  
[30] US (62/862,035) 2019-06-15

[21] **3,143,567**  
[13] A1

[51] **Int.Cl. C07K 14/74 (2006.01)**

[25] EN

[54] **PEPTIDE-MHC COMPLEXES**

[54] **COMPLEXES PEPTIDE-CMH**

[72] BLICHER, THOMAS HOLBERG, GB  
[72] DE SOUZA, VICTORIA ARENA, GB  
[71] IMMUNOCORE LIMITED, GB  
[85] 2021-12-15  
[86] 2020-07-01 (PCT/EP2020/068491)  
[87] (WO2021/001414)  
[30] GB (1909509.0) 2019-07-02

[21] **3,143,568**  
[13] A1

[51] **Int.Cl. A61L 27/52 (2006.01) B33Y 70/00 (2020.01) A61L 27/38 (2006.01) A61L 27/50 (2006.01)**

[25] EN

[54] **CROSSLINKABLE HYDROGEL COMPOSITIONS**

[54] **COMPOSITIONS D'HYDROGEL RETICULABLE**

[72] TIBBITT, MARK, CH  
[72] GUZZI, ELIA, CH  
[71] ETH ZURICH, CH  
[85] 2021-12-15  
[86] 2020-06-19 (PCT/EP2020/067187)  
[87] (WO2020/254626)  
[30] EP (19181458.1) 2019-06-20

[21] **3,143,570**  
[13] A1

[51] **Int.Cl. C12N 15/80 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **METHODS FOR TRANSFORMATION OF FUNGAL SPORES**

[54] **PROCEDES DE TRANSFORMATION DE SPORES FONGIQUES**

[72] STUIVER, MAARTEN, BE  
[72] SCHACHTSCHABEL, DOREEN, DE  
[72] HOFF, BIRGIT, DE  
[72] MENTZEL, TOBIAS, DE  
[72] SIEPE, ISABELLA, DE  
[72] THINES, ECKHARD, DE  
[72] JACOB, STEFAN, DE  
[72] BECKER, MICHAEL, DE  
[72] YEMELIN, ALEXANDER, DE  
[71] BASF PLANT SCIENCE COMPANY GMBH, DE  
[85] 2021-12-15  
[86] 2020-06-17 (PCT/EP2020/066828)  
[87] (WO2020/260104)  
[30] EP (19182791.4) 2019-06-27  
[30] EP (19217396.1) 2019-12-18

## PCT Applications Entering the National Phase

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[21] **3,143,572**  
[13] A1

[51] **Int.Cl. A61K 47/00 (2006.01) C07C 233/00 (2006.01) C07C 247/04 (2006.01) C07K 16/00 (2006.01)**

[25] EN

[54] **BIS(2-HALOACETAMIDO)-COMPOUNDS FOR USE AS LINKING AGENTS AND RESULTANT PRODUCTS WHICH COMPRISE ANTIBODIES, HALF-ANTIBODIES AND ANTIBODY FRAGMENTS**

[54] **COMPOSES BIS(2-HALOACETAMIDO) DESTINES A ETRE UTILISES EN TANT QU'AGENTS DE LIAISON ET PRODUITS RESULTANTS QUI COMPRENENT DES ANTICORPS, DES DEMI-ANTICORPS ET DES FRAGMENTS D'ANTICORPS**

[72] WATTS, ANDREW, GB  
[72] ALKHAWAJA, BAYAN, GB  
[71] THE UNIVERSITY OF BATH, GB  
[85] 2021-12-15  
[86] 2020-06-25 (PCT/EP2020/067922)  
[87] (WO2020/260514)  
[30] GB (1909103.2) 2019-06-25

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[21] **3,143,573**  
[13] A1

[51] **Int.Cl. B08B 9/04 (2006.01) F16L 55/46 (2006.01)**

[25] EN

[54] **SYSTEM FOR LAUNCHING EQUIPMENT WITH A CABLE FOR INTERNALLY INSPECTING AND UNBLOCKING PRODUCTION, INJECTION AND DISTRIBUTION DUCTS**

[54] **SYSTEME DE LANCEMENT D'EQUIPEMENT AVEC CABLE POUR L'INSPECTION INTERNE ET LA DESOBSTRUCTION DE CONDUITS DE PRODUCTION, D'INJECTION ET D'EXPORTATION**

[72] LISBOA SANTOS, HUGO FRANCISCO, BR  
[72] GERHARDT, EDUARDO, BR  
[72] VIEGAS WENTZ, ANDRE, BR  
[72] GALASSI, MAURICIO, BR  
[72] HERNALSTEENS, CEDRIC, BR  
[71] SERVICIO NACIONAL DE APRENDIZAGEM INDUSTRIAL - DEPARTAMENTO REGIONAL DE SANTA CATARINA - SENAI/SC, BR  
[71] PETROLEO BRASILEIRO S. A. - PETROBRAS, BR  
[85] 2021-12-15  
[86] 2020-06-15 (PCT/BR2020/050212)  
[87] (WO2020/252548)  
[30] BR (BR 102019012854-2) 2019-06-19

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[21] **3,143,574**  
[13] A1

[51] **Int.Cl. G10L 19/002 (2013.01) G10L 19/26 (2013.01)**

[25] EN

[54] **AUDIO ENCODER WITH A SIGNAL-DEPENDENT NUMBER AND PRECISION CONTROL, AUDIO DECODER, AND RELATED METHODS AND COMPUTER PROGRAMS**

[54] **CODEUR AUDIO AVEC UN NOMBRE DEPENDANT DU SIGNAL ET UNE COMMANDE DE PRECISION, DECODEUR AUDIO, ET PROCEDES ET PROGRAMMES INFORMATIQUES ASSOCIES**

[72] BUTHE, JAN, DE  
[72] SCHNELL, MARKUS, DE  
[72] DOHLA, STEFAN, DE  
[72] GRILL, BERNHARD, DE  
[72] DIETZ, MARTIN, DE  
[71] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2021-12-15  
[86] 2020-06-10 (PCT/EP2020/066088)  
[87] (WO2020/254168)  
[30] EP (PCT/EP2019/065897) 2019-06-17

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[21] **3,143,575**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 31/135 (2006.01)**

[25] EN

[54] **ORAL THIN FILM**

[54] **FILM MINCE D'HYGIENE BUCCO-DENTAIRE**

[72] MULLER, MARKUS, DE  
[72] LINN, MICHAEL, DE  
[71] LTS LOHMANN THERAPIE-SYSTEME AG, DE  
[85] 2021-12-15  
[86] 2020-07-02 (PCT/EP2020/068598)  
[87] (WO2021/001461)  
[30] DE (10 2019 117 870.3) 2019-07-02

## Demandes PCT entrant en phase nationale

[21] **3,143,577**  
[13] A1

[51] **Int.Cl. C07D 211/62 (2006.01) A61K 39/12 (2006.01) A61K 47/18 (2017.01) A61K 47/22 (2006.01) A61P 31/14 (2006.01) C07C 229/12 (2006.01) C07D 207/08 (2006.01) C07D 207/16 (2006.01) C07D 211/60 (2006.01) C07D 233/64 (2006.01) C07D 295/15 (2006.01) C07D 453/02 (2006.01) C12N 15/11 (2006.01) C12N 15/87 (2006.01)**

[25] EN

[54] **IONIZABLE LIPIDS FOR NUCLEIC ACID DELIVERY**

[54] **LIPIDES IONISABLES POUR L'ADMINISTRATION D'ACIDES NUCLEIQUES**

[72] JAIN, NIKITA, CA  
[72] THOMAS, ANITHA, CA  
[72] BROWN, ANDREW WILLIAM, CA  
[71] PRECISION NANOSYSTEMS INC., CA

[85] 2021-12-15  
[86] 2020-06-19 (PCT/CA2020/050854)  
[87] (WO2020/252589)

[21] **3,143,578**  
[13] A1

[51] **Int.Cl. C07D 307/20 (2006.01) A61K 9/14 (2006.01) A61K 47/22 (2006.01) A61K 47/28 (2006.01) A61K 47/30 (2006.01) C07D 405/12 (2006.01) C07D 453/02 (2006.01) C07H 13/06 (2006.01) C07H 13/10 (2006.01) C12N 15/87 (2006.01)**

[25] EN

[54] **IONIZABLE LIPIDS FOR NUCLEIC ACID DELIVERY**

[54] **LIPIDES IONISABLES POUR L'ADMINISTRATION D'ACIDES NUCLEIQUES**

[72] THOMAS, ANITHA, CA  
[72] JAIN, NIKITA, CA  
[72] BROWN, ANDREW WILLIAM, CA  
[71] PRECISION NANOSYSTEMS INC., CA

[85] 2021-12-15  
[86] 2020-06-26 (PCT/CA2020/050897)  
[87] (WO2021/000041)  
[30] US (62/868,900) 2019-06-29  
[30] US (63/009,042) 2020-04-13

[21] **3,143,581**  
[13] A1

[51] **Int.Cl. G06N 10/00 (2022.01) G06J 1/00 (2006.01) H01L 29/04 (2006.01) H01L 31/173 (2006.01)**

[25] EN

[54] **SYSTEMS, DEVICES, ARTICLES, AND METHODS TO INTERACT WITH INFORMATION STORED IN BOUND-EXCITON STATES ASSOCIATED WITH LUMINESCENT SILICON DEFECTS**

[54] **SYSTEMES, DISPOSITIFS, ARTICLES ET PROCEDES POUR INTERAGIR AVEC DES INFORMATIONS MEMORISEES DANS DES ETATS D'EXCITONS LIES ASSOCIES A DES DEFAUTS DE SILICIUM LUMINESCENTS**

[72] SIMMONS, STEPHANIE, CA  
[72] THEWALT, MICHAEL L. W., CA  
[71] PHOTONIC INC., CA

[85] 2021-12-15  
[86] 2020-08-06 (PCT/CA2020/051077)  
[87] (WO2021/022375)  
[30] US (62/883,598) 2019-08-06

[21] **3,143,582**  
[13] A1

[51] **Int.Cl. B60R 9/10 (2006.01) B60R 9/06 (2006.01)**

[25] EN

[54] **LOAD CARRIER**

[54] **SUPPORT DE CHARGEMENT**

[72] LARSSON, FREDRIK, SE  
[72] JONSSON, TOBIAS, SE  
[72] HELMERSSON, SIMON, SE  
[72] LARSSON, JOHAN, SE  
[72] ALM, HENRIK, SE  
[72] LARSSON, STIG-JOHAN, SE  
[72] RAWOOL, SACHIN, SE  
[72] FRITJOFSSON, ALEXANDER, SE  
[71] THULE SWEDEN AB, SE

[85] 2021-12-15  
[86] 2020-06-10 (PCT/EP2020/066106)  
[87] (WO2020/254170)  
[30] EP (19181348.4) 2019-06-19

[21] **3,143,583**  
[13] A1

[51] **Int.Cl. F16F 9/53 (2006.01) B61G 11/12 (2006.01)**

[25] EN

[54] **NOVEL ANTI-IMPACT DEVICE AND WORKING METHOD THEREOF**

[54] **NOUVEAU DISPOSITIF ANTI-IMPACT ET PROCEDE DE TRAVAIL ASSOCIE**

[72] WANG, CHENGLONG, CN  
[72] CHEN, YIFANG, CN  
[72] WEI, XUEQIAN, CN  
[72] WANG, XUETING, CN  
[72] CHEN, MENG, CN  
[72] ZENG, QINGLIANG, CN  
[71] SHANDONG UNIVERSITY OF SCIENCE AND TECHNOLOGY, CN

[85] 2021-12-15  
[86] 2020-05-07 (PCT/CN2020/088982)  
[87] (WO2021/155645)  
[30] CN (202010080319.5) 2020-02-05

[21] **3,143,584**  
[13] A1

[51] **Int.Cl. C07K 14/575 (2006.01) A61K 38/22 (2006.01) A61P 9/00 (2006.01)**

[25] EN

[54] **ADRENOMEDULLIN-ANALOGUES FOR LONG-TERM STABILIZATION AND THEIR USE**

[54] **ANALOGUES D'ADRENOMEDULLINE POUR STABILISATION A LONG TERME ET LEUR UTILISATION**

[72] KOBBERLING, JOHANNES, DE  
[72] BIERER, DONALD, DE  
[72] FLAMME, INGO, DE  
[72] RIEDL, BERND, DE  
[72] HOFMEISTER, LUCAS HUDSON, DE  
[72] BECK-SICKINGER, ANNETTE, DE  
[72] ELS-HEINDL, SYLVIA, DE  
[72] FISCHER, JAN-PATRICK, DE  
[72] JULKE, EVA-MARIA, DE  
[71] BAYER AKTIENGESELLSCHAFT, DE

[85] 2021-12-15  
[86] 2020-06-12 (PCT/EP2020/066253)  
[87] (WO2020/254197)  
[30] EP (19180955.7) 2019-06-18

## PCT Applications Entering the National Phase

[21] **3,143,586**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/107 (2006.01) A61K 31/685 (2006.01) A61P 25/28 (2006.01) A61P 27/12 (2006.01)**

[25] EN

[54] **PARENTERAL LYSOPHOSPHATIDYLCHOLINE FORMULATIONS SUCH AS LPC-DHA, LPC-EPA AND THEIR USE IN THERAPY**

[54] **FORMULATIONS DE LYSOPHOSPHATIDYLCHOLINE PARENTERALES TELLES QUE LPC-DHA, LPC-EPA ET LEUR UTILISATION EN THERAPIE**

[72] SKOLEM, LOTTE, NO

[72] MYHREN, FINN, NO

[72] HOEM, NILS, NO

[72] HALS, PETTER-ARNT, NO

[72] BERG STORSVE, ANDREAS, NO

[72] HATI, ARMEND GAZMENO, NO

[71] AKER BIOMARINE ANTARCTIC AS, NO

[85] 2021-12-15

[86] 2020-06-21 (PCT/EP2020/067263)

[87] (WO2020/254675)

[30] US (62/864,073) 2019-06-20

[21] **3,143,587**  
[13] A1

[51] **Int.Cl. E21B 41/00 (2006.01) E21B 17/02 (2006.01) E21B 43/12 (2006.01) E21B 47/12 (2012.01)**

[25] EN

[54] **POWER AND TELEMETRY SYSTEMS FOR A DOWNHOLE INSTRUMENT**

[54] **SYSTEMES DE PUISSANCE ET DE TELEMESURE POUR INSTRUMENT DE FOND DE TROU**

[72] MCKAY, JOHN, HENRY, GB

[72] SHANKS, DAVID, SIRDA, GB

[71] EXPRO NORTH SEA LIMITED, GB

[85] 2021-12-15

[86] 2020-06-16 (PCT/EP2020/066556)

[87] (WO2020/254286)

[30] GB (1908929.1) 2019-06-21

[21] **3,143,588**  
[13] A1

[51] **Int.Cl. H04N 21/431 (2011.01) H04N 21/439 (2011.01) H04N 21/44 (2011.01) H04N 21/472 (2011.01) H04N 21/475 (2011.01) H04N 21/4788 (2011.01) H04N 21/482 (2011.01) H04N 21/488 (2011.01) H04N 21/8352 (2011.01) H04N 21/84 (2011.01) H04N 21/845 (2011.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR RECOMMENDING CONTENT USING PROGRESS BARS**

[54] **SYSTEMES ET PROCEDES DE RECOMMANDATION DE CONTENU A L'AIDE DE BARRES DE PROGRESSION**

[72] CHUNDI, CHARISHMA, IN

[72] SEN, SUSANTO, IN

[71] ROVI GUIDES, INC., US

[85] 2021-12-15

[86] 2020-05-05 (PCT/US2020/031431)

[87] (WO2021/225581)

[21] **3,143,590**  
[13] A1

[51] **Int.Cl. C09K 8/584 (2006.01)**

[25] EN

[54] **FOAMING FORMULATIONS FOR ENHANCED OIL RECOVERY**

[54] **FORMULATIONS MOUSSANTES POUR LA RECUPERATION ASSISTEE DU PETROLE**

[72] CHEVALLIER, ELOISE, FR

[72] MORVAN, MIKEL, FR

[71] RHODIA OPERATIONS, FR

[71] IFP ENERGIES NOUVELLES, FR

[85] 2021-12-15

[86] 2020-06-16 (PCT/EP2020/066562)

[87] (WO2020/254290)

[30] EP (19181088.6) 2019-06-19

[21] **3,143,591**  
[13] A1

[51] **Int.Cl. A61F 5/04 (2006.01) A61F 5/37 (2006.01)**

[25] EN

[54] **TRACTION TOWER TRAP AND FINGER TRAP SYSTEM**

[54] **PIEGE A TOUR DE TRACTION ET SYSTEME DE PIEGE A DOIGTS**

[72] ALFONSO, GREGORY, US

[72] THIBODEAU, ROBERT, US

[72] SUMMITT, MATTHEW C., US

[72] VU, THIEN, US

[72] HICKS, JENNIFER, US

[72] YANTZER, BRENDA, US

[71] CONMED CORPORATION, US

[85] 2021-12-15

[86] 2020-06-05 (PCT/US2020/036376)

[87] (WO2021/006971)

[30] US (62/871,146) 2019-07-07

[30] US (62/930,115) 2019-11-04

[21] **3,143,592**  
[13] A1

[51] **Int.Cl. E21B 43/20 (2006.01) B01D 61/02 (2006.01) C02F 1/44 (2006.01) C09K 8/58 (2006.01)**

[25] EN

[54] **WATER INJECTION INTO A HYDROCARBON RESERVOIR**

[54] **INJECTION D'EAU DANS UN RESERVOIR D'HYDROCARBURES**

[72] JANSON, ARNOLD, US

[72] ADHAM, SAMER, US

[72] MINIER-MATAR, JOEL, US

[72] DARDOR, DAREEN, US

[72] SHARMA, RAMESH, US

[72] AL-MAAS, MASHAEL, US

[71] CONOCOPHILLIPS COMPANY, US

[85] 2021-12-15

[86] 2020-06-16 (PCT/US2020/037905)

[87] (WO2020/257179)

[30] US (62/864,315) 2019-06-20

[30] US (16/902,567) 2020-06-16

## Demandes PCT entrant en phase nationale

[21] **3,143,593**  
[13] A1

[51] **Int.Cl. E02F 9/28 (2006.01) E02F 9/24 (2006.01) E02F 9/26 (2006.01) G01K 3/08 (2006.01) G01K 3/10 (2006.01) G01K 7/00 (2006.01) G05B 19/4065 (2006.01) G05B 19/4068 (2006.01)**

[25] EN

[54] **MONITORING GROUND ENGAGING PRODUCTS**

[54] **SURVEILLANCE DE PRODUITS ENTRANT EN CONTACT AVEC LE SOL**

[72] BETOURNAY, JASON WAYNE, US  
[72] COWGILL, NOAH D., US  
[72] HYDE, STEVEN DANIEL, US  
[72] CARPENTER, CHRISTOPHER M., US  
[72] ANDERTON, JOHN M., US  
[71] ESCO GROUP LLC, US  
[85] 2021-12-15  
[86] 2020-06-16 (PCT/US2020/037959)  
[87] (WO2020/257209)  
[30] US (62/862,625) 2019-06-17

[21] **3,143,594**  
[13] A1

[51] **Int.Cl. A61B 17/70 (2006.01) A61B 17/88 (2006.01) A61B 17/00 (2006.01)**

[25] FR

[54] **INTERSPINOUS IMPLANT AND ASSOCIATED IMPLANTATION ANCILLARY**

[54] **IMPLANT VERTEBRAL INTEREPINEUX ET ANCILLAIRE DE POSE ASSOCIE**

[72] HANNEMA, GWENAEL LOIC, CH  
[72] SAMANI, JACQUES, FR  
[72] BEUCHAT, DOMINIQUE CONSTANT, CH  
[71] INNOSPINA SARL, CH  
[85] 2021-12-15  
[86] 2020-07-07 (PCT/EP2020/069143)  
[87] (WO2021/005070)  
[30] FR (FR1907608) 2019-07-08  
[30] FR (FR1907609) 2019-07-08

[21] **3,143,597**  
[13] A1

[51] **Int.Cl. A61P 9/00 (2006.01) A61P 13/12 (2006.01) A61P 17/06 (2006.01) A61P 19/02 (2006.01) A61P 29/00 (2006.01) A61P 37/02 (2006.01)**

[25] EN

[54] **PREVOTELLA PREPARATIONS AND TREATING CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) AND OTHER LUNG CONDITIONS**

[54] **PREPARATIONS DE PREVOTELLA ET TRAITEMENT DE LA BRONCHOPNEUMOPATHIE CHRONIQUE OBSTRUCTIVE (BPCO) ET D'AUTRES AFFECTIONS PULMONAIRES**

[72] TANEJA, VEENA, US  
[71] MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH, US  
[85] 2021-12-15  
[86] 2020-06-17 (PCT/US2020/038084)  
[87] (WO2020/257248)  
[30] US (62/862,186) 2019-06-17

[21] **3,143,598**  
[13] A1

[51] **Int.Cl. A42B 3/32 (2006.01) A42B 3/04 (2006.01) A42B 3/06 (2006.01) A42B 3/12 (2006.01) A42C 2/00 (2006.01) B29C 45/00 (2006.01)**

[25] EN

[54] **HELMET**

[54] **CASQUE**

[72] POMERING, AMY, SE  
[71] MIPS AB, SE  
[85] 2021-12-15  
[86] 2020-06-22 (PCT/EP2020/067308)  
[87] (WO2020/260185)  
[30] GB (1908997.8) 2019-06-24

[21] **3,143,599**  
[13] A1

[51] **Int.Cl. A61K 35/15 (2015.01) A61K 38/19 (2006.01) A61K 39/12 (2006.01) C07K 14/52 (2006.01) C07K 14/705 (2006.01) C12N 15/09 (2006.01)**

[25] EN

[54] **ALLOGENEIC T-CELL-BASED HIV VACCINE TO INDUCE CELLULAR AND HUMORAL IMMUNITY**

[54] **VACCIN CONTRE LE VIH A BASE DE LYMPHOCYTES T ALLOGENIQUES POUR INDUIRE UNE IMMUNITE CELLULAIRE ET HUMORALE**

[72] GUMRUKCU, SERHAT, US  
[71] ENOCHIAN BIOPHARMA, INC., US  
[85] 2021-12-15  
[86] 2020-06-17 (PCT/US2020/038177)  
[87] (WO2020/257309)  
[30] US (62/862,432) 2019-06-17

[21] **3,143,600**  
[13] A1

[51] **Int.Cl. B22D 41/38 (2006.01) B22D 41/40 (2006.01)**

[25] EN

[54] **SLIDE CLOSURE FOR VESSEL CONTAINING MOLTEN METAL**

[54] **FERMETURE COULISSANTE POUR RECIPIENT CONTENANT DU METAL EN FUSION**

[72] COLLURA, MARIANO, BE  
[72] SIBIET, FABRICE, FR  
[72] QUINN, JASON, US  
[72] BUTTS, JEFFREY, US  
[72] ADAMS, STEPHEN J., US  
[71] VESUVIUS GROUP, S.A., BE  
[85] 2021-12-15  
[86] 2020-06-16 (PCT/EP2020/066653)  
[87] (WO2020/254338)  
[30] EP (19181862.4) 2019-06-21

## PCT Applications Entering the National Phase

[21] **3,143,601**  
[13] A1

[51] **Int.Cl. H04N 7/14 (2006.01)**  
[25] EN  
[54] **SHARED RESOURCE FOR TRANSFORMATION OF DATA**  
[54] **RESSOURCE PARTAGEE POUR LA TRANSFORMATION DE DONNEES**  
[72] THAI, ARI, US  
[72] NGUYEN, AN VAN, US  
[71] XCELASTREAM, INC., US  
[85] 2021-12-15  
[86] 2020-06-17 (PCT/US2020/038180)  
[87] (WO2020/257312)  
[30] US (62/862,875) 2019-06-18

[21] **3,143,602**  
[13] A1

[51] **Int.Cl. B65F 1/04 (2006.01) B65F 1/08 (2006.01)**  
[25] EN  
[54] **CONTAINER FOR THE COLLECTION OF URBAN WASTE**  
[54] **CONTENEUR POUR LA RECUPERATION DE DECHETS URBAINS**  
[72] MARTIN HERRERO, JAVIER JESUS, ES  
[71] OCEAN KUBE ENVIRONMENT, S.L., ES  
[85] 2021-12-15  
[86] 2020-05-20 (PCT/ES2020/070327)  
[87] (WO2020/254702)  
[30] ES (U201931013) 2019-06-17

[21] **3,143,603**  
[13] A1

[51] **Int.Cl. A41B 11/00 (2006.01) A43B 1/04 (2022.01) A61K 35/66 (2015.01)**  
[25] EN  
[54] **FUNGAL TEXTILE MATERIALS AND LEATHER ANALOGS**  
[54] **MATIERES TEXTILES FONGIQUES ET ANALOGUES DU CUIR**  
[72] STEWART, BRENDAN ALLEN, US  
[72] ALEGRIA, LARRY ANDREW, US  
[72] TOTMAN, RYAN JACOB, US  
[72] AVNIEL, YUVAL CHARLES, US  
[71] THE FYNDER GROUP, INC., US  
[85] 2021-12-15  
[86] 2020-06-17 (PCT/US2020/038194)  
[87] (WO2020/257320)  
[30] US (62/862,680) 2019-06-18  
[30] US (62/951,332) 2019-12-20  
[30] US (62/966,525) 2020-01-27

