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# The Patent

Office Record

# La Gazette

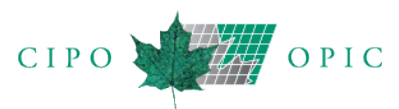
du Bureau des brevets



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Canada



# THE CANADIAN PATENT OFFICE RECORD

## LA GAZETTE DU BUREAU DES BREVETS

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

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

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

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

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## Notices

## Avis

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

#### Dates

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

#### Code Numerals

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

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

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

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

#### Dates

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

#### Chiffres de code

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

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

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

## 2. Country Code

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

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

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

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

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

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

## 2. Code des pays

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

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

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

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

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

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

## 5. Advice on Making a Patent Application

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

## 6. Licensing of Patents

### Voluntary Licences

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

### Compulsory Licences

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

## 7. Patents Available for Licence or Sale

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

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

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

None

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

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

## 6. Octroi de licences en vertu des brevets

### Licences librement accordées

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

### Licences obligatoires

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

## 7. Brevets disponibles pour licence ou vente

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

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

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

Aucun

## 9. Applications Open to Public Inspection

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

## 10. Language of Published Documents

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

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

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

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

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

## 9. Demandes mises à la disponibilité du public

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

## 10. Langue du document publié

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

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

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

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

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

## Notices

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

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:

\* Les frais seront réduits de:

- **\$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).

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

## 12. PCT Notices

## 12. Avis PCT

### Patent Cooperation Treaty (PCT)

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

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

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

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

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

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

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

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

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



### 13. Practice Notice

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

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

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

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

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

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

### 13. Énoncé de pratique

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

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

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

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

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

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

## Notices

Offices.

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

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

## 14. Correspondence Procedures

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

Web Link for MOPOP:

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

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

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

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

Publication date: May 10, 2017

Amendment date: June 17, 2019

### On this page:

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

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

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

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

## 14. Procédures de correspondance

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

Lien Web pour le RPBB :

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

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

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

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

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1. Remise physique de correspondance et communications écrites à l'OPIC.
2. Correspondance électronique
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6. Procédures en cas de fermeture imprévue des bureaux de l'OPIC

## Avis

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Le formulaire de paiements des frais devrait toujours être

## Notices

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

- 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

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

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

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

l'exception des jours fériés

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

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

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.

### 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

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. 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

## Notices

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



## Avis

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 16, 2024 contains applications open to public inspection from December 31, 2023 to January 6, 2024.

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

La *Gazette du bureau des brevets* du 16 janvier 2024 contient les demandes disponibles au public pour consultation pour la période du 31 décembre 2023 au 6 janvier 2024.

# Canadian Patents Issued

January 16, 2024

## Brevets canadiens délivrés

16 janvier 2024

---

[11] **2,846,197**  
[13] C

[51] **Int.Cl. C12N 15/62 (2006.01) C12N 5/07 (2010.01) C12N 15/113 (2010.01) A61K 31/4045 (2006.01) A61K 31/44 (2006.01) A61K 31/506 (2006.01) A61K 31/517 (2006.01) A61P 35/00 (2006.01) C07H 21/00 (2006.01) C07K 14/82 (2006.01) C07K 16/32 (2006.01) C07K 19/00 (2006.01) C12N 15/12 (2006.01) G01N 33/48 (2006.01) G01N 33/574 (2006.01)**

[25] EN

[54] **KIF5B-RET FUSION MOLECULES AND USES THEREOF**

[54] **MOLECULE DE FUSION KIF5B-RET ET SES UTILISATIONS**

[72] LIPSON, DORON, US

[72] STEPHENS, PHILIP JAMES, US

[72] PARKER, ALEXANDER N., US

[72] DOWNING, SEAN R., US

[72] HAWRYLUK, MATTHEW J., US

[73] FOUNDATION MEDICINE, INC., US

[85] 2014-02-21

[86] 2012-08-23 (PCT/US2012/051978)

[87] (WO2013/028817)

[30] US (61/526,613) 2011-08-23

[30] US (61/537,024) 2011-09-20

[30] US (61/542,112) 2011-09-30

[30] US (61/594,739) 2012-02-03

---

[11] **2,849,763**  
[13] C

[51] **Int.Cl. H04W 48/02 (2009.01) H04W 12/08 (2021.01)**

[25] EN

[54] **MANAGING MOBILE DEVICE APPLICATIONS**

[54] **GESTION D'APPLICATIONS POUR DISPOSITIF MOBILE**

[72] PECEN, MARK E., CA

[72] ANDERSEN, NIELS PETER SKOV, DK

[72] PERIYALWAR, SHALINI SURESH, CA

[72] CAMPAGNA, MATTHEW JOHN, US

[73] BLACKBERRY LIMITED, CA

[85] 2014-03-21

[86] 2012-09-21 (PCT/US2012/056656)

[87] (WO2013/044090)

[30] US (13/242,051) 2011-09-23

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[11] **2,858,901**  
[13] C

[51] **Int.Cl. G16H 10/60 (2018.01) G16H 15/00 (2018.01) G16H 70/60 (2018.01)**

[25] EN

[54] **DIABETES CARE HOST-CLIENT ARCHITECTURE AND DATA MANAGEMENT SYSTEM**

[54] **ARCHITECTURE HOTE-CLIENT DE SOINS POUR LE DIABETE ET SYSTEMES DE GESTION DE DONNEES**

[72] ANDERSON, CAROLYN, US

[72] LOVE, TOM, US

[73] ABBOTT DIABETES CARE INC., US

[86] (2858901)

[87] (2858901)

[22] 2005-06-06

[62] 2,572,455

[30] US (60/577,064) 2004-06-04

---

[11] **2,860,406**  
[13] C

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

[25] EN

[54] **ANTI-CD40 ANTIBODIES, USES AND METHODS**

[54] **ANTICORPS ANTI-CD40, LEURS UTILISATIONS ET LEURS PROCEDES**

[72] ELLMARK, PETER BO JOAKIM, SE

[72] DAHLEN, EVA MARIA, SE

[73] ALLIGATOR BIOSCIENCE AB, SE

[85] 2014-07-03

[86] 2012-09-05 (PCT/GB2012/052179)

[87] (WO2013/034904)

[30] GB (1115280.8) 2011-09-05

---

[11] **2,865,575**  
[13] C

[51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6851 (2018.01) C12Q 1/686 (2018.01)**

[25] EN

[54] **COMPOSITIONS AND KITS FOR MOLECULAR COUNTING**

[54] **COMPOSITIONS ET TROUSSES POUR LE COMPTAGE MOLECULAIRE**

[72] FU, GLENN K., US

[72] FODOR, STEPHEN P.A., US

[72] WILHELMY, JULIE, US

[73] BECTON, DICKINSON AND COMPANY, US

[85] 2014-08-26

[86] 2013-02-27 (PCT/US2013/028103)

[87] (WO2013/130674)

[30] US (61/603,921) 2012-02-27

[30] US (61/745,385) 2012-12-21

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[11] **2,883,606**  
[13] C

[51] **Int.Cl. F04D 29/44 (2006.01) F04D 25/06 (2006.01) F04D 25/08 (2006.01) F23L 17/00 (2006.01) F24F 7/06 (2006.01)**

[25] EN

[54] **BLOWER HOUSING HAVING INTEGRAL EXHAUST BLOWER DISCHARGE DRAIN SECTION**

[54] **LOGEMENT DE SOUFFLERIE COMPORTANT UNE SECTION D'EVACUATION DE SOUFFLERIE INTEGRALE**

[72] LYONS, LESLIE A., US

[73] REGAL BELOIT AMERICA, INC., US

[86] (2883606)

[87] (2883606)

[22] 2015-02-27

[30] US (14/194,099) 2014-02-28

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **2,885,988**  
[13] C

[51] **Int.Cl. G06Q 99/00 (2006.01) G06Q 90/00 (2006.01)**

[25] EN

[54] **STRUCTURED GUIDED FRAMEWORK AND METHODS OF INSTRUCTION STEPS FOR ACCORDING FAIR DISTRIBUTIONS**

[54] **CADRE GUIDE STRUCTURE ET PROCEDES DES ETAPES D'INSTRUCTIONS POUR ACCORDER DES DISTRIBUTIONS JUSTES**

[72] YAP, CHENG KANG COMPASS, SG

[73] YAP, CHENG KANG COMPASS, SG

[85] 2015-03-23

[86] 2013-07-29 (PCT/SG2013/000317)

[87] (WO2014/046612)

[30] SG (PCT/SG2012/000356) 2012-09-24

---

[11] **2,896,298**  
[13] C

[51] **Int.Cl. A61K 39/02 (2006.01) A61P 31/04 (2006.01) C12N 1/20 (2006.01) C12N 5/071 (2010.01)**

[25] EN

[54] **METHOD OF MAKING A MYCOPLASMA VACCINE**

[54] **PROCEDE DE FABRICATION D'UN VACCIN DE MYCOPLASME**

[72] JORDAN, DIANNA M. MURPHY, US

[72] MARTINSON, BRIAN THOMAS, US

[72] MUEHLENTHALER, CHRISTINE MARGARET, US

[72] NEUBAUER, AXEL, US

[72] IYER, ARUN V., US

[73] BOEHRINGER INGELHEIM VETMEDICA GMBH, DE

[85] 2015-06-23

[86] 2013-12-20 (PCT/US2013/076807)

[87] (WO2014/105672)

[30] US (61/746,997) 2012-12-28

---

[11] **2,902,141**  
[13] C

[51] **Int.Cl. G16H 40/20 (2018.01) G06Q 10/04 (2023.01) G06Q 10/0631 (2023.01)**

[25] EN

[54] **AUTOMATED HOSPITAL WORKFORCE SYSTEM FOR LOAD DRIVEN SCHEDULING OPTIMIZATION**

[54] **SYSTEME AUTOMATISE D'ORGANISATION DE LA MAIN D'OEUVRE EN MILIEU HOSPITALIER DESTINE A OPTIMISER L'HORAIRE SELON LA CHARGE DE TRAVAIL**

[72] DUBE, CHRISTOPHER, US

[72] FLETCHER, RODGER, US

[72] HARBER, JASON, US

[72] MANCINE, NATHAN, US

[72] MCCLEEREY, MICHELLE, US

[73] TELETRACKING TECHNOLOGIES, INC., US

[86] (2902141)

[87] (2902141)

[22] 2015-08-28

[30] US (62/043,560) 2014-08-29

---

[11] **2,909,753**  
[13] C

[51] **Int.Cl. H01G 11/36 (2013.01) B82Y 30/00 (2011.01) H01G 11/40 (2013.01) C08J 7/044 (2020.01) H04B 1/12 (2006.01)**

[25] EN

[54] **CONDUCTIVE CELLULOSE NANOCRYSTALS, METHOD OF PRODUCING SAME AND USES THEREOF**

[54] **NANOCRISTAUX DE CELLULOSE CONDUCTEURS, METHODE DE PRODUCTION DESDITS NANOCRISTAUX ET LEURS UTILISATIONS**

[72] WU, XIUYUN, CA

[72] TAM, KAM CHIU, CA

[72] BERRY, RICHARD, CA

[72] YU, AIPING, CA

[73] CELLUFORCE INC., CA

[86] (2909753)

[87] (2909753)

[22] 2015-10-19

[30] US (62/065,954) 2014-10-20

---

[11] **2,913,159**  
[13] C

[51] **Int.Cl. C05F 11/08 (2006.01) A01C 21/00 (2006.01) C10G 1/00 (2006.01) C10L 1/00 (2006.01)**

[25] EN

[54] **PRODUCING FUELS AND BIOFERTILIZERS FROM BIOMASS**

[54] **PROCEDES DE PRODUCTION DE CARBURANTS ET DE BIOFERTILISANTS**

[72] FIATO, ROCCO A., US

[72] SUN, YUHAN, CN

[72] ALLEN, MARK, US

[72] ZHAO, QUANYU, CN

[73] ACCELERGY CORPORATION, US

[73] SHANGHAI ADVANCED RESEARCH INSTITUTE OF THE CHINESE ACADEMY OF SCIENCE, CN

[85] 2015-11-20

[86] 2014-05-23 (PCT/US2014/039458)

[87] (WO2014/190332)

[30] US (61/855,789) 2013-05-23

[30] US (14/286,800) 2014-05-23

---

[11] **2,916,388**  
[13] C

[51] **Int.Cl. C09J 7/29 (2018.01)**

[25] EN

[54] **TAPE WITH SMOOTH DEPLOYMENT**

[54] **RUBAN A DEPLOIEMENT REGULIER**

[72] GUINOT, FRANCOIS, FR

[72] VEZAIN, STEPHANE, FR

[72] STANEK, DIDIER, FR

[72] BAUDASSE, YANNICK, FR

[72] BOURGEOIS, STEPHANE, FR

[72] MARONE-HITZ, PERNELLE, FR

[73] THALES, FR

[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR

[73] L'ECOLE CENTRALE DE MARSEILLE, FR

[86] (2916388)

[87] (2916388)

[22] 2015-12-29

[30] FR (1403027) 2014-12-30

**Canadian Patents Issued  
January 16, 2024**

---

[11] **2,920,217**  
[13] C

[51] **Int.Cl. E06B 9/262 (2006.01) E06B 9/322 (2006.01)**  
[25] EN  
[54] **COVERING FOR AN ARCHITECTURAL OPENING HAVING NESTED TUBES**  
[54] **REVETEMENT DESTINE A UNE OUVERTURE ARCHITECTURALE COMPORTANT DES TUBES NICHES**  
[72] HOLT, RONALD, US  
[72] LONG, MARCUS, US  
[72] WISECUP, STEPHEN T., US  
[73] HUNTER DOUGLAS INC., US  
[86] (2920217)  
[87] (2920217)  
[22] 2016-02-08  
[30] US (62/116,335) 2015-02-13

---

[11] **2,920,508**  
[13] C

[51] **Int.Cl. C12N 15/115 (2010.01) A61K 31/7115 (2006.01) A61K 31/7125 (2006.01) C07H 21/00 (2006.01) C12Q 1/6876 (2018.01) C07K 14/475 (2006.01) C07K 14/49 (2006.01)**  
[25] EN  
[54] **PDGF AND VEGF APTAMERS HAVING IMPROVED STABILITY AND THEIR USE IN TREATING PDGF AND VEGF MEDIATED DISEASES AND DISORDERS**  
[54] **APTAMERES DE PDGF ET VEGF PRESENTANT UNE STABILITE AMELIOREE ET LEUR UTILISATION DANS LE TRAITEMENT DE MALADIES ET DE TROUBLES MEDIES PAR PDGF ET VEGF**  
[72] JANJIC, NEBOJSA, US  
[72] DROLET, DANIEL W., US  
[72] GELINAS, AMY D., US  
[72] ZHANG, CHI, US  
[72] VRKLJAN, MICHAEL, US  
[73] SOMALOGIC OPERATING CO., INC., US  
[85] 2016-02-04  
[86] 2014-09-08 (PCT/US2014/054561)  
[87] (WO2015/035305)  
[30] US (61/875,660) 2013-09-09

---

[11] **2,921,866**  
[13] C

[51] **Int.Cl. C12N 7/01 (2006.01) C12N 5/078 (2010.01) A61K 35/76 (2015.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01) C07K 16/46 (2006.01) C12N 15/45 (2006.01) C12N 15/62 (2006.01) C12N 15/86 (2006.01) C07K 14/705 (2006.01)**  
[25] EN  
[54] **RNA VIRUSES FOR IMMUNOVIROTHERAPY**  
[54] **VIRUS D'ARN DESTINES A L'IMMUNOVIROTHERAPIE**  
[72] UNGERECHTS, GUY, DE  
[72] SPECK, TOBIAS, DE  
[72] ENGELAND, CHRISTINE, DE  
[72] BOSSOW, SASCHA, DE  
[73] UNIVERSITAET HEIDELBERG, DE  
[86] (2921866)  
[87] (2921866)  
[22] 2016-02-25  
[30] JP (2015-166899) 2015-08-26

---

[11] **2,924,228**  
[13] C

[51] **Int.Cl. C07K 14/005 (2006.01) A61K 39/12 (2006.01) C12N 7/04 (2006.01)**  
[25] EN  
[54] **PCV2 ORF2 PROTEIN VARIANT AND VIRUS LIKE PARTICLES COMPOSED THEREOF**  
[54] **VARIANT DE PROTEINE ORF2 DE PCV2 ET PARTICULES DE TYPE VIRAL COMPOSEES DE CELUI-CI**  
[72] HERNANDEZ, LUIS ALEJANDRO, US  
[72] MUEHLENTHALER, CHRISTINE MARGARET, US  
[72] VAUGHN, ERIC MARTIN, US  
[72] HAIWICK, GREGORY, US  
[73] BOEHRINGER INGELHEIM VETMEDICA, INC., US  
[85] 2016-03-11  
[86] 2014-10-02 (PCT/US2014/058793)  
[87] (WO2015/051099)  
[30] US (61/885,871) 2013-10-02

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[11] **2,925,111**  
[13] C

[51] **Int.Cl. G16B 30/00 (2019.01) C12Q 1/6869 (2018.01) G16B 20/00 (2019.01) C12Q 1/68 (2018.01)**  
[25] EN  
[54] **METHODS AND PROCESSES FOR NON-INVASIVE ASSESSMENT OF CHROMOSOME ALTERATIONS**  
[54] **METHODES ET PROCEDES D'EVALUATION NON INVASIVE DE MODIFICATIONS CHROMOSOMIQUES**  
[72] KIM, SUNG, US  
[72] JENSEN, TAYLOR JACOB, US  
[72] EHRICH, MATHIAS, US  
[73] SEQUENOM, INC., US  
[85] 2016-03-22  
[86] 2014-10-03 (PCT/US2014/059156)  
[87] (WO2015/054080)  
[30] US (61/887,801) 2013-10-07

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[11] **2,927,257**  
[13] C

[51] **Int.Cl. F01D 25/24 (2006.01) F01D 9/02 (2006.01)**  
[25] EN  
[54] **GAS TURBINE ENGINE ROTOR CASING TREATMENT**  
[54] **TRAITEMENT DE CARTER DE ROTOR DE TURBINE A GAZ**  
[72] URAC, TIBOR, CA  
[72] TOWNSEND, PETER, CA  
[72] THERATIL, IGNATIUS, CA  
[73] PRATT & WHITNEY CANADA CORP., CA  
[86] (2927257)  
[87] (2927257)  
[22] 2016-04-14  
[30] US (14/686,010) 2015-04-14

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[11] **2,927,582**  
[13] C

[51] **Int.Cl. A01B 69/00 (2006.01) A01B 49/06 (2006.01) A01C 7/06 (2006.01) A01C 7/08 (2006.01) B62D 9/00 (2006.01) E02F 3/84 (2006.01)**  
[25] EN  
[54] **IMPLEMENT OPERATING APPARATUS WITH OPEN END LOADING**  
[54] **APPAREIL D'UTILISATION D'ACCESSOIRE A CHARGEMENT A EXTREMITE OUVERTE**  
[72] BEAUJOT, NORBERT, CA  
[73] DOT TECHNOLOGY CORP., CA  
[86] (2927582)  
[87] (2927582)  
[22] 2016-04-19

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **2,927,973**  
[13] C

[51] **Int.Cl. E21B 34/14 (2006.01) E21B 23/00 (2006.01)**

[25] EN

[54] **PLUG-ACTUATED FLOW CONTROL MEMBER**

[54] **ELEMENT DE CONTROLE DE DEBIT ACTIONNE PAR UNE PRISE**

[72] RAVENSBERGEN, JOHN EDWARD, CA

[72] GETZLAF, DON, CA

[72] GILLIS, BROCK, CA

[72] JOHNSON, TIM, CA

[72] NCS MULTISTAGE INC., CA

[86] (2927973)

[87] (2927973)

[22] 2016-04-22

[30] US (62/152,603) 2015-04-24

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[11] **2,928,605**  
[13] C

[51] **Int.Cl. H01F 1/147 (2006.01) C22C 38/02 (2006.01) C22C 38/04 (2006.01) C22C 38/10 (2006.01)**

[25] EN

[54] **ULTRA-LOW COBALT IRON-COBALT MAGNETIC ALLOYS**

[54] **ALLIAGES MAGNETIQUES DE FER ET COBALT A FAIBLE TENEUR EN COBALT**

[72] JAYARAMAN, TANJORE V., US

[73] CARPENTER TECHNOLOGY CORPORATION, US

[86] (2928605)

[87] (2928605)

[22] 2016-05-03

[30] US (14/702,933) 2015-05-04

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[11] **2,929,492**  
[13] C

[51] **Int.Cl. G01N 33/48 (2006.01) C12Q 1/6809 (2018.01) C12Q 1/6886 (2018.01) C40B 30/04 (2006.01) G01N 33/483 (2006.01) G01N 33/574 (2006.01)**

[25] EN

[54] **METHODS OF DETECTING CANCER**

[54] **METHODE DE DETECTION DE CANCER**

[72] DAILY, ANNA, US

[72] RUTHERFORD, LINDSAY, US

[73] ASCENDANT DIAGNOSTICS, LLC, US

[86] (2929492)

[87] (2929492)

[22] 2016-05-09

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[11] **2,933,695**  
[13] C

[51] **Int.Cl. A61G 5/04 (2013.01) A61G 5/06 (2006.01) A61G 5/10 (2006.01) A61G 5/12 (2006.01)**

[25] EN

[54] **ELEVATED HEIGHT WHEELCHAIR**

[54] **FAUTEUIL ROULANT DE HAUTEUR ELEVEE**

[72] ANTONISHAK, STEPHEN J., US

[72] MULHERN, JAMES P., US

[73] PRIDE MOBILITY PRODUCTS CORPORATION, US

[85] 2016-06-13

[86] 2014-12-16 (PCT/US2014/070652)

[87] (WO2015/095221)

[30] US (61/916,500) 2013-12-16

[30] US (61/938,880) 2014-02-12

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[11] **2,936,422**  
[13] C

[51] **Int.Cl. B62D 33/02 (2006.01) B65G 69/28 (2006.01)**

[25] EN

[54] **LOADING PLATFORM FOR WHEELED VEHICLES**

[54] **PLATEFORME DE CHARGEMENT DESTINEE A DES VEHICULES SUR ROUES**

[72] DESCHENES, GUY, CA

[72] OUELLET, STEPHANE, CA

[73] SERVICE D'EQUIPEMENT G.D. INC., CA

[86] (2936422)

[87] (2936422)

[22] 2016-07-15

[30] US (62/210,220) 2015-08-26

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[11] **2,937,049**  
[13] C

[51] **Int.Cl. A61K 47/02 (2006.01) A61K 9/14 (2006.01) A61L 29/10 (2006.01) A61P 7/02 (2006.01) A61P 7/04 (2006.01) C01F 11/18 (2006.01) C12N 11/14 (2006.01)**

[25] EN

[54] **SELF-FUELED PARTICLES FOR PROPULSION THROUGH FLOWING AQUEOUS FLUIDS**

[54] **PARTICULES AUTO-ALIMENTEES POUR LA PROPULSION A TRAVERS DES LIQUIDES AQUEUX FLUIDES**

[72] KASTRUP, CHRISTIAN, CA

[72] YEON, JU HUN, KR

[72] BAYLIS, JAMES, CA

[72] BURKE, THOMAS FREDERICK, US

[73] THE UNIVERSITY OF BRITISH COLUMBIA, CA

[73] THE GENERAL HOSPITAL CORPORATION, US

[85] 2016-07-15

[86] 2014-10-02 (PCT/CA2014/000721)

[87] (WO2015/089626)

[30] US (61/916,674) 2013-12-16

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[11] **2,937,553**  
[13] C

[51] **Int.Cl. B65D 43/06 (2006.01)**

[25] EN

[54] **LID FOR BEVERAGE CONTAINERS**

[54] **COUVERCLE DE RECIPIENTS POUR BOISSON**

[72] ABDIYE, ABBEY, CA

[73] ABDIYE, ABBEY, CA

[85] 2016-07-21

[86] 2015-01-23 (PCT/CA2015/050048)

[87] (WO2015/109409)

[30] US (61/930,480) 2014-01-23

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[11] **2,937,628**  
[13] C

[51] **Int.Cl. E04F 13/22 (2006.01) E04F 13/24 (2006.01)**

[25] EN

[54] **HIDDEN BOARD ANCHOR**

[54] **ANCRAGE CACHE**

[72] MITCHELL, STEVEN A., US

[73] ROYAL GROUP, INC., US

[86] (2937628)

[87] (2937628)

[22] 2016-08-02

[30] US (62/200,313) 2015-08-03

[30] US (15/221,772) 2016-07-28

**Canadian Patents Issued  
January 16, 2024**

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[11] **2,939,564**  
[13] C

[51] **Int.Cl. C12N 7/01 (2006.01) C12Q 1/6897 (2018.01) C12Q 1/04 (2006.01) C12Q 1/70 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR RAPID DETECTION OF MICROORGANISMS USING RECOMBINANT BACTERIOPHAGE**

[54] **PROCEDES ET SYSTEMES POUR UNE DETECTION RAPIDE DE MICRO-ORGANISMES A L'AIDE D'UN BACTERIOPHAGE RECOMBINANT**

[72] ANDERSON, DWIGHT LYMAN, US

[72] GIL, JOSE S., US

[72] HOPKINS, BEN BARRETT, US

[72] ERICKSON, STEPHEN ERIC, US

[73] LABORATORY CORPORATION OF AMERICA HOLDINGS, US

[85] 2016-08-11

[86] 2015-02-18 (PCT/US2015/016415)

[87] (WO2015/126966)

[30] US (61/940,959) 2014-02-18

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[11] **2,940,479**  
[13] C

[51] **Int.Cl. E04B 2/74 (2006.01) A47B 96/00 (2006.01) E04B 2/82 (2006.01)**

[25] EN

[54] **SLIDABLE FURNITURE WITH IN-WALL MOUNTING SYSTEM**

[54] **MEUBLE DEPLACABLE DOTE D'UN MECANISME D'INSTALLATION INTEGRE AU MUR**

[72] GOSLING, GEOFF, CA

[72] SMED, MOGENS, CA

[73] DIRTT ENVIRONMENTAL SOLUTIONS, LTD., CA

[85] 2016-08-26

[86] 2016-05-31 (PCT/US2016/035001)