[21] **3,143,605**  
[13] A1

[51] **Int.Cl. A61K 31/437 (2006.01) A61P 27/16 (2006.01) C07D 471/04 (2006.01)**  
[25] EN  
[54] **STABLE POLYMORPHIC FORM OF 6-FLUORO-9-METHYL-9H-BETA-CARBOLINE AND USES THEREOF**  
[54] **FORME POLYMORPHE STABLE DE 6-FLUORO-9-METHYL-9 H-BETA-CARBOLINE ET SES UTILISATIONS**  
[72] ROMMELSPACHER, HANS, DE  
[72] ZYGMUNT, TOMASZ, DE  
[72] SCHLINGENSIEPEN, REIMAR, DE  
[71] AUDIOCURE PHARMA GMBH, DE  
[85] 2021-12-15  
[86] 2020-08-07 (PCT/EP2020/072328)  
[87] (WO2021/028365)  
[30] EP (19191150.2) 2019-08-09

[21] **3,143,606**  
[13] A1

[51] **Int.Cl. A24B 15/16 (2020.01) A24B 13/00 (2006.01)**  
[25] EN  
[54] **AN ORAL POUCHED NICOTINE PRODUCT INCLUDING A FILLING MATERIAL COMPRISING NICOTINE-CONTAINING PARTICLES**  
[54] **PRODUIT A BASE DE NICOTINE EN SACHET POUR ADMINISTRATION ORALE CONTENANT UN MATERIAU DE REMPLISSAGE COMPRENANT DES PARTICULES CONTENANT DE LA NICOTINE**  
[72] KINDVALL, MARTEN, SE  
[71] SWEDISH MATCH NORTH EUROPE AB, SE  
[85] 2021-12-15  
[86] 2020-07-03 (PCT/EP2020/068797)  
[87] (WO2021/004928)  
[30] EP (19184827.4) 2019-07-05

[21] **3,143,608**  
[13] A1

[51] **Int.Cl. A61K 31/145 (2006.01) A61P 3/00 (2006.01)**  
[25] EN  
[54] **USE OF DISULFIRAM OR ITS DERIVATIVES FOR THE TREATMENT OF MITOCHONDRIAL DISEASES OR DYSFUNCTION**  
[54] **UTILISATION DE DISULFIRAME OU DE SES DERIVES POUR LE TRAITEMENT DE MALADIES MITOCHONDRIALES OU D'UN DYSFONCTIONNEMENT MITOCHONDRIAL**  
[72] PROCACCIO, VINCENT, FR  
[72] ROTIG, AGNES, FR  
[72] DELAHODDE, AGNES, FR  
[72] TRIBOUILLARD-TANVIER, DEBORAH, FR  
[72] DUJARDIN, GENEVIEVE, FR  
[72] BLONDEL, MARC, FR  
[71] UNIVERSITE D'ANGERS, FR  
[71] CENTRE HOSPITALIER UNIVERSITAIRE D'ANGERS, FR  
[71] INSTITUT NATIONAL DE LA SANTÉ ET DE LA RECHERCHE MEDICALE, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[71] UNIVERSITE DE BRETAGNE OCCIDENTALE, FR  
[71] ASSOCIATION FRANCAISE CONTRE LES MYOPATHIES, FR  
[71] UNIVERSITE DE PARIS, FR  
[71] UNIVERSITE PARIS-SACLAY, FR  
[71] UNIVERSITE DE BORDEAUX, FR  
[85] 2021-12-15  
[86] 2020-06-19 (PCT/EP2020/067195)  
[87] (WO2020/254632)  
[30] EP (19305784.1) 2019-06-19



## Demandes PCT entrant en phase nationale

[21] **3,143,612**  
[13] A1

[51] **Int.Cl. C10G 31/08 (2006.01) C10G 45/02 (2006.01) C10G 45/08 (2006.01) C10G 45/38 (2006.01) C10G 69/06 (2006.01)**

[25] EN

[54] **PROCESS FOR TREATING A FEEDSTOCK COMPRISING HALIDES**

[54] **PROCEDE DE TRAITEMENT D'UNE CHARGE D'ALIMENTATION COMPRENANT DES HALOGENURES**

[72] JORGENSEN, LARS, DK

[71] HALDOR TOPSOE A/S, DK

[85] 2021-12-15

[86] 2020-06-19 (PCT/EP2020/067197)

[87] (WO2020/254634)

[30] DK (PA 2019 00753) 2019-06-20

[21] **3,143,613**  
[13] A1

[51] **Int.Cl. C07D 515/22 (2006.01) A61K 31/395 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **MACROCYCLIC INHIBITORS OF MCL-1**

[54] **INHIBITEURS MACROCYCLIQUES DE MCL-1**

[72] ROMBOUTS, FREDERIK JAN RITA, BE

[72] PESCHIULLI, ALDO, BE

[71] JANSSEN PHARMACEUTICA NV, BE

[85] 2021-12-15

[86] 2020-06-18 (PCT/EP2020/066890)

[87] (WO2020/254471)

[30] EP (19181605.7) 2019-06-21

[21] **3,143,615**  
[13] A1

[51] **Int.Cl. A61K 31/734 (2006.01) A61P 7/02 (2006.01)**

[25] EN

[54] **USE OF ALGINATE OLIGOMERS IN THE ANTICOAGULATION THERAPY OF SUBJECTS AT RISK OF BLOOD CLOTS WHICH HAVE AN ABNORMALLY DENSE MICROSTRUCTURE**

[54] **UTILISATION D'OLIGOMERES D'ALGINATE DANS LE TRAITEMENT ANTICOAGULANT DE SUJETS PRESENTANT UN RISQUE DE CAILLOTS SANGUINS QUI ONT UNE MICROSTRUCTURE ANORMALEMENT DENSE**

[72] WILLIAMS, RHODRI, GB

[72] EVANS, PHILLIP ADRIAN, GB

[72] DESSEN, ARNE, NO

[72] RYE, PHILIP, NO

[71] ALGIPHARMA AS, NO

[85] 2021-12-15

[86] 2020-06-17 (PCT/EP2020/066799)

[87] (WO2020/254427)

[30] GB (1908639.6) 2019-06-17

[21] **3,143,616**  
[13] A1

[51] **Int.Cl. G01N 33/536 (2006.01) C12Q 1/6818 (2018.01)**

[25] EN

[54] **METHOD AND KIT FOR MEASURING OF ANALYTES IN BI-COMPONENT SYSTEMS AND USES THEREOF**

[54] **PROCEDE ET KIT DE MESURE D'ANALYTES DANS DES SYSTEMES A DEUX COMPOSANTS ET LEURS UTILISATIONS**

[72] JENEY, CSABA, DE

[72] KOLTAY, PETER, DE

[71] ACTOME GMBH, DE

[85] 2021-12-15

[86] 2020-06-23 (PCT/EP2020/067493)

[87] (WO2020/260277)

[30] EP (19182157.8) 2019-06-25

[21] **3,143,617**  
[13] A1

[51] **Int.Cl. A61C 7/00 (2006.01) A61B 17/66 (2006.01) A61C 7/06 (2006.01) A61C 7/10 (2006.01) A61F 5/042 (2006.01) A61F 5/058 (2006.01)**

[25] EN

[54] **CRANIAL RESTRUCTURING DEVICES**

[54] **DISPOSITIFS DE RESTRUCTURATION CRANIENNE**

[72] HOWES, BILL, GB

[71] PATEL, SHAILEN, GB

[85] 2021-12-15

[86] 2020-06-19 (PCT/EP2020/067216)

[87] (WO2020/254642)

[30] GB (1908862.4) 2019-06-20

[21] **3,143,618**  
[13] A1

[51] **Int.Cl. C07D 401/12 (2006.01) A61K 31/4427 (2006.01) A61P 3/04 (2006.01) A61P 3/08 (2006.01) A61P 9/00 (2006.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01) C07D 401/14 (2006.01)**

[25] EN

[54] **PYRIDIN-3-YL DERIVATIVES**

[54] **DERIVES DE PYRIDIN-3-YLE**

[72] BOLLI, MARTIN, CH

[72] BROTSCHI, CHRISTINE, CH

[72] LESCOP, CYRILLE, CH

[71] IDORSIA PHARMACEUTICALS LTD, CH

[85] 2021-12-15

[86] 2020-06-17 (PCT/EP2020/066767)

[87] (WO2020/254408)

[30] EP (PCT/EP2019/065963) 2019-06-18

## PCT Applications Entering the National Phase

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[21] **3,143,619**  
[13] A1

[51] **Int.Cl. A61K 31/4985 (2006.01) A61K 31/65 (2006.01) A61P 13/00 (2006.01) A61P 15/00 (2006.01) A61P 31/04 (2006.01)**

[25] EN

[54] **COMBINATION FOR THE TREATMENT OF INFECTIONS CAUSED BY MYCOPLASMA GENITALIUM**

[54] **COMBINAISON POUR LE TRAITEMENT D'INFECTIONS PROVOQUEES PAR MYCOPLASMA GENITALIUM**

[72] SCANGARELLA-OMAN, NICOLE, US

[71] GLAXOSMITHKLINE  
INTELLECTUAL PROPERTY  
DEVELOPMENT LIMITED, GB

[85] 2021-12-15

[86] 2020-07-03 (PCT/EP2020/068754)

[87] (WO2021/004910)

[30] US (62/870,990) 2019-07-05

[30] US (62/985,465) 2020-03-05

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[21] **3,143,620**  
[13] A1

[51] **Int.Cl. A01N 25/04 (2006.01) A01N 25/22 (2006.01) A01N 25/30 (2006.01) A01N 37/50 (2006.01) A01N 43/40 (2006.01) A01N 43/54 (2006.01) A01N 43/88 (2006.01) A01P 3/00 (2006.01)**

[25] EN

[54] **STABLE AQUEOUS SUSPENSION FORMULATIONS**

[54] **FORMULATIONS DE SUSPENSION AQUEUSE STABLE**

[72] KALT, MARKUS, DE

[72] BENTELE, JOACHIM, DE

[72] RUDE, JANINE, DE

[72] KREMZOW-GRAW, DORIS, DE

[71] BASF SE, DE

[85] 2021-12-15

[86] 2020-06-18 (PCT/EP2020/066988)

[87] (WO2020/254505)

[30] EP (19181301.3) 2019-06-19

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[21] **3,143,621**  
[13] A1

[51] **Int.Cl. A23J 3/14 (2006.01) A23J 3/22 (2006.01) A23J 3/26 (2006.01)**

[25] EN

[54] **BACON ANALOGUE PRODUCT**

[54] **PRODUIT ANALOGUE DE BACON**

[72] HERZ, EVA, DE

[72] HERZ, LAURA, DE

[72] PIBAROT, PATRICK, CH

[72] RAY, JOYDEEP, CH

[72] SCHMITT, CHRISTOPHE JOSEPH  
ETIENNE, CH

[72] WEISS, JOCHEN, DE

[72] FERNANDEZ, FARRIS ISABEL, CH

[72] PELLOUX, CINDY, FR

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

[85] 2021-12-15

[86] 2020-07-10 (PCT/EP2020/069649)

[87] (WO2021/009075)

[30] EP (19186161.6) 2019-07-12

[30] EP (20163926.7) 2020-03-18

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[21] **3,143,623**  
[13] A1

[51] **Int.Cl. A61L 27/12 (2006.01) C01B 25/32 (2006.01)**

[25] EN

[54] **OSTEOTROPIC BONE REPLACEMENT**

[54] **SUBSTITUT OSSEUX OSTEOTROPE**

[72] HAAS, ANDREAS, DE

[72] KASPERK, CHRISTIAN, DE

[72] BURCHARD, MICHAEL, DE

[71] UNIVERSITAT HEIDELBERG, DE

[71] HAAS, ANDREAS, DE

[85] 2021-12-15

[86] 2020-08-14 (PCT/EP2020/072884)

[87] (WO2021/032628)

[30] EP (19192028.9) 2019-08-16

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[21] **3,143,624**  
[13] A1

[51] **Int.Cl. F15D 1/04 (2006.01) G01F 1/66 (2022.01)**

[25] EN

[54] **GAS FLOW CONDITIONER IN THE FLOW BEND, ESPECIALLY FOR ULTRASONIC GAS METER**

[54] **CONDITIONNEUR DE FLUX DE GAZ DANS UNE COURBE DE FLUX, NOTAMMENT POUR COMPTEUR A GAZ A ULTRASONS**

[72] MIKAN, JAROSLAV, CZ

[71] OIL&GAS METERING EQUIPMENT  
S.R.O., CZ

[85] 2021-12-15

[86] 2021-06-10 (PCT/IB2021/055096)

[87] (WO2021/229554)

[30] CZ (PV 2020-381) 2020-06-29

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[21] **3,143,626**  
[13] A1

[51] **Int.Cl. A61B 90/50 (2016.01) F16D 7/02 (2006.01) F16M 11/00 (2006.01) F16M 11/18 (2006.01) F16M 13/00 (2006.01)**

[25] EN

[54] **TRAY ARM ASSEMBLY INCLUDING A JOINT WITH A TWO-TIER FRICTION MECHANISM**

[54] **ENSEMBLE BRAS DE PLATEAU COMPRENANT UNE ARTICULATION POURVUE D'UN MECANISME DE FROTTEMENT A DEUX NIVEAUX**

[72] HAHN, ANDREW MASON, US

[72] NESTOR, MARC, US

[72] NEWTON, SCOTT, US

[72] SEITER, PAUL, US

[71] ALCON INC., CH

[85] 2021-12-15

[86] 2020-07-30 (PCT/IB2020/057207)

[87] (WO2021/028765)

[30] US (62/884,762) 2019-08-09

## Demandes PCT entrant en phase nationale

[21] **3,143,627**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61K 39/385 (2006.01) A61K 39/39 (2006.01) A61P 31/20 (2006.01)**

[25] EN

[54] **CARBOHYDRATE NANOCARRIER DELIVERY OF HEPATITIS B VIRUS (HBV) VACCINES**

[54] **ADMINISTRATION PAR NANOPORTEURS GLUCIDIQUES, DE VACCINS CONTRE LE VIRUS DE L'HEPATITE B (VHB)**

[72] HORTON, HELEN, BE  
[72] STRICKLAND, IAN, BE  
[72] BODEN, DANIEL, BE  
[71] JANSSEN SCIENCES IRELAND UNLIMITED COMPANY, IE

[85] 2021-12-15  
[86] 2020-06-19 (PCT/IB2020/055786)  
[87] (WO2020/255063)  
[30] US (62/863,950) 2019-06-20

[21] **3,143,628**  
[13] A1

[51] **Int.Cl. E05F 15/643 (2015.01) E05F 15/665 (2015.01) A61L 2/07 (2006.01)**

[25] EN

[54] **MAGNETICALLY OPERATED CLOSING DEVICE FOR CONTROLLED CONTAMINATION EQUIPMENT**

[54] **DISPOSITIF DE FERMETURE ACTIONNE MAGNETIQUEMENT POUR EQUIPEMENT DE CONTAMINATION CONTROLEE**

[72] MUGGIASCA, ANDREA, IT  
[72] BIANCHI, PAOLO, IT  
[71] DELAMA S.P.A., IT

[85] 2021-12-15  
[86] 2020-06-24 (PCT/IB2020/055971)  
[87] (WO2020/261142)  
[30] IT (102019000009960) 2019-06-24

[21] **3,143,631**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61K 39/29 (2006.01) A61K 39/39 (2006.01) A61K 47/14 (2017.01) A61P 31/20 (2006.01) C07C 271/22 (2006.01)**

[25] EN

[54] **LIPID NANOPARTICLE OR LIPOSOME DELIVERY OF HEPATITIS B VIRUS (HBV) VACCINES**

[54] **ADMINISTRATION DE NANOPARTICULES LIPIDIQUES OU DE LIPOSOMES DE VACCINS CONTRE LE VIRUS DE L'HEPATITE B (VHB)**

[72] HORTON, HELEN, BE  
[72] STRICKLAND, IAN, BE  
[72] BODEN, DANIEL, BE  
[71] JANSSEN SCIENCES IRELAND UNLIMITED COMPANY, IE

[85] 2021-12-15  
[86] 2020-06-19 (PCT/IB2020/055785)  
[87] (WO2020/255062)  
[30] US (62/863,958) 2019-06-20

[21] **3,143,632**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61P 31/20 (2006.01)**

[25] EN

[54] **SELF-REPLICATING RNA MOLECULES FOR HEPATITIS B VIRUS (HBV) VACCINES AND USES THEREOF**

[54] **MOLECULES D'ARN A AUTO-REPLICATION POUR VACCINS CONTRE LE VIRUS DE L'HEPATITE B (VHB) ET UTILISATIONS ASSOCIEES**

[72] HORTON, HELEN, BE  
[72] BODEN, DANIEL, BE  
[71] JANSSEN SCIENCES IRELAND UNLIMITED COMPANY, IE

[85] 2021-12-15  
[86] 2020-06-19 (PCT/IB2020/055775)  
[87] (WO2020/255055)  
[30] US (62/863,961) 2019-06-20  
[30] US (63/006,925) 2020-04-08

[21] **3,143,634**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61K 39/395 (2006.01) A61P 31/20 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **COMBINATION OF HEPATITIS B VIRUS (HBV) VACCINES AND ANTI-PD-1 ANTIBODY**

[54] **COMBINAISON DE VACCINS CONTRE LE VIRUS DE L'HEPATITE B (VHB) ET D'ANTICORPS ANTI-PD-1**

[72] HORTON, HELEN, BE  
[72] DE CREUS, AN MARTINE M, BE  
[72] VAN GULCK, ELLEN ROSALIE A, BE  
[71] JANSSEN SCIENCES IRELAND UNLIMITED COMPANY, IE

[85] 2021-12-15  
[86] 2020-06-18 (PCT/IB2020/055698)  
[87] (WO2020/255009)  
[30] US (62/862,774) 2019-06-18

[21] **3,143,660**  
[13] A1

[51] **Int.Cl. B61C 9/38 (2006.01) F16H 57/04 (2010.01)**

[25] EN

[54] **TRACTION TRANSMISSION**

[54] **TRANSMISSION PAR TRACTION**

[72] FIALA, PAVEL, AT  
[72] GOTZ, JULIA, AT  
[72] STOCKMAYER, MICHAEL, AT  
[71] TRAKTIONSSYSTEME AUSTRIA GMBH, AT

[85] 2021-12-01  
[86] 2020-06-30 (PCT/EP2020/068348)  
[87] (WO2021/058151)  
[30] EP (19200031.3) 2019-09-27

## PCT Applications Entering the National Phase

[21] **3,143,661**  
[13] A1

[51] **Int.Cl. G06N 10/00 (2022.01) G06J 1/00 (2006.01) H01L 29/04 (2006.01) H01L 31/173 (2006.01)**

[25] EN

[54] **SYSTEMS, DEVICES, ARTICLES, AND METHODS TO INTERACT WITH INFORMATION STORED IN ORBITAL STATES ASSOCIATED WITH SILICON DEFECTS**

[54] **SYSTEMES, DISPOSITIFS, ARTICLES ET PROCEDES POUR INTERAGIR AVEC DES INFORMATIONS STOCKEES DANS DES ETATS ORBITAUX ASSOCIES A DES DEFAUTS DE SILICIUM**

[72] SIMMONS, STEPHANIE, CA  
[72] THEWALT, MICHAEL L. W., CA  
[71] PHOTONIC INC., CA  
[85] 2021-12-15  
[86] 2020-08-06 (PCT/CA2020/051078)  
[87] (WO2021/022376)  
[30] US (62/883,597) 2019-08-06

[21] **3,143,662**  
[13] A1

[51] **Int.Cl. C07K 1/107 (2006.01) A61K 47/54 (2017.01) C07K 1/04 (2006.01) C07K 1/113 (2006.01)**

[25] EN

[54] **A METHOD FOR MODIFICATION OF PEPTIDES IMMOBILIZED ON A SOLID SUPPORT BY TRACELESS REDUCTIVELY CLEAVABLE LINKER MOLECULES**

[54] **PROCEDE DE MODIFICATION DE PEPTIDES IMMOBILISES SUR UN SUPPORT SOLIDE PAR DES MOLECULES DE LIAISON POUVANT ETRE CLIVEES PAR REDUCTION SANS TRACE**

[72] ZITTERBART, ROBERT, DE  
[72] REIMANN, OLIVER, DE  
[71] BELYNTIC GMBH, DE  
[85] 2021-12-15  
[86] 2020-08-07 (PCT/EP2020/072330)  
[87] (WO2021/023892)  
[30] EP (19190627.0) 2019-08-07

[21] **3,143,663**  
[13] A1

[51] **Int.Cl. A61K 47/50 (2017.01) A61K 9/00 (2006.01) A61K 31/00 (2006.01) A61K 47/12 (2006.01) A61K 47/26 (2006.01) A61K 47/40 (2006.01)**

[25] EN

[54] **A STABLE FORMULATION OF CETRORELIX**

[54] **FORMULATION STABLE DE CETRORELIX**

[72] GEORGE, ALEX K., IN  
[72] JAIN, SHAILESH KUMAR, IN  
[71] INTAS PHARMACEUTICALS LTD., IN  
[85] 2021-12-15  
[86] 2020-06-16 (PCT/IB2020/055604)  
[87] (WO2020/254952)  
[30] IN (201921023926) 2019-06-17

[21] **3,143,664**  
[13] A1

[51] **Int.Cl. E05B 67/38 (2006.01) E05B 67/00 (2006.01)**

[25] EN

[54] **ELECTRONIC PADLOCK COVER WITH A KNOB**

[54] **PROTECTION POUR CADENAS ELECTRONIQUE A POMMEAU**

[72] MARTINEZ ALONSO, IBON, ES  
[72] FERREIRA SANCHEZ, CARLOS, ES  
[71] SALTO SYSTEMS S.L., ES  
[85] 2021-12-15  
[86] 2020-06-01 (PCT/ES2020/070359)  
[87] (WO2020/254703)  
[30] ES (P201930567) 2019-06-21

[21] **3,143,665**  
[13] A1

[51] **Int.Cl. H04N 21/258 (2011.01) H04N 21/466 (2011.01) G06N 20/00 (2019.01) H04L 12/16 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR IMPROVING CONTENT RECOMMENDATIONS USING A TRAINED MODEL**

[54] **SYSTEMES ET PROCEDES POUR AMELIORER DES RECOMMANDATIONS DE CONTENU A L'AIDE D'UN MODELE APPRIS**

[72] KADAM, LAKHAN TANAJI, IN  
[71] ROVI GUIDES, INC., US  
[85] 2021-12-15  
[86] 2020-12-21 (PCT/US2020/066409)  
[87] (WO2021/178024)  
[30] US (16/806,991) 2020-03-02  
[30] US (16/806,995) 2020-03-02

[21] **3,143,666**  
[13] A1

[51] **Int.Cl. A61K 31/41 (2006.01) A61K 31/4192 (2006.01) A61K 31/4402 (2006.01) A61K 31/497 (2006.01) A61K 31/506 (2006.01) A61P 35/00 (2006.01) C07D 413/06 (2006.01)**

[25] EN

[54] **BENZISOXAZOLE SULFONAMIDE DERIVATIVES**

[54] **DERIVES DE BENZISOXAZOLE SULFONAMIDE**

[72] BOZIKIS, YLVA ELISABET BERGMAN, AU  
[72] BRODSKY, OLEG, US  
[72] CAMERINO, MICHELLE ANG, AU  
[72] GREASLEY, SAMANTHA ELIZABETH, US  
[72] HOFFMAN, ROBERT LOUIS, US  
[72] KUMPF, ROBERT ARNOLD, US  
[72] KUNG, PEI-PEI, US  
[72] RICHARDSON, PAUL FRANCIS, US  
[72] STUPPLE, PAUL ANTHONY, AU  
[72] SUTTON, SCOTT CHANNING, US  
[71] PFIZER INC., US  
[71] CTXT PTY LTD, AU  
[85] 2021-12-15  
[86] 2020-06-16 (PCT/IB2020/055589)  
[87] (WO2020/254946)  
[30] US (62/863,199) 2019-06-18  
[30] US (62/953,223) 2019-12-24  
[30] US (63/025,278) 2020-05-15

[21] **3,143,667**  
[13] A1

[51] **Int.Cl. H04N 21/2343 (2011.01) H04N 21/845 (2011.01) G06F 16/16 (2019.01)**

[25] EN

[54] **SYSTEM AND METHOD OF WEB STREAMING MEDIA CONTENT**

[54] **SYSTEME ET PROCEDURE DE DIFFUSION EN CONTINU WEB DE CONTENU MULTIMEDIA**

[72] CAIN, JAMES WESTLAND, CA  
[71] GRASS VALLEY LIMITED, GB  
[85] 2021-12-15  
[86] 2020-06-19 (PCT/GB2020/051489)  
[87] (WO2020/254821)  
[30] US (62/864,990) 2019-06-21  
[30] US (16/903,960) 2020-06-17

## Demandes PCT entrant en phase nationale

[21] **3,143,668**  
[13] A1

[51] **Int.Cl. H04B 1/04 (2006.01) H04L 27/06 (2006.01)**  
[25] EN  
[54] **MULTI-ROTATIONAL WAVEFORM UTILIZING A PLURALITY OF TRANSMISSION WAVEFORMS AND TRANSMISSION PATHS**  
[54] **FORME D'ONDE MULTI-ROTATIONNELLE UTILISANT UNE PLURALITE DE FORMES D'ONDE D'EMISSION ET DE TRAJETS D'EMISSION**  
[72] GEIST, MICHAEL, US  
[72] BEELER, MICHAEL, US  
[71] ENVISTACOM, LLC, US  
[85] 2021-12-15  
[86] 2020-06-17 (PCT/US2020/038217)  
[87] (WO2020/257337)  
[30] US (62/862,389) 2019-06-17  
[30] US (16/516,967) 2019-07-19

[21] **3,143,669**  
[13] A1

[51] **Int.Cl. A63B 69/00 (2006.01) A63B 63/00 (2006.01)**  
[25] EN  
[54] **HOCKEY TRAINING DEVICE**  
[54] **DISPOSITIF D'ENTRAINEMENT AU HOCKEY**  
[72] SUTTA, PETERS, LV  
[72] LEITANS, JANIS, LV  
[71] SUTTA, PETERS, LV  
[71] LEITANS, JANIS, LV  
[85] 2021-12-15  
[86] 2020-06-08 (PCT/IB2020/055356)  
[87] (WO2020/254911)  
[30] LV (P-19-31) 2019-06-19

[21] **3,143,670**  
[13] A1

[51] **Int.Cl. F16K 39/02 (2006.01)**  
[25] EN  
[54] **AN ACTUATED VALVE**  
[54] **SOUPAPE ACTIONNEE**  
[72] BUHRMANN, RUDOLPH, ZA  
[71] THE BUHRMANN TRUST, ZA  
[85] 2021-12-15  
[86] 2019-06-14 (PCT/IB2019/054998)  
[87] (WO2019/239383)  
[30] ZA (2018/02740) 2018-06-15

[21] **3,143,671**  
[13] A1

[51] **Int.Cl. F28F 25/08 (2006.01) B23P 15/26 (2006.01) F28C 1/00 (2006.01) F28C 1/04 (2006.01)**  
[25] EN  
[54] **COOLING TOWER SPLASH BAR AND RELATED ASSEMBLY**  
[54] **BARRE D'ECLABOUSSEMENT DE TOUR DE REFROIDISSEMENT ET ENSEMBLE ASSOCIE**  
[72] KULICK, FRANK M., III, US  
[72] BOWMAN, CHRISTOPHER, US  
[71] BRENTWOOD INDUSTRIES, INC., US  
[85] 2021-12-15  
[86] 2019-07-15 (PCT/US2019/041798)  
[87] (WO2021/002877)  
[30] US (62/869,724) 2019-07-02

[21] **3,143,672**  
[13] A1

[51] **Int.Cl. H05B 47/155 (2020.01) H05B 47/175 (2020.01) G06F 1/16 (2006.01) G06F 3/044 (2006.01) G08C 17/00 (2006.01) H03K 17/96 (2006.01) H05B 39/00 (2006.01) H05K 1/11 (2006.01)**  
[25] EN  
[54] **LOAD CONTROL DEVICE HAVING A CAPACITIVE TOUCH SURFACE**  
[54] **DISPOSITIF DE COMMANDE DE CHARGE AYANT UNE SURFACE TACTILE CAPACITIVE**  
[72] STEINER, JAMES P., US  
[72] SUNDARA MOORTHY, DINESH, US  
[72] PORWOL, CHRISTOPH, US  
[71] LUTRON TECHNOLOGY COMPANY LLC, US  
[85] 2021-12-15  
[86] 2020-08-27 (PCT/US2020/048280)  
[87] (WO2021/041733)  
[30] US (62/892,469) 2019-08-27  
[30] US (63/028,968) 2020-05-22

[21] **3,143,673**  
[13] A1

[51] **Int.Cl. G06N 10/00 (2022.01)**  
[25] EN  
[54] **PARALLEL CROSS ENTROPY BENCHMARKING**  
[54] **REFERENCIATION A ENTROPIE CROISEE PARALLELE**  
[72] SATZINGER, KEVIN, US  
[72] NEILL, CHARLES, US  
[72] KELLY, JULIAN SHAW, US  
[72] DUNSWORTH, ANDREW, US  
[71] GOOGLE LLC, US  
[85] 2021-12-15  
[86] 2019-10-25 (PCT/US2019/058036)  
[87] (WO2020/263301)  
[30] US (62/868,451) 2019-06-28

[21] **3,143,675**  
[13] A1

[51] **Int.Cl. A61K 31/16 (2006.01) A61P 25/08 (2006.01)**  
[25] EN  
[54] **USE OF MARIMASTAT FOR PREVENTING AND/OR TREATING EPILEPTOGENESIS**  
[54] **UTILISATION DE MARIMASTAT POUR PREVENIR ET/OU TRAITER L'EPILEPTOGENESE**  
[72] KACZMAREK, LESZEK, PL  
[72] PIJET-BINKIEWICZ, BARBARA, PL  
[72] KONOPKA, ANNA, PL  
[72] REJMAK-KOZICKA, EMILIA, PL  
[71] INSTYTUT BIOLOGII DOSWIADCZALNEJ IM. MARCELEGO NENCKIEGO POLSKA AKADEMIA NAUK, PL  
[71] UNIWERSYTET WARSZAWSKI, PL  
[85] 2021-12-15  
[86] 2019-06-17 (PCT/IB2019/055040)  
[87] (WO2020/254853)

## PCT Applications Entering the National Phase

---

[21] **3,143,676**  
[13] A1

[51] **Int.Cl. C07K 14/475 (2006.01) A61K 38/00 (2006.01) A61K 47/12 (2006.01) A61P 27/02 (2006.01)**

[25] EN  
[54] **CONSTRAINED PEPTIDES**  
[54] **PEPTIDES CONTRAINTS**  
[72] GADEK, THOMAS R., US  
[72] LASKAR, PAUL A., US  
[72] LAURIE, GORDON W., US  
[71] TEARSOLUTIONS, INC., US  
[71] THE UNIVERSITY OF VIRGINIA PATENT FOUNDATION, US

[85] 2021-12-15  
[86] 2020-06-17 (PCT/US2020/038205)  
[87] (WO2020/257327)  
[30] US (62/863,651) 2019-06-19  
[30] US (62/863,666) 2019-06-19

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[21] **3,143,678**  
[13] A1

[51] **Int.Cl. G06N 10/00 (2022.01)**

[25] EN  
[54] **ESTIMATING THE FIDELITY OF QUANTUM LOGIC GATES AND QUANTUM CIRCUITS**  
[54] **ESTIMATION DE LA FIDELITE DE PORTES LOGIQUES QUANTIQUES ET DE CIRCUITS QUANTIQUES**  
[72] BOIXO CASTRILLO, SERGIO, US  
[72] SMELYANSKIY, VADIM, US  
[72] NEVEN, HARTMUT, US  
[72] KOROTKOV, ALEXANDER, US  
[71] GOOGLE LLC, US

[85] 2021-12-15  
[86] 2019-10-30 (PCT/US2019/058775)  
[87] (WO2020/263304)  
[30] US (62/868,525) 2019-06-28

---

[21] **3,143,679**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 39/12 (2006.01) A61K 39/395 (2006.01) A61P 31/20 (2006.01) C07K 16/28 (2006.01)**

[25] EN  
[54] **COMBINATION OF HEPATITIS B VIRUS (HBV) VACCINES AND HBV-TARGETING RNAI**  
[54] **COMBINAISON DE VACCINS CONTRE LE VIRUS DE L'HEPATITE B (HBV) ET D'ARNI CIBLANT LE HBV**  
[72] HORTON, HELEN, BE  
[72] DE CREUS, AN MARTINE M, BE  
[72] BERKE, JAN MARTIN, BE  
[71] JANSSEN SCIENCES IRELAND UNLIMITED COMPANY, IE

[85] 2021-12-15  
[86] 2020-06-18 (PCT/IB2020/055697)  
[87] (WO2020/255008)  
[30] US (62/862,764) 2019-06-18

---

[21] **3,143,680**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61K 39/395 (2006.01) A61P 31/20 (2006.01) C07K 16/28 (2006.01)**

[25] EN  
[54] **COMBINATION OF HEPATITIS B VIRUS (HBV) VACCINES AND ANTI-PD-1 OR ANTI-PD-L1 ANTIBODY**  
[54] **COMBINAISON DE VACCINS CONTRE LE VIRUS DE L'HEPATITE B (VHB) ET D'ANTICORPS ANTI-PD-1 OU ANTI-PD-L1**  
[72] HORTON, HELEN, BE  
[72] DE CREUS, AN MARTINE M, BR  
[72] VAN GULCK, ELLEN ROSALIE A, BE  
[71] JANSSEN SCIENCES IRELAND UNLIMITED COMPANY, IE

[85] 2021-12-15  
[86] 2020-06-18 (PCT/IB2020/055701)  
[87] (WO2020/255011)  
[30] US (62/862,791) 2019-06-18

---

[21] **3,143,683**  
[13] A1

[51] **Int.Cl. C12P 13/06 (2006.01) C12P 13/20 (2006.01)**

[25] EN  
[54] **RECOMBINANT HOST CELLS AND METHODS FOR THE PRODUCTION OF ASPARTIC ACID AND S-ALANINE**  
[54] **CELLULES HOTES RECOMBINEES ET PROCEDES DE PRODUCTION D'ACIDE ASPARTIQUE ET DE ?-ALANINE**  
[72] LE, CHI, US  
[72] SHING, KELVIN, US  
[72] ROSS, DREW, US  
[72] BLACKBURN, DANIEL, US  
[72] DIETRICH, JEFFREY A., US  
[72] OUELLET, MARIO, US  
[72] GOH, EE-BEEN, US  
[71] LYGOS, INC., US

[85] 2021-12-15  
[86] 2019-06-24 (PCT/US2019/038732)  
[87] (WO2020/005834)  
[30] US (62/689,265) 2018-06-25

---

[21] **3,143,684**  
[13] A1

[51] **Int.Cl. E04F 15/02 (2006.01) E04F 15/06 (2006.01) E04F 15/08 (2006.01)**

[25] EN  
[54] **A COVERING ELEMENT FOR FLOOR AND A FLOOR COVERING**  
[54] **ELEMENT DE RECOUVREMENT POUR PLANCHER ET UN COUVRE-PLANCHER**  
[72] PAGANELLI, MARIANO, IT  
[72] BENEVENTI, CLAUDIO, IT  
[72] VALERIANI, LORENZO, IT  
[71] FLOORING INDUSTRIES LIMITED, SARL, LU

[85] 2021-12-15  
[86] 2020-08-19 (PCT/IB2020/057788)  
[87] (WO2021/038386)  
[30] IT (102019000015117) 2019-08-29

## Demandes PCT entrant en phase nationale

[21] **3,143,685**  
[13] A1

[51] **Int.Cl. B01L 3/00 (2006.01) B01L 7/00 (2006.01)**  
[25] EN  
[54] **ASSAYS AND METHODS FOR DETECTION OF NUCLEIC ACIDS**  
[54] **DOSAGES ET METHODES DE DETECTION D'ACIDES NUCLEIQUES**  
[72] BROUGHTON, JAMES PAUL, US  
[72] SINGH, JASMEET, US  
[72] FASCHING, CLARE LOUISE, US  
[72] TSALOGLOU, MARIA-NEFELI, US  
[72] GALARZO, PEDRO PATRICK DRAPER, US  
[72] CHEN, JANICE SHA, US  
[72] MIAO, XIN, US  
[72] HARRINGTON, LUCAS, US  
[72] DRZAL, DANIEL THOMAS, US  
[72] SHAPIRO, SARAH JANE, US  
[71] MAMMOTH BIOSCIENCES, INC., US  
[85] 2021-12-15  
[86] 2020-06-17 (PCT/US2020/038242)  
[87] (WO2020/257356)  
[30] US (62/863,178) 2019-06-18  
[30] US (62/879,325) 2019-07-26  
[30] US (62/881,809) 2019-08-01  
[30] US (62/944,926) 2019-12-06  
[30] US (62/985,850) 2020-03-05

[21] **3,143,686**  
[13] A1

[51] **Int.Cl. A61K 47/10 (2017.01) A61K 51/12 (2006.01) A61P 19/02 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **A NOVEL TIN-117M COLLOID FORMULATION WITH THE ABILITY TO DISTINGUISH IT FROM EXISTING TIN-117M COLLOID FORMULATIONS**  
[54] **NOUVELLE FORMULATION COLLOIDALE D'ETAIN-117M POUVANT ETRE DIFFERENCIÉE DES FORMULATIONS COLLOIDALES D'ETAIN-117M EXISTANTES**  
[72] STEVENSON, NIGEL R., US  
[72] GONZALES, GILBERT R., US  
[72] SIMON, JAIME, US  
[71] SERENE, LLC, US  
[85] 2021-12-15  
[86] 2020-06-18 (PCT/US2020/038369)  
[87] (WO2020/257409)  
[30] US (62/862,969) 2019-06-18

[21] **3,143,688**  
[13] A1

[51] **Int.Cl. C12N 9/18 (2006.01) A01N 63/20 (2020.01) A01N 63/50 (2020.01) C12N 15/10 (2006.01)**  
[25] EN  
[54] **STABILIZED MUTANTS OF QUORUM QUENCHING LACTONASE AND USE THEREOF IN TREATMENT OF PATHOGENS**  
[54] **MUTANTS STABILISES DE LACTONASE DE DESACTIVATION DE QUORUM ET LEUR UTILISATION DANS LE TRAITEMENT D'AGENTS PATHOGENES**  
[72] AFRIAT-JURNOU, LIVNAT, IL  
[72] EROV, MAAYAN, IL  
[72] GUREVICH, DAVID, IL  
[72] YELIN, MERY DAFNY, IL  
[71] MIGAL GALILEE RESEARCH INSTITUTE LTD., IL  
[85] 2021-12-15  
[86] 2020-06-17 (PCT/IL2020/050673)  
[87] (WO2020/255131)  
[30] US (62/862,348) 2019-06-17

[21] **3,143,689**  
[13] A1

[25] EN  
[54] **METHOD TO CONTROL A DISPENSING MACHINE OF FLUID PRODUCTS**  
[54] **PROCEDE DE COMMANDE D'UNE MACHINE DE DISTRIBUTION DE PRODUITS FLUIDES**  
[72] BERGAMINI, ANDREA, IT  
[72] MERCURIO, VITTORIO, IT  
[72] CASALINI, GIUSEPPE, IT  
[72] THOMPSON, JOANNE SARAH, GB  
[72] D'EPENOUX, ALBAN R., CH  
[71] COROB S.P.A., IT  
[71] PPG INDUSTRIES OHIO, INC., US  
[85] 2021-12-15  
[86] 2020-06-16 (PCT/IT2020/050151)  
[87] (WO2020/255178)  
[30] IT (102019000009267) 2019-06-18

[21] **3,143,691**  
[13] A1

[51] **Int.Cl. G06N 10/00 (2022.01)**  
[25] EN  
[54] **PROBE OF QUBIT-RESONATOR DISPERSIVE SHIFT USING AC STARK SHIFT**  
[54] **SONDE DE DECALAGE DISPERSIF DE RESONATEUR A BITS QUANTIQUES UTILISANT UN DECALAGE STARK AC**  
[72] SANK, DANIEL THOMAS, US  
[72] CHEN, ZIJUN, US  
[71] GOOGLE LLC, US  
[85] 2021-12-15  
[86] 2019-06-27 (PCT/US2019/039392)  
[87] (WO2020/263255)

[21] **3,143,693**  
[13] A1

[51] **Int.Cl. C21D 8/12 (2006.01) H01F 1/147 (2006.01)**  
[25] EN  
[54] **GRAIN-ORIENTED ELECTRICAL STEEL SHEET AND PRODUCTION METHOD THEREFOR**  
[54] **TOLE D'ACIER ELECTROMAGNETIQUE A GRAINS ORIENTES ET PROCEDE DE PRODUCTION ASSOCIE**  
[72] ICHIHARA, YOSHIHISA, JP  
[72] OMURA, TAKESHI, JP  
[72] SENDA, KUNIHIRO, JP  
[71] JFE STEEL CORPORATION, JP  
[85] 2021-12-15  
[86] 2020-04-17 (PCT/JP2020/016843)  
[87] (WO2020/255552)  
[30] JP (2019-112292) 2019-06-17

## PCT Applications Entering the National Phase

[21] **3,143,694**  
[13] A1

[51] **Int.Cl. F03D 13/10 (2016.01) F03D 13/40 (2016.01) B66C 1/16 (2006.01) B66C 13/08 (2006.01) B66C 23/00 (2006.01) F03D 1/00 (2006.01) F03D 1/06 (2006.01)**

[25] EN

[54] **WIND TURBINE BLADE REMOVAL DEVICE AND METHOD**

[54] **DISPOSITIF ET PROCEDE D'EXTRACTION DE PALE D'EOLIENNE**

[72] REYNOLDS, KEVIN, US

[71] BARNHART CRANE AND RIGGING CO., US

[85] 2021-12-15

[86] 2020-06-18 (PCT/US2020/038533)

[87] (WO2020/257522)

[30] US (62/862,748) 2019-06-18

[21] **3,143,695**  
[13] A1

[51] **Int.Cl. A23D 7/00 (2006.01) A23L 33/115 (2016.01) A23D 7/02 (2006.01) C11C 3/04 (2006.01)**

[25] EN

[54] **WATER-IN-OIL EMULSIFIED COMPOSITION**

[54] **COMPOSITION EMULSIFIEE EAU DANS L'HUILE**

[72] TAKANO, KAN, JP

[72] KUMATANI, TOMOAKI, JP

[72] NAKANO, MIKIO, JP

[71] FUJI OIL HOLDINGS INC., JP

[85] 2021-12-15

[86] 2020-06-22 (PCT/JP2020/024433)

[87] (WO2020/262310)

[30] JP (2019-118210) 2019-06-26

[21] **3,143,696**  
[13] A1

[51] **Int.Cl. D04H 1/498 (2012.01) D04H 1/425 (2012.01) D04H 1/4374 (2012.01) B32B 5/26 (2006.01) D04H 1/4382 (2012.01) D04H 1/495 (2012.01) A47L 13/16 (2006.01) D04H 1/46 (2012.01)**

[25] EN

[54] **COMPOSITE NONWOVEN SHEET MATERIAL**

[54] **MATERIAU COMPOSITE NON TISSE EN FEUILLE**

[72] BOGREN, MARIA, SE

[72] STRANDQVIST, MIKAEL, SE

[72] AHONIEMI, HANNU, SE

[71] ESSITY HYGIENE AND HEALTH AKTIEBOLAG, SE

[85] 2021-12-15

[86] 2019-10-11 (PCT/SE2019/051000)

[87] (WO2021/010875)

[30] SE (PCT/SE2019/050700) 2019-07-18

[21] **3,143,701**  
[13] A1

[51] **Int.Cl. B21D 51/50 (2006.01) B21D 1/02 (2006.01) B21D 51/00 (2006.01) B21D 51/16 (2006.01) B21D 51/26 (2006.01)**

[25] EN

[54] **A METHOD AND APPARATUS FOR SEALING A METALLIC CONTAINER WITH A METALLIC END CLOSURE**

[54] **PROCEDE ET APPAREIL POUR SCELLER UN RECIPIENT METALLIQUE AVEC UNE FERMETURE D'EXTREMITE METALLIQUE**

[72] ROSS, JOHN R., US

[71] BALL CORPORATION, US

[85] 2021-12-15

[86] 2020-06-19 (PCT/US2020/038640)

[87] (WO2020/263698)

[30] US (62/866,966) 2019-06-26

[21] **3,143,702**  
[13] A1

[51] **Int.Cl. G05B 13/02 (2006.01) A01G 23/00 (2006.01) G01L 5/00 (2006.01) G01M 5/00 (2006.01) E02F 9/26 (2006.01)**

[25] EN

[54] **A METHOD AND AN ARRANGEMENT FOR MANAGING AND CONTROLLING THE LIFETIME OF A TREE HANDLING SYSTEM FOR A FOREST MACHINE**

[54] **PROCEDE ET AGENCEMENT POUR GERER ET COMMANDER LA DUREE DE VIE D'UN SYSTEME DE MANIPULATION D'ARBRE POUR UNE MACHINE FORESTIERE**

[72] UDD, ERIK, SE

[71] KOMATSU FOREST AB, SE

[85] 2021-12-15

[86] 2020-05-14 (PCT/SE2020/050494)

[87] (WO2020/256614)

[30] SE (1950738-3) 2019-06-18

---

[21] **3,143,705**  
[13] A1

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

[25] EN

[54] **SYSTEMS AND METHODS FOR USING DENSITY OF SINGLE NUCLEOTIDE VARIATIONS FOR THE VERIFICATION OF COPY NUMBER VARIATIONS IN HUMAN EMBRYOS**

[54] **SYSTEMES ET PROCEDES D'UTILISATION DE LA DENSITE DE VARIATIONS MONONUCLEOTIDIQUES PERMETTANT LA VERIFICATION DE VARIATIONS DU NOMBRE DE COPIES DANS DES EMBRYONS HUMAINS**

[72] BURKE, JOHN, US

[72] RHEES, BRIAN, US

[72] BLAZEK, JOSHUA DAVID, US

[72] LARGE, MICHAEL JON, US

[71] COOPERSURGICAL, INC., US

[85] 2021-12-15

[86] 2020-06-19 (PCT/US2020/038670)

[87] (WO2020/257605)

[30] US (62/865,126) 2019-06-21



## Demandes PCT entrant en phase nationale

[21] 3,143,709 [13] A1	[21] 3,143,711 [13] A1	[21] 3,143,713 [13] A1
[51] <b>Int.Cl. C08F 220/14 (2006.01) G01N 33/92 (2006.01)</b>	[51] <b>Int.Cl. A61K 31/404 (2006.01) A61K 31/437 (2006.01) A61K 31/706 (2006.01) A61L 2/00 (2006.01) A61L 2/16 (2006.01) A61P 35/02 (2006.01)</b>	[51] <b>Int.Cl. A23L 33/135 (2016.01) A61K 35/741 (2015.01) A61K 35/744 (2015.01) A61K 35/745 (2015.01) A61K 35/747 (2015.01) A23L 33/10 (2016.01) A23L 33/14 (2016.01) A23L 33/21 (2016.01) A61K 31/702 (2006.01) A61K 31/715 (2006.01) A61K 35/66 (2015.01) A61K 35/74 (2015.01) A61P 5/48 (2006.01) A61P 19/10 (2006.01) C12N 1/14 (2006.01) C12N 1/20 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>LIPID NANODISCS SOLUBILIZED THROUGH POLY(ACRYLIC ACID-CO-STYRENE) COPOLYMERS</b>	[54] <b>AZACITIDINE IN COMBINATION WITH VENETOCLAX, GILTERITINIB, MIDOSTAURIN OR OTHER COMPOUNDS FOR TREATING LEUKEMIA OR MYELODYSPLASTIC SYNDROME</b>	[54] <b>MICROBIAL COMPOSITIONS AND METHODS FOR PRODUCING UPGRADED PROBIOTIC ASSEMBLAGES</b>
[54] <b>NANODISQUES LIPIDIQUES SOLUBILISES A TRAVERS DES COPOLYMERES DE POLY(ACIDE ACRYLIQUE-CO-STYRENE)</b>	[54] <b>AZACITIDINE EN COMBINAISON AVEC DU VENETOCLAX, DU GILTERITINIB, DE LA MIDOSTAURINE OU D'AUTRES COMPOSES POUR LE TRAITEMENT DE LA LEUCEMIE OU DU SYNDROME MYELODYSPLASIQUE</b>	[54] <b>COMPOSITIONS MICROBIENNES ET PROCEDES DE PRODUCTION D'ASSEMBLAGES PROBIOTIQUES AMELIORES</b>
[72] APPEL, ERIC A., US	[54] <b>AZACITIDINE EN COMBINAISON AVEC DU VENETOCLAX, DU GILTERITINIB, DE LA MIDOSTAURINE OU D'AUTRES COMPOSES POUR LE TRAITEMENT DE LA LEUCEMIE OU DU SYNDROME MYELODYSPLASIQUE</b>	[54] <b>COMPOSITIONS MICROBIENNES ET PROCEDES DE PRODUCTION D'ASSEMBLAGES PROBIOTIQUES AMELIORES</b>
[72] SMITH, ANTON, US	[72] FRATTINI, MARK, US	[72] TOLEDO, GERARDO V., US
[72] AUTZEN, HENRIETTE E., US	[72] BEACH, CL, US	[72] SCHOTT, ERIC MICHAEL, US
[72] CHENG, YIFAN, US	[72] ROSE, SHELONITDA, US	[72] SOTO-GIRON, MARIA JULIANA, US
[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US	[72] DUNSHEE, DIANA R., US	[72] KIM, JINWOO, US
[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US	[72] LOPES DE MENEZES, DANIEL E., US	[72] BUTTON, JULIE, US
[71] AARHUS UNIVERSITY, DK	[72] MACBETH, KYLE, US	[71] SOLAREA BIO, INC., US
[85] 2021-12-15	[72] DAI, YUMIN, US	[85] 2021-12-15
[86] 2020-06-19 (PCT/US2020/038714)	[72] JANG, JESSICA, US	[86] 2020-06-19 (PCT/US2020/038830)
[87] (WO2020/257637)	[71] CELGENE CORPORATION, US	[87] (WO2020/257722)
[30] US (62/864,696) 2019-06-21	[85] 2021-12-15	[30] US (62/863,762) 2019-06-19
	[86] 2020-06-19 (PCT/US2020/038760)	[30] US (62/863,722) 2019-06-19
	[87] (WO2020/257665)	[30] US (PCT/US2019/049823) 2019-09-05
	[30] US (62/864,413) 2019-06-20	