[87] (WO2016/200641)

[30] US (62/173,138) 2015-06-09

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[11] **2,941,006**  
[13] C

[51] **Int.Cl. H02G 1/08 (2006.01) G09F 1/00 (2006.01) H01B 7/36 (2006.01)**

[25] EN

[54] **CONDUCTOR IDENTIFICATION**

[54] **IDENTIFICATION DE CONDUCTEUR**

[72] FOWLER, WILLIE FRANKLIN, US

[72] HARRIS, JEREMY, US

[72] TEMPLADOR, RICHARD MIKE, US

[72] GALINDO GONZALEZ, JUAN ALBERTO, US

[73] SOUTHWIRE COMPANY, LLC, US

[86] (2941006)

[87] (2941006)

[22] 2016-09-01

[30] US (62/212,624) 2015-09-01

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[11] **2,942,465**  
[13] C

[51] **Int.Cl. E04H 15/08 (2006.01) B60P 3/32 (2006.01) E04F 10/02 (2006.01) E04F 10/06 (2006.01)**

[25] EN

[54] **AWNING ASSEMBLY**

[54] **ASSEMBLAGE D'AUVENT**

[72] MEYERS, CLAYTON HENDRY, US

[72] ALBERTSON, KYLE PATRICK, US

[73] DOMETIC SWEDEN AB, SE

[86] (2942465)

[87] (2942465)

[22] 2016-09-20

[30] US (15/223,825) 2016-07-29

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[11] **2,943,022**  
[13] C

[51] **Int.Cl. C07D 471/04 (2006.01) A61K 31/4375 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01) C07D 401/12 (2006.01) C07D 403/12 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **BENZO[G]PYRIDO[2,1-B] QUINAZOLINE CARBOXAMIDE COMPOUNDS WHICH INHIBIT RNA POLYMERASE, COMPOSITIONS INCLUDING SUCH COMPOUNDS, AND THEIR USE**

[54] **COMPOSES CARBOXAMIDES QUINAZOLINE BENZO[G]PYRIDO[2,1-B] QUI INHIBENT L'ARN POLYMERASE, COMPOSITIONS COMPRENANT DE TELS COMPOSES, ET LEUR UTILISATION**

[72] LAIHO, MARIKKI, US

[72] COLIS, LAUREEN, US

[72] BARROW, JAMES C., US

[72] ERNST, GLEN, US

[72] SANDERS, SARAH, US

[73] THE JOHNS HOPKINS UNIVERSITY, US

[73] LIEBER INSTITUTE FOR BRAIN DEVELOPMENT, US

[85] 2016-09-15

[86] 2015-03-20 (PCT/US2015/021699)

[87] (WO2015/143293)

[30] US (61/968,079) 2014-03-20

[30] US (62/062,197) 2014-10-10

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[11] **2,943,220**  
[13] C

[51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/55 (2006.01) A61P 35/00 (2006.01) A61P 37/02 (2006.01) C07D 405/14 (2006.01) C07D 409/14 (2006.01)**

[25] EN

[54] **BENZIMIDAZOLE DERIVATIVES AS ERBB TYROSINE KINASE INHIBITORS FOR THE TREATMENT OF CANCER**

[54] **DERIVES DE BENZIMIDAZOLE COMME INHIBITEURS DE TYROSINE KINASE DE FAMILLE ERBB POUR LE TRAITEMENT DU CANCER**

[72] LONG, YUN, US

[73] CAPELLA THERAPEUTICS, INC., US

[85] 2016-09-19

[86] 2015-03-19 (PCT/US2015/021455)

[87] (WO2015/143148)

[30] US (61/968,225) 2014-03-20



**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **2,943,962**  
[13] C

[51] **Int.Cl. H04L 9/06 (2006.01) G06F 21/62 (2013.01) H04L 9/08 (2006.01) H04L 9/14 (2006.01) H04L 9/30 (2006.01) H04W 12/06 (2009.01) H04W 12/069 (2021.01)**

[25] EN

[54] **SECURING DATA VIA MULTI-LAYER TOKENS**

[54] **SECURISATION DES DONNEES AU MOYEN DE JETONS MULTICOUCHES**

[72] BARNETT, JONATHAN K., CA  
[72] D'SOUZA, ROY, CA  
[72] LEE, JOHN JONG SUK, CA  
[72] MCALPINE, CHRISTOPHER ARTHUR HOLLAND, CA  
[72] ROSKIC, ALEKSANDAR, CA  
[72] WATSON, DOUGLAS EDWARD WILLIAM, CA  
[72] XI, ZHENG, CA  
[72] YEOMAN, SHANNON ROSE, CA  
[73] THE TORONTO-DOMINION BANK, CA  
[86] (2943962)  
[87] (2943962)  
[22] 2016-10-03  
[30] US (62/251,664) 2015-11-05

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[11] **2,944,204**  
[13] C

[51] **Int.Cl. C02F 1/50 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR DETECTING BIOFILM GROWTH IN WATER SYSTEMS**

[54] **SYSTEME ET PROCEDE DE DETECTION DE CROISSANCE DE BIOFILM DANS DES SYSTEMES AQUEUX**

[72] VELA, DAVID, US  
[72] DENVIR, ADRIAN, US  
[72] HOLLOWAY, MATTHEW C., US  
[73] NCH CORPORATION, US  
[85] 2016-09-27  
[86] 2015-04-08 (PCT/US2015/024963)  
[87] (WO2015/157442)  
[30] US (61/977,464) 2014-04-09  
[30] US (14/681,777) 2015-04-08

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[11] **2,944,929**  
[13] C

[51] **Int.Cl. F24H 3/06 (2006.01)**

[25] EN

[54] **FURNACE**

[54] **CHAUDIERE**

[72] HAYNES, DANNY N., US  
[72] MILLER, GREGORY A., US  
[73] FIRE CHIEF INDUSTRIES LLC, US  
[86] (2944929)  
[87] (2944929)  
[22] 2016-10-11  
[30] US (15/247,640) 2016-08-25

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[11] **2,945,137**  
[13] C

[51] **Int.Cl. G16H 40/20 (2018.01) G16H 10/20 (2018.01) G16H 10/60 (2018.01) G16H 15/00 (2018.01) G16H 50/20 (2018.01) G16H 50/30 (2018.01) G16H 50/50 (2018.01) G16H 50/70 (2018.01) G16H 70/00 (2018.01) G16H 20/90 (2018.01)**

[25] EN

[54] **HOLISTIC HOSPITAL PATIENT CARE AND MANAGEMENT SYSTEM AND METHOD FOR AUTOMATED PATIENT MONITORING**

[54] **SOINS HOLISTIQUES A DISPENSER A UN PATIENT DANS UN HOPITAL ET SYSTEME DE GESTION ET PROCEDE DE SURVEILLANCE AUTOMATISEE DE PATIENT**

[72] AMARASINGHAM, RUBENDRAN, US  
[72] OLIVER, GEORGE, US  
[72] SHAH, ANAND, US  
[72] SIVA, VAIDYANATHA, US  
[72] LUCENA, BRIAN, US  
[72] SHAH, MONAL, US  
[72] CHERIAN, PRASEETHA, US  
[72] BALLARD, SPENCER, US  
[72] MCGINN, JASON, US  
[73] PARKLAND CENTER FOR CLINICAL INNOVATION, US  
[85] 2016-10-06  
[86] 2015-04-09 (PCT/US2015/025205)  
[87] (WO2015/157575)  
[30] US (61/978,058) 2014-04-10

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[11] **2,946,885**  
[13] C

[51] **Int.Cl. A47K 13/26 (2006.01) B25F 1/00 (2006.01) B25B 13/00 (2006.01) B25B 15/00 (2006.01) E03D 11/13 (2006.01)**

[25] EN

[54] **TOILET SEAT TIGHTENING KIT**

[54] **TROUSSE DE SERRAGE DE SIEGE DE TOILETTE**

[72] DEL DUKE, MATTHEW JAMES, US  
[72] GRECO, CHRISTOPHER ERNEST, US  
[73] GINSEY INDUSTRIES, INC., US  
[86] (2946885)  
[87] (2946885)  
[22] 2016-10-31  
[30] US (15/284,970) 2016-10-04

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[11] **2,947,962**  
[13] C

[51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/689 (2018.01) A61K 31/437 (2006.01) A61P 1/00 (2006.01) A61P 1/12 (2006.01) A61P 31/04 (2006.01) C12Q 1/02 (2006.01) G01N 33/48 (2006.01)**

[25] EN

[54] **IBS MICROBIOTA AND USES THEREOF**

[54] **MICROBIOTE DU SYNDROME DU COLON IRRITABLE ET UTILISATIONS ASSOCIEES**

[72] GOLDEN, PAM, US  
[72] FODOR, ANTHONY, US  
[72] BORTEY, ENOCH, US  
[72] FORBES, WILLIAM, US  
[73] SALIX PHARMACEUTICALS, INC., US  
[85] 2016-11-03  
[86] 2015-05-04 (PCT/US2015/029040)  
[87] (WO2015/171493)  
[30] US (61/988,293) 2014-05-04  
[30] US (61/988,841) 2014-05-05  
[30] US (62/036,085) 2014-08-11  
[30] US (62/135,658) 2015-03-19

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**Canadian Patents Issued  
January 16, 2024**

[11] **2,948,491**  
[13] C

[51] **Int.Cl. C12N 15/38 (2006.01) A61K 39/245 (2006.01) A61P 37/04 (2006.01) C07K 14/035 (2006.01) C12N 7/01 (2006.01) C12N 15/869 (2006.01)**

[25] EN

[54] **VACCINES AGAINST GENITAL HERPES SIMPLEX INFECTIONS**

[54] **VACCINS CONTRE LES INFECTIONS DE L'HERPES SIMPLEX GENITAL**

[72] KOUSOULAS, KONSTANTIN, US

[73] BOARD OF SUPERVISORS OF LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COLLEGE, US

[85] 2016-11-08

[86] 2015-05-08 (PCT/US2015/029905)

[87] (WO2015/172033)

[30] US (61/990,975) 2014-05-09

[11] **2,948,581**  
[13] C

[51] **Int.Cl. A63G 31/00 (2006.01) A63B 69/00 (2006.01) A63G 21/18 (2006.01)**

[25] EN

[54] **INFLATABLE SURFING APPARATUS AND METHOD OF PROVIDING REDUCED FLUID TURBULENCE**

[54] **APPAREIL DE GLISSE SUR L'EAU GONFLABLE ET METHODE PERMETTANT DE REDUIRE LA TURBULENCE DU LIQUIDE**

[72] VICENTE, ORIOL A., US

[72] MYRMAN, MARSHALL COREY, US

[72] KOIDE, BRAD, US

[72] PHILP, DAVID, ZA

[73] WHITEWATER WEST INDUSTRIES LTD., US

[86] (2948581)

[87] (2948581)

[22] 2016-11-14

[30] US (62/255,054) 2015-11-13

[11] **2,948,583**  
[13] C

[51] **Int.Cl. A63G 21/18 (2006.01) A63G 31/00 (2006.01)**

[25] EN

[54] **WAVE CATCHING SHUTDOWN LANE END**

[54] **EXTREMITE DE VOIE D'ARRET SAISSANT LA VAGUE**

[72] BARRERA, CLAUDIO, CA

[72] CARLSON, KARL, CA

[72] BRADLEY, BRUCE, CA

[72] KHOMOVSKIY, ANDREY, CA

[73] WHITEWATER WEST INDUSTRIES LTD., US

[86] (2948583)

[87] (2948583)

[22] 2016-11-14

[30] US (62/254,586) 2015-11-12

[11] **2,948,710**  
[13] C

[51] **Int.Cl. E04F 10/00 (2006.01) H01M 50/244 (2021.01) B60P 3/36 (2006.01) H02J 7/00 (2006.01)**

[25] EN

[54] **POWER WAND AND METHOD OF USE**

[54] **BAGUETTE ELECTRIQUE ET SA METHODE D'UTILISATION**

[72] BECKER, KENT, US

[73] DOMETIC SWEDEN AB, SE

[86] (2948710)

[87] (2948710)

[22] 2016-11-17

[30] US (62/306,831) 2016-03-11

[11] **2,948,787**  
[13] C

[51] **Int.Cl. B60T 17/22 (2006.01)**

[25] EN

[54] **CONTROLLER AND METHOD FOR MONITORING TRAILER BRAKE APPLICATIONS**

[54] **CONTROLEUR ET METHODE DE SURVEILLANCE D'APPLICATIONS DE FREIN DE REMORQUE**

[72] GRANDSTAFF, MICHAEL D., US

[72] RIPLEY, JOHN V., US

[73] BENDIX COMMERCIAL VEHICLE SYSTEMS LLC, US

[86] (2948787)

[87] (2948787)

[22] 2016-11-16

[30] US (14/944,261) 2015-11-18

[11] **2,949,911**  
[13] C

[51] **Int.Cl. A61M 5/32 (2006.01) A61M 5/178 (2006.01) A61M 5/31 (2006.01)**

[25] EN

[54] **SHORT INJECTION LENGTH SYRINGE**

[54] **SERINGUE A COURTE LONGUEUR D'INJECTION**

[72] LIMAYE, AMIT, US

[72] O'HARA, KEVIN, US

[72] SCHIFF, DAVID R., US

[72] GALA, JESSE, US

[73] BECTON, DICKINSON AND COMPANY, US

[86] (2949911)

[87] (2949911)

[22] 2016-11-29

[30] US (62/261,100) 2015-11-30

[11] **2,950,338**  
[13] C

[51] **Int.Cl. A61K 31/4184 (2006.01) A61K 38/05 (2006.01) A61K 38/08 (2019.01) A61P 35/00 (2006.01)**

[25] EN

[54] **USE OF A BENZIMIDAZOLE ALKYLATING HDAC INHIBITOR IN COMBINATION WITH A PROTEOSOME INHIBITOR IN THE TREATMENT OF CANCER**

[54] **ASSOCIATIONS PHARMACEUTIQUES POUR TRAITER LE CANCER**

[72] MEHRLING, THOMAS JORG, CH

[72] OCIO, ENRIQUE MARIA, ES

[73] EURO-CELTIQUE S.A., LU

[85] 2016-11-25

[86] 2015-05-26 (PCT/EP2015/061571)

[87] (WO2015/181156)

[30] GB (1409471.8) 2014-05-28

[11] **2,950,668**  
[13] C

[51] **Int.Cl. B08B 9/093 (2006.01)**

[25] EN

[54] **APPARATUS FOR REMOVING MATERIAL FROM A BODY OF LIQUID**

[54] **APPAREIL D'ELIMINATION DE MATIERE D'UN VOLUME DE LIQUIDE**

[72] VLAHOGEORGE, JOHN T., US

[73] VLAHOGEORGE, JOHN T., US

[86] (2950668)

[87] (2950668)

[22] 2016-12-06

[30] US (15/008,568) 2016-01-28

**Brevets canadiens délivrés  
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[11] **2,951,843**  
[13] C

[51] **Int.Cl. G07C 5/08 (2006.01) B64D 11/00 (2006.01) B64D 37/00 (2006.01) B64D 47/00 (2006.01) G01M 17/00 (2006.01)**

[25] FR

[54] **CONTROL AND MONITORING SYSTEM AND METHOD FOR AIRCRAFT EQUIPMENT**

[54] **SYSTEME ET PROCEDE DE COMMANDE ET DE SURVEILLANCE D'EQUIPEMENTS D'UN AERONEF**

[72] BRANTHOMME, ARNAUD, FR

[72] SCHALLER, GUY, FR

[72] BOUTZEN, LORIANNE, FR

[73] DASSAULT AVIATION, FR

[86] (2951843)

[87] (2951843)

[22] 2016-12-14

[30] FR (15 02696) 2015-12-24

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[11] **2,951,848**  
[13] C

[51] **Int.Cl. G01N 27/90 (2021.01)**

[25] EN

[54] **PULSED EDDY CURRENT TESTING WITH DUAL-PURPOSE COILS**

[54] **TEST DE COURANT DE FOUCAULT PULSE AU MOYEN DE BOBINES DOUBLE FONCTION**

[72] HARDY, FLORIAN, CA

[72] ROCHETTE, MAXIME, CA

[72] GRENIER, MARC, CA

[72] DEMERS-CARPENTIER, VINCENT, CA

[73] EDDYFI CANADA INC., CA

[86] (2951848)

[87] (2951848)

[22] 2016-12-14

[30] US (62/267,470) 2015-12-15

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[11] **2,952,209**  
[13] C

[51] **Int.Cl. A61K 9/12 (2006.01) A61K 47/14 (2017.01) A61K 47/24 (2006.01) A61K 47/44 (2017.01) A61P 17/00 (2006.01)**

[25] EN

[54] **STABLE FOAMING COMPOSITION AND METHOD OF USE**

[54] **COMPOSITION MOUSSANTE STABLE ET METHODE D'UTILISATION**

[72] PATEL, JIGER, US

[73] JOHNSON & JOHNSON CONSUMER INC., US

[86] (2952209)

[87] (2952209)

[22] 2016-12-20

[30] US (62/270,889) 2015-12-22

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[11] **2,953,428**  
[13] C

[51] **Int.Cl. A23L 3/10 (2006.01) A23L 3/02 (2006.01) B65B 31/00 (2006.01)**

[25] FR

[54] **CONTINUOUS PROCESS AND SYSTEM FOR PASTEURIZING OR STERILIZING FOOD IN A RIGID CONTAINER FOLLOWED BY DEEP VACUUM SEALING BY ROTARY STEAM INJECTION AND FAST HOMOGENEOUS COOLING**

[54] **PROCEDE CONTINU, ET SYSTEME POUR LA PASTEURISATION OU LA STERILISATION DE DENREES ALIMENTAIRES DANS UN CONTENEUR RIGIDE SUIVIE DE SA FERMETURE SOUS VIDE PROFOND PAR INJECTION DE VAPEUR ROTATIVE ET REFROIDISSEMENT RAPIDE HOMOGENE**

[72] LARROCHE, JEAN, FR

[72] LARROCHE, BRIGITTE, FR

[73] AUXILIAR CONSERVERA S.A., ES

[86] (2953428)

[87] (2953428)

[22] 2017-01-04

[30] FR (1650122) 2016-01-07

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[11] **2,954,190**  
[13] C

[51] **Int.Cl. H02J 3/38 (2006.01)**

[25] EN

[54] **GRID NETWORK GATEWAY AGGREGATION**

[54] **AGREGATION DE PASSERELLE DE RESEAU MAILLE**

[72] MATAN, STEFAN, US

[72] HORTON, FRED, US

[72] MARRONE, FRANK, US

[72] BORZINI, CLAYTON, US

[73] XSLENT ENERGY TECHNOLOGIES, LLC, US

[85] 2017-01-03

[86] 2015-07-06 (PCT/US2015/039232)

[87] (WO2016/004433)

[30] US (62/021,085) 2014-07-04

[30] US (14/791,438) 2015-07-04

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[11] **2,955,788**  
[13] C

[51] **Int.Cl. A61K 39/395 (2006.01) C07K 16/18 (2006.01)**

[25] EN

[54] **ANTI-PD-1 ANTIBODIES**

[54] **ANTICORPS ANTI-PD-1**

[72] SUN, ZIYONG, CN

[72] ZHA, JIPING, CN

[72] QIU, JUNZHUAN, CN

[73] APOLLOMICS INC., US

[85] 2017-01-19

[86] 2015-07-22 (PCT/US2015/041575)

[87] (WO2016/014688)

[30] CN (PCT/CN2014/082721) 2014-07-22

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[11] **2,957,552**  
[13] C

[51] **Int.Cl. A61K 38/17 (2006.01) C12N 5/09 (2010.01) A61K 9/10 (2006.01) A61K 9/127 (2006.01) A61K 9/51 (2006.01) A61K 47/10 (2017.01) A61K 47/30 (2006.01) A61K 47/34 (2017.01) A61P 35/00 (2006.01) C12N 5/02 (2006.01)**

[25] EN  
[54] **COMPOSITIONS AND METHODS FOR INDUCING NANOPARTICLE-MEDIATED MICROVASCULAR EMBOLIZATION OF TUMORS**

[54] **COMPOSITIONS ET PROCEDES D'INDUCTION D'UNE EMBOLISATION MICROVASCULAIRE DES TUMEURS A MEDIATION PAR DES NANOPARTICULES**

[72] GHOROGHCHIAN, P. PETER, US  
[73] POSEIDA THERAPEUTICS, INC., US  
[85] 2017-02-07  
[86] 2015-08-06 (PCT/US2015/044017)  
[87] (WO2016/022805)  
[30] US (14/455,082) 2014-08-08

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[11] **2,957,575**  
[13] C

[51] **Int.Cl. E21B 12/00 (2006.01) E21B 10/62 (2006.01)**

[25] EN  
[54] **MECHANISM FOR RETAINING BITS ON A BLASTHOLE DRILL**

[54] **MECANISME DE FIXATION DE TREPANS SUR UNE FOREUSE DE TROU DE MINE**

[72] GASKA, JASON E., US  
[73] JOY GLOBAL SURFACE MINING INC, US  
[86] (2957575)  
[87] (2957575)  
[22] 2017-02-10  
[30] US (62/294,658) 2016-02-12

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[11] **2,958,944**  
[13] C

[51] **Int.Cl. A23L 3/375 (2006.01) A23B 4/09 (2006.01) A23B 5/055 (2006.01) A23B 7/055 (2006.01) A23B 9/10 (2006.01) A23B 9/18 (2006.01) B65B 31/02 (2006.01)**

[25] FR  
[54] **FOOD LIQUID DEGASSING AND REINJECTION PROCESS AND SYSTEM**

[54] **PROCEDE ET SYSTEME DE DEGAZAGE ET DE RE-INJECTION DE FLUIDES DE PRODUITS ALIMENTAIRES**

[72] LARROCHE, JEAN, FR  
[72] LARROCHE, BRIGITTE, FR  
[73] AUXILIAR CONSERVERA S.A., ES  
[86] (2958944)  
[87] (2958944)  
[22] 2017-02-24  
[30] FR (1651544) 2016-02-25

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[11] **2,959,098**  
[13] C

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/1455 (2006.01) A61B 5/145 (2006.01)**

[25] EN  
[54] **METHOD AND APPARATUS FOR TRANSDERMAL IN VIVO MEASUREMENT BY RAMAN SPECTROSCOPY**

[54] **PROCEDE ET APPAREIL POUR MESURE IN VIVO TRANSDERMIQUE PAR SPECTROSCOPIE RAMAN**

[72] BANKE, STEFAN OVESEN, DK  
[73] RSP SYSTEMS A/S, DK  
[85] 2017-02-23  
[86] 2015-08-24 (PCT/EP2015/069332)  
[87] (WO2016/034448)  
[30] GB (1415671.5) 2014-09-04

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[11] **2,959,243**  
[13] C

[51] **Int.Cl. F28F 9/00 (2006.01) F16L 25/00 (2006.01) F25C 3/02 (2006.01) F28F 9/26 (2006.01)**

[25] EN  
[54] **COOLING MEMBER FOR A MOBILE ICE RINK**

[54] **ELEMENT DE REFROIDISSEMENT DESTINE A UN ANNEAU DE GLACE MOBILE**

[72] VAN NIGTEVECHT, HUGO JACOB, NL  
[72] MOLENAAR, GUIDO WILLIAM, NL  
[72] HOEKS, WILHELMUS ADOLFUS JOHANNES MARIE, NL  
[73] ICE-WORLD HOLDING B.V., NL  
[86] (2959243)  
[87] (2959243)  
[22] 2017-02-27  
[30] EP (16158284.6) 2016-03-02

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[11] **2,960,416**  
[13] C

[51] **Int.Cl. G06Q 40/12 (2023.01) G06F 16/93 (2019.01) G06V 30/10 (2022.01)**

[25] FR  
[54] **SYSTEM AND METHOD FOR THE AUTOMATED MANAGEMENT OF THE ACCOUNTING INFORMATION OF SMES ON THE WEB**

[54] **SYSTEME ET METHODE DE GESTION AUTOMATISEE DE L'INFORMATION COMPTABLE DES PME SUR LE WEB**

[72] CARLE, PATRICE, CA  
[72] VERGE, ROBERT H., CA  
[72] LESSARD, SERGE, CA  
[72] NADEAU, SEBASTIEN, CA  
[72] PRAIRIE, PATRICK, CA  
[73] SOLUTION ALEOP INC., CA  
[85] 2017-03-07  
[86] 2015-09-11 (PCT/CA2015/050878)  
[87] (WO2016/037285)  
[30] CA (2,863,303) 2014-09-11

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16 janvier 2024**

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[11] **2,961,412**  
[13] C

[51] **Int.Cl. C07D 473/04 (2006.01) A61K 31/522 (2006.01)**  
[25] EN  
[54] **INHIBITING THE TRANSIENT RECEPTOR POTENTIAL A1 ION CHANNEL**  
[54] **INHIBITION DE CANAL IONIQUE A POTENTIEL DE RECEPTEUR TRANSITOIRE A1**  
[72] CHENARD, BERTAND L., US  
[72] WU, XINYUAN, US  
[73] ELI LILLY AND COMPANY, US  
[85] 2017-03-14  
[86] 2015-09-18 (PCT/US2015/051063)  
[87] (WO2016/044792)  
[30] US (62/052,678) 2014-09-19

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[11] **2,962,858**  
[13] C

[51] **Int.Cl. A61B 34/20 (2016.01) A61B 90/90 (2016.01) A61B 90/98 (2016.01)**  
[25] EN  
[54] **TRACKABLE APPARATUSES AND METHODS**  
[54] **APPAREILS REPERABLES ET METHODES**  
[72] SRIMOHANARAJAH, KIRUSHA, CA  
[72] DYER, KELLY NOEL, CA  
[72] LUI, DOROTHY, CA  
[72] BAILEY, BRENT ANDREW, CA  
[72] SELA, GAL, CA  
[73] SYNAPTIVE MEDICAL INC., CA  
[86] (2962858)  
[87] (2962858)  
[22] 2017-03-31  
[30] US (15/262,560) 2016-09-12