## PCT Applications Entering the National Phase

[21] **3,143,715**  
[13] A1

[51] **Int.Cl. A21D 2/26 (2006.01) A23L 7/10 (2016.01)**  
[25] EN  
[54] **FLOUR-BASED SHAPE-CHANGING FOOD AND RELATED METHODS**  
[54] **ALIMENT A CHANGEMENT DE FORME A BASE DE FARINE ET PROCEDES ASSOCIES**  
[72] YAO, LINING, US  
[72] YANG, HUMPHREY, US  
[72] DO, YOUNGWOOK, US  
[72] MONDOA, CATHERINE, US  
[72] WANG, GUANYUN, US  
[72] CUI, JIANXUN, US  
[72] WANG, WEN, US  
[72] LEE, YI-CHIN, US  
[72] TAO, YE, US  
[72] BERTI, CLAUDIA, IT  
[72] BERTE, ELENA, IT  
[72] BERGAMINI, ELENA, IT  
[71] CARNEGIE MELLON UNIVERSITY, US  
[71] BARILLA G. & R. FRATELLI S.P.A., IT  
[85] 2021-12-15  
[86] 2020-06-22 (PCT/US2020/039019)  
[87] (WO2020/257801)  
[30] US (62/864,547) 2019-06-21  
[30] US (62/869,753) 2019-07-02

[21] **3,143,716**  
[13] A1

[51] **Int.Cl. A61K 31/426 (2006.01) A61K 31/427 (2006.01) A61K 31/4439 (2006.01) A61K 31/454 (2006.01) A61K 31/496 (2006.01) A61K 45/06 (2006.01) A61P 35/04 (2006.01)**  
[25] EN  
[54] **METHODS OF USING RAD51 INHIBITORS FOR TREATMENT OF PANCREATIC CANCER**  
[54] **METHODES POUR UTILISER DES INHIBITEURS DE RAD51 POUR LE TRAITEMENT DU CANCER DU PANCREAS**  
[72] CASTRO, ALFREDO C., US  
[72] MACLAY, TYLER, US  
[72] MCCOMAS, CASEY CAMERON, US  
[72] MILLS, KEVIN, US  
[72] VACCA, JOSEPH, US  
[72] DAY, MELINDA, US  
[71] CYTEIR THERAPEUTICS, INC., US  
[85] 2021-12-15  
[86] 2020-06-22 (PCT/US2020/038895)  
[87] (WO2020/257752)  
[30] US (62/864,861) 2019-06-21  
[30] US (62/895,138) 2019-09-03

[21] **3,143,719**  
[13] A1

[51] **Int.Cl. A61K 31/404 (2006.01) A61K 31/437 (2006.01) A61K 31/513 (2006.01) A61K 31/706 (2006.01) A61L 2/00 (2006.01) A61L 2/16 (2006.01) A61P 35/02 (2006.01)**  
[25] EN  
[54] **AZACITIDINE IN COMBINATION WITH VENETOCLAX, GILTERITINIB, MIDOSTAURIN OR OTHER COMPOUNDS FOR TREATING LEUKEMIA OR MYELODYSPLASTIC SYNDROME**  
[54] **AZACITIDINE EN ASSOCIATION AVEC DU VENETOCLAX, DU GILTERITINIB, DE LA MIDOSTAURINE OU D'AUTRES COMPOSES POUR LE TRAITEMENT DE LA LEUCEMIE OU DU SYNDROME MYELODYSPLASIQUE**  
[72] FRATTINI, MARK, US  
[72] BEACH, CL, US  
[72] ROSE, SHELOMITDA, US  
[72] DUNSHEE, DIANA R., US  
[72] LOPES DE MENEZES, DANIEL E., US  
[72] MACBETH, KYLE, US  
[72] DAI, YUMIN, US  
[72] JANG, JESSICA, US  
[71] CELGENE QUANTICEL RESEARCH, INC., US  
[85] 2021-12-15  
[86] 2020-06-19 (PCT/US2020/038772)  
[87] (WO2020/257671)  
[30] US (62/864,413) 2019-06-20

[21] **3,143,720**  
[13] A1

[51] **Int.Cl. G11B 7/1381 (2012.01) G11B 7/1384 (2012.01) G11B 7/005 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR INCREASING DATA RATE AND STORAGE DENSITY IN 3-DIMENSIONAL OPTICAL DATA STORAGE MEDIA**  
[54] **SYSTEMES ET PROCEDES D'AUGMENTATION DU DEBIT DE DONNEES ET DE LA DENSITE DE STOCKAGE DANS DES SUPPORTS DE STOCKAGE DE DONNEES OPTIQUES TRIDIMENSIONNELS**  
[72] SINGER, KENNETH D., US  
[72] SHIYANOVSKAYA, IRINA, US  
[72] SUSSMAN, ASHER, US  
[72] MILSTER, THOMAS, US  
[72] KIM, YOUNG SIK, US  
[71] FOLIO PHOTONICS INC., US  
[85] 2021-12-15  
[86] 2020-06-24 (PCT/US2020/039288)  
[87] (WO2020/263927)  
[30] US (62/865,575) 2019-06-24

[21] **3,143,722**  
[13] A1

[51] **Int.Cl. G16H 40/60 (2018.01) G16H 40/63 (2018.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR IMPLEMENTING TREATMENT OF BIOLOGICAL FLUIDS**  
[54] **SYSTEMES ET PROCEDES POUR METTRE EN ŒUVRE UN TRAITEMENT DE FLUIDES BIOLOGIQUES**  
[72] CHURCH, DANIEL, US  
[72] KIRKMAN, TRACEY, US  
[72] STERN, MARC, US  
[72] AKHLAGHPOUR, HOSNA, US  
[71] CERUS CORPORATION, US  
[85] 2021-12-15  
[86] 2020-06-22 (PCT/US2020/038950)  
[87] (WO2020/263745)  
[30] US (62/865,210) 2019-06-22  
[30] US (62/869,542) 2019-07-01  
[30] US (63/035,616) 2020-06-05

## Demandes PCT entrant en phase nationale

[21] **3,143,723**  
[13] A1

[51] **Int.Cl. G16B 20/20 (2019.01) G16B 20/10 (2019.01) G16B 25/10 (2019.01) G16B 30/00 (2019.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DETERMINING PATTERN OF INHERITANCE IN EMBRYOS**

[54] **SYSTEMES ET PROCEDES DE DETERMINATION DE MOTIF D'HEREDITE DANS DES EMBRYONS**

[72] BURKE, JOHN, US

[72] RHEES, BRIAN, US

[72] BLAZEK, JOSHUA DAVID, US

[72] LARGE, MICHAEL JON, US

[71] COOPERSURGICAL, INC., US

[85] 2021-12-15

[86] 2020-06-19 (PCT/US2020/038815)

[87] (WO2020/257709)

[30] US (62/865,130) 2019-06-21

[21] **3,143,724**  
[13] A1

[51] **Int.Cl. A61K 9/16 (2006.01) A61K 9/20 (2006.01) A61K 45/06 (2006.01)**

[25] EN

[54] **NOVEL IBUPROFEN AND ACETAMINOPHEN COMPOSITION**

[54] **NOUVELLE COMPOSITION D'IBUPROFENE ET D'ACETAMINOPHENE**

[72] ANDREWS, CHRISTINE DRUMHELLER, US

[72] KELLSTEIN, DAVID ELLIS, US

[72] KINTER, KEVIN SCOTT, US

[72] SHAW, BONNY RENE, US

[71] PF CONSUMER HEALTHCARE 1 LLC, US

[85] 2021-12-15

[86] 2020-06-24 (PCT/US2020/039321)

[87] (WO2020/263947)

[30] US (62/867,683) 2019-06-27

[21] **3,143,728**  
[13] A1

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

[25] EN

[54] **SYSTEM AND METHOD FOR DETERMINING GENETIC RELATIONSHIPS BETWEEN A SPERM PROVIDER, OOCYTE PROVIDER, AND THE RESPECTIVE CONCEPTUS**

[54] **SYSTEME ET PROCEDE DE DETERMINATION DES RELATIONS GENETIQUES ENTRE UN FOURNISSEUR DE SPERME, UNE FOURNISSEUSE D'OVOCYTES ET LE CONCEPTUS RESPECTIF**

[72] BURKE, JOHN, US

[72] RHEES, BRIAN, US

[72] BLAZEK, JOSHUA DAVID, US

[72] LARGE, MICHAEL JON, US

[71] COOPERSURGICAL, INC., US

[85] 2021-12-15

[86] 2020-06-19 (PCT/US2020/038824)

[87] (WO2020/257717)

[30] US (62/865,130) 2019-06-21

[21] **3,143,731**  
[13] A1

[51] **Int.Cl. G06F 16/178 (2019.01) G06G 10/08 (2012.01) G16H 20/10 (2018.01)**

[25] EN

[54] **SYSTEM AND METHODS FOR SECURING A DRUG THERAPY**

[54] **SYSTEMES ET PROCEDES DE SECURISATION D'UNE THERAPIE MEDICAMENTEUSE**

[72] SOLAKHYAN, ARMEN, US

[72] RICE, PETER, US

[72] BERGSTROM, RICHARD, US

[72] SCHNEIDER, PATRICK, US

[72] BOSKEY, COLE, US

[71] PHARMACCCX, INC., US

[85] 2021-12-15

[86] 2020-06-26 (PCT/US2020/039876)

[87] (WO2020/264338)

[30] US (62/867,014) 2019-06-26

[30] US (62/947,453) 2019-12-12

[21] **3,143,732**  
[13] A1

[51] **Int.Cl. G16H 40/63 (2018.01)**

[25] EN

[54] **SYSTEM AND METHODS FOR IMPLEMENTING A BIOLOGICAL FLUID TREATMENT DEVICE**

[54] **SYSTEME ET PROCEDES PERMETTANT DE METTRE EN ŒUVRE UN DISPOSITIF DE TRAITEMENT DE FLUIDE BIOLOGIQUE**

[72] CHURCH, DANIEL, US

[72] ISON, LLOYD, US

[72] AKKOYUN, SEYHAN, US

[71] CERUS CORPORATION, US

[85] 2021-12-15

[86] 2020-06-26 (PCT/US2020/039984)

[87] (WO2020/264421)

[30] US (62/868,859) 2019-06-28

[21] **3,143,738**  
[13] A1

[51] **Int.Cl. A61F 2/06 (2013.01)**

[25] EN

[54] **STENT DEVICE INCLUDING A FLARABLE CROWN**

[54] **DISPOSITIF D'ENDOPROTHESE COMPRENANT UNE COURONNE EVASEE**

[72] LABRECQUE, ROGER, US

[72] HEIM, DAVID, US

[71] ATRIUM MEDICAL CORPORATION, US

[85] 2021-12-15

[86] 2020-06-22 (PCT/US2020/038981)

[87] (WO2020/263752)

[30] US (62/866,414) 2019-06-25

[30] US (62/965,373) 2020-01-24

## PCT Applications Entering the National Phase

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[21] **3,143,739**  
[13] A1

[51] **Int.Cl. G06Q 20/20 (2012.01) G06Q 20/38 (2012.01) G06Q 20/40 (2012.01) G06Q 30/02 (2012.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR MANAGING PROMOTIONAL OFFER ISSUANCE AND REDEMPTION AND REDUCING FRAUD**

[54] **SYSTEMES ET PROCEDES DE GESTION D'EMISSION ET DE REMBOURSEMENT D'OFFRES PROMOTIONNELLES ET DE REDUCTION DE LA FRAUDE**

[72] SAMPEY, JAMES, US  
[72] TINSLEY, BOBBY, US  
[72] ZACCARDO, ROBERT, US  
[72] DOUGLAS, KENNETH, US  
[72] JOSHUA, MOSHE, US  
[71] SKUXCHANGE, LLC, US  
[85] 2021-12-15  
[86] 2020-07-06 (PCT/US2020/040896)  
[87] (WO2021/007161)  
[30] US (16/503,999) 2019-07-05  
[30] US (16/503,994) 2019-07-05  
[30] US (16/784,018) 2020-02-06  
[30] US (16/815,870) 2020-03-11  
[30] US (16/921,057) 2020-07-06

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[21] **3,143,741**  
[13] A1

[51] **Int.Cl. G06Q 10/10 (2012.01) G06Q 50/00 (2012.01)**

[25] EN

[54] **SYSTEM AND METHODS TO DENOTE UNSHARED CONTENT TO BE SHARED**

[54] **SYSTEME ET PROCEDES POUR DESIGNER UN CONTENU NON PARTAGE A PARTAGER**

[72] SRINIVASAN, MADHUSUDHAN, IN  
[72] RAUTRAY, ADITYA, IN  
[72] PUNJA, DEVIPRASAD, IN  
[71] ROVI GUIDES, INC., US  
[85] 2021-12-15  
[86] 2020-07-07 (PCT/US2020/041043)  
[87] (WO2021/007230)  
[30] US (16/506,440) 2019-07-09

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[21] **3,143,742**  
[13] A1

[51] **Int.Cl. A61B 5/16 (2006.01) A61B 5/11 (2006.01) G06K 9/00 (2022.01)**

[25] EN

[54] **PAIN ASSESSMENT METHOD AND SYSTEM**

[54] **PROCEDE ET SYSTEME D'EVALUATION DE LA DOULEUR**

[72] DAFFAS, PHILIP ANASTASIS, AU  
[71] ELECTRONIC PAIN ASSESSMENT TECHNOLOGIES (EPAT) PTY LTD, AU  
[85] 2021-12-16  
[86] 2020-06-26 (PCT/AU2020/050665)  
[87] (WO2020/257874)  
[30] AU (2019902296) 2019-06-28  
[30] AU (2019902390) 2019-07-05

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[21] **3,143,743**  
[13] A1

[51] **Int.Cl. H04N 21/458 (2011.01) H04N 21/44 (2011.01) H04N 21/45 (2011.01) H04N 21/454 (2011.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR PUSHING CONTENT**

[54] **SYSTEMES ET PROCEDES POUR POUSSER DU CONTENU**

[72] BENNAH, ALBERT, US  
[72] GILPIN, JONATHAN B., US  
[72] LENT, JAMES W., US  
[72] MILLER, KYLE, US  
[72] SCAPPINI, BRYAN S., US  
[71] ROVI GUIDES, INC., US  
[85] 2021-12-15  
[86] 2020-08-06 (PCT/US2020/045217)  
[87] (WO2021/030147)  
[30] US (16/541,969) 2019-08-15  
[30] US (16/541,975) 2019-08-15  
[30] US (16/541,977) 2019-08-15

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[21] **3,143,746**  
[13] A1

[51] **Int.Cl. G06F 21/55 (2013.01) G05B 23/02 (2006.01) G07C 3/00 (2006.01)**

[25] EN

[54] **MANAGING ASSETS BY PROCESS VARIABLE MAPPING**

[54] **GESTION D'ACTIFS PAR CARTOGRAPHIE DE VARIABLES DE PROCESSUS**

[72] PEEBLES, ROBERT, GB  
[72] THOMPSON, MATTHEW, US  
[71] CONOCOPHILIPS COMPANY, US  
[85] 2021-12-15  
[86] 2019-06-27 (PCT/US2019/039423)  
[87] (WO2020/263257)  
[30] US (16/454,303) 2019-06-27

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[21] **3,143,750**  
[13] A1

[51] **Int.Cl. A61M 5/24 (2006.01) A61M 5/31 (2006.01) A61M 5/315 (2006.01) F16F 1/00 (2006.01)**

[25] EN

[54] **SELF-CONTROLLABLE LOAD SPRING WASHER**

[54] **RONDELLE DE RESSORT DE CHARGE AUTO-REGLABLE**

[72] RODRIGUEZ SAN JUAN, NESTOR, US  
[72] LEIBOWITZ, EVAN, US  
[72] KASPAR, KAYLA, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2021-12-15  
[86] 2020-07-08 (PCT/US2020/041124)  
[87] (WO2021/007279)  
[30] US (62/872,017) 2019-07-09  
[30] US (16/922,137) 2020-07-07

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[21] **3,143,752**  
[13] A1

[51] **Int.Cl. A61K 38/00 (2006.01) C07K 7/00 (2006.01) C07K 7/06 (2006.01) C07K 7/08 (2006.01) C07K 14/00 (2006.01) C07K 14/435 (2006.01)**

[25] EN

[54] **PEPTIDES AND METHODS FOR TREATING DISEASES**

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

[72] WAGNER, JR., DAVID HAL, US  
[72] YUSSMAN, MARTIN GLENN, US  
[72] HENRY, CHARLES W., US  
[71] OP-T LLC, US  
[85] 2021-12-15  
[86] 2020-07-13 (PCT/US2020/041744)  
[87] (WO2021/011437)  
[30] US (62/873,776) 2019-07-12

## Demandes PCT entrant en phase nationale

[21] **3,143,758**  
[13] A1

[51] **Int.Cl. A61K 38/16 (2006.01) A61P 29/00 (2006.01)**  
[25] EN  
[54] **GHRH ANTAGONISTS FOR USE IN A METHOD OF TREATING SARCOIDOSIS**  
[54] **ANTAGONISTES DE GHRH DESTINES A ETRE UTILISES DANS UN PROCEDE DE TRAITEMENT DE LA SARCOIDOSE**  
[72] MIRSAEIDI, MEHDI, US  
[72] ZHANG, CHONGXU, US  
[72] SCHALLY, ANDREW, US  
[72] CAI, RENZHI, US  
[71] UNIVERSITY OF MIAMI, US  
[71] THE UNITED STATES GOVERNMENT AS REPRESENTED BY THE DEPARTMENT OF VETERANS AFFAIRS, US  
[85] 2021-12-15  
[86] 2020-07-17 (PCT/US2020/042540)  
[87] (WO2021/011874)  
[30] US (62/875,703) 2019-07-18

[21] **3,143,759**  
[13] A1

[51] **Int.Cl. G16B 20/10 (2019.01) G16B 20/20 (2019.01) G16B 30/00 (2019.01) C12Q 1/68 (2018.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR DETERMINING GENOME PLOIDY**  
[54] **SYSTEMES ET PROCEDES DESTINES A DETERMINER LA PLOIDIE DU GENOME**  
[72] BURKE, JOHN, US  
[72] RHEES, BRIAN, US  
[72] BLAZEK, JOSHUA DAVID, US  
[72] LARGE, MICHAEL JON, US  
[71] COOPERSURGICAL, INC., US  
[85] 2021-12-15  
[86] 2020-06-19 (PCT/US2020/038826)  
[87] (WO2020/257719)  
[30] US (62/865,122) 2019-06-21

[21] **3,143,762**  
[13] A1

[51] **Int.Cl. G01C 21/16 (2006.01) B60W 30/09 (2012.01) H04W 4/40 (2018.01) G08G 1/16 (2006.01)**  
[25] EN  
[54] **RELATIVE POSITION TRACKING USING MOTION SENSOR WITH DRIFT CORRECTION**  
[54] **SUIVI DE POSITION RELATIVE A L'AIDE D'UN CAPTEUR DE MOUVEMENT A CORRECTION DE DERIVE**  
[72] SETH, ROHIT, CA  
[71] SETH, ROHIT, CA  
[85] 2021-12-16  
[86] 2020-06-17 (PCT/CA2020/050838)  
[87] (WO2020/252575)  
[30] US (62/862,645) 2019-06-17

[21] **3,143,765**  
[13] A1

[51] **Int.Cl. A61K 36/185 (2006.01) A23L 33/105 (2016.01) A23N 15/00 (2006.01) B01D 3/00 (2006.01) B01D 11/02 (2006.01) B02B 1/00 (2006.01) C07B 63/02 (2006.01)**  
[25] EN  
[54] **INDUSTRIAL-SCALE PROCESSING OF CANNABIS MATERIAL**  
[54] **TRAITEMENT A L'ECHELLE INDUSTRIELLE DE SUBSTANCE DE CANNABIS**  
[72] ALSAYAR, MAX, CA  
[72] ELVIRA, GEORGE, CA  
[72] GEORGIEV, STEPHAN, CA  
[72] WALTERS, DAVID, CA  
[71] HEXO OPERATIONS INC., CA  
[85] 2021-12-16  
[86] 2020-06-19 (PCT/CA2020/050859)  
[87] (WO2020/252593)  
[30] US (62/864,594) 2019-06-21

[21] **3,143,767**  
[13] A1

[51] **Int.Cl. B01D 11/02 (2006.01) B01D 3/00 (2006.01)**  
[25] EN  
[54] **INDUSTRIAL-SCALE PROCESSING OF CANNABIS MATERIAL**  
[54] **TRAITEMENT A L'ECHELLE INDUSTRIELLE DE CANNABIS**  
[72] ALSAYAR, MAX, CA  
[72] ELVIRA, GEORGE, CA  
[72] GEORGIEV, STEPHAN, CA  
[72] WALTERS, DAVID, CA  
[71] HEXO OPERATIONS INC., CA  
[85] 2021-12-16  
[86] 2020-06-19 (PCT/CA2020/050860)  
[87] (WO2020/252594)  
[30] US (62/864,594) 2019-06-21

[21] **3,143,770**  
[13] A1

[51] **Int.Cl. B01D 11/02 (2006.01) B01D 9/02 (2006.01)**  
[25] EN  
[54] **INDUSTRIAL-SCALE PROCESSING OF CANNABIS MATERIAL**  
[54] **TRAITEMENT A L'ECHELLE INDUSTRIELLE DE MATIERE DE CANNABIS**  
[72] ALSAYAR, MAX, CA  
[72] ELVIRA, GEORGE, CA  
[72] GEORGIEV, STEPHAN, CA  
[72] WALTERS, DAVID, CA  
[71] HEXO OPERATIONS INC., CA  
[85] 2021-12-16  
[86] 2020-06-19 (PCT/CA2020/050861)  
[87] (WO2020/252595)  
[30] US (62/864,594) 2019-06-21

[21] **3,143,771**  
[13] A1

[51] **Int.Cl. E04G 7/16 (2006.01) F16B 7/04 (2006.01)**  
[25] EN  
[54] **SCAFFOLDING TUBE CLAMP**  
[54] **PINCE DE TUBE D'ECHAFAUDAGE**  
[72] MELIC, JONATHAN JONNY, CA  
[71] MELIC, JONATHAN JONNY, CA  
[85] 2021-12-16  
[86] 2020-06-30 (PCT/CA2020/050911)  
[87] (WO2021/000042)  
[30] US (62/869,812) 2019-07-02  
[30] US (62/941,093) 2019-11-27

## PCT Applications Entering the National Phase

[21] **3,143,775**  
[13] A1

[51] **Int.Cl. C08L 97/00 (2006.01) C04B 24/18 (2006.01) C08J 3/05 (2006.01) C04B 28/00 (2006.01)**

[25] EN

[54] **PROCESS OF MAKING SULFONATED LIGNIN-BASED COMPOSITIONS, SULFONATED LIGNIN-BASED COMPOSITIONS SO-OBTAINED AND THEIR USE**

[54] **PROCEDE DE FABRICATION DE COMPOSITIONS A BASE DE LIGNINE SULFONEE, COMPOSITIONS A BASE DE LIGNINE SULFONEE AINSI OBTENUES ET LEUR UTILISATION**

[72] LOISEAU, FRANCIS, CA  
[72] DUPUIS, MARIO, CA  
[72] TRIANTAFILLU, IORDANA, CA  
[71] RUETGERS POLYMERS LTD, CA  
[85] 2021-12-16  
[86] 2020-07-03 (PCT/CA2020/050925)  
[87] (WO2021/003561)  
[30] US (62/870,961) 2019-07-05

[21] **3,143,779**  
[13] A1

[51] **Int.Cl. A01N 1/02 (2006.01) C07B 63/00 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR STORAGE OF BIOLOGICAL MATERIAL**

[54] **PROCEDE ET APPAREIL DESTINES AU STOCKAGE DE MATERIAU BIOLOGIQUE**

[72] KUKAL, OLGA, CA  
[72] ALLEN, THOMAS FURMAN, CA  
[72] ALEXANDER, BILL RUSSELL, US  
[71] CRYOSTASIS LTD., CA  
[85] 2021-12-16  
[86] 2020-07-03 (PCT/CA2020/050929)  
[87] (WO2021/003563)  
[30] US (16/501,918) 2019-07-05

[21] **3,143,783**  
[13] A1

[51] **Int.Cl. A61B 5/02 (2006.01) G16H 50/20 (2018.01) A61B 5/0295 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM TO ASSESS DISEASE USING DYNAMICAL ANALYSIS OF CARDIAC AND PHOTOPLETHYSMOGRAPHIC SIGNALS**

[54] **PROCEDE ET SYSTEME PERMETTANT D'EVALUER UNE MALADIE A L'AIDE D'UNE ANALYSE DYNAMIQUE DE SIGNAUX CARDIAQUES ET PHOTOPLETHYSMOGRAPHIQUE S**

[72] PAAK, MEHDI, CA  
[72] BURTON, TIMOTHY WILLIAM FAWCETT, CA  
[72] RAMCHANDANI, SHYAMLAL, CA  
[71] ANALYTICS FOR LIFE INC., CA  
[85] 2021-12-15  
[86] 2020-03-26 (PCT/IB2020/052890)  
[87] (WO2020/254882)  
[30] US (62/862,991) 2019-06-18  
[30] US (62/863,005) 2019-06-18

[21] **3,143,788**  
[13] A1

[51] **Int.Cl. E21B 47/00 (2012.01) E21B 33/03 (2006.01) E21B 47/12 (2012.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR MONITORING WELLHEAD EQUIPMENT AND DOWNHOLE ACTIVITY**

[54] **SYSTEME ET PROCEDE DE SURVEILLANCE D'EQUIPEMENT DE TETE DE Puits ET D'ACTIVITE EN PROFONDEUR DE FORAGE**

[72] BIHUN, NICHOLAS, CA  
[71] QUANTUM DESIGN AND TECHNOLOGIES INC., CA  
[85] 2021-12-16  
[86] 2019-01-31 (PCT/CA2019/050122)  
[87] (WO2020/014769)  
[30] US (62/699,348) 2018-07-17

[21] **3,143,799**  
[13] A1

[51] **Int.Cl. E21B 43/26 (2006.01) E21B 43/267 (2006.01)**

[25] EN

[54] **CLOSE COUPLED FLUID PROCESSING SYSTEM**

[54] **SYSTEME DE TRAITEMENT DE FLUIDE A COUPLAGE ETROIT**

[72] BOLT, TRAVIS LEE, US  
[72] CALLAWAY, LEWIS PAUL, US  
[72] SEARS, ERIC O'REILLY, US  
[72] MAXWELL, JONATHAN TYLER, US  
[71] NATIONAL OILWELL VARCO, L.P., US  
[85] 2021-12-14  
[86] 2020-06-30 (PCT/US2020/040338)  
[87] (WO2021/003179)  
[30] US (62/869,459) 2019-07-01

[21] **3,143,804**  
[13] A1

[51] **Int.Cl. A61M 5/32 (2006.01) A61J 1/06 (2006.01) A61J 1/20 (2006.01) A61M 5/19 (2006.01) A61M 5/20 (2006.01) A61M 5/24 (2006.01) A61M 5/28 (2006.01) A61M 5/315 (2006.01)**

[25] EN

[54] **INJECTION SYSTEM AND METHOD**

[54] **SYSTEME ET METHODE D'INJECTION**

[72] DIAZ, STEPHEN H., US  
[72] STEESE-BRADLEY, GARY, US  
[72] SHLUZAS, ALAN E., US  
[72] SHANLEY, CONOR EDWARD, US  
[72] LEUNG, MINA M., US  
[72] TILLACK, JEFF, US  
[71] CREDENCE MEDSYSTEMS, INC., US  
[85] 2021-12-15  
[86] 2020-06-22 (PCT/US2020/039013)  
[87] (WO2020/257799)  
[30] US (62/864,509) 2019-06-21

## Demandes PCT entrant en phase nationale

[21] **3,143,806**  
[13] A1

[51] **Int.Cl. C22C 21/10 (2006.01) C22F 1/053 (2006.01)**  
[25] EN  
[54] **IMPROVED THICK WROUGHT 7XXX ALUMINUM ALLOYS, AND METHODS FOR MAKING THE SAME**  
[54] **ALLIAGES D'ALUMINIUM 7XXX CORROYES EPAIS PERFECTIONNES ET LEURS PROCEDES DE PRODUCTION**  
[72] CAMBIER, SEVERINE, US  
[72] BOSELLI, JULIEN, US  
[72] WANG, WEI, US  
[72] YANAR, CAGATAY, US  
[71] ARCONIC TECHNOLOGIES LLC, US  
[85] 2021-12-15  
[86] 2020-06-23 (PCT/US2020/039196)  
[87] (WO2020/263864)  
[30] US (62/865,716) 2019-06-24

[21] **3,143,813**  
[13] A1

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/53 (2006.01) A61K 31/5377 (2006.01) A61P 35/00 (2006.01) C07D 519/00 (2006.01)**  
[25] EN  
[54] **CDK KINASE INHIBITOR**  
[54] **INHIBITEUR DE KINASE CDK**  
[72] PAN, ZHENGYING, CN  
[72] ZHANG, RUI, CN  
[72] QI, ZUDE, CN  
[71] BEIJING BENICALL BIOTECH CO., LTD., CN  
[85] 2021-12-16  
[86] 2020-05-20 (PCT/CN2020/091324)  
[87] (WO2020/253458)  
[30] CN (201910529663.5) 2019-06-18

[21] **3,143,817**  
[13] A1

[51] **Int.Cl. G06T 7/246 (2017.01)**  
[25] EN  
[54] **STICKER GENERATING METHOD AND APPARATUS, AND MEDIUM AND ELECTRONIC DEVICE**  
[54] **PROCEDE ET APPAREIL DE GENERATION D'AUTOCOLLANT, ET SUPPORT AINSI QUE DISPOSITIF ELECTRONIQUE**  
[72] WEI, YANTONG, CN  
[71] BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD., CN  
[85] 2021-12-16  
[86] 2020-05-22 (PCT/CN2020/091805)  
[87] (WO2020/259152)  
[30] CN (201910556164.5) 2019-06-25

[21] **3,143,824**  
[13] A1

[51] **Int.Cl. H04W 56/00 (2009.01) H04W 4/00 (2018.01) H04W 4/80 (2018.01) H04W 76/14 (2018.01)**  
[25] EN  
[54] **SPECIAL EFFECT SYNCHRONIZATION METHOD, DEVICE, AND STORAGE MEDIUM**  
[54] **PROCEDE DE SYNCHRONISATION D'EFFETS SPECIAUX, DISPOSITIF, ET SUPPORT DE STOCKAGE**  
[72] MA, RUIFENG, CN  
[72] GAO, LE, CN  
[71] BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD., CN  
[85] 2021-12-16  
[86] 2020-05-22 (PCT/CN2020/091847)  
[87] (WO2020/259153)  
[30] CN (201910556470.9) 2019-06-25

[21] **3,143,830**  
[13] A1

[51] **Int.Cl. A61F 2/52 (2006.01) A61F 6/04 (2006.01)**  
[25] EN  
[54] **FLUID-CARRYING APPLICATION**  
[54] **APPLICATION DE TRANSPORT DE FLUIDE**  
[72] YANG, KUO HUANG, CN  
[71] YANG, KUO HUANG, CN  
[85] 2021-12-16  
[86] 2020-06-17 (PCT/CN2020/096478)  
[87] (WO2020/253702)  
[30] CN (201920932735.6) 2019-06-20

[21] **3,143,856**  
[13] A1

[51] **Int.Cl. A61H 23/00 (2006.01)**  
[25] EN  
[54] **MEDICAL VEST AND USING METHOD THEREOF**  
[54] **GILET MEDICAL ET SON PROCEDE D'UTILISATION**  
[72] CHEN, CHIA-HUNG, TW  
[72] SU, CHIA CHI, CN  
[72] SUNG, YU WEN, CN  
[71] CHEN, CHIA-HUNG, TW  
[85] 2021-12-16  
[86] 2020-06-17 (PCT/CN2020/096592)  
[87] (WO2020/253729)  
[30] US (62/862,690) 2019-06-18

[21] **3,143,857**  
[13] A1

[51] **Int.Cl. A01N 57/20 (2006.01) A01N 25/30 (2006.01)**  
[25] EN  
[54] **STABLE HERBICIDAL COMPOSITIONS COMPRISING AMINE OXIDE AND BETAINE**  
[54] **COMPOSITIONS HERBICIDES STABLES COMPRENANT DE L'OXYDE D'AMINE ET DE LA BETAINE**  
[72] CHEN, ZIXIAN, SG  
[72] ZHOU, YUMING, CN  
[72] O'BRIEN, PAIGE LANA, AU  
[72] MONTEROSSO, RENATO, AU  
[71] RHODIA OPERATIONS, FR  
[85] 2021-12-16  
[86] 2020-06-19 (PCT/CN2020/097018)  
[87] (WO2021/008300)  
[30] CN (PCT/CN2019/095673) 2019-07-12

## PCT Applications Entering the National Phase

[21] **3,143,858**  
[13] A1

[51] **Int.Cl. A61F 2/90 (2013.01) A61F 2/91 (2013.01) A61F 2/966 (2013.01) A61F 2/97 (2013.01) A61F 2/24 (2006.01)**

[25] EN

[54] **VASCULAR IMPLANT, DELIVERY DEVICE AND MEDICAL APPARATUS**

[54] **IMPLANT VASCULAIRE, DISPOSITIF D'INTRODUCTION ET APPAREIL MEDICAL**

[72] ZHAO, HANYI, CN

[72] TIAN, HAO, CN

[72] PENG, QING, CN

[72] WANG, QINFEN, CN

[71] MICROPORT NEUROTECH (SHANGHAI) CO., LTD., CN

[85] 2021-12-16

[86] 2020-06-26 (PCT/CN2020/098312)

[87] (WO2020/259640)

[30] CN (201910580250.X) 2019-06-28

[21] **3,143,859**  
[13] A1

[51] **Int.Cl. B23K 26/0622 (2014.01) B23K 26/352 (2014.01) B23K 26/00 (2014.01) C23C 24/04 (2006.01)**

[25] FR

[54] **METHOD FOR ATTACHING PARTS BY SPRAYING A POWDER OF A DUCTILE MATERIAL; CORRESPONDING ASSEMBLY**

[54] **PROCEDE DE FIXATION DE PIECES PAR PROJECTION D'UNE POUDRE D'UN MATERIAU DUCTILE; ASSEMBLAGE CORRESPONDANT**

[72] MERCS, DAVID, FR

[71] LISI AUTOMOTIVE, FR

[85] 2021-12-16

[86] 2020-06-25 (PCT/FR2020/000195)

[87] (WO2020/260778)

[30] FR (FR1906888) 2019-06-25

[30] FR (FR2003560) 2020-04-09

[21] **3,143,860**  
[13] A1

[51] **Int.Cl. G02B 23/12 (2006.01) G02B 27/01 (2006.01) G02B 26/02 (2006.01)**

[25] FR

[54] **VISION APPARATUS PROVIDING NIGHT VISION AND DIRECT VISION OF A SURROUNDING SCENE**

[54] **APPAREIL DE VISION OFFRANT UNE VISION NOCTURNE ET UNE VISION DIRECTE D'UNE SCENE ENVIRONNANTE**

[72] DELTEL, GEOFFROY, FR

[71] PHOTONIS FRANCE, FR

[85] 2021-12-16

[86] 2020-06-18 (PCT/FR2020/051056)

[87] (WO2020/254765)

[30] FR (FR1906602) 2019-06-20

[21] **3,143,861**  
[13] A1

[51] **Int.Cl. G06Q 20/04 (2012.01) G06Q 30/06 (2012.01)**

[25] FR

[54] **SYSTEM AND METHOD FOR EXCHANGING PAYMENT DATA BETWEEN A CASH REGISTER AND A DEVICE FOR ACQUIRING ELECTRONIC PAYMENTS**

[54] **SYSTEME ET PROCEDE POUR ECHANGER DES DONNEES DE PAIEMENT ENTRE UNE CAISSE ENREGISTREUSE ET UN DISPOSITIF D'ACQUISITION DE PAIEMENTS ELECTRONIQUES**

[72] NACCACHE, DAVID, FR

[72] POLECHTCHOUCK, PAVEL, FR

[72] TRICHINA, ELENA, FR

[71] BANKS AND ACQUIRERS INTERNATIONAL HOLDING, FR

[85] 2021-12-16

[86] 2020-06-22 (PCT/FR2020/051078)

[87] (WO2020/260811)

[30] FR (FR1906851) 2019-06-25

[21] **3,143,862**  
[13] A1

[51] **Int.Cl. F16L 21/06 (2006.01)**

[25] EN

[54] **PIPELINE CONNECTING DEVICE, PIPELINE ELEMENT COUPLING PIECE AND COUPLING METHOD THEREFOR**

[54] **DISPOSITIF DE RACCORDEMENT DE TUYAU, PIECE D'ACCOUPLLEMENT D'ELEMENT TUYAU ET PROCEDE D'ACCOUPLLEMENT ASSOCIE**

[72] LU, ZHIGANG, CN

[72] ZHAI, ZHIBING, CN

[71] SHANGHAI VISION MECHANICAL JOINT CO., LTD, CN

[85] 2021-12-16

[86] 2020-06-29 (PCT/CN2020/098869)

[87] (WO2021/000834)

[30] CN (201910581107.2) 2019-06-29

[30] CN (202010345015.7) 2020-04-27

[21] **3,143,863**  
[13] A1

[51] **Int.Cl. A23L 11/30 (2016.01) A23L 33/185 (2016.01) A23J 1/14 (2006.01) A23J 3/14 (2006.01)**

[25] FR

[54] **METHOD FOR PRODUCING LEGUMINOUS PROTEIN**

[54] **PROCEDE DE PRODUCTION DE PROTEINE DE LEGUMINEUSE**

[72] CALMON, LUCILE, FR

[72] LECOCQ, ALINE, FR

[71] ROQUETTE FRERES, FR

[85] 2021-12-16

[86] 2020-06-26 (PCT/FR2020/051122)

[87] (WO2020/260841)

[30] FR (19 07143) 2019-06-28

[21] **3,143,864**  
[13] A1

[25] EN

[54] **APPARATUS FOR DISSOLVING GAS INTO A LIQUID AND METHOD FOR PRODUCING THE SAME**

[54] **APPAREIL DE DISSOLUTION DE GAZ DANS UN LIQUIDE ET SON PROCEDE DE PRODUCTION**

[72] GLOMSET, KENNETH, NO

[71] LINDE GMBH, DE

[85] 2021-12-16

[86] 2020-07-14 (PCT/EP2020/025332)

[87] (WO2021/008733)

[30] EP (19020437 .0) 2019-07-18



## Demandes PCT entrant en phase nationale

[21] **3,143,865**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) A61K 9/10 (2006.01) A61K 31/7088 (2006.01) A61K 31/713 (2006.01) A61K 47/14 (2017.01) A61K 47/18 (2017.01) A61K 47/24 (2006.01) A61K 47/28 (2006.01) A61K 47/34 (2017.01) A61P 7/02 (2006.01)**

[25] EN  
[54] **LIPID COMPOSITION**  
[54] **COMPOSITION LIPIDIQUE**  
[72] ENDO, TAISUKE, JP  
[72] KANEUMI, SHUN, JP  
[72] NORO, MASAKI, JP  
[72] TANABE, SHINTARO, JP  
[72] YAMAMOTO, MASAHIKO, JP  
[71] FUJIFILM CORPORATION, JP  
[85] 2021-12-06  
[86] 2020-06-05 (PCT/JP2020/022279)  
[87] (WO2020/246581)  
[30] JP (2019-107457) 2019-06-07  
[30] JP (2019-207117) 2019-11-15

[21] **3,143,866**  
[13] A1

[51] **Int.Cl. B01D 53/047 (2006.01) B01D 53/22 (2006.01) C01B 23/00 (2006.01)**

[25] EN  
[54] **METHOD AND ARRANGEMENT FOR RECOVERING HELIUM**  
[54] **PROCEDE ET ARRANGEMENT POUR LA RECUPERATION D'HELIUM**  
[72] SALAZAR DUARTE, GABRIEL, DE  
[72] BAUER, MARTIN, DE  
[72] PLEINTINGER, STEFAN, DE  
[72] KRAMER, VERENA, DE  
[72] JOHANNINK, MATTHIAS, DE  
[71] LINDE GMBH, DE  
[85] 2021-12-16  
[86] 2020-08-06 (PCT/EP2020/025363)  
[87] (WO2021/032315)  
[30] EP (19020482.6) 2019-08-20

[21] **3,143,867**  
[13] A1

[51] **Int.Cl. H04W 74/08 (2009.01)**

[25] EN  
[54] **METHOD AND APPARATUS FOR RANDOM ACCESS**  
[54] **PROCEDE ET APPAREIL D'ACCES ALEATOIRE**  
[72] LIN, ZHIPENG, CN  
[72] REIAL, ANDRES, SE  
[72] HARRISON, ROBERT MARK, US  
[71] TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE  
[85] 2021-12-16  
[86] 2020-06-30 (PCT/CN2020/099386)  
[87] (WO2021/004336)  
[30] CN (PCT/CN2019/094917) 2019-07-05

[21] **3,143,868**  
[13] A1

[51] **Int.Cl. F28F 27/00 (2006.01) F25J 5/00 (2006.01)**

[25] EN  
[54] **METHOD FOR OPERATING A HEAT EXCHANGER, ARRANGEMENT WITH A HEAT EXCHANGER, AND SYSTEM WITH A CORRESPONDING ARRANGEMENT**  
[54] **PROCEDE DE FONCTIONNEMENT D'UN ECHANGEUR DE CHALEUR, AGENCEMENT DOTE D'UN ECHANGEUR DE CHALEUR ET SYSTEME DOTE D'UN AGENCEMENT CORRESPONDANT**  
[72] LOCHNER, STEFAN, DE  
[72] SPORI, RALPH, DE  
[72] LEHMACHER, AXEL, DE  
[72] FREKO, PASCAL, DE  
[72] HEINZ, PAUL, DE  
[72] ROSLER, FELIX, DE  
[71] LINDE GMBH, DE  
[85] 2021-12-16  
[86] 2020-08-18 (PCT/EP2020/025378)  
[87] (WO2021/037391)  
[30] EP (19020492.5) 2019-08-23

[21] **3,143,869**  
[13] A1

[51] **Int.Cl. B01D 53/22 (2006.01) B01D 53/047 (2006.01) C10L 3/10 (2006.01)**

[25] EN  
[54] **METHOD AND SYSTEM FOR OBTAINING COMPONENTS FROM NATURAL GAS**  
[54] **PROCEDE ET SYSTEME POUR OBTENIR DES COMPOSANTS A PARTIR DE GAZ NATUREL**  
[72] KELLER, TOBIAS, DE  
[72] VOSS, CHRISTIAN, DE  
[72] SALAZAR DUARTE, GABRIEL, DE  
[72] PLEINTINGER, STEFAN, DE  
[72] SCHIFFMANN, PATRICK, DE  
[72] KRAMER, VERENA, DE  
[71] LINDE GMBH, DE  
[85] 2021-12-16  
[86] 2020-09-22 (PCT/EP2020/025427)  
[87] (WO2021/058130)  
[30] EP (19020546.8) 2019-09-27

[21] **3,143,870**  
[13] A1

[51] **Int.Cl. C01B 32/40 (2017.01) B01D 53/04 (2006.01) B01D 53/047 (2006.01) B01D 53/22 (2006.01) B01D 53/32 (2006.01) C25B 1/00 (2021.01)**

[25] EN  
[54] **METHOD AND PLANT FOR PRODUCING A CARBON-MONOXIDE-RICH GAS PRODUCT**  
[54] **PROCEDE ET INSTALLATION POUR LA FABRICATION D'UN PRODUIT GAZEUX RICHE EN MONOXYDE DE CARBONE**  
[72] PESCHEL, ANDREAS, DE  
[72] HENTSCHEL, BENJAMIN, DE  
[71] LINDE GMBH, DE  
[85] 2021-12-16  
[86] 2020-09-22 (PCT/EP2020/025430)  
[87] (WO2021/073769)  
[30] DE (10 2019 007 265.0) 2019-10-18

## PCT Applications Entering the National Phase

[21] **3,143,871**  
[13] A1

[51] **Int.Cl. B61L 15/00 (2006.01) B61L 25/02 (2006.01) B61L 27/00 (2022.01)**

[25] EN

[54] **ODOMETRIC METHOD, IN PARTICULAR FOR A RAIL VEHICLE OR A CONTROL CENTER**

[54] **PROCEDE ODOMETRIQUE, EN PARTICULIER POUR UN VEHICULE FERROVIAIRE OU UN CENTRE DE COMMANDE**

[72] CALDER, STEVEN ALEXANDER, US

[71] SIEMENS MOBILITY GMBH, DE

[85] 2021-12-16

[86] 2020-06-15 (PCT/EP2020/066442)

[87] (WO2020/254229)

[30] DE (10 2019 208 865.1) 2019-06-18

[21] **3,143,873**  
[13] A1

[51] **Int.Cl. C07D 231/46 (2006.01) C07C 39/27 (2006.01) C07C 39/44 (2006.01) C07C 65/105 (2006.01) C07C 201/08 (2006.01) C07C 205/59 (2006.01) C07C 209/36 (2006.01) C07C 229/52 (2006.01)**

[25] EN

[54] **PROCESS FOR THE PREPARATION OF KEY INTERMEDIATES FOR THE SYNTHESIS OF ELTROMBOPAG OR SALT THEREOF**

[54] **PROCEDE DE PREPARATION D'INTERMEDIAIRES CLES POUR LA SYNTHESE D'ELTROMBOPAG OU D'UN SEL DE CELUI-CI**

[72] STABILE, PAOLO, IT

[72] SEMERARO, FLORIANA, IT

[71] F.I.S. - FABBRICA ITALIANA SINTETICI S.P.A., IT

[85] 2021-12-16

[86] 2019-07-04 (PCT/EP2019/067968)

[87] (WO2021/001044)

[21] **3,143,875**  
[13] A1

[51] **Int.Cl. C10G 1/10 (2006.01) C08J 11/12 (2006.01) C10B 53/07 (2006.01) F28G 1/16 (2006.01)**

[25] EN

[54] **A THERMOLYSIS PROCESS AND SYSTEM FOR OBTAINING RECOVERED CARBON BLACK AND FUL FROM DISUSED TIRES**

[54] **PROCEDE ET SYSTEME DE THERMOLYSE POUR L'OBTENTION DE NOIR DE FUMEE RECUPERE ET DE COMBUSTIBLE A PARTIR PNEUMATIQUES USAGES**

[72] RUIZ HERRERA, LUIS JAVIER, ES

[71] RUIZ HERRERA, LUIS JAVIER, ES

[85] 2021-12-16

[86] 2019-06-27 (PCT/ES2019/070450)

[87] (WO2020/260730)

[21] **3,143,876**  
[13] A1

[51] **Int.Cl. C25B 15/00 (2006.01) H02M 5/293 (2006.01)**

[25] EN

[54] **METHOD FOR OPERATING A SYSTEM FOR ELECTROLYSIS, AND SYSTEM FOR ELECTROLYSIS**

[54] **PROCEDE DE FONCTIONNEMENT D'UN SYSTEME D'ELECTROLYSE ET SYSTEME D'ELECTROLYSE**

[72] PESCHEL, ANDREAS, DE

[72] HENTSCHEL, BENJAMIN, DE

[72] LIEBHART, CHRISTIAN, DE

[71] LINDE GMBH, DE

[85] 2021-12-16

[86] 2020-11-20 (PCT/EP2020/025528)

[87] (WO2021/115625)

[30] DE (10 2019 008 670.8) 2019-12-13

[30] EP (20020167.1) 2020-04-09

[21] **3,143,877**  
[13] A1

[51] **Int.Cl. H01H 9/02 (2006.01) F21V 23/04 (2006.01) H01H 13/00 (2006.01) H01H 23/00 (2006.01) H01H 23/04 (2006.01) H01R 25/00 (2006.01)**

[25] EN

[54] **CABLE SWITCH WITH USB CHARGER**

[54] **INTERRUPTEUR DE CABLE A CHARGEUR USB**

[72] ROGOWIEC, BARTOSZ ZYGMUNT, ES

[71] ROGOWIEC, BARTOSZ ZYGMUNT, ES

[85] 2021-12-16

[86] 2020-06-22 (PCT/ES2020/070408)

[87] (WO2020/254712)

[30] ES (U201931053) 2019-06-21

[21] **3,143,879**  
[13] A1

[51] **Int.Cl. B41J 11/00 (2006.01) B41J 11/06 (2006.01) B41J 13/00 (2006.01)**

[25] EN

[54] **METHOD FOR DECORATING A PACKAGING BOX**

[54] **PROCEDE DE DECORATION D'UNE BOITE D'EMBALLAGE**

[72] DE ROECK, LUC, BE

[71] AGFA NV, BE

[85] 2021-12-16

[86] 2020-06-16 (PCT/EP2020/066554)

[87] (WO2020/254285)

[30] EP (19180589.4) 2019-06-17

[21] **3,143,880**  
[13] A1

[51] **Int.Cl. G01N 33/34 (2006.01)**

[25] EN

[54] **ESTIMATING RISK LEVEL IN AN AQUEOUS PROCESS**

[54] **ESTIMATION D'UN NIVEAU DE RISQUE DANS UN TRAITEMENT AQUEUX**

[72] JOENSUU, IIRIS, FI

[72] PIIRONEN, MARJATTA, FI

[71] KEMIRA OYJ, FI

[85] 2021-12-16

[86] 2020-06-17 (PCT/FI2020/050436)

[87] (WO2020/254729)

[30] FI (20195550) 2019-06-20

## Demandes PCT entrant en phase nationale

[21] **3,143,881**  
[13] A1

[51] **Int.Cl. B32B 3/06 (2006.01) B32B 3/26 (2006.01) B32B 9/04 (2006.01) B32B 27/30 (2006.01) B32B 29/00 (2006.01) E04F 13/08 (2006.01) E04F 13/18 (2006.01) E04F 15/02 (2006.01) E04F 15/10 (2006.01)**

[25] EN

[54] **A COVERING PLATE AND SYSTEM FOR COVERING VERTICAL AND HORIZONTAL SURFACES**

[54] **PLAQUE ET SYSTEME DE REVETEMENT DE SURFACES VERTICALES ET HORIZONTALES**

[72] GRANADOS PELAEZ, DAVID, ES  
[72] FERNANDEZ LOPEZ, LUIS, ES  
[71] EURO TRADE FLOORING, S.L., ES  
[85] 2021-12-16  
[86] 2020-06-29 (PCT/ES2020/070414)  
[87] (WO2021/005252)  
[30] ES (U201931180) 2019-07-10

[21] **3,143,882**  
[13] A1

[51] **Int.Cl. C09D 127/18 (2006.01) H01M 8/1004 (2016.01) H01M 8/1018 (2016.01) H01M 8/102 (2016.01) C09D 135/08 (2006.01) C09D 141/00 (2006.01) C25B 1/04 (2021.01) H01M 4/88 (2006.01)**