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[11] **2,962,952**  
[13] C

[51] **Int.Cl. G05B 19/418 (2006.01)**  
[25] EN  
[54] **DEVICE HIERARCHY BUILDING FOR A REMOTE TERMINAL UNIT**  
[54] **CONSTRUCTION DE HIERARCHIE DE DISPOSITIF POUR STATION TERMINALE A DISTANCE**  
[72] TIWARI, NEERAJ D., IN  
[72] VANDERAH, RICHARD J., US  
[73] BRISTOL, INC., D/B/A REMOTE AUTOMATION SOLUTIONS, US  
[85] 2017-03-28  
[86] 2015-10-02 (PCT/US2015/053779)  
[87] (WO2016/054541)  
[30] IN (3149/MUM/2014) 2014-10-04

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[11] **2,963,908**  
[13] C

[51] **Int.Cl. G08B 19/02 (2006.01) B64D 15/20 (2006.01) B64D 43/00 (2006.01)**  
[25] EN  
[54] **AUTOMATED SUPER-COOLED WATER-DROPLET SIZE DIFFERENTIATION USING AIRCRAFT ACCRETION PATTERNS**  
[54] **DIFFERENTIATION DE TAILLE DE GOUTTELETTE D'EAU SUPER REFROIDIE AUTOMATISEE AU MOYEN DE MOTIFS D'ACCRETION D'AERONEF**  
[72] LOPRESTO, VINCENT R., US  
[73] ROSEMOUNT AEROSPACE INC., US  
[86] (2963908)  
[87] (2963908)  
[22] 2017-04-10  
[30] US (15/195,811) 2016-06-28

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[11] **2,964,645**  
[13] C

[51] **Int.Cl. C07F 9/30 (2006.01) C22B 3/38 (2006.01)**  
[25] EN  
[54] **ALKENYL(PERFLUOROALKYL)PHOSPHINIC ACIDS**  
[54] **ACIDES ALCENYLE(PERFLUOROALKYLE)PHOSPHINIQUES**  
[72] IGNATYEV, NIKOLAI (MYKOLA), DE  
[72] SCHULTE, MICHAEL, DE  
[72] KOPPE, KARSTEN, DE  
[72] BILIR, VURAL, DE  
[72] FRANK, WALTER, DE  
[73] MERCK PATENT GMBH, DE  
[85] 2017-04-13  
[86] 2015-09-25 (PCT/EP2015/001911)  
[87] (WO2016/058668)  
[30] EP (14003549.4) 2014-10-17

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[11] **2,964,646**  
[13] C

[51] **Int.Cl. A01H 1/04 (2006.01) A23L 19/00 (2016.01) A01H 6/34 (2018.01) C12Q 1/6895 (2018.01) A01H 1/02 (2006.01) A01H 5/00 (2018.01) A01H 5/08 (2018.01) A01H 5/10 (2018.01) C12N 5/04 (2006.01)**  
[25] EN  
[54] **YIELD QTLS IN CUCUMBER PLANTS**  
[54] **LOCUS A CARACTERE QUANTITATIF (QTL) DE RENDEMENT DANS DES PLANTS DE CONCOMBRE**  
[72] REULING, GERHARD T.M., NL  
[72] KRAAN, PETER ARNOLD GIJSBERT, NL  
[72] BEENDERS, FRANK, NL  
[72] VAN DE WAL, MARION, NL  
[72] HERMANS, FREDDY, NL  
[72] KOELEWIJN, HANS-PETER, NL  
[72] TANKSLEY, STEVEN D., US  
[72] CASA, ALEXANDRA M., US  
[73] NUNHEMS B.V., NL  
[85] 2017-04-13  
[86] 2015-10-14 (PCT/EP2015/073742)  
[87] (WO2016/059092)  
[30] EP (14189200.0) 2014-10-16

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[11] **2,964,901**  
[13] C

[51] **Int.Cl. G06Q 10/087 (2023.01) G16H 20/10 (2018.01) G06Q 10/083 (2023.01) B65B 57/10 (2006.01)**  
[25] EN  
[54] **REMOTE FILLING, TRACKING AND VERIFICATION OF PHARMACY SUPPLY CONTAINERS**  
[54] **REPLISSAGE, SUIVI ET VERIFICATION A DISTANCE DE RECIPIENTS DE PRODUITS PHARMACEUTIQUES**  
[72] LOUIE, SHELTON, US  
[72] INTILE, JOSEPH, US  
[72] GARRETT, STEPHEN A., US  
[73] GSL SOLUTIONS, INC., US  
[85] 2017-04-18  
[86] 2015-10-16 (PCT/US2015/056107)  
[87] (WO2016/061559)  
[30] US (62/064,911) 2014-10-16

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[11] **2,965,747**  
[13] C

[51] **Int.Cl. C09D 11/101 (2014.01) C09D 11/30 (2014.01) C09D 11/34 (2014.01) C09D 11/38 (2014.01)**

[25] EN

[54] **HIGH GLOSS INK COMPOSITION**

[54] **COMPOSITION D'ENCRE TRES BRILLANTE**

[72] VAN HOUT, RICHARD F.E., NL

[72] VAN HAMEREN, RICHARD, NL

[73] CANON PRODUCTION PRINTING NETHERLANDS B.V, NL

[85] 2017-04-25

[86] 2015-12-10 (PCT/EP2015/079260)

[87] (WO2016/096603)

[30] EP (14198894.9) 2014-12-18

[30] EP (15171059.7) 2015-06-08

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[11] **2,966,111**  
[13] C

[51] **Int.Cl. B01J 19/18 (2006.01)**

[25] EN

[54] **REACTOR AND MULTIFUNCTIONAL RISER AND DOWNER SIMULATOR INCORPORATING THE SAME**

[54] **REACTEUR ET COLONNE MONTANTE MULTIFONCTIONNELLE ET SIMULATEUR DE COLONNE DESCENDANTE LES INCORPORANT**

[72] DE LASA, HUGO, CA

[73] THE UNIVERSITY OF WESTERN ONTARIO, CA

[86] (2966111)

[87] (2966111)

[22] 2017-05-03

[30] US (62/331007) 2016-05-03

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[11] **2,966,663**  
[13] C

[51] **Int.Cl. H01H 3/02 (2006.01) H01H 9/04 (2006.01) H01H 36/00 (2006.01) H05K 5/02 (2006.01) H01H 13/06 (2006.01) H01H 19/06 (2006.01)**

[25] EN

[54] **SWITCH APPARATUS FOR ENCLOSURES HAVING ENVIRONMENTAL PROTECTION**

[54] **APPAREIL DE COMMUTATION POUR ENCEINTES COMPRENANT UNE PROTECTION ENVIRONNEMENTALE**

[72] AMIRTHASAMY, STANLEY FELIX, US

[72] LI, PEI, CN

[72] BRAMA, MARWAN, SG

[72] WINKLER, RICHARD J., US

[73] FISHER CONTROLS INTERNATIONAL LLC, US

[85] 2017-05-02

[86] 2015-11-13 (PCT/US2015/060508)

[87] (WO2016/077660)

[30] US (14/541,696) 2014-11-14

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[11] **2,967,193**  
[13] C

[51] **Int.Cl. C12M 1/12 (2006.01) C12M 1/00 (2006.01) C12M 3/00 (2006.01) C12M 3/06 (2006.01) G01N 1/40 (2006.01)**

[25] EN

[54] **DISPOSABLE CELL REMOVAL SYSTEM**

[54] **SYSTEME D'ELIMINATION CELLULAIRE JETABLE**

[72] NEWBOLD, DAVID DIXON, US

[72] PEPPER, CLINTON BOYD, US

[72] HANSEN, DAVID ANDREW, US

[73] BEND RESEARCH INC., US

[85] 2017-05-10

[86] 2015-11-17 (PCT/IB2015/058869)

[87] (WO2016/087972)

[30] US (62/086,898) 2014-12-03

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[11] **2,967,569**  
[13] C

[51] **Int.Cl. G01J 3/36 (2006.01) G01N 21/3504 (2014.01) G01J 3/42 (2006.01) G01J 3/447 (2006.01) G01J 3/453 (2006.01)**

[25] EN

[54] **SPATIALLY RESOLVED GAS DETECTION**

[54] **DETECTION DE GAZ A RESOLUTION SPATIALE**

[72] VISSER, HUIBERT, NL

[72] VAN BRUG, HEDSER, NL

[73] NEDERLANDSE ORGANISATIE VOOR TOEGEPAST-NATUURWETENSCHAPPELIJK ONDERZOEK TNO, NL

[85] 2017-05-11

[86] 2015-11-13 (PCT/NL2015/050799)

[87] (WO2016/076724)

[30] EP (14192989.3) 2014-11-13

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[11] **2,967,826**  
[13] C

[51] **Int.Cl. A61K 31/41 (2006.01) A61K 31/416 (2006.01) A61K 31/425 (2006.01) A61P 25/28 (2006.01)**

[25] EN

[54] **A COMBINATION OF IBUDILAST AND RILUZOLE AND METHODS OF USING SAME**

[54] **ASSOCIATION D'IBUDILAST ET DE RILUZOLE, ET METHODE D'UTILISATION DE CETTE DERNIERE**

[72] MATSUDA, KAZUKO, US

[72] IWAKI, YUICHI, US

[73] MEDICINOVA, INC., US

[85] 2017-05-12

[86] 2015-11-24 (PCT/US2015/062456)

[87] (WO2016/085998)

[30] US (62/084,879) 2014-11-26

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[11] **2,967,834**  
[13] C

[51] **Int.Cl. C12N 5/10 (2006.01) C07K 14/705 (2006.01) C12N 15/12 (2006.01) C12N 15/85 (2006.01) C12Q 1/00 (2006.01) G01N 33/50 (2006.01)**

[25] EN

[54] **NON-HUMAN ANIMALS HAVING A HUMANIZED CLUSTER OF DIFFERENTIATION 47 GENE**

[54] **ANIMAUX NON HUMAINS POSSEDANT UN GENE CD47 HUMANISE**

[72] GURER, CAGAN, US

[72] IOFFE, ELLA, US

[72] MUJICA, ALEXANDER, US

[72] THURSTON, GAVIN, US

[73] REGENERON PHARMACEUTICALS, INC., US

[85] 2017-05-12

[86] 2015-11-25 (PCT/US2015/062614)

[87] (WO2016/089692)

[30] US (62/087,992) 2014-12-05

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[11] **2,968,151**  
[13] C

[51] **Int.Cl. G03F 1/62 (2012.01) G03F 1/00 (2012.01) G03F 7/20 (2006.01)**

[25] EN

[54] **MASK ASSEMBLY**

[54] **ENSEMBLE MASQUE**

[72] KRUIZINGA, MATTHIAS, NL

[72] JANSEN, MAARTEN MATHIJS MARINUS, NL

[72] AZEREDO LIMA, JORGE MANUEL, NL

[72] BOGAART, ERIK WILLEM, NL

[72] BROUNS, DERK, SERVATIUS, GERTRUDA, NL

[72] BRUIJN, MARC, NL

[72] BRULS, RICHARD JOSEPH, NL

[72] DEKKERS, JEROEN, NL

[72] JANSSEN, PAUL, NL

[72] KAMALI, MOHAMMAD REZA, NL

[72] KRAMER, RONALD HARM GUNTHER, NL

[72] LANSBERGEN, ROBERT GABRIEL MARIA, NL

[72] LEENDERS, MARTINUS HENDRIKUS ANTONIUS, NL

[72] LIPSON, MATTHEW, US

[72] LOOPSTRA, ERIK ROELOF, NL

[72] LYONS, JOSEPH H., US

[72] ROUX, STEPHEN, US

[72] VAN DEN BOSCH, GERRIT, NL

[72] VAN DEN HEJKANT, SANDER, NL

[72] VAN DER GRAAF, SANDRA, NL

[72] VAN DER MEULEN, FRITS, NL

[72] VAN LOO, JEROME FRANCOIS SYLVAIN VIRGILE, NL

[72] VERBRUGGE, BEATRIJS LOUISE MARIE-JOSEPH KATRIEN, NL

[73] ASML HOLDING N.V., NL

[73] ASML NETHERLANDS B.V., NL

[85] 2017-05-17

[86] 2015-11-16 (PCT/EP2015/076687)

[87] (WO2016/079051)

[30] US (62/080,561) 2014-11-17

[30] US (62/108,348) 2015-01-27

[30] US (62/110,841) 2015-02-02

[30] US (62/126,173) 2015-02-27

[30] US (62/149,176) 2015-04-17

[30] US (62/183,342) 2015-06-23

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[11] **2,969,627**  
[13] C

[51] **Int.Cl. C08F 210/16 (2006.01) C08F 2/34 (2006.01) C08F 4/16 (2006.01)**

[25] EN

[54] **ETHYLENE COPOLYMER HAVING ENHANCED FILM PROPERTIES**

[54] **COPOLYMERES D'ETHYLENE AYANT DES PROPRIETES DE FILM AMELIOREES**

[72] LAM, PATRICK, CA

[72] KER, VICTORIA, CA

[72] KELLY, MARK, CA

[73] NOVA CHEMICALS CORPORATION, CA

[86] (2969627)

[87] (2969627)

[22] 2017-05-30

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[11] **2,969,833**  
[13] C

[51] **Int.Cl. C22B 1/24 (2006.01)**

[25] EN

[54] **PROCESS FOR OBTAINING BRIQUETTES FROM PELLET FINES, DRI SLUDGE, DRI FINES AND DUST OF DRI DEDUSTING SYSTEMS FOR INDUSTRIAL USE IN PROCESSES OF DIRECT REDUCTION IRON PRODUCTION**

[54] **PROCEDE POUR OBTENIR DES BRIQUETTES A PARTIR DE RESIDUS FINS DE GRANULES, D'UNE BOUE DE FRD, DE RESIDUS FINS DE FRD ET DE POUSSIERE PROVENANT DE SYSTEMES DE DEPOUSSIERAGE A FRD AUX FINS D'UTILISATION INDUSTRIELLE DANS LES PROCEDES DE PRODUCTION DE FER DE REDUCTION DIRECTE**

[72] RAMIREZ ALVAREZ, FRANCISCO JAVIER, MX

[72] PALAFOX SANCHEZ, FRANCISCO JAVIER, MX

[73] DIPROINDUCA CANADA LIMITED, CA

[85] 2017-06-05

[86] 2015-07-24 (PCT/MX2015/000110)

[87] (WO2016/089192)

[30] MX (MX/a/2014/014746) 2014-12-03

**Canadian Patents Issued  
January 16, 2024**

[11] **2,969,873**  
[13] C

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/70 (2006.01) A61M 31/00 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL DOSAGE FORM FOR APPLICATION TO MUCOUS MEMBRANES**  
[54] **FORME POSOLOGIQUE PHARMACEUTIQUE POUR L'APPLICATION A DES MEMBRANES MUQUEUSES**  
[72] BOGDahn, MALTE, DE  
[72] KIRSCH, KIRSTEN, DE  
[72] GRIMM, MICHAEL, DE  
[72] KOZIOLEK, MIRKO, DE  
[72] WEITSCHIES, WERNER, DE  
[73] ESOCAP AG, CH  
[85] 2017-06-06  
[86] 2015-12-22 (PCT/EP2015/002601)  
[87] (WO2016/102067)  
[30] DE (10 2014 119 576.0) 2014-12-23

[11] **2,971,435**  
[13] C

[51] **Int.Cl. H04B 3/38 (2006.01) H04L 5/14 (2006.01) H04L 7/04 (2006.01) H04L 25/38 (2006.01) G01K 1/024 (2021.01) G01D 11/00 (2006.01)**  
[25] EN  
[54] **EXTENDABLE SYNCHRONOUS LOW POWER TELEMETRY SYSTEM FOR DISTRIBUTED SENSORS**  
[54] **SYSTEME TELEMETRIQUE BASSE PUISSANCE SYNCHRONE EXTENSIBLE POUR CAPTEURS DISTRIBUTIBUES**  
[72] MINARIK, DANIEL B., US  
[72] LANGELIER, MARK S., US  
[73] RAYTHEON COMPANY, US  
[85] 2017-06-16  
[86] 2015-12-21 (PCT/US2015/067221)  
[87] (WO2016/106253)  
[30] US (14/582,155) 2014-12-23

[11] **2,971,704**  
[13] C

[51] **Int.Cl. F04D 29/24 (2006.01) F04D 13/08 (2006.01) F04D 29/42 (2006.01)**  
[25] EN  
[54] **AGITATOR HAVING SHROUDED VANES FOR SUBMERSIBLE PUMPS**  
[54] **AGITATEUR A AUBES RENFORCEES POUR POMPES IMMERGEES**  
[72] VAN-DE-VELDE, PETER FRANCIS, CA  
[72] GUENTHER, NICHOLAS JAMES, CA  
[72] GJERNES, TIMOTHY ANDREW PHILLIP, CA  
[73] DAJUSTCO IP HOLDINGS INC., CA  
[86] (2971704)  
[87] (2971704)  
[22] 2017-06-23  
[30] CA (2,933,926) 2016-06-23  
[30] US (62/353,746) 2016-06-23

[11] **2,970,781**  
[13] C

[51] **Int.Cl. G01L 7/08 (2006.01) G01D 5/06 (2006.01)**  
[25] EN  
[54] **A SENSOR DEVICE, IN PARTICULAR A PRESSURE SENSOR**  
[54] **DISPOSITIF CAPTEUR, EN PARTICULIER CAPTEUR DE PRESSION**  
[72] GADINI, COSTANZO, IT  
[72] BIGLIATI, MARCO, IT  
[73] ELTEK S.P.A., IT  
[85] 2017-06-13  
[86] 2015-12-22 (PCT/IB2015/059869)  
[87] (WO2016/103171)  
[30] IT (TO2014A001091) 2014-12-23

[11] **2,971,605**  
[13] C

[51] **Int.Cl. C08F 8/42 (2006.01) C02F 5/12 (2006.01) C08F 26/02 (2006.01)**  
[25] EN  
[54] **SCALE INHIBITOR COMPOSITIONS AND METHODS OF USING**  
[54] **COMPOSITIONS INHIBITRICES D'ENTARTRAGE ET PROCEDES D'UTILISATION**  
[72] SONG, AIRONG, US  
[72] ZHANG, LEI, US  
[72] CYWAR, DOUGLAS, US  
[72] CHEN, HAUNN-LIN TONY, US  
[72] TAYLOR, MATTHEW, US  
[73] CYTEC INDUSTRIES INC., US  
[85] 2017-06-19  
[86] 2015-12-15 (PCT/US2015/065810)  
[87] (WO2016/100336)  
[30] US (62/092,950) 2014-12-17

[11] **2,972,032**  
[13] C

[51] **Int.Cl. A61N 1/372 (2006.01) A61B 5/293 (2021.01) A61B 17/34 (2006.01) A61N 1/05 (2006.01)**  
[25] EN  
[54] **METHODS, COMPOSITIONS, AND SYSTEMS FOR DEVICE IMPLANTATION**  
[54] **PROCEDES, COMPOSITIONS ET SYSTEMES POUR IMPLANTATION DE DISPOSITIF**  
[72] HANSON, TIMOTHY L., US  
[72] MAHARBIZ, MICHEL M., US  
[72] SABES, PHILIP N., US  
[73] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US  
[85] 2017-06-22  
[86] 2015-12-18 (PCT/US2015/066879)  
[87] (WO2016/126340)  
[30] US (62/096,257) 2014-12-23



**Brevets canadiens délivrés  
16 janvier 2024**

[11] **2,972,456**  
[13] C

- [51] **Int.Cl. G01N 23/046 (2018.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR DETECTING AND RECONSTRUCTING OBJECTS IN A NON-CONTINUOUS STREAM OF ITEMS IN AN IMAGING SYSTEM**  
[54] **SYSTEME ET METHODE DE DETECTION ET RECONSTRUCTION D'OBJETS DANS UN FLUX NON CONTINU D'ARTICLES DANS UN SYSTEME D'IMAGERIE**  
[72] HILLS, STEVEN LESLIE, US  
[72] BASU, SAMIT KUMAR, US  
[73] SMITHS DETECTION INC., US  
[86] (2972456)  
[87] (2972456)  
[22] 2017-07-06  
[30] US (15/206,804) 2016-07-11

[11] **2,972,475**  
[13] C

- [51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6818 (2018.01) C12Q 1/683 (2018.01) C12Q 1/689 (2018.01) C07H 21/04 (2006.01) C12Q 1/04 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR DIAGNOSING BACTERIAL VAGINOSIS**  
[54] **METHODES ET COMPOSITIONS POUR DIAGNOSTIQUER UNE VAGINOSE BACTERIENNE**  
[72] GRAHAM, MICHAEL, US  
[72] HALL, JEFF G., US  
[72] KING, JOSEPH J., US  
[73] GEN-PROBE INCORPORATED, US  
[85] 2017-06-27  
[86] 2016-01-08 (PCT/US2016/012589)  
[87] (WO2016/112252)  
[30] US (62/101,907) 2015-01-09

[11] **2,972,807**  
[13] C

- [51] **Int.Cl. C07K 14/005 (2006.01) A61K 31/7088 (2006.01) A61K 48/00 (2006.01) A61P 25/10 (2006.01) C12N 5/10 (2006.01) C12N 7/00 (2006.01) C12N 15/86 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR TARGETED GENE TRANSFER**  
[54] **PROCEDES ET COMPOSITIONS DESTINES AU TRANSFERT DE GENES CIBLE**  
[72] ASOKAN, ARAVIND, US  
[72] MURLIDHARAN, GIRIDHAR, US  
[72] SHEN, SHEN, US  
[73] THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, US  
[85] 2017-06-29  
[86] 2016-01-14 (PCT/US2016/013460)  
[87] (WO2016/115382)  
[30] US (62/103,462) 2015-01-14

[11] **2,973,915**  
[13] C

- [51] **Int.Cl. A01N 43/54 (2006.01) A01N 25/32 (2006.01) A01N 37/40 (2006.01) A01N 43/653 (2006.01) A01N 43/84 (2006.01) A01N 61/00 (2006.01) A01P 13/00 (2006.01)**  
[25] EN  
[54] **TERNARY HERBICIDAL COMBINATION COMPRISING SAFLUFENACIL**  
[54] **COMBINAISON HERBICIDE TERNAIRE COMPRENANT DU SAFLUFENACILE**  
[72] MASSA, DARIO, DE  
[72] EVANS, RICHARD, US  
[72] SEISER, TOBIAS, DE  
[72] WITSCHERL, MATTHIAS, DE  
[72] LIEBL, REX, US  
[72] FRATESCHI, ALEXANDRE, MX  
[73] BASF AGRO B.V., NL  
[85] 2017-07-14  
[86] 2016-01-21 (PCT/EP2016/051177)  
[87] (WO2016/116531)  
[30] EP (15152163.0) 2015-01-22

[11] **2,974,485**  
[13] C

- [51] **Int.Cl. C04B 35/565 (2006.01) C04B 35/80 (2006.01)**  
[25] EN  
[54] **SILICON CARBIDE FIBER REINFORCED SILICON CARBIDE COMPOSITE MATERIAL**  
[54] **MATERIAU COMPOSITE EN CARBURE DE SILICIUM RENFORCE PAR DES FIBRES DE CARBURE DE SILICIUM**  
[72] HINOKI, TATSUYA, JP  
[72] SHIMODA, KAZUYA, JP  
[73] KYOTO UNIVERSITY, JP  
[85] 2017-07-20  
[86] 2015-12-11 (PCT/JP2015/084858)  
[87] (WO2016/093360)  
[30] JP (2014-251734) 2014-12-12

[11] **2,974,592**  
[13] C

- [51] **Int.Cl. G06F 17/00 (2019.01) G06F 3/048 (2013.01)**  
[25] EN  
[54] **COMPUTING DEVICE AND METHOD TO PERFORM A DATA TRANSFER USING A DOCUMENT**  
[54] **DISPOSITIF INFORMATIQUE ET PROCEDE POUR EFFECTUER UN TRANSFERT DE DONNEES AU MOYEN D'UN DOCUMENT**  
[72] WALIA, SARABJIT SINGH, CA  
[72] LALKA, VIPUL KISHORE, CA  
[72] LEE, JOHN JONG-SUK, CA  
[73] THE TORONTO-DOMINION BANK, CA  
[86] (2974592)  
[87] (2974592)  
[22] 2017-07-26

**Canadian Patents Issued  
January 16, 2024**

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[11] **2,975,284**  
[13] C

[51] **Int.Cl. C02F 1/50 (2006.01) A01N 25/00 (2006.01) A01N 59/00 (2006.01) A01P 1/00 (2006.01) B01J 8/00 (2006.01) B01J 14/00 (2006.01) C01B 7/00 (2006.01) C01B 11/02 (2006.01) C02F 1/72 (2006.01) C02F 1/76 (2006.01)**

[25] EN

[54] **SUBMERGIBLE BIOCID REACTOR AND METHOD**

[54] **REACTEUR ET PROCÉDE POUR BIOCID SUBMERSIBLE**

[72] DIMASCIO, FELICE, US

[72] WELLS, DAVID, US

[72] POKOS, MARK, US

[73] ECOLAB USA INC., US

[85] 2017-07-27

[86] 2016-04-22 (PCT/US2016/028778)

[87] (WO2016/172435)

[30] US (62/152,342) 2015-04-24

[30] US (15/135,036) 2016-04-21

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[11] **2,975,730**  
[13] C

[51] **Int.Cl. C09C 1/56 (2006.01) B01J 8/24 (2006.01) C09C 1/48 (2006.01) H05H 1/24 (2006.01)**

[25] EN

[54] **CARBON BLACK COMBUSTABLE GAS SEPARATION**

[54] **SEPARATION DE GAZ COMBUSTIBLES CONTENUS DANS DU NOIR DE CARBONE**

[72] TAYLOR, ROSCOE W., US

[72] JOHNSON, PETER L., US

[73] MONOLITH MATERIALS, INC., US

[85] 2017-08-02

[86] 2016-02-01 (PCT/US2016/015939)

[87] (WO2016/126598)

[30] US (62/111,317) 2015-02-03

---

[11] **2,975,858**  
[13] C

[51] **Int.Cl. A61M 13/00 (2006.01) A61M 16/10 (2006.01) A61M 16/16 (2006.01)**

[25] EN

[54] **SYSTEM FOR HUMIDIFICATION OF MEDICAL GASES**

[54] **SYSTÈME D'HUMIDIFICATION DE GAZ A USAGE MEDICAL**

[72] BOYES, RICHARD JOHN, NZ

[72] FISCHER, CHRISTIAN, NZ

[72] STREVENS, JOSEPH PATRICK WALTER, NZ

[72] STOKS, ELMO BENSON, NZ

[72] MALLINSON, JAYANANDA, NZ

[73] FISHER & PAYKEL HEALTHCARE LIMITED, NZ

[85] 2017-08-03

[86] 2016-02-06 (PCT/IB2016/050619)

[87] (WO2016/125122)

[30] US (62/112,784) 2015-02-06

---

[11] **2,976,294**  
[13] C

[51] **Int.Cl. C07D 413/12 (2006.01) A61K 31/42 (2006.01) A61K 31/4353 (2006.01) A61K 31/4985 (2006.01) A61K 31/519 (2006.01) C07D 261/08 (2006.01) C07D 411/12 (2006.01) C07D 471/04 (2006.01) C07D 491/044 (2006.01) C07D 497/04 (2006.01) C07D 498/14 (2006.01)**

[25] EN

[54] **PREPARATION OF TRICYCLIC COMPOUNDS AS FARNESOID X RECEPTOR MODULATORS AND THEIR APPLICATION TO TREAT RELATED DISEASES**

[54] **PREPARATION DE COMPOSES TRICYCLIQUES COMME MODULATEURS DU RECEPTEUR DE FARNESOID X ET APPLICATION DANS LE TRAITEMENT DE MALADIES CONNEXES**

[72] WANG, XIAOJUN, CN

[72] YANG, XINYE, CN

[72] PAN, SHENGQIANG, CN

[72] GUO, RUI, CN

[72] WU, JUNWEN, CN

[72] ZHANG, YINGJUN, CN

[72] CHENG, CHANGCHUNG, CN

[73] SUNSHINE LAKE PHARMA CO., LTD., CN

[85] 2017-08-10

[86] 2016-02-05 (PCT/CN2016/073617)

[87] (WO2016/127924)

[30] CN (201510083621.5) 2015-02-13

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[11] **2,976,313**  
[13] C

[51] **Int.Cl. B01D 67/00 (2006.01) B82Y 30/00 (2011.01) C25F 7/00 (2006.01)**

[25] EN

[54] **LOCALIZING NANOPORE FABRICATION ON A MEMBRANE BY LASER ILLUMINATION DURING CONTROLLED BREAKDOWN**

[54] **FABRICATION DE NANOPORES DE LOCALISATION SUR UNE MEMBRANE PAR ECLAIRAGE LASER PENDANT UNE DEGRADATION CONTROLÉE**

[72] BUSTAMANTE, JOSE, CA

[72] TABARD-COSSA, VINCENT, CA

[72] BRIGGS, KYLE, CA

[73] THE UNIVERSITY OF OTTAWA, CA

[85] 2017-08-10

[86] 2016-02-24 (PCT/IB2016/051017)

[87] (WO2016/135656)

[30] US (62/120,054) 2015-02-24

---

[11] **2,976,463**  
[13] C

[51] **Int.Cl. H04L 9/08 (2006.01)**

[25] EN

[54] **SECURE AND DELEGATED DISTRIBUTION OF PRIVATE KEYS VIA DOMAIN NAME SERVICE**

[54] **DISTRIBUTION SECURISÉE ET DÉLÉGUÉE DE CLES PRIVÉES PAR L'INTERMÉDIAIRE D'UN SERVICE DE NOM DE DOMAINE**

[72] GOLDSTEIN, PETER MARTIN, US

[73] VALIMAIL INC., US

[85] 2017-08-11

[86] 2016-01-29 (PCT/US2016/015797)

[87] (WO2016/130340)

[30] US (62/116,414) 2015-02-14

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **2,976,754**  
[13] C

[51] **Int.Cl. E21B 43/01 (2006.01) E21B 43/013 (2006.01)**  
[25] EN  
[54] **DIRECT TIE-IN OF PIPELINES BY ADDED CURVATURE**  
[54] **RACCORD DIRECT DE PIPELINES PAR COURBURE AJOUTEE**  
[72] ENDAL, GEIR, NO  
[72] HAUGEN, JENS, NO  
[73] STATOIL PETROLEUM AS, NO  
[85] 2017-08-15  
[86] 2016-02-22 (PCT/NO2016/050030)  
[87] (WO2016/137333)  
[30] GB (1503069.5) 2015-02-24

---

[11] **2,976,920**  
[13] C

[51] **Int.Cl. A61M 5/145 (2006.01) A61M 39/10 (2006.01) A61M 39/22 (2006.01)**  
[25] EN  
[54] **MICRO INFUSION DEVICE FOR DRUG DELIVERY**  
[54] **DISPOSITIF DE MICRO-PERFUSION POUR L'ADMINISTRATION DE MEDICAMENTS**  
[72] VASKO, ROBERT, US  
[73] CAREFUSION 303, INC., US  
[85] 2017-08-16  
[86] 2016-02-18 (PCT/US2016/018414)  
[87] (WO2016/134113)  
[30] US (14/627,557) 2015-02-20

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[11] **2,978,224**  
[13] C

[51] **Int.Cl. B60K 7/00 (2006.01) F16H 3/66 (2006.01) F16H 3/44 (2006.01)**  
[25] EN  
[54] **GEARING ASSEMBLY, VEHICLE DRIVETRAIN AND ELECTRIC WHEEL HUB THEREWITH**  
[54] **ENSEMBLE D'ENGRENAGE, TRANSMISSION DE VEHICULE ET MOYEU DE ROUE ELECTRIQUE ASSOCIE**  
[72] THOMPSON, ROBERT WILLIAM, GB  
[73] QINETIQ LIMITED, GB  
[85] 2017-08-30  
[86] 2016-03-15 (PCT/EP2016/055544)  
[87] (WO2016/146628)  
[30] GB (1504469.6) 2015-03-17

---

[11] **2,978,977**  
[13] C

[51] **Int.Cl. B60P 7/08 (2006.01)**  
[25] EN  
[54] **LOAD-STRAPPING DEVICE**  
[54] **DISPOSITIF D'ARRIMAGE DE CHARGEMENT**  
[72] BOLLINGTOFT, JACKIE, DK  
[73] ERGOLASH PAT. APS, DK  
[85] 2017-09-07  
[86] 2016-03-09 (PCT/DK2016/050066)  
[87] (WO2016/141944)  
[30] DK (PA 2015 70133) 2015-03-10  
[30] DK (PA 2015 70153) 2015-03-18

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[11] **2,979,153**  
[13] C

[51] **Int.Cl. E03F 5/14 (2006.01) E02D 29/12 (2006.01) E03C 1/264 (2006.01)**  
[25] EN  
[54] **CATCH BASIN TRAP WITH FLEXIBLE OUTLET PIPE CONNECTOR**  
[54] **TRAPPE DE PUISARD DOTEE D'UN RACCORD DE TUYAU DE SORTIE SOUPLE**  
[72] RECCHIA, MARIO, CA  
[73] DECAST LTD., CA  
[86] (2979153)  
[87] (2979153)  
[22] 2017-09-14

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[11] **2,980,280**  
[13] C

[51] **Int.Cl. F23C 15/00 (2006.01) F02K 7/04 (2006.01) F23C 6/02 (2006.01) F23N 1/00 (2006.01) F23N 5/18 (2006.01) F23R 3/28 (2006.01) F23R 7/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR IMPROVING OPERATION OF PULSE COMBUSTORS**  
[54] **SYSTEMES ET PROCEDES D'AMELIORATION DU FONCTIONNEMENT DE CHAMBRES DE COMBUSTION A PULSATION**  
[72] MAQBOOL, DAANISH, US  
[73] NORTH AMERICAN WAVE ENGINE CORPORATION, US  
[85] 2017-09-19  
[86] 2016-03-18 (PCT/US2016/023238)  
[87] (WO2016/200459)  
[30] US (62/135,332) 2015-03-19  
[30] US (62/135,473) 2015-03-19  
[30] US (62/135,503) 2015-03-19

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[11] **2,981,667**  
[13] C

[51] **Int.Cl. G06F 16/25 (2019.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR INTEGRATING DATA**  
[54] **SYSTEME ET PROCEDE POUR INTEGRER DES DONNEES**  
[72] ECKER, JEFFREY AARON, CA  
[72] GLEESON, BRYAN MICHAEL, CA  
[72] MCPHEE, ADAM DOUGLAS, CA  
[72] WAKIM, MATTA, CA  
[72] ODOBETSKIY, KYRYLL, CA  
[72] LEE, JOHN JONG-SUK, CA  
[72] JETHWA, RAKESH THOMAS, CA  
[73] THE TORONTO-DOMINION BANK, CA  
[86] (2981667)  
[87] (2981667)  
[22] 2017-10-05

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[11] **2,982,423**  
[13] C

[51] **Int.Cl. C07D 405/12 (2006.01) A61K 31/517 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **POLYMORPHS AND PROCESS FOR THE PREPARATION OF QUINAZOLINYL DERIVATIVES**  
[54] **POLYMORPHES ET PROCEDE POUR LA PREPARATION DE DERIVES DE QUINAZOLINYLE**  
[72] PARTHASARADHI REDDY, BANDI, IN  
[72] RATHNAKAR REDDY, KURA, IN  
[72] VAMSI KRISHNA, BANDI, IN  
[72] SRINIVAS RAO, NIMMALA, IN  
[73] HETERO LABS LTD, IN  
[85] 2017-10-11  
[86] 2016-04-15 (PCT/IB2016/052164)  
[87] (WO2016/166720)  
[30] IN (1979/CHE/2015) 2015-04-17  
[30] IN (7060/CHE/2015) 2015-12-30

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[11] **2,982,858**  
[13] C

[51] **Int.Cl. A47D 13/00 (2006.01) A47D 13/08 (2006.01) A47D 15/00 (2006.01)**  
[25] EN  
[54] **INFANT ACCOMMODATION APPARATUS**  
[54] **APPAREIL DE SUPPORT DE NOURRISSON**  
[72] CROSS, SOPHIE, GB  
[73] JAMES GALT & CO. LIMITED, GB  
[85] 2017-10-16  
[86] 2016-05-03 (PCT/GB2016/051268)  
[87] (WO2016/178014)  
[30] GB (1507749.8) 2015-05-06

**Canadian Patents Issued  
January 16, 2024**

[11] **2,982,957**  
[13] C

[51] **Int.Cl. G06F 3/01 (2006.01) G06F 9/451 (2018.01) H04L 67/51 (2022.01) H04L 67/56 (2022.01) G06F 3/16 (2006.01)**

[25] EN  
[54] **DIGITAL ASSISTANT EXTENSIBILITY TO THIRD PARTY APPLICATIONS**  
[54] **EXTENSIBILITE D'ASSISTANT NUMERIQUE A DES APPLICATIONS TIERCES**

[72] SURTI, TANVI, US  
[72] PATTEN, MICHAEL, US  
[72] LYNDERSAY, SEAN, US  
[72] TONG, CHEE CHEN, US  
[73] MICROSOFT TECHNOLOGY LICENSING, LLC, US  
[85] 2017-10-16  
[86] 2016-04-15 (PCT/US2016/027653)  
[87] (WO2016/182682)  
[30] US (14/712,364) 2015-05-14

[11] **2,984,396**  
[13] C

[51] **Int.Cl. G01N 27/72 (2006.01) G01V 13/00 (2006.01)**

[25] EN  
[54] **METHOD FOR TESTING A METAL DETECTION APPARATUS AND METAL DETECTION APPARATUS**  
[54] **METHODE DE TEST D'UN APPAREIL DE DETECTION DE METAL ET APPAREIL DE DETECTION DE METAL**

[72] BUTTERWORTH, DAREN, GB  
[72] BLACKBURN, ANDREW, GB  
[73] METTLER-TOLEDO SAFELINE LTD., GB  
[86] (2984396)  
[87] (2984396)  
[22] 2017-11-01  
[30] EP (16198342.4) 2016-11-11

[11] **2,985,014**  
[13] C

[51] **Int.Cl. A61K 31/385 (2006.01) A61K 9/00 (2006.01) A61K 31/715 (2006.01) A61K 31/728 (2006.01) A61P 27/02 (2006.01)**

[25] FR  
[54] **OPHTHALMIC COMPOSITION COMPRISING LIPOIC ACID AND A MUCOMIMETIC POLYMER**  
[54] **COMPOSITION OPHTALMIQUE COMPRENANT DE L'ACIDE LIPOIQUE ET UN POLYMERE MUCO-MIMETIQUE**

[72] CLARET, MARTINE, CH  
[72] CLARET, CLAUDE, CH  
[72] CHATARD-BAPTISTE, CAROLINE, FR  
[73] OPHTALMIS MONACO, MC  
[85] 2017-11-03  
[86] 2016-05-20 (PCT/EP2016/061362)  
[87] (WO2016/185000)  
[30] FR (1554590) 2015-05-21  
[30] FR (1652042) 2016-03-11

[11] **2,985,674**  
[13] C

[51] **Int.Cl. H04L 1/08 (2006.01) H04L 43/0829 (2022.01) H04L 49/901 (2022.01) H04L 43/0864 (2022.01) H04L 43/16 (2022.01)**

[25] EN  
[54] **METHOD AND COMPUTER PRODUCT FOR OPERATING A MEMORY BUFFER SYSTEM**  
[54] **METHODE ET PRODUIT INFORMATIQUE POUR EXPLOITER UN SYSTEME DE TAMPON DE MEMOIRE**

[72] SIEMENS, EDUARD, DE  
[72] BAKHAREV, ALEKSANDR, DE  
[73] HOCHSCHULE ANHALT, DE  
[85] 2017-11-10  
[86] 2015-05-30 (PCT/EP2015/025029)  
[87] (WO2016/192744)

[11] **2,987,156**  
[13] C

[51] **Int.Cl. B08B 7/00 (2006.01) B24C 1/00 (2006.01) F01D 25/00 (2006.01)**

[25] EN  
[54] **METHOD AND DEVICE FOR CLEANING A JET ENGINE**  
[54] **PROCEDE ET DISPOSITIF POUR LE NETTOYAGE D'UN MOTEUR A REACTION**

[72] GILJOHANN, SEBASTIAN, DE  
[72] APPEL, HOLGER STEFAN, DE  
[72] DEJA, DIRK, DE  
[73] LUFTHANSA TECHNIK AG, DE  
[85] 2017-11-24  
[86] 2016-05-26 (PCT/EP2016/061890)  
[87] (WO2016/193112)  
[30] DE (10 2015 209 994.6) 2015-05-29

[11] **2,987,309**  
[13] C

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

[25] EN  
[54] **ATRIO-VENTRICULAR VALVE STENT WITH NATIVE LEAFLET GRASPING AND HOLDING MECHANISM**  
[54] **STENT A VALVE AURICULO-VENTRICULAIRE AVEC MECANISME DE PREHENSION ET DE MAINTIEN DE FEUILLET NATIF**

[72] PASQUINO, ENRICO, CH  
[72] SCORSIN, MARCIO, LU  
[72] PASQUINO, STEFANO, CH  
[72] MARCHISIO, ANDREA, IT  
[72] VALERIO, LORENZO, IT  
[72] CASALEGNO, SERGIO, IT  
[72] GARD, MARCO, IT  
[72] ARRU, PIETRO, IT  
[73] EPYGN, FR  
[85] 2017-11-27  
[86] 2016-06-03 (PCT/EP2016/062663)  
[87] (WO2016/193437)  
[30] EP (15170736.1) 2015-06-04  
[30] EP (PCT/EP2016/052452) 2016-02-05

**Brevets canadiens délivrés  
16 janvier 2024**

[11] **2,987,480**  
[13] C

[51] **Int.Cl. B25J 9/14 (2006.01)**  
[25] EN  
[54] **MODULAR ROBOTIC SYSTEMS**  
[54] **SYSTEMES ROBOTIQUES**  
**MODULAIRES**  
[72] LESSING, JOSHUA AARON, US  
[72] ALCEDO, KEVIN, US  
[72] KNOPF, RYAN RICHARD, US  
[72] HARBURG, DANIEL VINCENT, US  
[73] SOFT ROBOTICS, INC., US  
[85] 2017-11-27  
[86] 2016-06-13 (PCT/US2016/037197)  
[87] (WO2016/201418)  
[30] US (62/174,234) 2015-06-11

[11] **2,987,932**  
[13] C

[51] **Int.Cl. A61K 47/36 (2006.01) A61K**  
**9/16 (2006.01) A61K 9/50 (2006.01)**  
[25] EN  
[54] **ORAL DELIVERY SYSTEM FOR**  
**BIOACTIVE AGENTS**  
[54] **SYSTEME D'ADMINISTRATION**  
**D'AGENTS BIOACTIFS PAR VOIE**  
**ORALE**  
[72] WADSWORTH, SIMON, NO  
[72] KLARIC, GORAN, NO  
[72] JAYASINGH, SUWAN NALIN, GB  
[73] EWOS INNOVATION AS, NO  
[85] 2017-11-30  
[86] 2016-06-02 (PCT/NO2016/050113)  
[87] (WO2016/195509)  
[30] NO (20150715) 2015-06-03  
[30] GB (1509608.4) 2015-06-03

[11] **2,988,041**  
[13] C

[51] **Int.Cl. A47J 31/46 (2006.01) A47J**  
**31/52 (2006.01)**  
[25] EN  
[54] **CONTROL SYSTEM FOR PUMP**  
**OF BEVERAGE PREPARATION**  
**MACHINE**  
[54] **SYSTEME DE COMMANDE POUR**  
**POMPE DE MACHINE DE**  
**PREPARATION DE BOISSONS**  
[72] RUGGIERO, MARTINO, CH  
[72] CHIODA, SERGIO, CH  
[73] SOCIETE DES PRODUITS NESTLE  
S.A., CH  
[85] 2017-12-01  
[86] 2016-07-01 (PCT/EP2016/065453)  
[87] (WO2017/005618)  
[30] EP (15175206.0) 2015-07-03

[11] **2,988,201**  
[13] C

[51] **Int.Cl. C12N 9/16 (2006.01) A61K**  
**48/00 (2006.01) C12N 15/864**  
**(2006.01)**  
[25] EN  
[54] **ADENOASSOCIATED VIRUS**  
**VECTORS FOR THE TREATMENT**  
**OF MUCOPOLYSACCHARIDOSES**  
[54] **VECTEURS DERIVES DE VIRUS**  
**ADENO-ASSOCIES POUR LE**  
**TRAITEMENT DE**  
**MUCOPOLYSACCHARIDOSES**  
[72] BOSCH TUBERT, MARIA FATIMA,  
ES  
[72] AREBA HAURIGOT, VIRGINIA, ES  
[72] MOTAS MALLOL, SANDRA, ES  
[73] UNIVERSITAT AUTONOMA DE  
BARCELONA, ES  
[73] ESTEVE PHARMACEUTICALS, S.A.,  
ES  
[85] 2017-12-04  
[86] 2016-06-03 (PCT/EP2016/062655)  
[87] (WO2016/193431)  
[30] EP (15382297.8) 2015-06-05

[11] **2,989,533**  
[13] C

[51] **Int.Cl. G01K 11/32 (2021.01)**  
[25] EN  
[54] **FILTER AND METHOD AND**  
**DISTRIBUTED TEMPERATURE**  
**SENSOR SYSTEM**  
[54] **FILTRE ET PROCEDE ET**  
**SYSTEME DE CAPTEUR DE**  
**TEMPERATURE DISTRIBUE**  
[72] JOHNSTON, WILLIAM ALBERT, US  
[72] MITCHELL, IAN, US  
[73] BAKER HUGHES HOLDINGS LLC,  
US  
[85] 2017-12-14  
[86] 2016-05-13 (PCT/US2016/032450)  
[87] (WO2016/204898)  
[30] US (62/180,697) 2015-06-17

[11] **2,989,898**  
[13] C

[51] **Int.Cl. A61M 1/36 (2006.01) A61M**  
**1/02 (2006.01)**  
[25] EN  
[54] **CELL SEPARATION DEVICES,**  
**SYSTEMS, AND METHODS**  
[54] **DISPOSITIFS, SYSTEMES, ET**  
**PROCEDES DE SEPARATION**  
**CELLULAIRE**  
[72] COELHO, PHILIP H., US  
[72] BUSA, WILLIAM, US  
[72] ELLIS, JONATHAN, US  
[73] THERMOGENESIS CORPORATION,  
US  
[85] 2017-12-15  
[86] 2016-12-29 (PCT/US2016/069115)  
[87] (WO2017/117349)  
[30] US (62/272,533) 2015-12-29

[11] **2,989,911**  
[13] C

[51] **Int.Cl. B60W 40/09 (2012.01) G07C**  
**5/08 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR**  
**INFLUENCING THE BEHAVIOR**  
**OF A VEHICLE DRIVER**  
[54] **METHODE ET DISPOSITIF POUR**  
**INFLUENCER LE**  
**COMPORTEMENT D'UN**  
**CONDUCTEUR**  
[72] DECKER, CHRISTIAN, DE  
[72] ANDERER, SIMON, DE  
[73] INIT INNOVATIVE  
INFORMATIKANWENDUNGEN IN  
TRANSPORT-, VERKEHRS- UND  
LEITSYSTEMEN GMBH, DE  
[85] 2017-12-18  
[86] 2016-06-15 (PCT/DE2016/200276)  
[87] (WO2016/206680)  
[30] DE (10 2015 211 985.8) 2015-06-26

**Canadian Patents Issued  
January 16, 2024**

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[11] **2,990,134**  
[13] C

[51] **Int.Cl. F21V 31/03 (2006.01) F21V 29/83 (2015.01) F21K 9/23 (2016.01) F21K 9/237 (2016.01) F21K 9/238 (2016.01) F21V 31/00 (2006.01)**

[25] EN

[54] **LAMP AND LIGHTING FIXTURE COMPRISING THE LAMP**

[54] **LAMPE ET APPAREIL D'ECLAIRAGE COMPORTANT LA LAMPE**

[72] SUO, YIN, CN  
[72] LEI, MING, CN  
[72] ZHOU, HUISENG, CN  
[73] SAVANT TECHNOLOGIES LLC, US  
[86] (2990134)  
[87] (2990134)  
[22] 2017-12-27  
[30] CN (201611225008.3) 2016-12-27

---

[11] **2,990,448**  
[13] C

[51] **Int.Cl. A01K 39/01 (2006.01)**

[25] EN

[54] **BIRD FEEDER CABLE LID LOCK AND BIRD FEEDER WITH THE SAME**

[54] **VERROU DE COUVERCLE DE CABLE DE MANGEOIRE D'OISEAUX ET MANGEOIRE D'OISEAUX EQUIPEE DUDIT VERROU**

[72] LUBIC, MARKO K., US  
[72] HOFFMAN, ANDREW RYAN, US  
[73] WOODSTREAM CORPORATION, US  
[86] (2990448)  
[87] (2990448)  
[22] 2017-12-28  
[30] US (62/449,797) 2017-01-24  
[30] US (15/674,820) 2017-08-11

---

[11] **2,991,059**  
[13] C

[51] **Int.Cl. C07D 403/06 (2006.01)**

[25] EN

[54] **PLINABULIN MONOHYDRATE POLYMORPHS**

[54] **POLYMORPHIES DE MONOHYDRATE DE PLINABULIN**

[72] HUANG, LAN, US  
[72] SINGH, ANIRUDDH, US  
[73] BEYONDSRING PHARMACEUTICALS, INC., US  
[85] 2017-12-28  
[86] 2016-07-11 (PCT/US2016/041773)  
[87] (WO2017/011399)  
[30] US (62/191,990) 2015-07-13

---

[11] **2,991,698**  
[13] C

[51] **Int.Cl. A41D 13/05 (2006.01)**

[25] EN

[54] **MOLDED WATERSPORTS AND COLD CLIMATE ACCESSORIES**

[54] **ACCESSOIRES MOULES POUR SPORTS NAUTIQUES ET CLIMAT FROID**

[72] MEISELMAN, JAMES ALEXANDER, US  
[73] SOLITE INNOVATIONS LLC, US  
[85] 2018-01-08  
[86] 2015-06-23 (PCT/US2015/037143)  
[87] (WO2016/010691)  
[30] US (14/332,703) 2014-07-16

---

[11] **2,992,496**  
[13] C

[51] **Int.Cl. C08L 95/00 (2006.01) C08L 91/00 (2006.01) C08L 101/00 (2006.01)**

[25] EN

[54] **BIOBASED ASPHALT REJUVENATING EMULSION**

[54] **EMULSION DE REGENERATION DE BITUME D'ORIGINE BIOLOGIQUE**

[72] BAUMGARDNER, GAYLON L., US  
[72] MORRIS, PAUL A., US  
[72] SHEALEY, JOEL B., US  
[72] GRUBBA, WILLIAM E., US  
[73] ERGON ASPHALT & EMULSIONS, INC., US  
[85] 2018-01-12  
[86] 2016-07-15 (PCT/US2016/042495)  
[87] (WO2017/011747)  
[30] US (62/192,930) 2015-07-15  
[30] US (62/262,701) 2015-12-03