[25] EN

[54] **METHOD FOR PRODUCING A CATALYST-COATED MEMBRANE**

[54] **PROCEDE DE FABRICATION D'UNE MEMBRANE REVETUE D'UN CATALYSEUR**

[72] HASCHE, FREDERIC, DE  
[72] NESSELBERGER, MARKUS, DE  
[72] KUWERTZ, NADIA, DE  
[72] EWEINER, FLORIAN, DE  
[72] STOICA, LEONARD, DE  
[71] HERAEUS DEUTSCHLAND GMBH & CO. KG, DE  
[85] 2021-12-16  
[86] 2020-04-29 (PCT/EP2020/061867)  
[87] (WO2021/001082)  
[30] EP (19184400.0) 2019-07-04

[21] **3,143,883**  
[13] A1

[51] **Int.Cl. E04F 15/18 (2006.01)**

[25] EN

[54] **DECOUPLING WEB**

[54] **BANDE DE DECOUPLAGE**

[72] KAISER, UWE, DE  
[72] STRIEDER, BIRGIT, DE  
[72] KARGL, DANIEL, DE  
[72] BACHON, THOMAS, DE  
[71] EWALD DORKEN AG, DE  
[85] 2021-12-16  
[86] 2020-06-18 (PCT/EP2020/066913)  
[87] (WO2021/004745)  
[30] DE (10 2019 004 633.1) 2019-07-05

[21] **3,143,884**  
[13] A1

[51] **Int.Cl. B22D 1/00 (2006.01) B22D 18/04 (2006.01) B22D 18/06 (2006.01) B22D 35/04 (2006.01) B22D 35/06 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR USE IN CASTING OF METALS AND/ OR METAL ALLOYS**

[54] **APPAREIL ET PROCEDE DESTINES A ETRE UTILISES POUR LA COULEE DE METAUX ET/OU D'ALLIAGES METALLIQUES**

[72] CAMPBELL, JOHN, GB  
[72] SHAW, WILLIAM BENJAMIN, GB  
[71] SYLATECH LIMITED, GB  
[85] 2021-12-16  
[86] 2020-06-19 (PCT/GB2020/051491)  
[87] (WO2020/254823)  
[30] GB (1908822.8) 2019-06-20  
[30] GB (1918188.2) 2019-12-11

[21] **3,143,885**  
[13] A1

[51] **Int.Cl. H04N 21/234 (2011.01) H04N 21/44 (2011.01) H04N 19/169 (2014.01) H04N 19/187 (2014.01) H04N 19/30 (2014.01) H04N 19/597 (2014.01) H04N 19/70 (2014.01) H04N 13/172 (2018.01)**

[25] EN

[54] **AN APPARATUS, A METHOD AND A COMPUTER PROGRAM FOR VIDEO ENCODING AND DECODING**

[54] **APPAREIL, PROCEDE ET PROGRAMME INFORMATIQUE POUR UN CODAGE ET UN DECODAGE VIDEO**

[72] HANNUKSELA, MISKA, FI  
[71] NOKIA TECHNOLOGIES OY, FI  
[85] 2021-12-16  
[86] 2020-05-20 (PCT/FI2020/050340)  
[87] (WO2020/254720)  
[30] US (62/864,371) 2019-06-20

[21] **3,143,886**  
[13] A1

[51] **Int.Cl. H04N 19/13 (2014.01) H04N 19/184 (2014.01) H04N 19/593 (2014.01)**

[25] EN

[54] **IMAGE DATA ENCODING AND DECODING**

[54] **CODAGE ET DECODAGE DE DONNEES D'IMAGE**

[72] KEATING, STEPHEN MARK, GB  
[72] SHARMAN, KARL JAMES, GB  
[72] BROWNE, ADRIAN RICHARD, GB  
[71] SONY GROUP CORPORATION, JP  
[85] 2021-12-16  
[86] 2020-06-24 (PCT/GB2020/051531)  
[87] (WO2020/260874)  
[30] GB (1909141.2) 2019-06-25  
[30] GB (1910924.8) 2019-07-31

## PCT Applications Entering the National Phase

[21] **3,143,887**  
[13] A1

[51] **Int.Cl. E05B 65/00 (2006.01) E05B 13/00 (2006.01) E05B 63/18 (2006.01)**

[25] EN

[54] **CONTACT-MINIMIZING DOOR OPENING AND CLOSING SYSTEM AND CORRESPONDING METHOD**

[54] **SYSTEME D'OUVERTURE ET DE FERMETURE DE PORTE REDUISANT AU MINIMUM LES CONTACTS ET PROCEDE CORRESPONDANT**

[72] ZAFEIRAKIS, NIKOLAOS, GR  
[72] ZAFEIRAKI, ELENI, GR  
[71] ZAFEIRAKIS, NIKOLAOS, GR  
[71] ZAFEIRAKI, ELENI, GR

[85] 2021-12-16  
[86] 2020-06-18 (PCT/EP2020/066918)  
[87] (WO2020/254482)  
[30] US (62/863,970) 2019-06-20  
[30] US (62/989,152) 2020-03-13  
[30] US (16/901,768) 2020-06-15

[21] **3,143,889**  
[13] A1

[51] **Int.Cl. A61K 31/365 (2006.01) A61K 36/53 (2006.01) A61P 17/12 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL COMPOSITIONS OF OVATODIOLIDE AND THE USE THEREOF**

[54] **COMPOSITIONS PHARMACEUTIQUES D'OVATODIOLIDE ET LEUR UTILISATION**

[72] RAJENDRAN, SENTHIL KUMAR, FI  
[72] PAUL, PREETHY, FI  
[72] BRUSENTSEV, YURY, FI  
[72] EKLUND, PATRIK, FI  
[72] ERIKSSON, JOHN, FI  
[72] SIPPOLA-THIELE, MARIA, US  
[71] ANISON THERAPEUTICS OY, FI

[85] 2021-12-16  
[86] 2020-06-16 (PCT/FI2020/050429)  
[87] (WO2020/254726)  
[30] FI (20195527) 2019-06-17

[21] **3,143,890**  
[13] A1

[51] **Int.Cl. A01C 7/06 (2006.01) A01C 7/18 (2006.01)**

[25] EN

[54] **PORTIONING APPARATUS FOR CHEMICAL GRANULATE**

[54] **DISPOSITIF DE MISE EN PORTIONS POUR DU GRANULAT CHIMIQUE**

[72] WIEN, THOMAS, DE  
[72] HILBERT, FLORENZ, DE  
[72] JOHANNABER, STEFAN JAN, DE  
[72] STEIN, FLORIAN, DE  
[72] BREUER, JAN-HENRIK, DE  
[72] TECKEMEYER, STEPHAN, DE  
[72] WESSELS, MARIO, DE  
[71] AMAZONEN-WERKE H. DREYER SE & CO. KG, DE

[85] 2021-12-16  
[86] 2020-05-19 (PCT/EP2020/063921)  
[87] (WO2020/259925)  
[30] DE (10 2019 117 555.0) 2019-06-28

[21] **3,143,891**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/00 (2006.01) A61P 35/00 (2006.01) C07K 16/46 (2006.01) C12N 5/10 (2006.01) G01N 33/574 (2006.01)**

[25] EN

[54] **MONOCLONAL ANTIBODY TARGETING A UNIQUE CANCER-ASSOCIATED EPITOPE OF CD43**

[54] **ANTICORPS MONOCLONAL CIBLANT UN EPITOPE DE CD43 ASSOCIE A UN CANCER UNIQUE**

[72] TASSONE, PIERFRANCESCO, IT  
[71] UNIVERSITA DEGLI STUDI MAGNA GRAECIA CATANZARO, IT

[85] 2021-12-16  
[86] 2020-06-19 (PCT/EP2020/067258)  
[87] (WO2020/254670)  
[30] US (16/449,255) 2019-06-21

[21] **3,143,892**  
[13] A1

[51] **Int.Cl. A61M 1/34 (2006.01) A61L 27/50 (2006.01) A61M 1/36 (2006.01)**

[25] EN

[54] **DEVICES, SYSTEMS, AND METHODS FOR REMOVAL OF COMPONENTS FROM BIOLOGICAL FLUIDS**

[54] **DISPOSITIFS, SYSTEMES ET PROCEDES D'ELIMINATION DE COMPOSANTS DE LIQUIDES BIOLOGIQUES**

[72] CARMEL, SIGALIT, IL  
[72] SHTEINGART, SHIMON, IL  
[72] YITZCHAIK, SHLOMO, IL  
[72] AMARTELY, HADAR, IL  
[72] ALFASSY, OMRI SHMUEL, IL  
[72] SNIR, ELZA, IL  
[71] BIOIMMUNATE TECHNOLOGIES LTD., IL

[85] 2021-12-16  
[86] 2020-06-26 (PCT/IB2020/000541)  
[87] (WO2020/260949)  
[30] US (62/867,594) 2019-06-27  
[30] US (62/875,193) 2019-07-17

[21] **3,143,893**  
[13] A1

[25] EN

[54] **DEVICE FOR THE PRODUCTION OF HYDROGEN**

[54] **DISPOSITIF POUR LA PRODUCTION D'HYDROGENE**

[72] CATANORCHI, STEFANO, IT  
[72] FILPI, ANTONIO, IT  
[72] TRIVARELLI, FEDERICA, IT  
[72] SCHMIDT, JAN-JUSTUS, IT  
[71] ENAPTER S.R.L., IT

[85] 2021-12-16  
[86] 2020-06-24 (PCT/EP2020/067658)  
[87] (WO2020/260370)  
[30] GB (1909232.9) 2019-06-27

[21] **3,143,894**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 31/05 (2006.01)**

[25] EN

[54] **ADMINISTRATION OF CANNABIDIOL**

[54] **ADMINISTRATION DE CANNABIDIOL**

[72] HOVSEPYAN, DAVIT, AM  
[71] GN TOBACCO SWEDEN AB, SE

[85] 2021-12-16  
[86] 2020-06-25 (PCT/EP2020/067888)  
[87] (WO2020/260489)  
[30] EP (19183337.5) 2019-06-28

## Demandes PCT entrant en phase nationale

[21] **3,143,895**  
[13] A1

[51] **Int.Cl. C12N 1/12 (2006.01) C12M 1/00 (2006.01) C12M 1/04 (2006.01) C12M 1/36 (2006.01)**

[25] EN

[54] **METHODS OF OPTIMIZED EUGLENA FERMENTATION USING ENGINEERED TANK DESIGN**

[54] **PROCEDES DE FERMENTATION OPTIMISEE D'EUGLENES A L'AIDE D'UNE CONCEPTION DE RESERVOIR TECHNIQUE**

[72] NOBLE, ADAM J., CA  
[72] SHARIF, MOSTAFA ZAHID, CA  
[72] UPRETY, BIJAYA, CA  
[72] CASTIGLIONE, LEE ANTHONY, CA  
[72] CHAMPAGNE, PAUL-PHILIPPE, CA  
[72] CULLEN, RYAN RICHARD, CA  
[72] BAYRAK, ALEXANDER JOHN, CA  
[72] FARROW, SCOTT CAMERON, CA  
[71] NOBLEGEN INC., CA  
[85] 2021-12-16  
[86] 2020-06-29 (PCT/IB2020/056135)  
[87] (WO2020/261244)  
[30] US (62/868,343) 2019-06-28  
[30] US (62/868,589) 2019-06-28  
[30] US (62/954,837) 2019-12-30

[21] **3,143,896**  
[13] A1

[51] **Int.Cl. H02K 41/03 (2006.01)**

[25] EN

[54] **ASSEMBLY OF STATOR MODULES FOR A PLANAR DRIVE SYSTEM**

[54] **AGENCEMENT DE MODULES DE STATOR POUR UN SYSTEME D'ENTRAINEMENT PLANAIRE**

[72] PRUESSMEIER, UWE, DE  
[71] BECKHOFF AUTOMATION GMBH, DE  
[85] 2021-12-16  
[86] 2020-06-26 (PCT/EP2020/068000)  
[87] (WO2020/260566)  
[30] DE (10 2019 117 431.7) 2019-06-27  
[30] DE (10 2019 118 635.8) 2019-07-10

[21] **3,143,897**  
[13] A1

[51] **Int.Cl. C12M 1/30 (2006.01) C12M 1/34 (2006.01) C12Q 1/04 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR LOCATING A BACTERIAL COLONY ON A CULTURE PLATE**

[54] **PROCEDE ET SYSTEME DE LOCALISATION D'UNE COLONIE BACTERIENNE SUR UNE PLAQUE DE CULTURE**

[72] MARCELPOIL, RAPHAEL  
RODOLPHE, FR

[72] KLEEFSTRA, MARTIJN, NL  
[72] FEIJEN, FRANCISCUS, NL  
[72] VOLLE, JEAN-MARC, FR  
[72] OKKEMA-VAN DER LEI, MARISKA, NL

[72] MULDER, GERARD, NL  
[72] VEENINGA, EELKE JOHANNES, NL  
[71] BD KIESTRA B.V., NL  
[85] 2021-12-16  
[86] 2020-06-26 (PCT/EP2020/068100)  
[87] (WO2020/260634)  
[30] US (62/867,560) 2019-06-27

[21] **3,143,898**  
[13] A1

[51] **Int.Cl. A23K 10/30 (2016.01) A23K 20/147 (2016.01) A23L 7/10 (2016.01) A23L 33/17 (2016.01) A23J 1/12 (2006.01) A61K 8/64 (2006.01) A61K 36/899 (2006.01) A61Q 19/00 (2006.01)**

[25] EN

[54] **LOW LIPID CONTENT OAT PROTEIN COMPOSITION WITHOUT TRACES OF ORGANIC SOLVENT**

[54] **COMPOSITION A BASE DE PROTEINE D'AVOINE A FAIBLE TENEUR EN LIPIDES ET SANS TRACES DE SOLVANT ORGANIQUE**

[72] ZHOU, LEON, US  
[72] CAMPBELL, KERRY, US  
[72] CHENG, RON, US  
[71] ROQUETTE FRERES, FR  
[85] 2021-12-16  
[86] 2020-07-02 (PCT/EP2020/068658)  
[87] (WO2021/001478)  
[30] EP (19315052.1) 2019-07-02

[21] **3,143,899**  
[13] A1

[51] **Int.Cl. A61L 27/24 (2006.01) A61L 27/14 (2006.01) A61L 27/32 (2006.01) A61L 27/34 (2006.01) A61L 27/40 (2006.01)**

[25] EN

[54] **AN IMPLANT COMPRISING A COLLAGEN MEMBRANE**

[54] **IMPLANT COMPRENANT UNE MEMBRANE DE COLLAGENE**

[72] KAPRI, RAN, IL  
[72] BAYER, THOMAS, IL  
[72] GOLDLUST, ARIE, IL  
[71] DATUM BIOTECH LTD., IL  
[85] 2021-12-16  
[86] 2020-06-18 (PCT/IL2020/050686)  
[87] (WO2020/255143)  
[30] IL (PCT/IL2019/050690) 2019-06-20

[21] **3,143,900**  
[13] A1

[51] **Int.Cl. B29C 70/08 (2006.01) B29C 70/24 (2006.01)**

[25] FR

[54] **METHOD FOR REINFORCING A PANEL AND A METHOD FOR MANUFACTURING A COMPOSITE PANEL IMPLEMENTING SUCH A METHOD**

[54] **PROCEDE DE RENFORCEMENT D'UN PANNEAU ET UN PROCEDE DE FABRICATION DE PANNEAU COMPOSITE METTANT EN OEUVRE UN TEL PROCEDE**

[72] MARCOVICH, PHILIPPE, FR  
[72] SAJET, PHILIPPE, FR  
[72] COUVREUR, XAVIER, FR  
[72] LESTOQUOY, CHARLES, FR  
[72] LAINE, CYRIL, FR  
[71] SOCIETE INTERNATIONALE POUR LE COMMERCE ET L'INDUSTRIE, FR  
[71] ASCODERO PRODUCTIQUE, FR  
[85] 2021-12-16  
[86] 2020-07-08 (PCT/EP2020/069244)  
[87] (WO2021/005107)  
[30] FR (FR19 07623) 2019-07-08

## PCT Applications Entering the National Phase

[21] **3,143,901**  
[13] A1

[51] **Int.Cl. A23J 1/00 (2006.01) A23L 33/10 (2016.01) A23P 10/40 (2016.01) A23J 3/00 (2006.01) C07K 1/14 (2006.01) C11B 1/00 (2006.01) C12N 1/00 (2006.01) C12N 1/12 (2006.01) C12P 21/00 (2006.01)**

[25] EN

[54] **METHODS OF PROTEIN EXTRACTION AND DOWNSTREAM PROCESSING OF EUGLENA**

[54] **PROCEDES D'EXTRACTION DE PROTEINES ET DE TRAITEMENT EN AVAL D'EUGLENES**

[72] NOBLE, ADAM J., CA

[72] SABOURI, SOMAYCH, CA

[72] CLARKE, CHARLES JONATHAN, CA

[72] SWAIN, ANGELA, CA

[72] CAVERLY, MICHAEL ROBERT RANDLE, CA

[72] MAHESHWARI, PEEYUSH, CA

[72] KIRKWOOD, JAMES, CA

[72] ZHANG, CHONGGANG, CA

[72] CAMERON, LAUREN ELIZABETH, CA

[71] NOBLEGEN INC., CA

[85] 2021-12-16

[86] 2020-06-29 (PCT/IB2020/056137)

[87] (WO2020/261245)

[30] US (62/868,569) 2019-06-28

[21] **3,143,902**  
[13] A1

[51] **Int.Cl. C07K 16/30 (2006.01) A61K 39/395 (2006.01)**

[25] EN

[54] **ANTI-CD24 ANTIBODY AND USES THEREOF**

[54] **ANTICORPS ANTI-CD24 ET UTILISATIONS DE CELUI-CI**

[72] ARBER, NADIR, IL

[72] SHAPIRA, SHIRAN, IL

[72] KAZANOV, DIANA, IL

[71] ICHILOV TECH LTD., IL

[85] 2021-12-16

[86] 2020-06-25 (PCT/IL2020/050716)

[87] (WO2020/261280)

[30] US (62/866,008) 2019-06-25

[21] **3,143,903**  
[13] A1

[51] **Int.Cl. A23L 29/00 (2016.01) A61K 38/48 (2006.01) C12N 1/21 (2006.01) C12N 9/52 (2006.01) C12N 15/76 (2006.01)**

[25] EN

[54] **METHOD FOR THE PRODUCTION OF AN ENZYMATIC COMPOSITION COMPRISING A RECOMBINANT ENDOPEPTIDASE**

[54] **PROCEDE DE PRODUCTION D'UNE COMPOSITION ENZYMATIQUE COMPRENANT UNE ENDOPEPTIDASE RECOMBINANTE**

[72] TARAVELLA, ANNA, IT

[72] CARENZI, GIACOMO, IT

[72] SIGURTA', ALESSANDRO, IT

[72] CAVALETTI, LINDA, IT

[71] NEMYSIS LIMITED, IE

[85] 2021-12-16

[86] 2020-07-08 (PCT/EP2020/069297)

[87] (WO2021/013553)

[30] IT (102019000012942) 2019-07-25

[30] US (62/878,369) 2019-07-25

[21] **3,143,904**  
[13] A1

[51] **Int.Cl. A61F 5/455 (2006.01)**

[25] EN

[54] **FLUID COLLECTION DEVICES INCLUDING A BASE SECUREMENT AREA, AND RELATED SYSTEMS AND METHODS**

[54] **DISPOSITIFS DE COLLECTE DE FLUIDE COMPRENANT UNE ZONE DE FIXATION DE BASE, ET SYSTEMES ET PROCEDES ASSOCIES**

[72] JOHANNES, ASHLEY MARIE, US

[72] TRULLENQUE, HOLLIE, US

[72] REHM, ERIC, US

[72] ROOT, MICHELLE, US

[71] PUREWICK CORPORATION, US

[85] 2021-12-16

[86] 2020-05-15 (PCT/US2020/033064)

[87] (WO2020/256865)

[30] US (62/864,656) 2019-06-21

[21] **3,143,905**  
[13] A1

[51] **Int.Cl. G01N 22/00 (2006.01)**

[25] EN

[54] **ELECTROMAGNETIC IMAGING AND INVERSION OF SIMPLE PARAMETERS IN STORAGE BINS**

[54] **IMAGERIE ELECTROMAGNETIQUE ET INVERSION DE PARAMETRES SIMPLES DANS DES COMPARTIMENTS DE MEMORISATION**

[72] JEFFREY, IAN, CA

[72] GILMORE, COLIN GERALD, CA

[72] LOVETRI, JOE, CA

[72] ASELI, MOHAMMAD, CA

[72] GEDDERT, NICHOLAS, CA

[72] BROWN, KEVIN, CA

[71] 151 RESEARCH INC, CA

[71] UNIVERSITY OF MANITOBA, CA

[85] 2021-12-16

[86] 2020-07-03 (PCT/IB2020/056289)

[87] (WO2021/001796)

[30] US (62/870,254) 2019-07-03

[30] US (62/892,130) 2019-08-27

[30] US (62/912,337) 2019-10-08

[21] **3,143,906**  
[13] A1

[51] **Int.Cl. G01N 21/35 (2014.01) G01N 21/552 (2014.01) G01N 21/65 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM TO IDENTIFY MICROORGANISMS**

[54] **PROCEDE ET SYSTEME D'IDENTIFICATION DE MICRO-ORGANISMES**

[72] GALIANO, PAOLO, IT

[71] ALIFAX S.R.L., IT

[85] 2021-12-16

[86] 2019-07-30 (PCT/IT2019/000062)

[87] (WO2021/019581)

## Demandes PCT entrant en phase nationale

[21] **3,143,908**  
[13] A1

[51] **Int.Cl. F02C 3/10 (2006.01) F02C 9/54 (2006.01)**  
[25] EN  
[54] **TWO-SHAFT GAS TURBINE CONTROL SYSTEM AND METHOD**  
[54] **PROCEDE ET SYSTEME DE COMMANDE DE TURBINE A GAZ A DEUX ARBRES**  
[72] GIUNTA, BRUNO, IT  
[72] PALLADINO, MARCO, IT  
[71] NUOVO PIGNONE TECNOLOGIE S.R.L., IT  
[85] 2021-12-16  
[86] 2019-08-27 (PCT/IT2019/000067)  
[87] (WO2021/038604)

[21] **3,143,909**  
[13] A1

[51] **Int.Cl. A41B 13/06 (2006.01) A47D 15/00 (2006.01) A47G 9/00 (2006.01)**  
[25] EN  
[54] **BLANKET**  
[54] **COUVERTURE**  
[72] HOSHI, AKIRA, JP  
[72] TAKAHASHI, MEGUMI, JP  
[72] CHANG, YOUNA, JP  
[72] KAWANO, MAKI, JP  
[71] FAST RETAILING CO., LTD., JP  
[85] 2021-12-16  
[86] 2020-06-10 (PCT/JP2020/022797)  
[87] (WO2020/261989)  
[30] JP (2019-121861) 2019-06-28

[21] **3,143,910**  
[13] A1

[51] **Int.Cl. A61B 18/14 (2006.01) A61B 18/12 (2006.01)**  
[25] EN  
[54] **ELECTROSURGICAL TOOLS, ELECTROSURGICAL ELECTRODES, AND METHODS OF MAKING AN ELECTRODE FOR AN ELECTROSURGICAL TOOL**  
[54] **OUTILS ELECTROCHIRURGICAUX, ELECTRODES ELECTROCHIRURGICALES ET PROCEDES DE FABRICATION D'UNE ELECTRODE POUR UN OUTIL ELECTROCHIRURGICAL**  
[72] BUCKLEY, KEVIN, IE  
[72] FAUL, STEPHEN, IE  
[72] SHERIDAN, PAUL, IE  
[71] STRYKER EUROPEAN OPERATIONS LIMITED, IE  
[85] 2021-12-16  
[86] 2020-12-18 (PCT/IB2020/001063)  
[87] (WO2021/123912)  
[30] US (62/949,926) 2019-12-18

[21] **3,143,911**  
[13] A1

[51] **Int.Cl. C07H 19/14 (2006.01) A61K 31/4188 (2006.01) A61K 31/7064 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **NOVEL PHOSPHATE ESTER COMPOUND HAVING PYRROLOPYRIMIDINE SKELETON OR PHARMACEUTICALLY ACCEPTABLE SALT THEREOF**  
[54] **NOUVEAU COMPOSE ESTER D'ACIDE PHOSPHORIQUE POSSEDANT UN SQUELETTE PYROLO-PYRIMIDINE OU SEL PHARMACEUTIQUEMENT ACCEPTABLE DE CELUI-CI**  
[72] MIYAKOSHI, HITOSHI, JP  
[72] TANAKA, NOZOMU, JP  
[72] KOBAYAKAWA, YU, JP  
[71] TAIHO PHARMACEUTICAL CO., LTD., JP  
[85] 2021-12-16  
[86] 2020-06-17 (PCT/JP2020/023660)  
[87] (WO2020/255978)  
[30] JP (2019-113172) 2019-06-18  
[30] JP (2019-157375) 2019-08-29

[21] **3,143,912**  
[13] A1

[51] **Int.Cl. A01D 41/12 (2006.01) A01D 41/16 (2006.01) A01D 41/14 (2006.01)**  
[25] EN  
[54] **FEEDERHOUSE ASSEMBLIES, AGRICULTURAL HARVESTERS, AND METHODS OF CONNECTING HARVESTING HEADERS TO AGRICULTURAL HARVESTERS**  
[54] **ENSEMBLES CHAMBRE D'ALIMENTATION, MOISSONNEUSES AGRICOLES, ET PROCEDES DE RACCORDEMENT DE BECS CUEILLEURS DE RECOLTE A DES MOISSONNEUSES AGRICOLES**  
[72] SOLIMAR WALTER, AIRTON, BR  
[72] SARAIVA, DANIEL, BR  
[71] AGCO DO BRASIL SOLUCOES AGRICOLAS LTDA, BR  
[85] 2021-12-16  
[86] 2020-07-08 (PCT/IB2020/056411)  
[87] (WO2021/014254)  
[30] US (62/876,028) 2019-07-19