---

[11] **2,993,147**  
[13] C

[51] **Int.Cl. G10H 3/16 (2006.01) G10H 3/12 (2006.01) G10H 3/26 (2006.01)**

[25] EN

[54] **APPARATUS FOR A REED INSTRUMENT**

[54] **APPAREIL POUR INSTRUMENT A ANCHE**

[72] SMITH, BRIAN, GB  
[72] DAVEY, PAUL, GB  
[73] AUDIO INVENTIONS LIMITED, GB  
[85] 2018-01-19  
[86] 2016-07-25 (PCT/GB2016/052267)  
[87] (WO2017/013455)  
[30] GB (1513036.2) 2015-07-23

---

[11] **2,993,295**  
[13] C

[51] **Int.Cl. C08B 37/00 (2006.01) C08B 11/02 (2006.01) C08B 15/06 (2006.01) C08B 37/02 (2006.01) C08B 37/08 (2006.01) C09K 8/20 (2006.01) C09K 8/514 (2006.01) C09K 17/32 (2006.01) E02D 3/00 (2006.01) E02D 3/12 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR THE STABILIZATION OF CLAY-CONTAINING SOILS**

[54] **COMPOSITIONS ET PROCEDES DE STABILISATION DE SOLS CONTENANT DE L'ARGILE**

[72] MADDURI, ASHOKA V. R., US  
[72] BLACKMON, MATTHEW B., US  
[72] VHORA, SAMEER S., US  
[72] MILLIRON, CHARLES E., III, US  
[72] RODENCAL, CURTUS J., US  
[72] GANDHI, SANKET, US  
[73] INTEGRITY BIO-CHEMICALS, LLC, US  
[85] 2018-01-22  
[86] 2016-01-20 (PCT/US2016/014033)  
[87] (WO2016/160097)  
[30] US (62/142,886) 2015-04-03

---

[11] **2,993,607**  
[13] C

[51] **Int.Cl. C07D 211/24 (2006.01) C07D 211/20 (2006.01) C07D 211/30 (2006.01)**

[25] EN

[54] **PROCESS FOR PREPARING PRIDOPIDINE**

[54] **PROCEDE DE PREPARATION DE PRIDOPIDINE**

[72] BAREL, OFFIR, IL  
[72] LIDOR-HADAS, RAMY, IL  
[72] GOTTESFELD, RONEN, IL  
[72] MIZRAHI, OREL YOSEF, IL  
[72] BERGH, ANDERS OLOF INGEMAR, SE  
[72] NGUYEN, BA-VU, SE  
[73] PRILENIA NEUROTHERAPEUTICS LTD., IL  
[85] 2018-01-22  
[86] 2016-07-22 (PCT/US2016/043682)  
[87] (WO2017/015609)  
[30] US (62/195,756) 2015-07-22

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **2,993,943**  
[13] C

[51] **Int.Cl. A61L 27/22 (2006.01) C12M 3/00 (2006.01) G01N 33/50 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR IMMOBILIZING EXTRACELLULAR MATRIX MATERIAL ON ORGAN ON CHIP, MULTILAYER MICROFLUIDICS MICRODEVICES, AND THREE-DIMENSIONAL CELL CULTURE SYSTEMS**  
[54] **SYSTEMES ET PROCEDES POUR IMMOBILISER UNE MATIERE DE MATRICE EXTRACELLULAIRE SUR UN ORGANE SUR PUCE, MICRO-DISPOSITIFS MICROFLUIDIQUES MULTICOUCHES, ET SYSTEMES DE CULTURE CELLULAIRE EN TROIS DIMENSIONS**  
[72] HUH, DONGEUN, US  
[72] MONDRINOS, MARK, US  
[72] BLUNDELL, CASSIDY, US  
[72] SEO, JEONGYUN, US  
[73] THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, US  
[85] 2018-01-26  
[86] 2016-07-27 (PCT/US2016/044321)  
[87] (WO2017/019799)  
[30] US (62/197,444) 2015-07-27  
[30] US (62/348,055) 2016-06-09  
[30] US (62/348,036) 2016-06-09

---

[11] **2,994,208**  
[13] C

[51] **Int.Cl. G01F 1/74 (2006.01) G01F 1/00 (2022.01) G01N 29/024 (2006.01) G01N 29/46 (2006.01) G01P 5/22 (2006.01) G01P 5/24 (2006.01)**  
[25] EN  
[54] **MULTI-PHASE FLOW-MONITORING WITH AN OPTICAL FIBER DISTRIBUTED ACOUSTIC SENSOR**  
[54] **SURVEILLANCE D'ECOULEMENT POLYPHASIQUE AVEC UN CAPTEUR ACOUSTIQUE DISTRIBUE A FIBRES OPTIQUES**  
[72] AMIR, MOHAMMAD, GB  
[72] FARHADIROUSHAN, MAHMOUD, GB  
[72] FINFER, DANIEL, GB  
[72] MAHUE, VERONIQUE, GB  
[72] PARKER, TOM, GB  
[73] SILIXA LTD., GB  
[73] CHEVRON U.S.A. INC., US  
[85] 2018-01-30  
[86] 2016-08-05 (PCT/GB2016/052444)  
[87] (WO2017/021740)  
[30] GB (1513867.0) 2015-08-05

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[11] **2,994,261**  
[13] C

[51] **Int.Cl. G16Z 99/00 (2019.01) E21B 21/08 (2006.01) E21B 44/00 (2006.01) G06F 17/18 (2006.01)**  
[25] EN  
[54] **A METHOD AND APPARATUS OF DETERMINING A STATE OF A SYSTEM**  
[54] **PROCEDE ET APPAREIL DE DETERMINATION D'UN ETAT D'UN SYSTEME**  
[72] FRANGOS, MICHALIS, GB  
[73] SCHLUMBERGER CANADA LIMITED, CA  
[85] 2018-01-30  
[86] 2016-07-20 (PCT/US2016/043036)  
[87] (WO2017/023541)  
[30] US (62/199,618) 2015-07-31

---

[11] **2,994,498**  
[13] C

[51] **Int.Cl. E04C 2/288 (2006.01) B32B 5/02 (2006.01) B32B 5/28 (2006.01) B32B 9/00 (2006.01) B32B 9/02 (2006.01) E04C 2/00 (2006.01)**  
[25] EN  
[54] **MULTILAYER LAMINATE PANEL PANNEAU STRATIFIE MULTICOUCHE**  
[72] AMARAL, PEDRO, PT  
[72] PINHEIRO, JOEL, PT  
[73] FRONTWAVE - ENGENHARIA E CONSULTADORIA, S. A., PT  
[85] 2018-02-01  
[86] 2016-08-04 (PCT/EP2016/068680)  
[87] (WO2017/021505)  
[30] PT (108756) 2015-08-06

---

[11] **2,995,394**  
[13] C

[51] **Int.Cl. G06F 21/31 (2013.01)**  
[25] EN  
[54] **SYSTEM OF DEVICE AUTHENTICATION**  
[54] **SYSTEME D'AUTHENTICIFICATION DE DISPOSITIFS**  
[72] RICHARDSON, RIC B., AU  
[73] HAVENTEC PTY LTD, AU  
[85] 2018-02-12  
[86] 2016-08-12 (PCT/AU2016/000275)  
[87] (WO2017/024335)  
[30] AU (2015903231) 2015-08-12

---

[11] **2,995,999**  
[13] C

[51] **Int.Cl. G01V 1/16 (2006.01) G01V 1/18 (2006.01) G01V 1/28 (2006.01) G01V 1/30 (2006.01) G01V 1/38 (2006.01)**  
[25] EN  
[54] **NODAL HYBRID GATHER COLLECTE NODALE HYBRIDE**  
[72] EICK, PETER M., US  
[72] BREWER, JOEL D., US  
[73] CONOCOPHILLIPS COMPANY, US  
[85] 2018-02-16  
[86] 2016-08-26 (PCT/US2016/049006)  
[87] (WO2017/035476)  
[30] US (62/210,130) 2015-08-26  
[30] US (15/248,700) 2016-08-26

**Canadian Patents Issued  
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[11] **2,996,233**  
[13] C

[51] **Int.Cl. C07D 491/16 (2006.01) A61K 31/4745 (2006.01) A61P 3/00 (2006.01) A61P 9/00 (2006.01) A61P 25/00 (2006.01) A61P 29/00 (2006.01) A61P 31/00 (2006.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01) C07D 491/22 (2006.01)**

[25] EN  
[54] **CONDENSED TRICYCLIC COMPOUNDS AS PROTEIN KINASE INHIBITORS**

[54] **COMPOSES TRICYCLIQUES CONDENSES A TITRE D'INHIBITEURS DE PROTEINES KINASES**

[72] PASTOR FERNANDEZ, JOAQUIN, ES  
[72] MARTINEZ GONZALEZ, SONIA, ES  
[72] BLANCO-APARICIO, CARMEN, ES  
[72] HERNANDEZ HIGUERAS, ANA ISABEL, ES  
[72] GOMEZ DE LA OLIVA, CRISTINA ANA, ES  
[72] RIVERO BUCETA, VIRGINIA, ES  
[72] RIESCO FAGUNDO, ROSARIO CONCEPCION, ES  
[73] FUNDACION DEL SECTOR PUBLICO ESTATAL CENTRO NACIONAL DE INVESTIGACIONES ONCOLOGICAS CARLOS III (F.S.P. CNIO), ES  
[85] 2018-02-21  
[86] 2016-08-25 (PCT/GB2016/052641)  
[87] (WO2017/033019)  
[30] EP (15382431.3) 2015-08-26

---

[11] **2,996,303**  
[13] C

[51] **Int.Cl. G08B 21/24 (2006.01)**

[25] EN  
[54] **SYSTEMS AND METHODS FOR DEVICE USAGE MONITORING**

[54] **SYSTEMES ET PROCEDES DE SURVEILLANCE D'UTILISATION DE DISPOSITIF**

[72] WEGELIN, JACKSON, US  
[73] GOJO INDUSTRIES, INC., US  
[85] 2018-02-21  
[86] 2016-08-25 (PCT/US2016/048523)  
[87] (WO2017/040164)  
[30] US (62/211,253) 2015-08-28

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[11] **2,996,405**  
[13] C

[51] **Int.Cl. H04W 88/06 (2009.01) H04J 99/00 (2009.01) H04J 11/00 (2006.01)**

[25] EN  
[54] **USER TERMINAL, RADIO BASE STATION AND RADIO COMMUNICATION METHOD**

[54] **TERMINAL UTILISATEUR, STATION DE BASE RADIO ET PROCEDE DE COMMUNICATION RADIO**

[72] TAKEDA, KAZUKI, JP  
[72] HARADA, HIROKI, JP  
[72] NAGATA, SATOSHI, JP  
[73] NTT DOCOMO, INC., JP  
[85] 2018-02-22  
[86] 2016-08-23 (PCT/JP2016/074550)  
[87] (WO2017/038563)  
[30] JP (2015-171450) 2015-08-31

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[11] **2,996,536**  
[13] C

[51] **Int.Cl. H04N 21/442 (2011.01) H04N 21/466 (2011.01) H04N 21/482 (2011.01) H04N 21/658 (2011.01)**

[25] EN  
[54] **SYSTEMS, METHODS AND APPARATUS FOR PRESENTING RELEVANT PROGRAMMING INFORMATION**

[54] **SYSTEME, PROCEDE ET APPAREIL PERMETTANT DE PRESENTER DES INFORMATIONS DE PROGRAMMATION PERTINENTES**

[72] CARLSON, JAY P., US  
[72] MINNICK, DANNY J., US  
[73] DISH TECHNOLOGIES L.L.C., US  
[85] 2018-02-23  
[86] 2016-08-26 (PCT/US2016/048997)  
[87] (WO2017/040286)  
[30] US (14/839,492) 2015-08-28

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[11] **2,996,656**  
[13] C

[51] **Int.Cl. C07C 5/333 (2006.01) C07C 11/04 (2006.01)**

[25] EN  
[54] **ALKANE OXIDATIVE DEHYDROGENATION**

[54] **DESHYDROGENATION OXYDANTE D'ALCANE**

[72] BOS, ALOUISIUS NICOLAAS RENEE, NL  
[72] MITKIDIS, GEORGIOS, NL  
[72] ROSSUM VAN, GUUS, NL  
[72] SAN ROMAN MACIA, MARIA, NL  
[72] SCHOONEBEEK, RONALD JAN, NL  
[72] SHAH, VATSAL MUKUNDLAL, US  
[72] VERHAAK, MICHAEL JOHANNES FRANCISCUS MARIA, NL  
[73] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL  
[85] 2018-02-26  
[86] 2016-09-16 (PCT/EP2016/071948)  
[87] (WO2017/046315)  
[30] EP (15185778.6) 2015-09-18

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[11] **2,997,185**  
[13] C

[51] **Int.Cl. B41M 5/00 (2006.01) B41J 3/407 (2006.01) B41M 7/00 (2006.01)**

[25] EN  
[54] **METHODS AND COMPOSITIONS FOR DIRECT PRINT HAVING IMPROVED RECYCLABILITY**

[54] **PROCEDES ET COMPOSITIONS POUR IMPRESSION DIRECTE AVEC RECYCLABILITE AMELIOREE**

[72] UPTERGROVE, RONALD L., US  
[72] RENNER, JENNIFER L., US  
[73] PLASTIPAK PACKAGING, INC., US  
[85] 2018-02-28  
[86] 2016-08-31 (PCT/US2016/049690)  
[87] (WO2017/040654)  
[30] US (14/846,032) 2015-09-04



**Brevets canadiens délivrés  
16 janvier 2024**

[11] **2,997,751**  
[13] C

- [51] **Int.Cl. C02F 5/10 (2006.01)**  
[25] EN  
[54] **SCALE INHIBITOR METHODS AND COMPOSITIONS**  
[54] **PROCEDES ET COMPOSITIONS D'INHIBITION DE TARTRE**  
[72] REYES, LARISA MAE Q., US  
[72] HARRIS, J. KEITH, US  
[72] TUCKER, CHRISTOPHER J., US  
[72] KATZ, JOSHUA S., US  
[72] WALKER, BRITTANY A., US  
[72] ZIMMERMAN, STEVEN C., US  
[73] BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS, US  
[73] DOW GLOBAL TECHNOLOGIES LLC, US  
[73] ROHM AND HAAS COMPANY, US  
[85] 2018-03-06  
[86] 2016-09-02 (PCT/US2016/050083)  
[87] (WO2017/044383)  
[30] US (62/216,776) 2015-09-10

[11] **2,998,148**  
[13] C

- [51] **Int.Cl. H02G 3/06 (2006.01) H02G 3/12 (2006.01) H02G 3/18 (2006.01) H02G 15/10 (2006.01)**  
[25] EN  
[54] **CONDUIT SUPPORT BRACKET FOR ELECTRICAL BOX**  
[54] **CONSOLE DE SUPPORT DE CONDUIT POUR BOITE ELECTRIQUE**  
[72] KORCZ, KRZYSZOF, US  
[72] JOHNSON, STEVE, US  
[73] HUBBELL INCORPORATED, US  
[85] 2018-03-08  
[86] 2016-09-09 (PCT/US2016/051053)  
[87] (WO2017/044813)  
[30] US (62/216,761) 2015-09-10

[11] **2,998,464**  
[13] C

- [51] **Int.Cl. C09K 8/588 (2006.01) C08L 29/04 (2006.01)**  
[25] EN  
[54] **CRUDE OIL DISPERSION STABILIZER CONTAINING VINYL-ALCOHOL-BASED POLYMER**  
[54] **STABILISATEUR DE DISPERSION DE PETROLE BRUT CONTENANT UN POLYMER A BASE D'ALCOOL VINYLIQUE**  
[72] KANESHIMA, TAKUMA, JP  
[72] KUMAKI, YOSUKE, JP  
[73] KURARAY CO., LTD., JP  
[85] 2018-03-12  
[86] 2016-09-14 (PCT/JP2016/077055)  
[87] (WO2017/047616)  
[30] JP (2015-181952) 2015-09-15

[11] **2,998,741**  
[13] C

- [51] **Int.Cl. C07D 417/12 (2006.01) A61K 31/20 (2006.01) A61K 31/55 (2006.01) A61K 31/5513 (2006.01) A61K 31/554 (2006.01) C07D 417/14 (2006.01)**  
[25] EN  
[54] **HEPATITIS B CORE PROTEIN MODULATORS**  
[54] **MODULATEURS DES PROTEINES DU NOYAU DE L'HEPATITE B**  
[72] TURNER, WILLIAM, US  
[72] ARNOLD, LEE DANIEL, US  
[72] MAAG, HANS, DE  
[72] LI, LEPING, US  
[72] BURES, MARK, US  
[72] HAYDAR, SIMON, US  
[72] FRANCIS, SAMSON, US  
[73] ASSEMBLY BIOSCIENCES, INC., US  
[73] INDIANA UNIVERSITY RESEARCH AND TECHNOLOGY CORPORATION, US  
[85] 2018-03-14  
[86] 2016-09-15 (PCT/US2016/051934)  
[87] (WO2017/048950)  
[30] US (62/218,815) 2015-09-15

[11] **2,999,071**  
[13] C

- [51] **Int.Cl. G01L 11/02 (2006.01) G01L 13/00 (2006.01)**  
[25] EN  
[54] **OPTICAL PRESSURE SENSOR WITH REDUCED MECHANICAL STRESSES**  
[54] **CAPTEUR DE PRESSION OPTIQUE A CONTRAINTES MECANQUES REDUITES**  
[72] DUPLAIN, GAETAN, CA  
[72] BUSSIERE, SYLVAIN, CA  
[72] LAFLEUR, PHILIPPE, CA  
[73] OPSSENS SOLUTIONS INC., CA  
[85] 2018-03-19  
[86] 2016-09-21 (PCT/CA2016/051101)  
[87] (WO2017/049392)  
[30] US (62/221,313) 2015-09-21

[11] **2,999,262**  
[13] C

- [51] **Int.Cl. B31B 50/06 (2017.01) B31B 50/62 (2017.01) B65D 5/06 (2006.01) B65D 5/32 (2006.01)**  
[25] EN  
[54] **METHOD AND MACHINE FOR FORMING A TWO-PIECE BLANK ASSEMBLY**  
[54] **PROCEDES ET MACHINE DE FORMATION D'UN ENSEMBLE EBAUCHE EN DEUX PARTIES**  
[72] GRAHAM, THOMAS DEAN, US  
[72] AGANOVIC, AMER, US  
[72] KEMPNICH, KIRK S., US  
[73] WESTROCK SHARED SERVICES, LLC, US  
[85] 2018-03-20  
[86] 2016-09-13 (PCT/US2016/051511)  
[87] (WO2017/053130)  
[30] US (14/860,385) 2015-09-21

**Canadian Patents Issued  
January 16, 2024**

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[11] **2,999,879**  
[13] C

[51] **Int.Cl. G01R 31/52 (2020.01) H02H 3/17 (2006.01)**  
[25] EN  
[54] **AUTOMATED GROUND FAULT INTERRUPT TESTER**  
[54] **TESTEUR D'INTERRUPTION AUTOMATIQUE DE DEFAUT DE MISE A LA TERRE**  
[72] FREER, BENJAMIN AVERY, US  
[72] IANNCE, STEPHAN P., US  
[72] MANAHAN, JOSEPH MICHAEL, US  
[73] EATON INTELLIGENT POWER LIMITED, IE  
[85] 2018-03-23  
[86] 2016-09-23 (PCT/US2016/053544)  
[87] (WO2017/058668)  
[30] US (62/233,690) 2015-09-28

---

[11] **3,000,305**  
[13] C

[51] **Int.Cl. A01N 35/02 (2006.01) A01N 25/00 (2006.01) A01N 27/00 (2006.01) A01N 31/02 (2006.01) A01N 35/04 (2006.01) A01N 37/02 (2006.01) A01P 19/00 (2006.01)**  
[25] EN  
[54] **A COMPOSITION COMPRISING ACTIVE AGENTS, THE ACTIVE AGENTS CONSISTING OF (E)-2-OCTENAL AND NONANAL**  
[54] **COMPOSITION**  
[72] CAMERON, MARY MCFADDEN, GB  
[72] LOGAN, JAMES GEORGE, GB  
[72] WEEKS, EMMA NATALIE IVY, GB  
[72] PICKETT, JOHN ANTHONY, GB  
[72] BIRKETT, MICHAEL ALEXANDER, GB  
[73] LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE, GB  
[73] ROTHAMSTED RESEARCH LTD, GB  
[85] 2018-03-28  
[86] 2016-10-04 (PCT/GB2016/053076)  
[87] (WO2017/060682)  
[30] GB (1517546.6) 2015-10-05

---

[11] **3,000,373**  
[13] C

[51] **Int.Cl. H04N 19/593 (2014.01) H04N 19/11 (2014.01) H04N 19/117 (2014.01) H04N 19/146 (2014.01) H04N 19/176 (2014.01) H04N 19/182 (2014.01)**  
[25] EN  
[54] **VIDEO INTRA-PREDICTION USING POSITION DEPENDENT PREDICTION COMBINATION FOR VIDEO CODING**  
[54] **INTRA-PREDICTION VIDEO UTILISANT UNE COMBINAISON DE PREDICTIONS DEPENDANTES DE LA POSITION POUR LE CODAGE VIDEO**  
[72] SAID, AMIR, US  
[72] ZHAO, XIN, US  
[72] CHEN, JIANLE, US  
[72] KARCZEWICZ, MARTA, US  
[73] QUALCOMM INCORPORATED, US  
[85] 2018-03-28  
[86] 2016-09-22 (PCT/US2016/053126)  
[87] (WO2017/058635)  
[30] US (62/234,645) 2015-09-29  
[30] US (15/272,034) 2016-09-21

---

[11] **3,000,619**  
[13] C

[51] **Int.Cl. C08F 293/00 (2006.01) A61K 9/70 (2006.01) A61K 31/135 (2006.01) A61K 45/00 (2006.01) A61K 47/32 (2006.01)**  
[25] EN  
[54] **ADHESIVE POLYMER AND MEDICAL ADHESIVE PATCH**  
[54] **POLYMERE ADHESIF ET TIMBRE ADHESIF MEDICAL**  
[72] KAWAKAMI, SATOSHI, JP  
[72] SOGABE, MANABU, JP  
[72] SHIBATA, TAIKI, JP  
[72] HORIKAWA, YASUSHI, JP  
[72] HASEGAWA, HIROAKI, JP  
[73] TEIKOKU SEIYAKU CO., LTD., JP  
[85] 2018-03-29  
[86] 2016-09-30 (PCT/JP2016/079056)  
[87] (WO2017/057693)  
[30] JP (2015-193844) 2015-09-30

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[11] **3,000,794**  
[13] C

[51] **Int.Cl. C07D 401/08 (2006.01) A61K 31/4439 (2006.01) A61P 25/28 (2006.01)**  
[25] EN  
[54] **PYRROLIDINE DERIVATIVES**  
[54] **DERIVES DE PYRROLIDINE**  
[72] CHEN, LI, CN  
[72] DUAN, YUEJIAO, CN  
[72] SHE, JIN, CN  
[72] WU, CHENGDE, CN  
[73] HUA MEDICINE (SHANGHAI) LTD., CN  
[85] 2018-04-03  
[86] 2016-10-21 (PCT/CN2016/102946)  
[87] (WO2017/071536)  
[30] CN (201510713865.7) 2015-10-28

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[11] **3,001,071**  
[13] C

[51] **Int.Cl. B64B 1/44 (2006.01) H02J 50/23 (2016.01) H02J 50/27 (2016.01) B64D 47/00 (2006.01) B64G 1/40 (2006.01) B64G 1/42 (2006.01) H02K 44/02 (2006.01) H04B 7/195 (2006.01) H04B 7/26 (2006.01)**  
[25] EN  
[54] **GEOSTATIONARY HIGH ALTITUDE PLATFORM**  
[54] **PLATE-FORME A HAUTE ALTITUDE GEOSTATIONNAIRE**  
[72] VAN WYNSBERGHE, ERINN, CA  
[73] VAN WYNSBERGHE, ERINN, CA  
[85] 2018-04-05  
[86] 2016-10-07 (PCT/CA2016/051174)  
[87] (WO2017/059545)  
[30] US (62/239,425) 2015-10-09

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,001,489**  
[13] C

[51] **Int.Cl. A61K 31/506 (2006.01) A61K 31/404 (2006.01) A61K 31/44 (2006.01) A61K 31/4439 (2006.01) A61K 31/47 (2006.01) A61K 31/5025 (2006.01) A61P 17/02 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS OF TREATING SKIN FIBROTIC DISORDERS**

[54] **COMPOSITIONS ET METHODES DE TRAITEMENT DE TROUBLES FIBREUX DE LA PEAU**

[72] TANG-LIU, DIANE, US

[72] LIU, TIFFANY, US

[73] AIVIVA BIOPHARMA, INC., US

[85] 2018-04-09

[86] 2016-10-07 (PCT/US2016/055865)

[87] (WO2017/062694)

[30] US (62/238,309) 2015-10-07

---

[11] **3,001,887**  
[13] C

[51] **Int.Cl. A61M 5/145 (2006.01) A61M 5/142 (2006.01) A61M 5/38 (2006.01)**

[25] EN

[54] **SYSTEMS FOR FLUID DELIVERY WITH WICKING MEMBRANE**

[54] **SYSTEMES DE DISTRIBUTION DE FLUIDE MUNIS D'UNE MEMBRANE A EFFET DE MECHE**

[72] GROVER, BENJAMIN A., US

[72] ALL, SHERIF M., US

[73] MEDTRONIC MINIMED, INC., US

[85] 2018-04-12

[86] 2016-11-18 (PCT/US2016/062835)

[87] (WO2017/091469)

[30] US (14/952,068) 2015-11-25

---

[11] **3,002,146**  
[13] C

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

[25] EN

[54] **MEDICAL LUER CONNECTOR**

[54] **CONNECTEUR MEDICAL LUER**

[72] BONALDO, JEAN M., US

[72] MILLER, PAVEL T., US

[73] HALKEY-ROBERTS CORPORATION, US

[85] 2018-04-16

[86] 2016-10-18 (PCT/US2016/057499)

[87] (WO2017/070098)

[30] US (14/886,081) 2015-10-18

---

[11] **3,002,597**  
[13] C

[51] **Int.Cl. H03B 17/00 (2006.01) G02F 1/11 (2006.01) G02F 1/125 (2006.01) G02F 1/225 (2006.01) H01S 3/00 (2006.01) H03B 23/00 (2006.01)**

[25] EN

[54] **DEVICE FOR PHOTONIC GENERATION OF ARBITRARY MICROWAVE SIGNALS HAVING LINEAR FREQUENCY MODULATION**

[54] **DISPOSITIF DE GENERATION PHOTONIQUE DE SIGNAUX MICRO-ONDES A MODULATION LINEAIRE DE FREQUENCE ARBITRAIRES**

[72] GUILLET DE CHATELLUS, HUGUES, FR

[72] AZANA, JOSE, CA

[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR

[73] UNIVERSITE GRENOBLE ALPES, FR

[73] INSTITUT NATIONAL DE LA RECHERCHE SCIENTIFIQUE, CA

[85] 2018-04-19

[86] 2016-10-20 (PCT/EP2016/075249)

[87] (WO2017/072025)

[30] FR (1560294) 2015-10-28

---

[11] **3,002,724**  
[13] C

[51] **Int.Cl. C09C 1/48 (2006.01) C01B 32/00 (2017.01) C01B 32/05 (2017.01) C09C 1/56 (2006.01)**

[25] EN

[54] **PARTICULATE CARBON MATERIAL PRODUCIBLE FROM RENEWABLE RAW MATERIALS AND METHOD FOR ITS PRODUCTION**

[54] **MATERIAU PARTICULAIRE A BASE DE CARBONE POUVANT ETRE PRODUIT A PARTIR DE RESSOURCES RENOUVELABLES ET SON PROCEDE DE PRODUCTION**

[72] WITTMANN, TOBIAS, DE

[72] BERGEMANN, KLAUS, DE

[73] SUNCOAL INDUSTRIES GMBH, DE

[85] 2018-04-20

[86] 2016-11-18 (PCT/EP2016/078176)

[87] (WO2017/085278)

[30] DE (10 2015 014 956.3) 2015-11-21

[30] DE (10 2015 015 549.0) 2015-11-29

[30] DE (10 2015 015 550.4) 2015-11-29

[30] DE (10 2016 201 801.9) 2016-02-05

---

[11] **3,002,726**  
[13] C

[51] **Int.Cl. G06T 11/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR IMAGE RECONSTRUCTION AT HIGH COMPUTED TOMOGRAPHY PITCH**

[54] **SYSTEMES ET PROCEDES DE RECONSTRUCTION D'IMAGE A UN PAS ELEVE DE TOMOGRAPHIE ASSISTEE PAR ORDINATEUR**

[72] FOLAND, ANDREW D., US

[72] OREPER, BORIS, US

[72] SCHMITT, MICHAEL, US

[73] LEIDOS SECURITY DETECTION & AUTOMATION, INC., US

[85] 2018-04-19

[86] 2016-10-13 (PCT/US2016/056853)

[87] (WO2017/070000)

[30] US (14/886,883) 2015-10-19

---

[11] **3,002,915**  
[13] C

[51] **Int.Cl. A61K 38/48 (2006.01) A61P 3/00 (2006.01) A61P 9/00 (2006.01) A61P 29/00 (2006.01) C12N 9/68 (2006.01)**

[25] EN

[54] **PLASMINOGEN REPLACEMENT THERAPY FOR PLASMINOGEN-DEFICIENCY**

[54] **THERAPIE DE SUBSTITUTION DE PLASMINOGENE DESTINEE AU DEFICIT EN PLASMINOGENE**

[72] ROBITAILLE, MARTIN, CA

[72] THIBAUDEAU, KAREN, CA

[72] LAURIN, PIERRE, CA

[72] PLUM, STACY, US

[73] PROMETIC BIOTHERAPEUTICS, INC., US

[85] 2018-04-23

[86] 2016-11-03 (PCT/IB2016/001599)

[87] (WO2017/077380)

[30] US (62/250,235) 2015-11-03

**Canadian Patents Issued  
January 16, 2024**

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[11] **3,002,963**  
[13] C

[51] **Int.Cl. A01N 1/02 (2006.01) C12N 1/04 (2006.01) C12Q 1/02 (2006.01)**  
[25] EN  
[54] **SELECTION OF EXTRACELLULAR MATRIX COMPONENTS AND/OR MATRICELLULAR PROTEINS FOR IMPROVED POST-CRYOPRESERVATION CELL VIABILITY AND RETENTION**  
[54] **SELECTION D'ELEMENTS DE MATRICE EXTRACELLULAIRE ET/OU DE PROTEINES MATRICELLULAIRES POUR UNE VIABILITE ET UNE RETENTION DE CELLULE POST-CRYOCONSERVATION AMELIOREES**  
[72] BROCKBANK, KELVIN G.M., US  
[72] CAMPBELL, LIA, US  
[73] LIFELINE SCIENTIFIC, INC., US  
[85] 2018-04-23  
[86] 2015-10-26 (PCT/US2015/057396)  
[87] (WO2016/065363)  
[30] US (14/523,114) 2014-10-24

---

[11] **3,003,128**  
[13] C

[51] **Int.Cl. B60C 9/20 (2006.01) B60C 9/18 (2006.01) B60C 9/22 (2006.01) B60C 11/03 (2006.01) B60C 11/12 (2006.01)**  
[25] FR  
[54] **TYRE HAVING IMPROVED WEAR PROPERTIES**  
[54] **PNEUMATIQUE PRESENTANT DES PROPRIETES D'USURE AMELIOREES**  
[72] GERVAIS, PHILIPPE, FR  
[72] GODEAU, GILLES, FR  
[72] QUANTINET, BENJAMIN, FR  
[72] ZIVKOVIC, TONY, FR  
[73] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR  
[85] 2018-04-24  
[86] 2016-12-14 (PCT/FR2016/053392)  
[87] (WO2017/103448)  
[30] FR (1562442) 2015-12-16

---

[11] **3,003,434**  
[13] C

[51] **Int.Cl. H04L 12/413 (2006.01) H04L 12/12 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR INCREASED SPECTRAL EFFICIENCY IN WIRELESS LOCOMOTIVE REMOTE CONTROL**  
[54] **PROCEDE ET SYSTEME POUR EFFICACITE SPECTRALE ACCRUE DE COMMANDE A DISTANCE SANS FIL DE LOCOMOTIVE**  
[72] PADEN, DAVID M., US  
[72] GREER, KERRY L., US  
[73] METHODE ELECTRONICS, INC., US  
[85] 2018-04-26  
[86] 2016-08-25 (PCT/US2016/048618)  
[87] (WO2017/078828)  
[30] US (14/929,760) 2015-11-02

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[11] **3,003,486**  
[13] C

[51] **Int.Cl. G06F 3/06 (2006.01) G06F 11/07 (2006.01) G06F 12/02 (2006.01)**  
[25] EN  
[54] **USE OF VOLATILE MEMORY AS NON-VOLATILE MEMORY**  
[54] **UTILISATION DE MEMOIRE VOLATILE EN TANT QUE MEMOIRE NON VOLATILE**  
[72] KELLY, BRYAN, US  
[72] SANTANIELLO, MARK, US  
[72] GOVINDAN, SRIRAM, US  
[72] BADAM, ANIRUDH, US  
[73] MICROSOFT TECHNOLOGY LICENSING, LLC, US  
[85] 2018-04-26  
[86] 2017-01-20 (PCT/US2017/014377)  
[87] (WO2017/127709)  
[30] US (15/004,830) 2016-01-22

---

[11] **3,003,748**  
[13] C

[51] **Int.Cl. A61B 17/11 (2006.01) A61B 17/04 (2006.01) A61L 27/16 (2006.01) A61L 27/24 (2006.01)**  
[25] EN  
[54] **CONNECTOR AND WRAP FOR END-TO-SIDE NERVE COAPTATION**  
[54] **CONNECTEUR ET ENVELOPPE POUR COAPTATION DE NERF DU BOUT VERS LE COTE**  
[72] MERCED-O'NEILL, ORLANDO, US  
[72] ORRICO, MICHAEL RAYMOND, US  
[73] AXOGEN CORPORATION, US  
[85] 2018-04-30  
[86] 2016-11-07 (PCT/US2016/060791)  
[87] (WO2017/079726)  
[30] US (62/251,901) 2015-11-06

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[11] **3,004,050**  
[13] C

[51] **Int.Cl. E03C 1/04 (2006.01) E03C 1/02 (2006.01) E03C 1/044 (2006.01)**  
[25] EN  
[54] **WATER CONSERVING SHOWER SYSTEM AND THERMOCHROMIC FIXTURES USED THEREIN**  
[54] **SYSTEME DE DOUCHE FAVORISANT L'ECONOMIE D'EAU ET ELEMENTS THERMOCHROMIQUES UTILISES EN SON SEIN**  
[72] SEARCY, GUS, US  
[73] AQUA VIEW INC., US  
[85] 2018-05-02  
[86] 2016-05-18 (PCT/US2016/033140)  
[87] (WO2017/082960)  
[30] US (14/937,587) 2015-11-10

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,004,178**  
[13] C

[51] **Int.Cl. C08G 12/26 (2006.01) C08G 12/42 (2006.01) C09D 133/14 (2006.01) C09D 161/32 (2006.01)**

[25] EN

[54] **FORMALDEHYDE FREE CROSSLINKING COMPOSITIONS**

[54] **COMPOSITIONS DE RETICULATION EXEMPTES DE FORMALDEHYDE**

[72] TREASURER, URVEE Y., US

[72] WILDE, ZACHARY, US

[72] FLOOD, LAWRENCE, US

[72] QUINN, SARAH, US

[72] BROGAN, COLIN, US

[72] GUPTA, RAM, US

[73] ALLNEX NETHERLANDS B.V., NL

[85] 2018-05-03

[86] 2016-12-23 (PCT/EP2016/082521)

[87] (WO2017/114771)

[30] US (14/984,155) 2015-12-30

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[11] **3,004,945**  
[13] C

[51] **Int.Cl. C03B 37/012 (2006.01) G02B 6/032 (2006.01)**

[25] EN

[54] **AN ELEMENT FOR A PREFORM, A FIBER PRODUCTION METHOD AND AN OPTICAL FIBER DRAWN FROM THE PREFORM**

[54] **ELEMENT POUR UNE PREFORME, PROCEDE DE PRODUCTION DE FIBRE ET FIBRE OPTIQUE ETIREE A PARTIR DE LA PREFORME**

[72] SIMONSEN, HARALD ROAGER, DK

[72] JAKOBSEN, CHRISTIAN, DK

[73] NKT PHOTONICS A/S, DK

[85] 2018-05-10

[86] 2016-11-10 (PCT/DK2016/050364)

[87] (WO2017/080564)

[30] DK (PA 2015 70724) 2015-11-10

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[11] **3,005,149**  
[13] C

[51] **Int.Cl. B64C 3/56 (2006.01)**

[25] EN

[54] **AERIAL VEHICLE WITH DEPLOYABLE COMPONENTS**

[54] **VEHICULE AERIEN A ELEMENTS DEPLOYABLES**

[72] ALLEY, NICHOLAS ROBERT, US

[72] STEELE, JOSHUA LEMMING, US

[72] WILLIAMS, JESSE OWEN, US

[72] KUEHME, DANIEL, US

[72] PHILLIPS, JONATHAN CALEB, US

[73] ANDURIL INDUSTRIES, INC., US

[85] 2018-05-10

[86] 2016-04-21 (PCT/US2016/028649)

[87] (WO2017/082954)

[30] US (62/254,098) 2015-11-11

[30] US (15/092,219) 2016-04-06

[30] US (15/092,237) 2016-04-06

[30] US (15/092,257) 2016-04-06

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[11] **3,004,339**  
[13] C

[51] **Int.Cl. G01M 3/00 (2006.01) F17D 5/02 (2006.01)**

[25] EN

[54] **A METHOD AND SYSTEM FOR SIMULATING A LEAK IN A PIPELINE, AND AN OUTLET FOR COUPLING A CONDUIT TO A PIPELINE**

[54] **PROCEDE ET SYSTEME POUR SIMULER UNE FUITE DANS UN PIPELINE, ET SORTIE POUR RACCORDER UN CONDUIT A UN PIPELINE**

[72] HULL, JOHN, CA

[72] JALILIAN, SEYED EHSAN, CA

[72] PLETNYOV, OLEKSIY, CA

[73] HIFI ENGINEERING INC., CA

[85] 2018-05-04

[86] 2016-11-03 (PCT/CA2016/051283)

[87] (WO2017/075712)

[30] US (62/251,521) 2015-11-05

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[11] **3,004,982**  
[13] C

[51] **Int.Cl. C04B 26/04 (2006.01) B32B 7/12 (2006.01) B32B 13/12 (2006.01) B32B 27/20 (2006.01) B32B 27/30 (2006.01) C09J 11/04 (2006.01) E04B 1/66 (2006.01)**

[25] EN

[54] **CONTACT LAYER WITH A SOLID FILLER COMPONENT**

[54] **COUCHE DE CONTACT COMPORTANT UN CONSTITUANT DE CHARGE SOLIDE**

[72] ACKERMANN, HERBERT, CH

[72] HOFFFLIN, FRANK, CH

[72] ROHRER, ROMAN, CH

[72] GUTJAHR, LISA, DE

[72] Z'ROTZ, ROY, CH

[72] SCHOENBRODT, SIMON, CH

[73] SIKA TECHNOLOGY AG, CH

[85] 2018-05-10

[86] 2016-12-20 (PCT/EP2016/081977)

[87] (WO2017/108826)

[30] EP (15202467.5) 2015-12-23

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[11] **3,005,191**  
[13] C

[51] **Int.Cl. F24H 3/02 (2022.01) F24H 9/1863 (2022.01) F24D 13/02 (2006.01) H05B 3/28 (2006.01)**

[25] EN

[54] **ELECTRIC RESISTANCE RADIANT FURNACE WITH MESH, SCREEN, OR HONEYCOMB BETWEEN PANEL EMITTERS**

[54] **FOYER RAYONNANT A RESISTANCE ELECTRIQUE, DOTE D'UN TREILLIS, TAMIS OU NID D'ABEILLES ENTRE LES EMETTEURS DE PANNEAU**

[72] COGGINS, ALLEN, US

[73] THERMASI LLC, US

[85] 2018-05-11

[86] 2016-11-01 (PCT/US2016/059860)

[87] (WO2017/083135)

[30] US (14/941,321) 2015-11-13

**Canadian Patents Issued  
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[11] **3,005,291**  
[13] C

[51] **Int.Cl. A61K 47/12 (2006.01) A61K 9/00 (2006.01) A61K 9/14 (2006.01) A61K 31/00 (2006.01) A61K 47/26 (2006.01)**

[25] EN

[54] **A PROCESS FOR PREPARING A DRY POWDER FORMULATION COMPRISING AN ANTICHOLINERGIC, A CORTICOSTEROID AND A BETA-ADRENERGIC**

[54] **PROCEDE DE PREPARATION D'UNE FORMULATION DE Poudre Seche Comprenant Un Anticholinergique, Un Corticosteroide Et Un Beta-Adrenergique**

[72] CAFIERO, CLAUDIO, IT  
[72] ORTENZI, LEONARDO, IT  
[73] CHIESI FARMACEUTICI S.P.A., IT  
[85] 2018-05-14  
[86] 2016-11-14 (PCT/EP2016/077566)  
[87] (WO2017/085007)  
[30] EP (15194661.3) 2015-11-16

---

[11] **3,005,322**  
[13] C

[51] **Int.Cl. A61F 2/08 (2006.01)**

[25] EN

[54] **HIGH-STRENGTH ALLOGRAFT TENDON CONSTRUCT**

[54] **CONSTRUCTION DE TENDON D'ALLOGREFFE DE HAUTE RESISTANCE**

[72] SAMANIEGO, ADRIAN, US  
[72] SOUTHARD, MATT, US  
[72] FRANKLIN, WENDY DESIREE, US  
[72] HODGKISS, JESSICA, US  
[72] KARAZE, BILAL, US  
[73] ALLOSOURCE, US  
[85] 2018-05-14  
[86] 2016-03-17 (PCT/US2016/022984)  
[87] (WO2017/160301)

---

[11] **3,005,345**  
[13] C

[51] **Int.Cl. A61D 7/00 (2006.01) A01K 9/00 (2006.01) A61M 5/00 (2006.01) A61M 11/06 (2006.01) A61M 15/00 (2006.01)**

[25] EN

[54] **AUTOMATIC SYSTEM AND METHOD FOR INJECTING A SUBSTANCE INTO AN ANIMAL**

[54] **SYSTEME AUTOMATIQUE ET PROCEDE D'INJECTION D'UNE SUBSTANCE DANS UN ANIMAL**

[72] KARIMPOUR, RAMIN, US  
[73] TARGAN INC., US  
[85] 2018-05-14  
[86] 2016-11-11 (PCT/US2016/061565)  
[87] (WO2017/083674)  
[30] US (62/254,737) 2015-11-13  
[30] US (62/349,981) 2016-06-14

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[11] **3,005,503**  
[13] C

[51] **Int.Cl. H01M 50/271 (2021.01)**

[25] EN

[54] **REMOVABLE FLAP FOR CLOSING A LOCATION SUITED TO RECEIVING AT LEAST ONE BATTERY OF AN ELECTRONIC DEVICE AND CORRESPONDING ELECTRONIC DEVICE.**

[54] **VOLET AMOVIBLE POUR FERMER UN EMPLACEMENT ADAPTE POUR LA RECEPTION D'AU MOINS UNE BATTERIE D'UN DISPOSITIF ELECTRONIQUE, ET DISPOSITIF ELECTRONIQUE CORRESPONDANT.**

[72] FROMENT, MARION, FR  
[73] BANKS AND ACQUIRERS INTERNATIONAL HOLDING, FR  
[85] 2018-05-16  
[86] 2016-11-24 (PCT/EP2016/078733)  
[87] (WO2017/089493)  
[30] FR (1561511) 2015-11-27

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[11] **3,005,534**  
[13] C

[51] **Int.Cl. G01L 19/00 (2006.01) F04D 17/00 (2006.01) F04D 29/00 (2006.01) F04D 29/40 (2006.01) F23L 5/02 (2006.01) F23N 5/18 (2006.01)**

[25] EN

[54] **STATIC PRESSURE TAP**

[54] **ROBINET A PRESSION STATIQUE**

[72] LYONS, LESLIE ALAN, US  
[72] FISHER, DAVID ALLEN, US  
[73] REGAL BELOIT AMERICA, INC., US  
[86] (3005534)  
[87] (3005534)  
[22] 2018-05-22  
[30] US (15/603,664) 2017-05-24

---

[11] **3,005,861**  
[13] C

[51] **Int.Cl. C12M 1/00 (2006.01) B01F 21/20 (2022.01) B01F 25/10 (2022.01) B01F 35/53 (2022.01) C12M 1/02 (2006.01) C12M 3/00 (2006.01) C12N 1/00 (2006.01) C12N 5/02 (2006.01)**

[25] EN

[54] **MEDIA MIXING CHAMBER**

[54] **CHAMBRE DE MELANGE DE MILIEU**

[72] FLETCHER, THOMAS REID, US  
[73] FUJIFILM IRVINE SCIENTIFIC, INC., US  
[85] 2018-05-18  
[86] 2016-08-11 (PCT/US2016/046603)  
[87] (WO2017/087040)  
[30] US (62/257,685) 2015-11-19  
[30] US (15/087,826) 2016-03-31

**Brevets canadiens délivrés  
16 janvier 2024**

[11] **3,006,294**  
[13] C

- [51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/06 (2006.01) A61K 31/155 (2006.01) A61K 31/436 (2006.01) A61K 31/519 (2006.01) A61P 17/00 (2006.01) A61P 19/02 (2006.01) A61P 29/00 (2006.01) A61P 43/00 (2006.01)**
- [25] EN
- [54] **COMBINATIONS OF RAPAMYCIN AND METFORMIN FOR THE TREATMENT OF JOINT AND SKIN DISEASES**
- [54] **COMBINAISONS DE RAPAMYCINE ET DE METFORMINE POUR LE TRAITEMENT DE MALADIES ARTICULAIRES ET CUTANÉES**
- [72] MELIN, JEFFREY M., US
- [73] MELIN, JEFFREY M., US
- [85] 2018-05-24
- [86] 2016-11-18 (PCT/US2016/062656)
- [87] (WO2017/091454)
- [30] US (62/259,384) 2015-11-24
- [30] US (62/318,302) 2016-04-05
- [30] US (15/241,312) 2016-08-19

[11] **3,006,379**  
[13] C

- [51] **Int.Cl. G05B 19/409 (2006.01) B66F 11/04 (2006.01)**
- [25] FR
- [54] **CONTROL CONSOLE AND AERIAL LIFT INCLUDING SUCH A CONTROL CONSOLE**
- [54] **PUPITRE DE COMMANDE ET NACELLE ELEVATRICE COMPRENANT UN TEL PUPITRE DE COMMANDE**
- [72] BEJI, SLAHEDDINE, FR
- [72] LEMARCHAND, LUDOVIC, FR
- [73] HAULOTTE GROUP, FR
- [85] 2018-05-24
- [86] 2016-12-08 (PCT/EP2016/080180)
- [87] (WO2017/097874)
- [30] FR (1562064) 2015-12-09

[11] **3,006,570**  
[13] C

- [51] **Int.Cl. E04H 17/10 (2006.01)**
- [25] EN
- [54] **FENCING SYSTEM**
- [54] **SYSTEME DE CLOTURE**
- [72] DURHAM, CHRISTOPHER JOHN WALTER, GB
- [73] HAMPTON STEEL LIMITED, GB
- [85] 2018-05-28
- [86] 2017-01-19 (PCT/GB2017/050119)
- [87] (WO2017/125736)
- [30] GB (1600991.2) 2016-01-19

[11] **3,006,588**  
[13] C

- [51] **Int.Cl. A61K 8/891 (2006.01) A61K 8/23 (2006.01) A61K 8/81 (2006.01) A61K 8/86 (2006.01) A61Q 11/02 (2006.01)**
- [25] EN
- [54] **ORAL CARE WHITENING COMPOSITIONS**
- [54] **COMPOSITIONS DE BLANCHIMENT POUR L'HYGIENE BUCCALE**
- [72] ROBBINS, KYLE, US
- [72] LAVENDER, STACEY, US
- [72] NESTA, JASON, US
- [72] XU, GUOFENG, US
- [73] COLGATE-PALMOLIVE COMPANY, US
- [85] 2018-05-28
- [86] 2016-12-12 (PCT/US2016/066070)
- [87] (WO2017/106067)
- [30] US (14/972,649) 2015-12-17

[11] **3,006,751**  
[13] C

- [51] **Int.Cl. C07C 29/151 (2006.01) C07C 29/152 (2006.01) C07C 29/154 (2006.01) C07C 31/04 (2006.01)**
- [25] EN
- [54] **METHANOL PROCESS**
- [54] **PROCEDE DE SYNTHÈSE DE METHANOL**
- [72] YIU, KAR CHI, GB
- [73] JOHNSON MATTHEY DAVY TECHNOLOGIES LIMITED, GB
- [85] 2018-05-29
- [86] 2016-12-16 (PCT/GB2016/053960)
- [87] (WO2017/121981)
- [30] GB (1600794.0) 2016-01-15

[11] **3,007,047**  
[13] C

- [51] **Int.Cl. B01J 8/00 (2006.01) B01J 8/20 (2006.01) B01J 8/22 (2006.01) B01J 19/00 (2006.01) B01J 19/26 (2006.01)**
- [25] EN
- [54] **PRESSURE DRIVEN FLOW CRYSTALLIZER**
- [54] **CRISTALLISEUR D'ÉCOULEMENT ENTRAÎNÉ PAR PRESSION**
- [72] MYERSON, ALLAN STUART, US
- [72] O'MAHONY, MARCUS, US
- [72] STELZER, TORSTEN, US
- [72] CUI, YUQING, US
- [73] MASSACHUSETTS INSTITUTE OF TECHNOLOGY, US
- [85] 2018-05-30
- [86] 2016-12-08 (PCT/US2016/000122)
- [87] (WO2017/099817)
- [30] US (62/264,843) 2015-12-08

[11] **3,007,423**  
[13] C

- [51] **Int.Cl. F25B 49/02 (2006.01)**
- [25] EN
- [54] **TWO-STAGE COMPRESSION AIR CONDITIONING SYSTEM AND AIR REPLENISHMENT CONTROL METHOD THEREFOR**
- [54] **SYSTEME DE CLIMATISATION A COMPRESSION A DEUX ETAGES ET SON PROCEDE DE COMMANDE D'APPORT D'AIR**
- [72] ZHAO, HUAN, CN
- [72] TAN, FENG, CN
- [72] LI, PENGFEI, CN
- [72] LIANG, YOUXUAN, CN
- [73] GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI, CN
- [85] 2018-06-05
- [86] 2016-11-25 (PCT/CN2016/107254)
- [87] (WO2017/101658)
- [30] CN (201510929233.4) 2015-12-14

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[11] **3,007,446**  
[13] C

[51] **Int.Cl. A61K 31/4439 (2006.01) A61K 47/44 (2017.01) A61P 1/04 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR TREATING GASTRIC ULCERS**  
[54] **METHODES ET COMPOSITIONS DE TRAITEMENT DES ULCERES GASTRIQUES**  
[72] BOVA, NICHOLAS, GB  
[72] GARG, SANJAY, AU  
[72] PAGE, STEPHEN, AU  
[73] LUODA PHARMA LIMITED, IE  
[85] 2018-06-05  
[86] 2016-12-08 (PCT/AU2016/051205)  
[87] (WO2017/096426)  
[30] AU (2015905078) 2015-12-08