[21] **3,143,913**  
[13] A1

[51] **Int.Cl. A61M 1/36 (2006.01) A61M 5/158 (2006.01) A61M 39/02 (2006.01)**  
[25] EN  
[54] **IMPLANTABLE VASCULAR ACCESS DEVICE**  
[54] **DISPOSITIF D'ACCES VASCULAIRE IMPLANTABLE**  
[72] PECORARI, GIANNI, IT  
[71] EMODIAL S.R.L., IT  
[85] 2021-12-16  
[86] 2020-06-17 (PCT/IB2020/055640)  
[87] (WO2020/254976)  
[30] IT (102019000009318) 2019-06-18  
[30] IT (102020000013321) 2020-06-05

## PCT Applications Entering the National Phase

[21] **3,143,914**  
[13] A1

[51] **Int.Cl. A61K 31/7064 (2006.01) A61P 35/00 (2006.01) C07H 19/14 (2006.01)**

[25] EN

[54] **NOVEL CARBONATE COMPOUND HAVING PYRROLOPYRIMIDINE SKELETON OR PHARMACEUTICALLY ACCEPTABLE SALT THEREOF**

[54] **NOUVEAU COMPOSE CARBONATE POSSEDANT UN SQUELETTE PYROLO-PYRIMIDINE OU SEL PHARMACEUTIQUEMENT ACCEPTABLE DE CELUI-CI**

[72] MIYAKOSHI, HITOSHI, JP

[72] TANAKA, NOZOMU, JP

[72] KOBAYAKAWA, YU, JP

[71] TAIHO PHARMACEUTICAL CO., LTD., JP

[85] 2021-12-16

[86] 2020-06-17 (PCT/JP2020/023661)

[87] (WO2020/255979)

[30] JP (2019-113172) 2019-06-18

[30] JP (2019-157375) 2019-08-29

[21] **3,143,915**  
[13] A1

[51] **Int.Cl. B01D 61/36 (2006.01) C02F 1/44 (2006.01) C10L 3/10 (2006.01)**

[25] EN

[54] **PROCESS FOR CONCENTRATING AMINE WATER**

[54] **PROCEDE DE CONCENTRATION D'EAU AMINEE**

[72] TAGLIABUE, MARCO, IT

[72] CATTANEO, CLAUDIA, IT

[72] COMITE, ANTONIO, IT

[71] ENI S.P.A., IT

[85] 2021-12-16

[86] 2020-06-17 (PCT/IB2020/055655)

[87] (WO2020/254986)

[30] IT (102019000009207) 2019-06-17

[21] **3,143,916**  
[13] A1

[51] **Int.Cl. C07C 5/48 (2006.01) C07C 11/04 (2006.01) C07C 27/12 (2006.01) C07C 29/04 (2006.01) C07C 31/08 (2006.01) C07C 45/28 (2006.01) C07C 47/06 (2006.01) C07C 51/16 (2006.01) C07C 51/215 (2006.01) C07C 53/08 (2006.01)**

[25] EN

[54] **OXIDATIVE DEHYDROGENATION COPRODUCTION**

[54] **COPRODUCTION PAR DESHYDROGENATION OXYDANTE**

[72] SIMANZHENKOV, VASILY, CA

[72] GOODARZANIA, SHAHIN, CA

[71] NOVA CHEMICALS CORPORATION, CA

[85] 2021-12-16

[86] 2020-08-17 (PCT/IB2020/057741)

[87] (WO2021/038374)

[30] US (62/892,810) 2019-08-28

[21] **3,143,918**  
[13] A1

[51] **Int.Cl. C10G 9/36 (2006.01) B01D 53/04 (2006.01) C10G 25/00 (2006.01) C10G 25/05 (2006.01) C10G 55/04 (2006.01)**

[25] EN

[54] **PROCESS FOR REMOVING CS2 FROM HYDROCARBON STREAMS**

[54] **PROCEDE D'ELIMINATION DE CS2 DE FLUX D'HYDROCARBURES**

[72] BOERMAN, ERNST, NL

[72] BRANDTS, JIM, NL

[71] BASF CORPORATION, US

[85] 2021-12-16

[86] 2020-06-23 (PCT/IB2020/055895)

[87] (WO2020/261099)

[30] EP (19182111.5) 2019-06-24

[21] **3,143,919**  
[13] A1

[51] **Int.Cl. C07D 239/48 (2006.01) A61K 31/505 (2006.01) A61K 31/506 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01) C07D 403/12 (2006.01) C07D 495/04 (2006.01)**

[25] EN

[54] **PYRIMIDINE DERIVATIVE INHIBITING GROWTH OF CANCER CELL AND MEDICINAL USE THEREOF**

[54] **DERIVE DE PYRIMIDINE INHIBANT LA CROISSANCE D'UNE CELLULE CANCEREUSE ET SON UTILISATION MEDICINALE**

[72] RYU, HYUNG-CHUL, KR

[72] KIM, JAE-SUN, KR

[72] KIM, SUNG-EUN, KR

[72] LEE, SUN-HO, KR

[72] LEE, YONG-HYUB, KR

[71] ONCOBIX CO., LTD., KR

[85] 2021-12-16

[86] 2020-06-19 (PCT/KR2020/007982)

[87] (WO2020/256477)

[30] KR (10-2019-0073345) 2019-06-20

[21] **3,143,920**  
[13] A1

[51] **Int.Cl. A61M 37/00 (2006.01)**

[25] EN

[54] **MICRONEEDLE ARRAY HAVING UNEVEN NEEDLE DENSITY**

[54] **RESEAU DE MICRO-AIGUILLES PRESENTANT UNE DENSITE D'AIGUILLE IRREGULIERE**

[72] QUAN, YING-SHU, JP

[72] LI, YING-ZHE, JP

[72] YAMASHITA, HIROFUMI, JP

[72] KAJIYAMA, KENJI, JP

[72] KAMIYAMA, FUMIO, JP

[71] COSMED PHARMACEUTICAL CO., LTD., JP

[85] 2021-12-16

[86] 2020-06-24 (PCT/JP2020/024859)

[87] (WO2020/262473)

[30] JP (2019-117926) 2019-06-25

[30] JP (2019-219179) 2019-12-03



## Demandes PCT entrant en phase nationale

[21] **3,143,921**  
[13] A1

[51] **Int.Cl. A61K 31/48 (2006.01) C07D 401/14 (2006.01)**  
[25] EN  
[54] **TETRAZINES FOR HIGH CLICK RELEASE SPEED AND YIELD**  
[54] **TETRAZINES POUR UNE VITESSE ET UN RENDEMENT DE LIBERATION DE CHIMIE CLIC ELEVES**  
[72] ROBILLARD, MARC STEFAN, NL  
[72] HOEBEN, FREEK JOHANNES MARIA, NL  
[72] ROSSIN, RAFFAELLA, NL  
[72] VERSTEEGEN, RONNY MATHIEU, NL  
[72] JANSSEN, HENRICUS MARIE, NL  
[71] TAGWORKS PHARMACEUTICALS B.V., NL  
[85] 2021-12-16  
[86] 2020-06-17 (PCT/NL2020/050386)  
[87] (WO2020/256544)  
[30] EP (19180678.5) 2019-06-17

[21] **3,143,923**  
[13] A1

[51] **Int.Cl. C12Q 1/6876 (2018.01) C12M 1/34 (2006.01) C12N 11/00 (2006.01) C12N 15/09 (2006.01) C12Q 1/34 (2006.01) G01N 21/64 (2006.01) G01N 37/00 (2006.01)**  
[25] EN  
[54] **METHOD AND KIT FOR DETECTING TARGET NUCLEIC ACID FRAGMENT**  
[54] **PROCEDE ET KIT DE DETECTION DE FRAGMENT D'ACIDE NUCLEIQUE CIBLE**  
[72] WATANABE, RIKIYA, JP  
[72] NUREKI, OSAMU, JP  
[72] NISHIMASU, HIROSHI, JP  
[71] RIKEN, JP  
[85] 2021-12-16  
[86] 2020-07-06 (PCT/JP2020/026371)  
[87] (WO2021/002476)  
[30] JP (2019-125564) 2019-07-04

[21] **3,143,925**  
[13] A1

[51] **Int.Cl. A61K 47/54 (2017.01) C07C 13/263 (2006.01) C07D 317/44 (2006.01)**  
[25] EN  
[54] **COMPOUNDS FOR FAST AND EFFICIENT CLICK RELEASE**  
[54] **COMPOSES POUR LIBERATION DE CHIMIE CLICK RAPIDE ET EFFICACE**  
[72] ROBILLARD, MARC STEFAN, NL  
[72] MIKULA, HANNES, AT  
[72] TEN HOEVE, WOLTER, NL  
[72] ROSSIN, RAFFAELLA, NL  
[71] TAGWORKS PHARMACEUTICALS B.V., NL  
[71] TECHNISCHE UNIVERSITAT WIEN, AT  
[85] 2021-12-16  
[86] 2020-06-17 (PCT/NL2020/050388)  
[87] (WO2020/256546)  
[30] EP (19180683.5) 2019-06-17

[21] **3,143,922**  
[13] A1

[51] **Int.Cl. B23K 26/361 (2014.01) C21D 8/12 (2006.01) C22C 38/00 (2006.01) C22C 38/60 (2006.01) H01F 1/147 (2006.01)**  
[25] EN  
[54] **LINEAR GROOVE FORMATION METHOD AND METHOD FOR MANUFACTURING GRAIN-ORIENTED ELECTRICAL STEEL SHEET**  
[54] **PROCEDE DE FORMATION D'UNE RAINURE LINEAIRE ET PROCEDE DE FORMATION D'UNE TOLE D'ACIER ELECTRIQUE A GRAINS ORIENTES**  
[72] ICHIHARA, YOSHIHISA, JP  
[72] OMURA, TAKESHI, JP  
[72] INOUE, HIROTAKA, JP  
[72] TAKAJO, SHIGEHIRO, JP  
[71] JFE STEEL CORPORATION, JP  
[85] 2021-12-16  
[86] 2020-07-03 (PCT/JP2020/026182)  
[87] (WO2021/020027)  
[30] JP (2019-140969) 2019-07-31

[21] **3,143,924**  
[13] A1

[51] **Int.Cl. A61K 51/10 (2006.01) A61P 35/02 (2006.01) C07K 16/30 (2006.01)**  
[25] EN  
[54] **AGENTS FOR CLEAVING LABELS FROM BIOMOLECULES IN VIVO**  
[54] **AGENTS PERMETTANT DE CLIVER IN VIVO DES MARQUEURS LIES A DES BIOMOLECULES**  
[72] ROSSIN, RAFFAELLA, NL  
[72] ROBILLARD, MARC STEFAN, NL  
[72] KLEIJN, LAURENS HENRI JOHAN, NL  
[71] TAGWORKS PHARMACEUTICALS B.V., NL  
[85] 2021-12-16  
[86] 2020-06-17 (PCT/NL2020/050387)  
[87] (WO2020/256545)  
[30] EP (19180694.2) 2019-06-17

[21] **3,143,927**  
[13] A1

[51] **Int.Cl. B65G 15/08 (2006.01) B65G 15/60 (2006.01) B65G 15/62 (2006.01) B65G 21/10 (2006.01)**  
[25] EN  
[54] **TROUGH BELT CONVEYOR**  
[54] **TRANSPORTEUR A COURROIE FORMANT COULOIR**  
[72] DIX, JORRIT WIJNAND, NL  
[71] BOLLEGRAAF PATENTS AND BRANDS B.V., NL  
[85] 2021-12-16  
[86] 2020-06-23 (PCT/NL2020/050408)  
[87] (WO2020/263083)  
[30] NL (2023394) 2019-06-27

[21] **3,143,928**  
[13] A1

[51] **Int.Cl. G06T 7/00 (2017.01) G06T 3/40 (2006.01)**  
[25] EN  
[54] **DYNAMIC IMAGE RESOLUTION ASSESSMENT**  
[54] **EVALUATION DYNAMIQUE DE LA RESOLUTION D'UNE IMAGE**  
[72] SU, WEI, US  
[72] LIU, XIN, US  
[71] HUAWAI TECHNOLOGIES CO., LTD, CN  
[85] 2021-12-16  
[86] 2019-06-18 (PCT/US2019/037638)  
[87] (WO2020/256698)

## PCT Applications Entering the National Phase

[21] **3,143,929**  
[13] A1

[51] **Int.Cl. A61B 17/3211 (2006.01)**  
[25] EN  
[54] **RETRACTABLE SURGICAL  
BLADE DEVICE AND METHOD**  
[54] **DISPOSITIF DE LAME  
CHIRURGICALE RETRACTABLE  
ET PROCEDE**  
[72] SHACKELFORD, HOWARD L., US  
[71] SHACKELFORD, HOWARD L., US  
[85] 2021-12-16  
[86] 2020-06-15 (PCT/US2020/037754)  
[87] (WO2020/263610)  
[30] US (62/866,282) 2019-06-25

[21] **3,143,931**  
[13] A1

[51] **Int.Cl. A61K 47/50 (2017.01) A61K  
47/55 (2017.01) A61P 35/04 (2006.01)**  
[25] EN  
[54] **ANTIBODY-ALK5 INHIBITOR  
CONJUGATES AND THEIR USES**  
[54] **CONJUGUES D'ANTICORPS-  
INHIBITEUR DE ALK5 ET LEURS  
UTILISATIONS**  
[72] THOMAS-KARYAT, DORI A., US  
[71] SYNTHIS THERAPEUTICS, INC., US  
[85] 2021-12-16  
[86] 2019-07-09 (PCT/US2019/040964)  
[87] (WO2020/256751)  
[30] US (US2019/037978) 2019-06-19

[21] **3,143,935**  
[13] A1

[51] **Int.Cl. E21B 17/10 (2006.01) B65G  
39/02 (2006.01) F16C 29/00 (2006.01)**  
[25] EN  
[54] **DOWNHOLE FRICTION  
REDUCTION TOOLS**  
[54] **OUTILS DE REDUCTION DE  
FROTTEMENT DE FOND DE  
TROU**  
[72] GORDON, DANNY L., US  
[72] DRIVER, ZACHARY, US  
[72] JONES, ROY, US  
[71] STINGER OIL TOOLS, LLC, US  
[85] 2021-12-16  
[86] 2019-11-19 (PCT/US2019/062151)  
[87] (WO2021/021233)  
[30] US (62/880,300) 2019-07-30

[21] **3,143,936**  
[13] A1

[51] **Int.Cl. G06F 16/9032 (2019.01) G06F  
40/279 (2020.01)**  
[25] EN  
[54] **NATURAL LANGUAGE QUERY  
HANDLING IN MULTI-DOMAIN  
SYSTEMS**  
[54] **MANIPULATION DE REQUETE  
EN LANGAGE NATUREL DANS  
DES SYSTEMES A DOMAINES  
MULTIPLES**  
[72] ROBERT JOSE, JEFFRY COPPS, IN  
[71] ROVI GUIDES, INC., US  
[85] 2021-12-16  
[86] 2019-11-22 (PCT/US2019/062864)  
[87] (WO2021/076161)  
[30] US (62/923,276) 2019-10-18

[21] **3,143,938**  
[13] A1

[51] **Int.Cl. B65D 77/06 (2006.01) B65D  
47/24 (2006.01)**  
[25] EN  
[54] **PRODUCT CONTAINER  
INCLUDING A PRODUCT  
DISCHARGE DEVICE AND  
METHOD OF USE**  
[54] **RECIPIENT DE PRODUIT  
COMPRENANT UN DISPOSITIF  
DE REJET DE PRODUIT ET  
PROCEDE D'UTILISATION**  
[72] BROESS, ALFONSUS WILHELMUS  
MARIA, NL  
[72] BULSINK, DIRK JAN, NL  
[72] HEIJDENRIJK, JACOBUS  
CONSTANTIJN, NL  
[72] KNAPEN, FRANCISCUS  
JOHANNES, NL  
[71] FRIESLANDCAMPINA  
NEDERLAND B.V., NL  
[85] 2021-12-16  
[86] 2020-07-01 (PCT/NL2020/050432)  
[87] (WO2021/002748)  
[30] EP (19183832.5) 2019-07-02

[21] **3,143,942**  
[13] A1

[51] **Int.Cl. G11B 27/10 (2006.01) H04N  
21/43 (2011.01) H04N 21/442  
(2011.01)**  
[25] EN  
[54] **METHODS, SYSTEMS, AND  
MEDIA FOR PROVIDING  
DYNAMIC MEDIA SESSIONS**  
[54] **PROCEDES, SYSTEMES, ET  
SUPPORTS PERMETTANT DE  
FOURNIR DES SESSIONS  
MULTIMEDIA DYNAMIQUES**  
[72] CHAN, CHRISTOPHER, US  
[72] MACKAY, KENNETH J., US  
[72] WEST, JAMES CARROLL, US  
[72] MACLELLAN, TAVIS A., US  
[71] GOOGLE LLC, US  
[85] 2021-12-16  
[86] 2019-12-02 (PCT/US2019/063938)  
[87] (WO2020/256766)  
[30] US (62/862,416) 2019-06-17

[21] **3,143,943**  
[13] A1

[51] **Int.Cl. C23C 14/00 (2006.01) C23C  
14/06 (2006.01) C23C 14/32 (2006.01)  
C23C 28/04 (2006.01) C23C 30/00  
(2006.01)**  
[25] EN  
[54] **SAW BLADE OR OTHER  
CUTTING TOOL COMPRISING A  
COATING**  
[54] **LAME DE SCIE OU AUTRE OUTIL  
DE COUPE COMPRENANT UN  
REVETEMENT**  
[72] SCHRODER, WERNER, NL  
[71] KNIGHT ACQUISITION B.V., NL  
[85] 2021-12-16  
[86] 2020-07-10 (PCT/NL2020/050461)  
[87] (WO2021/006739)  
[30] US (62/872,763) 2019-07-11  
[30] NL (2023484) 2019-07-11  
[30] NL (2023485) 2019-07-11

## Demandes PCT entrant en phase nationale

[21] **3,143,944**  
[13] A1

[51] **Int.Cl. G10L 15/22 (2006.01) G10L 15/30 (2013.01) G10L 15/32 (2013.01) G06F 3/16 (2006.01) G10L 15/06 (2013.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR LOCAL AUTOMATED SPEECH-TO-TEXT PROCESSING**

[54] **SYSTEMES ET PROCEDES POUR UN TRAITEMENT PAROLE-TEXTE AUTOMATISE LOCAL**

[72] ROBERT JOSE, JEFFRY COPPS, IN

[72] GOYAL, AASHISH, IN

[71] ROVI GUIDES, INC., US

[85] 2021-12-16

[86] 2019-12-10 (PCT/US2019/065383)

[87] (WO2021/118531)

[21] **3,143,946**  
[13] A1

[51] **Int.Cl. G10L 15/22 (2006.01) G10L 15/065 (2013.01) G10L 15/30 (2013.01) G10L 15/06 (2013.01) G10L 15/08 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR INTERPRETING A VOICE QUERY**

[54] **SYSTEMES ET PROCEDES D'INTERPRETATION D'UNE INTERROGATION VOCALE**

[72] ROBERT JOSE, JEFFRY COPPS, IN

[72] GOYAL, AASHISH, IN

[71] ROVI GUIDES, INC., US

[85] 2021-12-16

[86] 2019-12-10 (PCT/US2019/065394)

[87] (WO2021/118532)

[21] **3,143,947**  
[13] A1

[51] **Int.Cl. E21B 34/02 (2006.01) F16K 31/122 (2006.01)**

[25] EN

[54] **A VALVE ARRANGEMENT**

[54] **AGENCEMENT DE SOUPAPE**

[72] BRODIE, ALAN DAVID, AE

[72] D'SOUZA, RYLAN PAUL, AE

[71] PETROLEUM TECHNOLOGY COMPANY AS, NO

[85] 2021-12-16

[86] 2020-06-24 (PCT/NO2020/050177)

[87] (WO2021/002757)

[30] NO (20190835) 2019-07-03

[21] **3,143,949**  
[13] A1

[51] **Int.Cl. B02C 17/18 (2006.01) B02C 17/22 (2006.01)**

[25] EN

[54] **LINER ASSEMBLY AND SYSTEM FOR ORE GRINDING MILL**

[54] **ENSEMBLE CHEMISE ET SYSTEME POUR BROYEUR DE MINERAI**

[72] SAXENA, AMIT, US

[72] MELVILLE, JASON S., US

[72] MEDINA, ARIEL, CL

[71] COMPANIA ELECTRO METALLURGICA S.A., CL

[85] 2021-12-16

[86] 2019-12-18 (PCT/US2019/067238)

[87] (WO2020/256780)

[30] US (PCT/US2019/037470) 2019-06-17

[21] **3,143,955**  
[13] A1

[51] **Int.Cl. C12P 5/02 (2006.01) C02F 3/28 (2006.01)**

[25] EN

[54] **IMPROVEMENTS IN AND RELATING TO EFFLUENT**

[54] **AMELIORATIONS APPORTEES A UN EFFLUENT ET SE RAPPORTANT A CE DERNIER**

[72] DI, HONG JIE, NZ

[72] CAMERON, KEITH CRAIG, NZ

[71] LINCOLN UNIVERSITY, NZ

[85] 2021-12-16

[86] 2020-10-12 (PCT/NZ2020/050123)

[87] (WO2021/071367)

[30] NZ (757817) 2019-10-10

[21] **3,143,964**  
[13] A1

[51] **Int.Cl. C09D 5/30 (2006.01) C09D 7/42 (2018.01) C09D 7/61 (2018.01) C08K 3/08 (2006.01) C09C 1/64 (2006.01)**

[25] EN

[54] **LOW EMISSIVE COATING COMPOSITIONS FOR CAMOUFLAGE, AND PRODUCTS THEREFROM**

[54] **COMPOSITIONS DE REVETEMENT A FAIBLE EMISSION POUR CAMOUFLAGE ET PRODUITS DERIVES**

[72] KLING, DANIEL, SE

[72] OLOVSSON, ANN-SOFIE, SE

[72] BOSTROM, BJORN, SE

[71] SAAB AB (PUBL), SE

[85] 2021-12-16

[86] 2019-06-28 (PCT/SE2019/050641)

[87] (WO2020/263145)

[21] **3,143,980**  
[13] A1

[51] **Int.Cl. H04L 12/10 (2006.01) H04L 12/28 (2006.01)**

[25] EN

[54] **BATTERY-ASSISTED POWER-OVER-ETHERNET POWERED DEVICE**

[54] **DISPOSITIF ALIMENTE PAR ALIMENTATION ELECTRIQUE PAR ETHERNET ASSISTE PAR BATTERIE**

[72] CHRISTIE, CARY L., US

[71] SAVANT SYSTEMS, INC., US

[85] 2021-12-16

[86] 2020-06-16 (PCT/US2020/037857)

[87] (WO2020/257146)

[30] US (16/442,987) 2019-06-17

# Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

## Demands canadiennes apparentées par division et demandes mises à la disponibilité du public non disponibles auparavant

[21] <b>3,067,948</b> [13] A1	[21] <b>3,141,976</b> [13] A1	[21] <b>3,141,978</b> [13] A1
[51] <b>Int.Cl. A01M 31/00 (2006.01)</b> [25] FR [54] <b>FREESTANDING 360-DEGREE LOOKOUT WITH MANUAL LIFTING SYSTEM</b> [54] <b>MIRADOR AUTOPORTANT SUR 360 DEGRES AVEC SYSTEME DE LEVAGE MANUEL</b> [72] BOUCHER, SYLVAIN, CA [71] BOUCHER, SYLVAIN, CA [22] 2020-01-15 [41] 2021-07-15	[25] EN [54] <b>SYSTEMS AND METHODS FOR NAVIGATING PROGRAM LISTINGS IN A MEDIA GUIDANCE APPLICATION</b> [54] <b>SYSTEMES ET PROCEDES DE NAVIGATION DANS DES LISTES DE PROGRAMMES DANS UNE APPLICATION DE GUIDAGE MULTIMEDIA</b> [72] SINHA, GAURAV, US [72] ARAI, CHINA, US [72] CONNESS, JASON, US [72] PETERSON, BRIAN, US [71] ROVI GUIDES, INC., US [22] 2010-10-07 [41] 2011-06-23 [62] 3,038,606 [30] US (61/288123) 2009-12-18 [30] US (12/773205) 2010-05-04 [30] US (12/773204) 2010-05-04	[25] EN [54] <b>TECHNIQUES FOR PREDICTING, DETECTING AND REDUCING ASPECIFIC PROTEIN INTERFERENCE IN ASSAYS INVOLVING IMMUNOGLOBULIN SINGLE VARIABLE DOMAINS</b> [54] <b>TECHNIQUES PERMETTANT DE PREDIRE, DETECTER ET REDUIRE UNE INTERFERENCE PROTEINIQUE SPECIFIQUE DANS DES DOSAGES IMPLIQUANT DES DOMAINES VARIABLES UNIQUES D'IMMUNOGLOBULINE</b> [72] BAUMEISTER, JUDITH, BE [72] BOUCHE, MARIE-PAULE, LUCIENNE, ARMANDA, BE [72] BOUTTON, CARLO, BE [72] BUYSE, MARIE-ANGE, BE [72] SNOECK, VEERLE, BE [72] STAELENS, STEPHANIE, BE [71] ABLYNX NV, BE [22] 2012-06-25 [41] 2012-12-27 [62] 2,837,998 [30] US (61/500,464) 2011-06-23 [30] US (61/500,360) 2011-06-23 [30] US (61/541,368) 2011-09-30 [30] EP (PCT/EP2011/067132) 2011-09-30 [30] US (13/435,567) 2012-03-30 [30] EP (PCT/EP2012/061304) 2012-06-14
[21] <b>3,141,737</b> [13] A1		
[51] <b>Int.Cl. C07D 279/20 (2006.01) A61K 31/5415 (2006.01) A61P 25/28 (2006.01) A61P 31/12 (2006.01) A61P 35/00 (2006.01)</b> [25] EN [54] <b>CRYSTALLINE METHYLTHIONINIUM CHLORIDE HYDRATES</b> [54] [72] HILFIKER, ROLF, CH [72] RAGER, TIMO, CH [71] WISTA LABORATORIES LTD., SG [22] 2010-09-23 [41] 2011-03-31 [62] 3,077,911 [30] US (61/245,391) 2009-09-24		
		[21] <b>3,142,074</b> [13] A1
		[51] <b>Int.Cl. A61B 17/3207 (2006.01) A61M 25/10 (2013.01)</b> [25] EN [54] <b>EXPANDABLE BALLOON</b> [54] <b>BALLONNET EXTENSIBLE</b> [72] MCMAHON, TONY, IE [72] BURKE, MARTIN G., GB [72] HERATY, KEVIN B., IE [72] YEO, NICHOLAS, GB [71] VERYAN MEDICAL LIMITED, GB [22] 2014-05-02 [41] 2014-11-06 [62] 2,909,548 [30] US (61/818,592) 2013-05-02