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[11] **3,007,498**  
[13] C

[51] **Int.Cl. B21D 39/04 (2006.01)**  
[25] EN  
[54] **DIE FOR SWAGE PRESS**  
[54] **MATRICE POUR PRESSE DE RETREINTE**  
[72] TURNER, KELVIN, US  
[72] KRANZ, STEVEN, US  
[73] AFL TELECOMMUNICATIONS LLC, US  
[85] 2018-06-05  
[86] 2017-01-17 (PCT/US2017/013702)  
[87] (WO2017/127340)  
[30] US (62/280,454) 2016-01-19

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[11] **3,007,740**  
[13] C

[51] **Int.Cl. C08G 69/10 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PREPARATION OF BIOORGANIC NYLON POLYMERS AND THEIR USE AS ANTIBACTERIAL MATERIAL**  
[54] **PROCEDE DE PREPARATION DE POLYMERES DE NYLON BIO-ORGANIQUES ET LEUR UTILISATION A TITRE DE MATIERE ANTIBACTERIENNE**  
[72] MARTINEZ, JEAN, FR  
[72] MEHDI, AHMAD, FR  
[72] SUBRA, GILLES, FR  
[72] JEBORS, SAID, FR  
[73] UNIVERSITE DE MONTPELLIER, FR  
[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS), FR  
[85] 2018-06-07  
[86] 2016-12-09 (PCT/EP2016/080517)  
[87] (WO2017/098018)  
[30] EP (15306964.6) 2015-12-09

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[11] **3,007,993**  
[13] C

[51] **Int.Cl. C07D 495/16 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **INHIBITORS OF BRUTON'S TYROSINE KINASE AND METHODS OF THEIR USE**  
[54] **INHIBITEURS DE TYROSINE KINASE DE BRUTON ET LEURS PROCEDES D'UTILISATION**  
[72] ARORA, NIDHI, US  
[72] BACANI, GENESIS M., US  
[72] BARBAY, JOSEPH KENT, US  
[72] BEMBENEK, SCOTT D., US  
[72] CAI, MIN, CN  
[72] CHEN, WEI, CN  
[72] DECKHUT, CHARLOTTE POOLEY, US  
[72] EDWARDS, JAMES P., US  
[72] GHOSH, BRAHMANANDA, US  
[72] HAO, BAOYU, CN  
[72] KREUTTER, KEVIN D., US  
[72] LI, GANG, CN  
[72] TICHENOR, MARK S., US  
[72] VENABLE, JENNIFER D., US  
[72] WEI, JIANMEI, US  
[72] WIENER, JOHN J. M., US  
[72] WU, YAO, CN  
[72] ZHU, YAOPING, CN  
[72] ZHANG, FEIHUANG, CN  
[72] ZHANG, ZHENG, CN  
[72] XIAO, KUN, CN  
[73] JANSSEN PHARMACEUTICA NV, BE  
[85] 2018-06-08  
[86] 2016-12-09 (PCT/US2016/065964)  
[87] (WO2017/100668)  
[30] US (62/265,780) 2015-12-10

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[11] **3,008,185**  
[13] C

[51] **Int.Cl. A61K 38/48 (2006.01) A61P 7/02 (2006.01)**  
[25] EN  
[54] **METHOD FOR PREVENTION OR TREATMENT OF ACUTE AND CHRONIC THROMBOSIS**  
[54] **METHODE DE PREVENTION OU DE TRAITEMENT DE LA THROMBOSE AIGUE ET CHRONIQUE**  
[72] LI, JINAN, CN  
[73] TALENGEN INTERNATIONAL LIMITED, CN  
[85] 2018-06-12  
[86] 2016-12-16 (PCT/CN2016/110448)  
[87] (WO2017/101866)  
[30] CN (PCT/CN2015/097941) 2015-12-18



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[11] **3,008,355**  
[13] C

[51] **Int.Cl. G01V 1/24 (2006.01)**  
[25] EN  
[54] **AVERAGE CLOCK ADJUSTMENT FOR DATA ACQUISITION SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE D'AJUSTEMENT D'HORLOGE MOYENNE POUR ACQUISITION DE DONNEES**  
[72] SENECHAL, EMMANUEL, FR  
[73] SERCEL, FR  
[85] 2018-06-13  
[86] 2016-12-14 (PCT/IB2016/001939)  
[87] (WO2017/103681)  
[30] US (14/968,991) 2015-12-15

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[11] **3,008,757**  
[13] C

[51] **Int.Cl. C02F 1/461 (2006.01) C02F 1/46 (2006.01)**  
[25] EN  
[54] **AN ELECTROCHEMICAL REACTOR FOR ELECTROCHEMICALLY TREATING WATER, A WATER TREATMENT APPARATUS AND USE OF SUCH SAID ELECTROCHEMICAL REACTOR**  
[54] **REACTEUR ELECTROCHIMIQUE POUR TRAITEMENT ELECTROCHIMIQUE D'EAU, APPAREIL DE TRAITEMENT D'EAU ET UTILISATION DUDIT REACTEUR ELECTROCHIMIQUE**  
[72] MARTIKAINEN, MIKA, FI  
[72] KARHU, MIKKO, FI  
[72] LUUKKONEN, MATTI, FI  
[72] ISOMAKI, NIKO, FI  
[72] VAN DER MEER, TUOMAS, FI  
[73] METSO OUTOTEC FINLAND OY, FI  
[85] 2018-06-15  
[86] 2016-12-21 (PCT/FI2016/050904)  
[87] (WO2017/109284)  
[30] FI (20155993) 2015-12-22

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[11] **3,009,051**  
[13] C

[51] **Int.Cl. G01R 31/28 (2006.01)**  
[25] EN  
[54] **GFCI SELF TEST SOFTWARE FOR AUTONOMOUS MONITORING AND FAIL SAFE POWER DENIAL**  
[54] **LOGICIEL D'AUTO-ESSAI GFCI POUR SURVEILLANCE AUTONOME ET REFUS D'ENERGIE ELECTRIQUE A SECURITE INTRINSEQUE**  
[72] SIMONIN, STEPHEN PAUL, US  
[73] HUBBELL INCORPORATED, US  
[85] 2018-06-18  
[86] 2015-12-18 (PCT/US2015/066627)  
[87] (WO2017/105483)

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[11] **3,009,800**  
[13] C

[51] **Int.Cl. A61K 8/24 (2006.01) A61K 8/19 (2006.01) A61K 8/21 (2006.01) A61Q 15/00 (2006.01)**  
[25] EN  
[54] **PERSONAL CARE COMPOSITION COMPRISING TIN FLUORIDE AND PYROPHOSPHATE**  
[54] **COMPOSITION DE SOINS PERSONNELS COMPRENANT DU FLUORURE D'ETAIN ET DU PYROPHOSPHATE**  
[72] SCHANKEL, DANIEL, US  
[72] NAWROCKI, SHIRI, US  
[72] DUBOVOY, VIKTOR, US  
[72] PAN, LONG, US  
[73] COLGATE-PALMOLIVE COMPANY, US  
[85] 2018-06-26  
[86] 2016-12-27 (PCT/US2016/068769)  
[87] (WO2017/117155)  
[30] US (62/273,315) 2015-12-30

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[11] **3,009,947**  
[13] C

[51] **Int.Cl. B23F 17/00 (2006.01) B23F 5/16 (2006.01) B23F 21/00 (2006.01) B23F 21/12 (2006.01)**  
[25] EN  
[54] **DEVICE AND METHOD FOR ROUGHING AND FINE-MACHINING OF GEARS**  
[54] **DISPOSITIF ET PROCEDE D'EBAUCHAGE ET D'USINAGE FIN DE ROUES DENTEES**  
[72] ZIMMERMANN, JONATHAN, DE  
[73] PROFILATOR GMBH & CO. KG, DE  
[85] 2018-06-26  
[86] 2016-12-07 (PCT/EP2016/079991)  
[87] (WO2017/097796)  
[30] DE (10 2015 121 523.3) 2015-12-10

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[11] **3,010,161**  
[13] C

[51] **Int.Cl. C08B 37/00 (2006.01) C08B 37/08 (2006.01) C08J 3/075 (2006.01) C08L 5/00 (2006.01)**  
[25] EN  
[54] **CARBOHYDRATE CROSSLINKER**  
[54] **RETICULATEUR DE GLUCIDES**  
[72] OLSSON, JOHAN, SE  
[72] HARRIS, CRAIG STEVEN, FR  
[72] MOJARRADI, HOTAN, CH  
[72] BOITEAU, JEAN-GUY, FR  
[72] GERFAUD, THIBAUT, FR  
[72] TOMAS, LOIC, FR  
[73] GALDERMA HOLDING S.A., CH  
[85] 2018-06-28  
[86] 2016-12-28 (PCT/EP2016/082783)  
[87] (WO2017/114867)  
[30] EP (15202944.3) 2015-12-29  
[30] EP (16172254.1) 2016-05-31  
[30] EP (16172225.1) 2016-05-31  
[30] EP (16172241.8) 2016-05-31

**Canadian Patents Issued  
January 16, 2024**

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[11] **3,010,362**  
[13] C

[51] **Int.Cl. B32B 15/08 (2006.01) B05D 7/00 (2006.01) B32B 27/08 (2006.01) B32B 27/30 (2006.01) B32B 27/32 (2006.01) B32B 27/40 (2006.01) F16L 59/14 (2006.01) F16L 59/16 (2006.01)**

[25] EN

[54] **COMPOSITE ARTICLE**

[54] **ARTICLE COMPOSITE**

[72] DODGE, JEFFREY A., US

[72] KAMM, ANDRE, DE

[72] JONES, CHARLES E., JR., US

[72] GUST, KARL R., US

[73] BASF SE, DE

[85] 2018-06-28

[86] 2017-01-13 (PCT/US2017/013395)

[87] (WO2017/123915)

[30] US (62/279,029) 2016-01-15

[30] US (62/279,026) 2016-01-15

[30] US (62/279,027) 2016-01-15

[30] US (62/279,033) 2016-01-15

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[11] **3,010,558**  
[13] C

[51] **Int.Cl. B01J 23/40 (2006.01) B01D 53/86 (2006.01) B01J 21/08 (2006.01) B01J 21/12 (2006.01) B01J 23/42 (2006.01) B01J 37/02 (2006.01) B01J 37/08 (2006.01)**

[25] EN

[54] **DIESEL OXIDATION CATALYST COMPRISING PLATINUM GROUP METAL NANOPARTICLES**

[54] **CATALYSEUR D'OXYDATION DE DIESEL COMPRENANT DES NANOPARTICULES DE METAL DU GROUPE PLATINE**

[72] WEI, XINYI, US

[72] XU, XIAOMING, US

[72] ROTH, STANLEY, US

[73] BASF CORPORATION, US

[85] 2018-07-04

[86] 2017-01-05 (PCT/IB2017/050039)

[87] (WO2017/118932)

[30] US (62/275,434) 2016-01-06

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[11] **3,010,669**  
[13] C

[51] **Int.Cl. C10L 1/00 (2006.01) C10L 1/30 (2006.01) C10M 171/00 (2006.01)**

[25] FR

[54] **USE OF RARE EARTH COMPLEXES AS MARKERS OF PETROLEUM PRODUCTS, CRUDE OILS, BIOFUELS OR LUBRICANTS**

[54] **UTILISATION DE COMPLEXES DE TERRES RARES COMME MARQUEURS DE PRODUITS PETROLIERS, DE PETROLES BRUTS, DE BIOCARBURANTS OU DE LUBRIFIANTS**

[72] MARAIS, ARTHUR, FR

[72] OULD-METIDJI, MAHMOUD, FR

[72] LEPOIVRE, FLORIAN, FR

[72] COLLET, ANATOLE, FR

[72] MARTINI, MATTEO, FR

[72] ROSSETTI, FABIEN, FR

[72] TILLEMENT, OLIVIER, FR

[72] VANLAER, ANTOINE, FR

[72] GHILLEBAERT, FRANCOIS, FR

[73] INOVENTEAM, FR

[73] UNIVERSITE CLAUDE BERNARD LYON 1, FR

[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE - CNRS, FR

[85] 2018-07-05

[86] 2017-01-12 (PCT/FR2017/050062)

[87] (WO2017/121958)

[30] FR (16 50208) 2016-01-12

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[11] **3,010,863**  
[13] C

[51] **Int.Cl. A47B 21/013 (2006.01) A61B 34/30 (2016.01) A61B 90/50 (2016.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR POSITIONING A WORKSTATION FOR CONTROLLING A ROBOTIC SYSTEM**

[54] **PROCEDE ET APPAREIL POUR POSITIONNER UN POSTE DE TRAVAIL POUR COMMANDER UN SYSTEME ROBOTIQUE**

[72] LUTZOW, THOMAS ANDREW, US

[72] BACHER, DANIEL, CA

[73] TITAN MEDICAL INC., CA

[85] 2018-07-06

[86] 2016-12-13 (PCT/CA2016/000316)

[87] (WO2017/124170)

[30] US (62/280,230) 2016-01-19

---

[11] **3,010,864**  
[13] C

[51] **Int.Cl. C08G 18/48 (2006.01) C08G 18/32 (2006.01) C08G 18/66 (2006.01) C08G 18/76 (2006.01) C08K 5/103 (2006.01) C08K 5/315 (2006.01)**

[25] EN

[54] **METHOD FOR THE REDUCTION OF ALDEHYDE EMISSION IN POLYURETHANE FOAM**

[54] **PROCEDE DE REDUCTION D'EMISSION D'ALDEHYDE DANS UNE MOUSSE DE POLYURETHANNE**

[72] WELVAERT, INGRID, BE

[72] DRIES, GEERT LODEWIJK, BE

[72] BOSMAN, JORIS KAREL PETER, BE

[73] HUNTSMAN INTERNATIONAL LLC, US

[85] 2018-07-06

[86] 2017-02-06 (PCT/EP2017/052517)

[87] (WO2017/134296)

[30] EP (16154445.7) 2016-02-05

---

[11] **3,011,421**  
[13] C

[51] **Int.Cl. B27M 3/18 (2006.01) A47B 47/00 (2006.01) B27C 5/00 (2006.01) B27D 5/00 (2006.01) B27F 1/02 (2006.01)**

[25] EN

[54] **A METHOD FOR FORMING A PANEL FOR A FURNITURE PRODUCT**

[54] **PROCEDE POUR FORMER UN PANNEAU POUR UN PRODUIT DE MOBILIER**

[72] FRIDLUND, MAGNUS, SE

[73] VALINGE INNOVATION AB, SE

[85] 2018-07-13

[86] 2017-02-14 (PCT/SE2017/050135)

[87] (WO2017/142459)

[30] SE (1650196-7) 2016-02-15

**Brevets canadiens délivrés  
16 janvier 2024**

[11] **3,011,441**

[13] C

- [51] **Int.Cl. B05B 7/24 (2006.01)**  
[25] EN  
[54] **WIDE-MOUTHED FLUID CONNECTOR FOR HAND-HELD SPRAY GUNS**  
[54] **RACCORD FLUIDIQUE A LARGE EMBOUCHURE POUR PISTOLETS PULVERISATEURS TENUS A LA MAIN**  
[72] HEGDAHL, ANNA M., US  
[72] JOSEPH, STEPHEN C.P., US  
[72] EBERTOWSKI, ALEXANDER T., US  
[72] HENRY, ANDREW R., GB  
[73] 3M INNOVATIVE PROPERTIES COMPANY, US  
[85] 2018-07-13  
[86] 2017-01-12 (PCT/US2017/013127)  
[87] (WO2017/123714)  
[30] US (62/279,619) 2016-01-15

[11] **3,011,834**

[13] C

- [51] **Int.Cl. A61K 8/49 (2006.01) A61K 8/9728 (2017.01) A61K 8/60 (2006.01) A61K 8/97 (2017.01) A61Q 19/02 (2006.01) A61Q 19/08 (2006.01)**  
[25] EN  
[54] **SKIN COSMETIC COMPOSITION COMPRISING SACCHARIN, MALTOL, AND THEOBROMINE**  
[54] **COMPOSITION DE PRODUIT DE BEAUTE POUR LA PEAU COMPRENANT DE LA SACCHARINE, DU MALTOL ET DE LA THEOBROMINE**  
[72] CHEETHAM, PETER SAMUEL JAMES, GB  
[72] LANGWALLNER, CHRISTOPH, SG  
[72] LANGWALLNER, MARGIT, SG  
[72] TAN, WEN JUE AMELIA, SG  
[73] ACHROMAZ PTE. LTD., SG  
[85] 2018-07-17  
[86] 2017-01-19 (PCT/SG2017/050030)  
[87] (WO2017/127025)  
[30] SG (10201600391R) 2016-01-19

[11] **3,011,981**

[13] C

- [51] **Int.Cl. A61K 31/19 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS OF USE OF .BETA.-HYDROXY-.BETA.-METHYLBUTYRATE (HMB) FOR MODULATING AUTOPHAGY AND LIPOPHAGY**  
[54] **COMPOSITIONS ET METHODES D'UTILISATION DE .BETA.-HYDROXY-.BETA.-METHYLBUTYRATE (HMB) POUR MODULER L'AUTOPHAGIE ET LA LIPOPHAGIE**  
[72] ABUMRAD, NAJI, US  
[72] RATHMACHER, JOHN, US  
[72] BAIER, SHAWN, US  
[73] METABOLIC TECHNOLOGIES, LLC, US  
[85] 2018-07-19  
[86] 2017-01-20 (PCT/US2017/014328)  
[87] (WO2017/127675)  
[30] US (62/281,561) 2016-01-21

[11] **3,013,084**

[13] C

- [51] **Int.Cl. E21B 33/06 (2006.01) F16J 15/3208 (2016.01) F16J 15/32 (2016.01)**  
[25] EN  
[54] **ANTI-EXTRUSION SEAL ARRANGEMENT AND RAM-STYLE BLOWOUT PREVENTER**  
[54] **AGENCEMENT DE JOINT ANTI-EXTRUSION ET BLOC OBTURATEUR DE Puits DE TYPE A MACHOIRES**  
[72] MCADAM, DAVID, CA  
[72] MCADAM, BRIAN, CA  
[72] ORR, JAMES, CA  
[73] NOV CANADA ULC, CA  
[85] 2018-07-30  
[86] 2017-02-10 (PCT/CA2017/050161)  
[87] (WO2017/136948)  
[30] US (62/293,718) 2016-02-10

[11] **3,013,307**

[13] C

- [51] **Int.Cl. C02F 1/28 (2006.01)**  
[25] FR  
[54] **DEVICE AND METHOD FOR EXTRACTING SOLUBLE SUBSTANCES DISSOLVED IN AN AQUEOUS SOLUTION**  
[54] **DISPOSITIF ET PROCEDE D'EXTRACTION DE SUBSTANCES SOLUBLES DISSOUTES DANS UNE SOLUTION AQUEUSE**  
[72] BERMUDES, MARC, FR  
[73] BERMUDES, MARC, FR  
[85] 2018-07-31  
[86] 2017-02-03 (PCT/EP2017/052349)  
[87] (WO2017/134205)  
[30] FR (16 50898) 2016-02-04

[11] **3,013,634**

[13] C

- [51] **Int.Cl. A61K 31/4439 (2006.01) A61K 8/49 (2006.01) A61P 17/14 (2006.01) A61Q 7/00 (2006.01)**  
[25] EN  
[54] **METHODS OF INCREASING HAIR GROWTH AND IMPROVING HAIR APPEARANCE**  
[54] **PROCEDES POUR ACCROITRE LA POUSSE DES CHEVEUX ET AMELIORER L'ASPECT DES CHEVEUX**  
[72] WILLIAMS, JONNIE R., US  
[73] MYMD PHARMACEUTICALS, INC., US  
[85] 2018-08-02  
[86] 2017-02-13 (PCT/US2017/017641)  
[87] (WO2017/142833)  
[30] US (62/295,618) 2016-02-16

**Canadian Patents Issued  
January 16, 2024**

[11] **3,013,652**  
[13] C

[51] **Int.Cl. H04W 48/14 (2009.01)**  
[25] EN  
[54] **TERMINAL APPARATUS, BASE STATION APPARATUS, COMMUNICATION METHOD, AND INTEGRATED CIRCUIT**  
[54] **DISPOSITIF TERMINAL, DISPOSITIF STATION DE BASE, PROCEDE DE COMMUNICATIONS, ET CIRCUIT INTEGRE**  
[72] SUZUKI, SHOICHI, JP  
[72] AIBA, TATSUSHI, JP  
[72] OHUCHI, WATARU, JP  
[72] HAYASHI, TAKASHI, JP  
[73] SHARP KABUSHIKI KAISHA, JP  
[85] 2018-08-02  
[86] 2017-01-19 (PCT/JP2017/001743)  
[87] (WO2017/135052)  
[30] JP (2016-019541) 2016-02-04

[11] **3,014,818**  
[13] C

[51] **Int.Cl. A41D 1/00 (2018.01) A41D 29/00 (2006.01)**  
[25] EN  
[54] **EMBLEM ADHESIVE REMOVAL ASSEMBLY AND ASSOCIATED METHODS**  
[54] **ENSEMBLE DE RETRAIT D'ADHESIF D'EMBLEME ET PROCEDES ASSOCIES**  
[72] FIGUEROA, MANUEL, US  
[72] LILLARD, SUSAN, US  
[72] VENTURA, CHRISTOPHER R., US  
[73] CINTAS CORPORATE SERVICES, INC., US  
[73] WORLD EMBLEM INTERNATIONAL, INC., US  
[85] 2018-08-15  
[86] 2017-02-23 (PCT/US2017/019058)  
[87] (WO2017/147252)  
[30] US (62/299,599) 2016-02-25

[11] **3,015,512**  
[13] C

[51] **Int.Cl. A61K 31/451 (2006.01) A61K 31/4704 (2006.01)**  
[25] EN  
[54] **TREATMENT OF NEURODEGENERATIVE EYE DISEASE USING PRIDOPIDINE**  
[54] **TRAITEMENT D'UNE MALADIE NEURODEGENERATIVE DE L'OEIL A L'AIDE DE PRIDOPIDINE**  
[72] RUSS, HERMANN KURT, CH  
[72] GEVA, MICHAL, IL  
[72] LAUFER, RALPH, IL  
[72] ORBACH, ARIC, IL  
[73] PRILENIA NEUROTHERAPEUTICS LTD., IL  
[85] 2018-08-22  
[86] 2017-02-24 (PCT/US2017/019266)  
[87] (WO2017/147366)  
[30] US (62/299,290) 2016-02-24

[11] **3,013,872**  
[13] C

[51] **Int.Cl. A47J 31/36 (2006.01) A47J 31/06 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR THE PREPARATION OF BEVERAGES WITH THE USE OF CAPSULES**  
[54] **SYSTEME DE PREPARATION DE BREUVAGES AU MOYEN DE CAPSULES**  
[72] BOLOGNESE, DANILLO, IT  
[72] CABILLI, ALBERTO, IT  
[72] BORELLO, LUISA ANNA, IT  
[73] LUIGI LAVAZZA S.P.A., IT  
[85] 2018-08-07  
[86] 2017-02-10 (PCT/IB2017/050730)  
[87] (WO2017/137933)  
[30] IT (102016000014612) 2016-02-12

[11] **3,015,042**  
[13] C

[51] **Int.Cl. B05B 7/00 (2006.01) A47J 31/46 (2006.01)**  
[25] EN  
[54] **SMALL CONICAL FILTER PLATE**  
[54] **PLAQUE FILTRANTE CONIQUE**  
[72] ZWICK, BORIS, DE  
[73] UBERMORGEN INNOVATIONS GMBH, DE  
[85] 2018-08-17  
[86] 2017-02-16 (PCT/EP2017/053549)  
[87] (WO2017/140809)  
[30] DE (10 2016 102 795.2) 2016-02-17

[11] **3,016,238**  
[13] C

[51] **Int.Cl. C23F 13/08 (2006.01) B32B 15/01 (2006.01) C22C 21/10 (2006.01) C23F 13/14 (2006.01) C23F 13/16 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR CATHODIC PROTECTION BY DISTRIBUTED SACRIFICIAL ANODES**  
[54] **SYSTEME ET PROCEDE DE PROTECTION CATHODIQUE PAR ANODES SACRIFICIELLES DISTRIBUEES**  
[72] ARTUN, LARS, NO  
[72] IANNUZZI, MARIANO, NO  
[73] VETCO GRAY SCANDINAVIA AS, NO  
[85] 2018-08-30  
[86] 2017-03-01 (PCT/EP2017/054806)  
[87] (WO2017/149030)  
[30] NO (20160374) 2016-03-03

[11] **3,015,403**  
[13] C

[51] **Int.Cl. A01D 41/06 (2006.01) A01D 41/14 (2006.01) A01D 67/00 (2006.01)**  
[25] EN  
[54] **CROP HEADER WITH WING BALANCE CALIBRATION**  
[54] **COLLECTEUR POUR MOISSONNEUSE AVEC CALIBRATION DE L'EQUILIBRE DES AILES**  
[72] SHEARER, BRUCE R., CA  
[72] GRENIER, ERIC, CA  
[72] WILLER, LANCE, CA  
[72] TALBOT, FRANCOIS, CA  
[73] MACDON INDUSTRIES LTD., CA  
[86] (3015403)  
[87] (3015403)  
[22] 2018-08-27  
[30] US (62763122) 2018-06-29

**Brevets canadiens délivrés**  
**16 janvier 2024**

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[11] **3,016,785**  
[13] C

[51] **Int.Cl. A61B 34/20 (2016.01) A61M 1/00 (2006.01)**  
[25] EN  
[54] **TRACKED SUCTION TOOL**  
[54] **OUTIL D'ASPIRATION TRACTE**  
[72] KHERADPIR, LEILA, CA  
[72] DUPONT, KYLE RICHARD, CA  
[72] JANKOWSKI, JAKUB, CA  
[73] SYNAPTIVE MEDICAL INC., CA  
[86] (3016785)  
[87] (3016785)  
[22] 2018-09-10  
[30] US (15/732,113) 2017-09-21