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,142,102**  
[13] A1

[51] **Int.Cl. E21B 7/15 (2006.01) E21B 10/00 (2006.01)**  
[25] EN  
[54] **REPETITIVE PULSED ELECTRIC DISCHARGE APPARATUS FOR DOWNHOLE FORMATION EVALUATION**  
[54] **APPAREIL A DECHARGE ELECTRIQUE PAR IMPULSION REPETITIVE POUR EVALUATION DE FORMATION DE FOND DE TROU**  
[72] MOENY, WILLIAM, M., US  
[71] SDG, LLC, US  
[22] 2013-12-18  
[41] 2014-06-26  
[62] 2,896,335  
[30] US (61/738,837) 2012-12-18  
[30] US (61/738,753) 2012-12-18  
[30] US (61/739,187) 2012-12-19  
[30] US (61/739,172) 2012-12-19  
[30] US (61/739,144) 2012-12-19  
[30] US (61/740,812) 2012-12-21  
[30] US (61/749,071) 2013-01-04  
[30] US (61/905,060) 2013-11-15

[21] **3,142,170**  
[13] A1

[51] **Int.Cl. H04N 19/117 (2014.01) H04N 19/11 (2014.01) H04N 19/159 (2014.01) H04N 19/176 (2014.01) H04N 19/59 (2014.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR PERFORMING IMAGE DECODING ON BASIS OF INTRA PREDICTION IN IMAGE CODING SYSTEM**  
[54]  
[72] YOO, SUNMI, KR  
[72] LEE, JAEHO, KR  
[72] CHOI, JANGWON, KR  
[72] SEO, JUNG DONG, KR  
[72] HEO, JIN, KR  
[71] LG ELECTRONICS INC., KR  
[22] 2018-01-05  
[41] 2018-12-06  
[62] 3,060,033  
[30] US (62/512,737) 2017-05-31

[21] **3,142,363**  
[13] A1

[51] **Int.Cl. A01B 49/04 (2006.01) A01B 76/00 (2006.01) A01C 7/08 (2006.01) A01C 7/10 (2006.01) A01C 7/20 (2006.01)**  
[25] EN  
[54] **AGRICULTURAL IMPLEMENTS FOR SOIL AND VEGETATION ANALYSIS**  
[54] **INSTRUMENTS AGRICOLES POUR ANALYSE DE SOL ET DE VEGETATION**  
[72] KOCH, DALE, US  
[72] SWANSON, TODD, US  
[71] LEVY, KENT, US  
[72] VACCARI, ADAM, US  
[72] STROLLER, JASON, US  
[71] THE CLIMATE CORPORATION, US  
[22] 2017-11-07  
[41] 2018-05-11  
[62] 3,043,170  
[30] US (62/418,650) 2016-11-07

[21] **3,142,369**  
[13] A1

[51] **Int.Cl. B01D 19/00 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR COMPOSITION COMPOUNDING**  
[54] **PROCEDES ET SYSTEMES DE MELANGE DE COMPOSITION**  
[72] DANOPOULOS, PANAGIOTA, CA  
[71] MEDISCA PHARMACEUTIQUE INC., CA  
[22] 2020-12-24  
[41] 2021-03-10  
[62] 3,104,321  
[30] US (63/051,281) 2020-07-13

[21] **3,142,376**  
[13] A1

[51] **Int.Cl. E03D 9/052 (2006.01) A41D 31/10 (2019.01) A41D 31/02 (2019.01)**  
[25] EN  
[54] **IMPROVED VENTILATED TOILET**  
[54] **TOILETTES VENTILEES AMELIOREES**  
[72] NELSON, DAVID, CA  
[71] VENTEX INDUSTRIES, LTD., CA  
[22] 2019-04-09  
[41] 2020-06-04  
[62] 3,039,703  
[30] US (62/656,547) 2018-12-04

[21] **3,142,413**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR BLUEPRINT-BASED CLOUD MANAGEMENT**  
[54]  
[72] PADMANABH, GIRI, US  
[72] GOYAL, BRAJESH, US  
[72] THAKRAR, UTPAL, US  
[72] MADHAVAN, ASHOK, US  
[71] SERVICENOW, INC., US  
[22] 2017-12-28  
[41] 2018-11-05  
[62] 2,990,252  
[30] US (15/587,610) 2017-05-05

[21] **3,142,515**  
[13] A1

[25] EN  
[54] **SYSTEM AND METHOD FOR A VENTED AND WATER CONTROL SIDING, VENTED AND WATER CONTROL SHEATHING AND VENTED AND WATER CONTROL TRIM-BOARD**  
[54] **SYSTEME ET PROCEDE POUR UN PAREMENT VENTILE ET A REGULATION DE L'HUMIDITE, REVETEMENT VENTILE ET A REGULATION DE L'HUMIDITE ET PANNEAU D'HABILLAGE VENTILE ET A REGULATION DE L'HUMIDITE**  
[72] NORWOOD, STEVEN, US  
[72] ABU-JABER, AMIR, US  
[71] NORWOOD ARCHITECTURE, INC., US  
[22] 2015-02-13  
[41] 2015-08-20  
[62] 3,035,061  
[30] US (61/940,285) 2014-02-14  
[30] US (61/955,702) 2014-03-19

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

[21] **3,142,573**  
[13] A1

[25] EN  
[54] **USE OF STATHMIN AS A BIOMARKER OF DRUG RESPONSE TO FURAZANOBENZIMIDAZOLES**  
[54] **UTILISATION DE LA STATHMINE COMME BIOMARQUEUR DE REPOSE MEDICAMENTEUSE AUX FURAZANOBENZIMIDAZOLES**  
[72] LANE, HEIDI ALEXANDRA, CH  
[72] BACHMANN, FELIX, CH  
[71] BASILEA PHARMACEUTICA AG, CH  
[22] 2012-01-19  
[41] 2012-07-26  
[62] 2,822,540  
[30] EP (11151674.6) 2011-01-21

[21] **3,142,574**  
[13] A1

[25] EN  
[54] **HEAVY MARINE FUEL OIL COMPOSITION**  
[54] **COMPOSITION D'HUILE COMBUSTIBLE MARINE LOURDE**  
[72] KLUSSMANN, BERTRAND R., US  
[72] MOORE, MICHAEL J., US  
[71] MAGEMA TECHNOLOGY, LLC, US  
[22] 2018-02-12  
[41] 2018-08-16  
[62] 3,052,981  
[30] US (62/458,002) 2017-02-12  
[30] US (62/589,479) 2017-11-21

[21] **3,142,576**  
[13] A1

[25] EN  
[54] **USE OF BUBR1 AS A BIOMARKER OF DRUG RESPONSE TO FURAZANOBENZIMIDAZOLES**  
[54] **UTILISATION DU BUBR1 COMME BIOMARQUEUR DE REPOSE MEDICAMENTEUSE AUX FURAZANOBENZIMIDAZOLES**  
[72] LANE, HEIDI ALEXANDRA, CH  
[72] BACHMANN, FELIX, CH  
[72] BREULEUX, MADLAINA, CH  
[72] BOUTROS, MICHAEL, DE  
[72] GILBERT, DANIEL, DE  
[72] ZHANG, XIAN, DE  
[71] BASILEA PHARMACEUTICA AG, CH  
[22] 2012-01-19  
[41] 2012-07-26  
[62] 2,822,491  
[30] EP (11151677.9) 2011-01-21

[21] **3,142,595**  
[13] A1

[51] **Int.Cl. C22B 3/18 (2006.01) C12N 1/20 (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  
[71] MIDDLE EAST MINE AND INDUSTRY COMPANY, IR  
[22] 2016-03-16  
[41] 2017-06-14  
[62] 2,923,902  
[30] EP (15199787.1) 2015-12-14

[21] **3,142,600**  
[13] A1

[51] **Int.Cl. B62D 63/04 (2006.01)**  
[25] EN  
[54] **ROOF MOUNTING APPARATUS AND SYSTEM FOR VEHICLE TOPPER**  
[54] **APPAREIL ET SYSTEME DE MONTAGE DE TOIT POUR UN SURMONTAIRE DE VEHICULE**  
[72] HORNSBY, ERIC, US  
[72] DUNN, WILLIAM, US  
[72] BROWN, MIKE, US  
[72] BENNETT, DOUG, US  
[71] MANUFACTURING RESOURCES INTERNATIONAL, INC., US  
[22] 2018-03-23  
[41] 2018-09-27  
[62] 3,057,321  
[30] US (62/476,385) 2017-03-24  
[30] US (62/571,631) 2017-10-12

[21] **3,142,715**  
[13] A1

[25] EN  
[54] **IMAGE RESHAPING IN VIDEO CODING USING RATE DISTORTION OPTIMIZATION**  
[54] **REDEFINITION D'IMAGES DANS UN CODAGE VIDEO A L'AIDE D'UNE OPTIMISATION DE DISTORSION DU TAUX DE CODAGE**  
[72] YIN, PENG, US  
[72] PU, FANGJUN, US  
[72] LU, TAORAN, US  
[72] CHEN, TAO, US  
[72] HUSAK, WALTER J., US  
[72] MCCARTHY, SEAN THOMAS, US  
[71] DOLBY LABORATORIES LICENSING CORPORATION, US  
[22] 2019-02-13  
[41] 2019-08-22  
[62] 3,091,190  
[30] US (62/630,385) 2018-02-14  
[30] US (62/691,366) 2018-06-28  
[30] US (62/726,608) 2018-09-04  
[30] US (62/739,402) 2018-10-01  
[30] US (62/772,228) 2018-11-28  
[30] US (62/782,659) 2018-12-20  
[30] US (62/792,122) 2019-01-14

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,142,741**  
[13] A1

[51] **Int.Cl. F01D 5/14 (2006.01) F01D 5/02 (2006.01) F01D 5/30 (2006.01) F01D 5/34 (2006.01) F04D 29/32 (2006.01)**

[25] EN

[54] **LOW HUB-TO-TIP RATIO FAN FOR A TURBOFAN GAS TURBINE ENGINE**

[54] **VENTILATEUR A FAIBLE RAPPORT MOYEU-POINTE POUR UNE TURBINE A GAZ**

[72] HEIKURINEN, KARI, CA

[72] TOWNSEND, PETER, CA

[71] PRATT & WHITNEY CANADA CORP., CA

[22] 2013-11-18

[41] 2014-05-28

[62] 2,833,986

[30] US (13/687,540) 2012-11-28

[21] **3,142,744**  
[13] A1

[25] EN

[54] **USE OF GLU-TUBULIN AS A BIOMARKER OF DRUG RESPONSE TO FURAZANOBENZIMIDAZOLES**

[54] **UTILISATION DE GLU-TUBULINE EN TANT QUE BIOMARQUEUR DE LA REPOSE AU MEDICAMENT COMME LES FURAZANOBENZIMIDAZOLES**

[72] LANE, HEIDI ALEXANDRA, NL

[72] BACHMANN, FELIX, NL

[71] BASILEA PHARMACEUTICA AG, CH

[22] 2012-01-19

[41] 2012-07-26

[62] 2,822,530

[30] EP (11151681.1) 2011-01-21

[21] **3,142,745**  
[13] A1

[51] **Int.Cl. A61M 5/20 (2006.01) A61M 5/24 (2006.01) A61M 5/31 (2006.01)**

[25] EN

[54] **AUTOINJECTOR SYSTEM**

[54] **SYSTEME D'AUTO-INJECTION**

[72] SLATE, JOHN B., US

[72] BURK, MICHAEL W., US

[72] KOERNER, RICHARD J., US

[72] MAGERS, COREY M., US

[72] BARNES, ANDREW C., US

[71] AVANT MEDICAL CORP., US

[22] 2009-05-20

[41] 2009-11-26

[62] 3,070,644

[30] US (12/123,888) 2008-05-20

[30] US (12/178,447) 2008-07-23

[21] **3,142,753**  
[13] A1

[25] EN

[54] **POWER CONSUMPTION MANAGEMENT THROUGH ENERGY STORAGE DEVICES**

[54] **GESTION DE LA CONSOMMATION D'ENERGIE D'UN DISPOSITIF DE STOCKAGE D'ENERGIE**

[72] STEFFES, PAUL J., US

[72] ZELLER, AUSTIN P., US

[72] STEFFES, THOMAS P., US

[71] STEFFES CORPORATION, US

[22] 2015-01-16

[41] 2015-08-06

[62] 2,935,852

[30] US (61/933,923) 2014-01-31

[21] **3,142,754**  
[13] A1

[25] EN

[54] **SYNTHESIS OF TRANS-8-CHLORO-5-METHYL-1[4-(PYRIDIN-2-YLOXY)-CYCLOHEXYL]-5,6-DIHYDRO-4H-2,3,5,10B-TETRAAZA-BENZO[E]AZULENE AND CRYSTALLINE FORM THEREOF**

[54] **SYNTHESE DE TRANS-8-CHLORO-5-METHYL-1-[4-(PYRIDIN-2-YLOXY)-CYCLOHEXYL]-5,6-DIHYDRO-4H-2,3,5,10B-TETRAAZA-BENZO[E]AZULENE ET LEURS FORMES CRISTALLINES**

[72] ROTHENHAEULSLER, BENNO, DE

[72] TRUSSARDI, RENE, CH

[72] HOFFMANN-EMERY, FABIENNE, DE

[72] SCHWITTER, URS, CH

[72] ADAM, JEAN-MICHEL, FR

[72] GRASSMANN, OLAF, DE

[72] HARTUNG, THOMAS, DE

[72] RAN, FREDERIC, FR

[72] DIODONE, RALPH, DE

[72] PFLERGER, CHRISTOPHE, FR

[72] BARTELS, BJOERN, DE

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

[22] 2014-12-01

[41] 2015-06-11

[62] 2,931,016

[30] EP (13195864.7) 2013-12-05

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[21] **3,142,762**  
[13] A1

[51] **Int.Cl. A61M 5/315 (2006.01) A61M 5/142 (2006.01) A61M 5/168 (2006.01) A61M 5/172 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR CAPTURING DOSE INFORMATION**

[54] **SYSTEME ET PROCEDE DE CAPTURE D'INFORMATIONS DE DOSE**

[72] BURKE, ANDREW, US

[72] COSTELLO, PETER, US

[72] FOCHT, KENNETH, US

[72] GIANELIS, STEPHEN, US

[72] ROSS, FRANCIS L., III, US

[72] SEARLE, GARY, US

[72] SIWINSKI, SHANE, US

[71] BECTON, DICKINSON AND COMPANY, US

[22] 2015-09-14

[41] 2016-03-17

[62] 2,960,286

[30] US (14/485,749) 2014-09-14

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

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[21] **3,142,764**  
[13] A1  
[25] EN  
[54] **PIPE CONNECTOR**  
[54]  
[72] GOESS-SAURAU, KONRAD, GB  
[72] COPLESTONE, RODNEY, GB  
[71] POULTON TECHNOLOGIES LIMITED, GB  
[22] 2014-09-10  
[41] 2015-03-19  
[62] 2,923,960  
[30] GB (1316077.5) 2013-09-10  
[30] GB (1319292.7) 2013-10-31  
[30] GB (1405658.4) 2014-03-28  
[30] GB (1408085.7) 2014-05-07  
[30] US (14/303,164) 2014-06-12

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[21] **3,142,769**  
[13] A1  
[51] **Int.Cl. A47K 10/16 (2006.01) B31F 1/07 (2006.01)**  
[25] EN  
[54] **HIGH BULK TISSUE PRODUCT**  
[54]  
[72] DWIGGINS, JOHN H., US  
[71] GPCP IP HOLDINGS LLC, US  
[22] 2015-05-06  
[41] 2015-11-19  
[62] 2,948,665  
[30] US (61/994,325) 2014-05-16  
[30] US (62/108,243) 2015-01-27  
[30] US (14/699,690) 2015-04-29

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[21] **3,142,804**  
[13] A1  
[51] **Int.Cl. A61M 5/168 (2006.01) A61B 5/145 (2006.01) A61M 5/142 (2006.01) A61M 5/172 (2006.01) A61M 5/315 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR CAPTURING DOSE INFORMATION**  
[54] **SYSTEME ET PROCEDE DE CAPTURE D'INFORMATIONS DE DOSE**  
[72] BURKE, ANDREW, US  
[72] GIANELIS, STEPHEN, US  
[72] FOCHT, KENNETH, US  
[72] COSTELLO, PETER, US  
[72] SIWINSKI, SHANE, US  
[72] ROSS, FRANCIS L., III, US  
[72] SEARLE, GARY, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[22] 2015-09-14  
[41] 2016-03-17  
[62] 2,960,286  
[30] US (14/485,749) 2014-09-14

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[21] **3,142,808**  
[13] A1  
[51] **Int.Cl. A61M 5/315 (2006.01) A61M 5/142 (2006.01) A61M 5/168 (2006.01) A61M 5/172 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR CAPTURING DOSE INFORMATION**  
[54] **SYSTEME ET PROCEDE DE CAPTURE D'INFORMATIONS DE DOSE**  
[72] SEARLE, GARY, US  
[72] BURKE, ANDREW, US  
[72] GIANELIS, STEPHEN, US  
[72] FOCHT, KENNETH, US  
[72] COSTELLO, PETER, US  
[72] SIWINSKI, SHANE, US  
[72] ROSS, FRANCIS L., III, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[22] 2015-09-14  
[41] 2016-03-17  
[62] 2,960,286  
[30] US (14/485,749) 2014-09-14

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[21] **3,142,810**  
[13] A1  
[51] **Int.Cl. A61M 5/32 (2006.01) A61M 5/34 (2006.01) A61M 5/50 (2006.01)**  
[25] EN  
[54] **DUAL CHAMBER SYRINGE WITH RETRACTABLE NEEDLE**  
[54] **SERINGUE A DOUBLE COMPARTIMENT COMPRENANT UNE AIGUILLE RETRACTABLE**  
[72] ZIVKOVIC, IVAN, US  
[72] HAGER, JORGEN, SE  
[72] HANDBERG, ULF, SE  
[72] HANNER, GERT, SE  
[72] HOLMA, THOMAS, SE  
[72] WAHLBERG, ULF, SE  
[71] BECTON, DICKINSON AND COMPANY, US  
[22] 2011-07-21  
[41] 2012-01-26  
[62] 3,060,507  
[30] US (61/366,874) 2010-07-22  
[30] US (13/187,200) 2011-07-20

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[21] **3,142,812**  
[13] A1  
[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  
[71] W. L. GORE & ASSOCIATES, INC., US  
[22] 2015-06-05  
[41] 2015-12-10  
[62] 3,053,118  
[30] US (62/009,026) 2014-06-06  
[30] US (14/731,205) 2015-06-04



**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,142,813**  
[13] A1

[25] EN  
[54] **TWO-STAGE METHOD FOR MAKING BROMIDES**  
[54] **METHODE EN DEUX ETAPES DE PRODUCTION DE BROMURES**  
[72] RAY, THOMAS G., US  
[72] BARTLEY, DAVID W., US  
[72] BROADHURST, HUGH, US  
[72] GOODWIN, NATE, US  
[71] LANXESS CORPORATION, US  
[22] 2014-11-20  
[41] 2015-06-18  
[62] 2,929,613  
[30] US (61/963,531) 2013-12-09  
[30] US (14/538,838) 2014-11-12

[21] **3,142,839**  
[13] A1

[25] EN  
[54] **MANIFOLD INCLUDING A DATA CARRIER FOR A MEDICAL/SURGICAL WASTE COLLECTION ASSEMBLY**  
[54]  
[72] MURRAY, SEAN A., US  
[72] HERSHBERGER, DAVID, US  
[72] LALOMIA, BRENT S., US  
[72] REASONER, STEPHEN, US  
[72] ISHAM, STEPHEN, US  
[71] STRYKER CORPORATION, US  
[22] 2006-12-08  
[41] 2007-07-12  
[62] 3,028,892  
[30] US (60/750,862) 2005-12-14  
[30] US (11/554,616) 2006-10-31

[21] **3,142,856**  
[13] A1

[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  
[71] MEMORIAL SLOAN-KETTERING CANCER CENTER, US  
[22] 2014-12-17  
[41] 2015-07-02  
[62] 2,934,524  
[30] US (61/920,289) 2013-12-23

[21] **3,142,817**  
[13] A1

[25] EN  
[54] **SUBSTITUTED BENZALDEHYDE COMPOUNDS AND METHODS FOR THEIR USE IN INCREASING TISSUE OXYGENATION**  
[54] **COMPOSES BENZALDEHYDE SUBSTITUES ET PROCEDES D'UTILISATION DE CEUX-CI DANS L'AUGMENTATION DE L'OXYGENATION DES TISSUS**  
[72] METCALF, BRIAN, US  
[72] CHUANG, CHIHYUAN, US  
[71] GLOBAL BLOOD THERAPEUTICS, INC., US  
[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US  
[22] 2012-12-28  
[41] 2013-07-04  
[62] 2,860,323  
[30] US (61/581,053) 2011-12-28  
[30] US (61/661,320) 2012-06-18

[21] **3,142,853**  
[13] A1

[25] EN  
[54] **USE OF GENE EXPRESSION PROFILING TO PREDICT SURVIVAL IN CANCER PATIENT**  
[54] **UTILISATION DU PROFILAGE DE L'EXPRESSION GENETIQUE POUR PREVOIR LES CHANCES DE SURVIE D'UN PATIENT ATTEINT D'UN CANCER**  
[72] SHAUGHNESSY, JOHN, D., US  
[72] ZHAN, FENGHUANG, US  
[72] BARLOGIE, BART, US  
[71] THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ARKANSAS, US  
[22] 2005-05-20  
[41] 2005-12-08  
[62] 3,002,661  
[30] US (60/573,669) 2004-05-21  
[30] US (60/606,319) 2004-09-01

[21] **3,142,941**  
[13] A1

[25] EN  
[54] **IMAGE PROCESSING METHOD AND APPARATUS THEREFOR**  
[54] **METHODE DE TRAITEMENT D'IMAGE ET APPAREIL ASSOCIE**  
[72] JANG, HYEONGMOON, KR  
[72] NAM, JUNGHAK, KR  
[72] KIM, SEUNGHWAN, KR  
[72] LIM, JAEHYUN, KR  
[71] LG ELECTRONICS INC., KR  
[22] 2017-12-27  
[41] 2018-07-12  
[62] 3,049,196  
[30] US (62/441,588) 2017-01-03  
[30] US (62/446,535) 2017-01-16

[21] **3,142,945**  
[13] A1

[25] EN  
[54] **VEGF ANTAGONIST FORMULATIONS**  
[54] **FORMULATIONS D'ANTAGONISTES DU FACTEUR VEGF**  
[72] DIX, DANIEL, US  
[72] FRYE, KELLY, US  
[72] KAUTZ, SUSAN, US  
[71] REGENERON PHARMACEUTICALS, INC., US  
[22] 2006-03-22  
[41] 2006-10-05  
[62] 2,995,971  
[30] US (60/665,125) 2005-03-25

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[21] **3,143,066**

[13] A1

[25] EN

[54] **LONG ACTING MULTI-SPECIFIC  
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[54] **MOLECULES MULTI-  
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[72] LIU, SHU-MIN, US

[72] WU, DECHUN, CN

[71] SHENZHEN ENDURING BIOTECH,  
LTD., CN

[22] 2017-10-11

[41] 2018-04-26

[62] 3,036,889

[30] US (62/408,865) 2016-10-17

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[21] **3,143,138**

[13] A1

[51] **Int.Cl. H04L 12/16 (2006.01) G06F  
16/903 (2019.01) G06F 16/953  
(2019.01)**

[25] EN

[54] **ELECTRONIC CONTENT  
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[54] **CLASSEMENT DE CONTENU  
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[72] LIVINGSTON, BLAIR, CA

[72] BALL, MATT, CA

[71] QUANTIFY LABS, INC., CA

[22] 2015-07-31

[41] 2016-02-01

[62] 2,899,046

[30] US (62/031934) 2014-08-01

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