---

[11] **3,016,978**  
[13] C

[51] **Int.Cl. C10L 1/32 (2006.01)**  
[25] EN  
[54] **FUEL OIL / PARTICULATE MATERIAL SLURRY COMPOSITIONS AND PROCESSES**  
[54] **COMPOSITIONS DE SUSPENSION DE MATIERE PARTICULAIRE/MAZOUT ET PROCEDES**  
[72] SNAITH, PAUL, GB  
[72] UNSWORTH, JOHN FRANCIS, GB  
[73] ARQ IP LIMITED, GB  
[85] 2018-09-06  
[86] 2017-04-04 (PCT/GB2017/050938)  
[87] (WO2017/174972)  
[30] GB (1605768.9) 2016-04-04  
[30] GB (1607557.4) 2016-04-29  
[30] US (15/284,995) 2016-10-04  
[30] CN (2016110441160) 2016-11-23

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[11] **3,017,020**  
[13] C

[51] **Int.Cl. C07C 317/44 (2006.01) A61K 31/166 (2006.01) A61P 31/20 (2006.01) C07C 323/62 (2006.01) C07D 213/32 (2006.01) C07D 213/75 (2006.01) C07D 213/81 (2006.01) C07D 213/89 (2006.01) C07D 215/36 (2006.01) C07D 261/20 (2006.01) C07D 303/02 (2006.01) C07D 307/33 (2006.01) C07D 309/08 (2006.01) C07D 313/04 (2006.01) C07D 317/72 (2006.01) C07D 401/04 (2006.01) C07D 493/04 (2006.01)**

[25] EN  
[54] **HEPATITIS B ANTIVIRAL AGENTS**  
[54] **AGENTS ANTIVIRAUX CONTRE L'HEPATITE B**  
[72] QIU, YAO-LING, US  
[72] GAO, XURI, US  
[72] LI, WEI, US  
[72] CAO, HUI, US  
[72] JIN, MEIZHONG, US  
[72] KASS, JORDEN, US  
[72] PENG, XIAOWEN, US  
[72] OR, YAT SUN, US  
[73] ENANTA PHARMACEUTICALS, INC., US  
[85] 2018-09-04  
[86] 2017-03-06 (PCT/US2017/020853)  
[87] (WO2017/155844)  
[30] US (62/304,671) 2016-03-07  
[30] US (62/337,675) 2016-05-17

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[11] **3,017,031**  
[13] C

[51] **Int.Cl. C10G 75/04 (2006.01) C08F 212/08 (2006.01) C08F 220/06 (2006.01) C08F 228/02 (2006.01) C10G 19/02 (2006.01)**

[25] EN  
[54] **METHODS AND COMPOSITIONS FOR PREVENTION OF FOULING IN CAUSTIC TOWERS**  
[54] **PROCEDES ET COMPOSITIONS POUR LA PREVENTION DE L'ENCRASSEMENT DANS DES TOURS CAUSTIQUES**  
[72] TANG, XIAOFENG, CN  
[72] ZHANG, GUIXI, CN  
[72] HONG, MIKE, CN  
[72] SHI, YONGTAO, CN  
[72] XU, CHUN, CN  
[72] YAN, DENGCHAO, CN  
[73] BL TECHNOLOGIES, INC., US  
[85] 2018-09-07  
[86] 2016-03-18 (PCT/CN2016/076767)  
[87] (WO2017/156781)

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[11] **3,017,348**  
[13] C

[51] **Int.Cl. C22B 3/06 (2006.01) C22B 3/22 (2006.01) C22B 3/44 (2006.01) C22B 11/00 (2006.01)**  
[25] EN  
[54] **RECOVERY OF PRECIOUS AND RARE EARTH METALS USING CYCLODEXTRIN**  
[54] **RECUPERATION DE METAUX PRECIEUX ET DE TERRES RARES A L'AIDE DE CYCLODEXTRINE**  
[72] PETTMAN, ROGER BRUCE, US  
[72] ARNOLD, DALE F., US  
[73] CYCLODEX INC., US  
[85] 2018-09-10  
[86] 2017-03-17 (PCT/IB2017/051556)  
[87] (WO2017/158561)  
[30] US (62/309,601) 2016-03-17

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[11] **3,017,358**  
[13] C

[51] **Int.Cl. H05H 1/34 (2006.01)**  
[25] EN  
[54] **IMPROVED PLASMA ARC CUTTING SYSTEM, CONSUMABLES AND OPERATIONAL METHODS**  
[54] **SYSTEME DE COUPAGE A L'ARC DE PLASMA AMELIORE, PROCEDES DE FONCTIONNEMENT ET CONSOMMABLES**  
[72] MITRA, MADHURA S., US  
[72] LIEBOLD, STEPHEN M., US  
[72] JOGDAND, HARSHAWARDHAN, US  
[72] CHEVALIER, ADAM, US  
[72] PETERS, JOHN, US  
[72] MITRA, SOUMYA, US  
[73] HYPER THERM, INC., US  
[85] 2018-09-07  
[86] 2017-03-28 (PCT/US2017/024473)  
[87] (WO2017/172715)  
[30] US (62/314,097) 2016-03-28  
[30] US (62/320,935) 2016-04-11  
[30] US (62/347,856) 2016-06-09

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**Canadian Patents Issued  
January 16, 2024**

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[11] **3,017,364**  
[13] C

[51] **Int.Cl. H04B 7/0413 (2017.01) H04L 5/00 (2006.01) H04L 27/26 (2006.01)**  
[25] EN  
[54] **HIGH DOPPLER CHANNEL PERFORMANCE ENHANCEMENT**  
[54] **AMELIORATION DE PERFORMANCES DE CANAL DOPPLER ELEVEES**  
[72] SUN, JING, US  
[72] YOO, TAESANG, US  
[72] LUO, TAO, US  
[73] QUALCOMM INCORPORATED, US  
[85] 2018-09-10  
[86] 2017-03-17 (PCT/US2017/023044)  
[87] (WO2017/184278)  
[30] US (62/325,946) 2016-04-21  
[30] US (15/461,368) 2017-03-16

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[11] **3,018,457**  
[13] C

[51] **Int.Cl. G06F 40/166 (2020.01) G06F 40/186 (2020.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR AUTOMATIC REPORT GENERATION AND RETAINING OF ANNOTATIONS IN REPORTING DOCUMENTS AFTER REGENERATION**  
[54] **SYSTEMES ET PROCEDES DE GENERATION DE RAPPORTS AUTOMATIQUE ET DE CONSERVATION D'ANNOTATIONS DANS DES DOCUMENTS DE RAPPORT APRES REGENERATION**  
[72] RYCHLEWSKI, GREGORY VICTOR DAVID, CA  
[72] LIU, JINGANG, CA  
[73] THE TORONTO-DOMINION BANK, CA  
[86] (3018457)  
[87] (3018457)  
[22] 2018-09-25  
[30] US (16/139,964) 2018-09-24

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[11] **3,018,567**  
[13] C

[51] **Int.Cl. A61B 5/028 (2006.01) G01N 21/47 (2006.01) G01N 21/53 (2006.01) G02B 27/48 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR BLOOD FLOW MEASUREMENT WITH AFFIXED LASER SPECKLE CONTRAST ANALYSIS**  
[54] **SYSTEME DE MESURE DU FLUX SANGUIN PAR ANALYSE A CONTRASTE DE CHATOIEMENT LASER APOSE**  
[72] RICE, TYLER BYWATERS, US  
[72] WHITE, SEAN MICHAEL, US  
[72] YANG, BRUCE YEE, US  
[73] COVIDIEN AG, CH  
[85] 2018-09-20  
[86] 2017-04-04 (PCT/US2017/025979)  
[87] (WO2017/176781)  
[30] US (62/318,884) 2016-04-06

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[11] **3,018,832**  
[13] C

[51] **Int.Cl. A47F 11/10 (2006.01) F21S 4/20 (2016.01) F21V 7/00 (2006.01) F21V 11/00 (2015.01)**  
[25] EN  
[54] **HIDDEN LIGHTING FOR A DISPLAY SPACE**  
[54] **ECLAIRAGE DISSIMULE POUR UN ESPACE D'AFFICHAGE**  
[72] PALLAI, ANDRE, CA  
[73] EKLIPSE LUMINAIRE ARCHITECTURAL INC., CA  
[85] 2018-09-24  
[86] 2017-03-24 (PCT/CA2017/050377)  
[87] (WO2017/161462)  
[30] US (62/312,847) 2016-03-24

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[11] **3,019,173**  
[13] C

[51] **Int.Cl. A47K 5/12 (2006.01) A47K 5/14 (2006.01) B05B 7/00 (2006.01) F04B 13/02 (2006.01) F04B 23/02 (2006.01) F04B 43/02 (2006.01) F04B 43/04 (2006.01) F04B 49/06 (2006.01)**  
[25] EN  
[54] **SEQUENTIALLY ACTIVATED MULTI-DIAPHRAGM FOAM PUMPS, REFILL UNITS AND DISPENSER SYSTEMS**  
[54] **POMPES A MOUSSE MULTI-DIAPHRAGMES ACTIVEES SEQUENTIELLEMENT, UNITES DE REMPLISSAGE ET SYSTEMES DE DISTRIBUTEUR**  
[72] CIAVARELLA, NICK E., US  
[72] JENKINS, DENNIS K., US  
[72] MARSHALL, AARON D., US  
[73] GOJO INDUSTRIES, INC., US  
[85] 2018-09-26  
[86] 2017-04-06 (PCT/US2017/026293)  
[87] (WO2017/176967)  
[30] US (62/319,061) 2016-04-06

---

[11] **3,019,189**  
[13] C

[51] **Int.Cl. C08L 23/06 (2006.01) C08K 5/14 (2006.01) C08K 5/3435 (2006.01) C08K 5/3492 (2006.01) H01B 3/44 (2006.01)**  
[25] EN  
[54] **CROSSLINKABLE POLYMERIC COMPOSITIONS WITH METHYL-RADICAL SCAVENGERS AND ARTICLES MADE THEREFROM**  
[54] **COMPOSITIONS POLYMERES RETICULABLES COMPRENANT DES PIEGEURS DE RADICAUX METHYLE, ET ARTICLES FABRIQUES A PARTIR DE CELLES-CI**  
[72] SUN, YABIN, CN  
[72] COGEN, JEFFREY M., US  
[72] LI, WEI, CN  
[72] CAI, YU, CN  
[73] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2018-09-27  
[86] 2016-03-30 (PCT/CN2016/077825)  
[87] (WO2017/166105)

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,020,078**  
[13] C

[51] **Int.Cl. C08J 5/24 (2006.01) B29C 70/14 (2006.01) B32B 27/04 (2006.01)**

[25] EN

[54] **PREPREG AND PRODUCTION METHOD THEREFOR**

[54] **PREIMPREGNE ET SON PROCEDE DE PRODUCTION**

[72] NAITO, YUTA, JP

[72] KAWAMOTO, SHIORI, JP

[72] SATO, NARUMICHI, JP

[72] TAKETA, ICHIRO, JP

[72] FUJITA, YUZO, JP

[72] KARAKI, TAKUYA, JP

[73] TORAY INDUSTRIES, INC., JP

[85] 2018-10-04

[86] 2017-06-23 (PCT/JP2017/023199)

[87] (WO2018/003694)

[30] JP (2016-127270) 2016-06-28

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[11] **3,020,157**  
[13] C

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/107 (2006.01) A61K 31/00 (2006.01) A61K 47/06 (2006.01) A61K 47/14 (2017.01)**

[25] EN

[54] **TOPICAL COMPOSITION COMPRISING TACROLIMUS**

[54] **COMPOSITION TOPIQUE COMPRENANT DU TACROLIMUS**

[72] CRUTCHLEY, NIGEL, GB

[73] MC2 THERAPEUTICS LIMITED, GB

[85] 2018-10-04

[86] 2017-04-03 (PCT/EP2017/057897)

[87] (WO2017/174530)

[30] EP (16163724.4) 2016-04-04

---

[11] **3,020,363**  
[13] C

[51] **Int.Cl. C08F 210/02 (2006.01) C08K 3/04 (2006.01) C08K 5/14 (2006.01) H01B 3/00 (2006.01) H01B 3/44 (2006.01)**

[25] EN

[54] **CROSSLINKED POLYMER COMPOSITION FOR CABLE ACCESSORIES**

[54] **COMPOSITION DE POLYMERE RETICULE POUR ACCESSOIRES DE CABLE**

[72] BERGQVIST, MATTIAS, SE

[72] SANDHOLZER, MARTINA, AT

[72] TRANCHIDA, DAVIDE, AT

[72] ANDERSSON, JOHAN, SE

[72] ENGLUND, VILGOT, SE

[72] HJERTBERG, THOMAS, SE

[73] BOREALIS AG, AT

[85] 2018-10-09

[86] 2017-03-30 (PCT/EP2017/057612)

[87] (WO2017/186451)

[30] EP (16167231.6) 2016-04-27

---

[11] **3,020,366**  
[13] C

[51] **Int.Cl. B65D 35/28 (2006.01) B65B 69/00 (2006.01)**

[25] EN

[54] **DEVICE FOR PRESSING OUT A MATERIAL FROM A DEFORMABLE TUBE**

[54] **DISPOSITIF POUR EXPULSER UNE SUBSTANCE HORS D'UN TUBE DEFORMABLE**

[72] RUTHE-STEINSIEK, KAI, DE

[72] RUSHE, PETER, DE

[73] HENKEL AG & CO. KGAA, DE

[85] 2018-10-09

[86] 2017-04-11 (PCT/EP2017/058680)

[87] (WO2017/178487)

[30] DE (10 2016 206 084.8) 2016-04-12

---

[11] **3,020,891**  
[13] C

[51] **Int.Cl. G21F 9/30 (2006.01) G21C 19/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR NUCLEAR REACTOR VESSEL SEGMENTING**

[54] **SYSTEMES ET PROCEDES DE SEGMENTATION DE CUVE DE REACTEUR NUCLEAIRE**

[72] LAGUARDIA, THOMAS S., US

[72] SIMONEAU, RICHARD, US

[73] ARC SAW TECHNOLOGIES, US

[85] 2018-10-12

[86] 2016-05-12 (PCT/US2016/032222)

[87] (WO2016/183388)

[30] US (62/160,250) 2015-05-12

---

[11] **3,021,184**  
[13] C

[51] **Int.Cl. C25D 11/02 (2006.01) C25D 11/08 (2006.01) C25D 11/24 (2006.01) C25D 11/16 (2006.01)**

[25] EN

[54] **METHOD OF ANODIZING AN ARTICLE OF ALUMINIUM OR ALLOY THEREOF**

[54] **PROCEDE D'ANODISATION D'UN ARTICLE EN ALUMINIUM OU EN ALLIAGE DE CELUI-CI**

[72] DE KOK, JOHANNES MARINUS MARIA, NL

[72] VAN DEN HEUVEL, VINCENT KORNELIS JOHANNES, NL

[73] FOKKER AEROSTRUCTURES B.V., NL

[85] 2018-10-16

[86] 2017-04-18 (PCT/NL2017/050240)

[87] (WO2017/183965)

[30] NL (2016630) 2016-04-18

**Canadian Patents Issued  
January 16, 2024**

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[11] **3,021,198**  
[13] C

[51] **Int.Cl. A61F 13/38 (2006.01)**  
[25] EN  
[54] **SURFACE SAMPLING WITH SWAB AND PRESSURIZED FOAM**  
[54] **ECHANTILLONNAGE DE SURFACE AVEC ECOUVILLON ET MOUSSE SOUS PRESSION**  
[72] ADOLPHSON, ALEC D., US  
[72] PACKINGHAM, ANN K., US  
[72] PAGE, ANDREW E., US  
[72] ALBURTY, DAVID S., US  
[72] PACKINGHAM, ZACHARY A., US  
[72] BIRKENHOLZ, JOHN D., US  
[72] FISCHER, MICHAEL F., US  
[73] INNOVAPREP LLC, US  
[85] 2018-10-16  
[86] 2016-04-18 (PCT/US2016/028153)  
[87] (WO2016/168841)  
[30] US (62/149,142) 2015-04-17

---

[11] **3,021,490**  
[13] C

[51] **Int.Cl. F04D 25/02 (2006.01) F01D 5/02 (2006.01) F04D 17/12 (2006.01) F04D 29/051 (2006.01) F04D 29/053 (2006.01) F04D 29/054 (2006.01) F04D 29/62 (2006.01) F16D 1/076 (2006.01)**  
[25] EN  
[54] **ROTARY MACHINE WITH IMPROVED SHAFT**  
[54] **MACHINE ROTATIVE A ARBRE AMELIORE**  
[72] IURISCI, GIUSEPPE, IT  
[72] NALDI, LORENZO, IT  
[72] DIDDI, PRADEEP KUMAR, IT  
[73] NUOVO PIGNONE TECNOLOGIE - S.R.L., IT  
[85] 2018-10-18  
[86] 2017-01-16 (PCT/EP2017/050786)  
[87] (WO2017/125344)  
[30] IT (102016000004020) 2016-01-18

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[11] **3,022,384**  
[13] C

[51] **Int.Cl. B01D 53/26 (2006.01) B01D 53/28 (2006.01) C10L 3/10 (2006.01)**  
[25] EN  
[54] **COMPOSITION AND PROCESS FOR THE DEHYDRATION OF GASES USING A GLYCOL, AN IMIDAZOLE COMPOUND AND AN OPTIONAL ADDITIVE**  
[54] **COMPOSITION ET PROCEDE DE DESHYDRATATION DE GAZ AU MOYEN D'UN GLYCOL, D'UN COMPOSE IMIDAZOLE ET D'UN ADDITIF OPTIONNEL**  
[72] LAROCHE, CHRISTOPHE R., US  
[72] KLINKER, ERIC J., US  
[72] KLAMO, SARA B., US  
[72] PADILLA-ACEVEDO, ANGELA I., US  
[72] BHARADWAJ, ASHWIN R., US  
[72] KING, STEPHEN W., US  
[72] DAUGS, EDWARD D., US  
[72] JAZDZEWSKI, BRIAN A., US  
[73] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2018-10-26  
[86] 2017-04-20 (PCT/US2017/028563)  
[87] (WO2017/189318)  
[30] US (62/329,415) 2016-04-29

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[11] **3,022,943**  
[13] C

[51] **Int.Cl. A23L 3/005 (2006.01) A23L 27/00 (2016.01) A23L 27/10 (2016.01) A23L 27/14 (2016.01)**  
[25] EN  
[54] **RF PROCESS FOR TREATING SEASONING COMPONENTS**  
[54] **PROCEDE RF DE TRAITEMENT DE COMPOSANTS D'ASSAISONNEMENT**  
[72] LOMBARDO, STEPHEN, US  
[72] NGO, THAO XUAN, US  
[72] CONWAY, WILLIAM, US  
[72] GIANNELLI, MATTHEW JOHN, US  
[73] MCCORMICK & COMPANY, INCORPORATED, US  
[85] 2018-11-01  
[86] 2017-05-03 (PCT/US2017/030785)  
[87] (WO2017/192683)  
[30] US (62/331,579) 2016-05-04

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[11] **3,023,483**  
[13] C

[51] **Int.Cl. C12N 1/14 (2006.01) A01N 63/30 (2020.01) A01P 7/00 (2006.01)**  
[25] EN  
[54] **ENTOMOPATHOGENIC PRODUCTS, METARHIZIUM ANISOPLIAE OR METARHIZIUM ROBERTSII**  
[54] **PRODUITS ENTOMOPATHOGENES, METARHIZIUM ANISOPLIAE OU METARHIZIUM ROBERTSII**  
[72] ALDIGUIER, ANNE-SOPHIE MADELEINE ELISABETH, US  
[72] LATONE, JACOB ANDREW, US  
[72] LEIVA, NICOLAS, US  
[72] MICHEL, JOSHUA KLAUS, US  
[72] VIRAG, ALEKSANDRA, US  
[73] DANISCO US INC., US  
[85] 2018-11-07  
[86] 2016-10-07 (PCT/US2016/055913)  
[87] (WO2017/200563)  
[30] US (62/336,902) 2016-05-16

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[11] **3,023,524**  
[13] C

[51] **Int.Cl. A61K 6/887 (2020.01) A61K 6/54 (2020.01)**  
[25] EN  
[54] **DENTAL COMPOSITION COMPRISING AN ACIDIC POLYMERIZABLE COMPOUND**  
[54] **COMPOSITION DENTAIRE COMPRENANT UN COMPOSE POLYMERISABLE ACIDE**  
[72] FIK, CHRISTOPH, CH  
[72] POHLE, SVEN, DE  
[72] KLEE, JOACHIM E., DE  
[72] STOJILJKOVIC, MARINA, DE  
[72] SCHMIDT, MAGNUS, DE  
[72] RINGWALD, MARKUS, DE  
[73] DENTSPLY DETREY GMBH, DE  
[85] 2018-11-07  
[86] 2017-05-19 (PCT/EP2017/062158)  
[87] (WO2017/198843)  
[30] EP (16170584.3) 2016-05-20

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[11] **3,023,795**  
[13] C

[51] **Int.Cl. A61K 9/14 (2006.01) A61K 31/192 (2006.01) A61K 31/4184 (2006.01) A61K 31/496 (2006.01)**

[25] EN

[54] **USE OF AN AMINO SUGAR AS PLASTICIZER**

[54] **UTILISATION DE SUCRE AMINE COMME PLASTIFIANT**

[72] LUBDA, DIETER, DE

[72] ZHENG, MENG YAO, DE

[72] ELIA, ALESSANDRO, DE

[72] DI GALLO, NICOLE, DE

[72] KNUETTEL, ANJA-NADINE, DE

[73] MERCK PATENT GMBH, DE

[85] 2018-11-09

[86] 2017-05-10 (PCT/EP2017/061127)

[87] (WO2017/194577)

[30] EP (16169691.9) 2016-05-13

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[11] **3,024,003**  
[13] C

[51] **Int.Cl. B01J 23/00 (2006.01) B01J 23/648 (2006.01) C07C 51/25 (2006.01)**

[25] EN

[54] **MIXED OXIDES FOR THE OXIDATIVE CLEAVAGE OF LIPIDS USING OXYGEN TO AFFORD MONO- AND DICARBOXYLIC ACIDS**

[54] **OXYDES MIXTES POUR LE CLIVAGE OXYDATIF DE LIPIDES A L'AIDE D'OXYGENE POUR OBTENIR DES ACIDES MONO- ET DICARBOXYLIQUES**

[72] ARESTA, MICHELE, IT

[72] DIBENEDETTO, ANGELA, IT

[72] CORNACCHIA, DANIELE, IT

[73] CATALISI INNOVATIVA PER IL RICICLO DEL CARBONIO E BIOPOLIMERI SRL, IT

[73] NOVAMONT S.P.A., IT

[85] 2018-11-13

[86] 2017-05-24 (PCT/EP2017/062616)

[87] (WO2017/202955)

[30] IT (102016000053407) 2016-05-24

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[11] **3,024,138**  
[13] C

[51] **Int.Cl. C02F 1/02 (2006.01) C02F 1/04 (2006.01)**

[25] EN

[54] **HUMIDIFICATION-DEHUMIDIFICATION SYSTEMS AND METHODS AT LOW TOP BRINE TEMPERATURES**

[54] **SYSTEMES ET PROCEDES D'HUMIDIFICATION-DESHUMIDIFICATION A DES BASSES TEMPERATURES DE SAUMURE MAXIMALES**

[72] LAM, STEVEN, US

[72] WILSON, CONOR THOMAS, US

[72] ST. JOHN, MAXIMUS G., US

[72] GOVINDAN, PRAKASH NARAYAN, US

[73] GRADIANT CORPORATION, US

[85] 2018-11-13

[86] 2017-05-19 (PCT/US2017/033557)

[87] (WO2017/201417)

[30] US (15/161,051) 2016-05-20

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[11] **3,024,773**  
[13] C

[51] **Int.Cl. D21H 27/30 (2006.01) D21H 17/42 (2006.01) D21H 17/44 (2006.01) D21H 17/63 (2006.01) D21H 17/68 (2006.01) D21H 21/16 (2006.01)**

[25] EN

[54] **METHOD AND TREATMENT SYSTEM FOR MAKING OF PAPER**

[54] **PROCEDE ET SYSTEME DE TRAITEMENT DESTINES A LA FABRICATION DE PAPIER**

[72] BISBAL, JOSEP LLUIS, ES

[72] SANTOS, DANIEL NUNO DA RITA, PT

[72] HIETANIEMI, MATTI, FI

[73] KEMIRA OYJ, FI

[85] 2018-11-19

[86] 2017-05-19 (PCT/EP2017/062072)

[87] (WO2017/198804)

[30] EP (16170565.2) 2016-05-20

---

[11] **3,024,799**  
[13] C

[51] **Int.Cl. F16M 13/02 (2006.01) G03B 17/00 (2021.01)**

[25] EN

[54] **TRAIL CAMERA MOUNTING SYSTEM**

[54] **SYSTEME D'INSTALLATION DE CAMERA DE SUIVI**

[72] DEMERS, MICHAEL S., US

[72] EVANS, SIMON, US

[73] SPY HIGH LLC, US

[86] (3024799)

[87] (3024799)

[22] 2018-11-20

[30] US (16/195,462) 2018-11-19

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[11] **3,024,955**  
[13] C

[51] **Int.Cl. A61N 1/36 (2006.01) A61N 1/04 (2006.01) A61N 1/05 (2006.01) H01R 4/04 (2006.01)**

[25] EN

[54] **ELECTRICAL INTERCONNECTION SYSTEM BETWEEN AN INTRINSICALLY EXTENSIBLE CONDUCTOR AND A NOT INTRINSICALLY EXTENSIBLE ONE**

[54] **SYSTEME D'INTERCONNEXION ELECTRIQUE ENTRE UN CONDUCTEUR INTRINSEQUEMENT EXTENSIBLE ET UN CONDUCTEUR QUI N'EST PAS INTRINSEQUEMENT EXTENSIBLE**

[72] MARELLI, MATTIA, IT

[72] ANTONINI, ALESSANDRO, IT

[72] GHISLERI, CRISTIAN, IT

[72] SPREAFICO, LAURA, IT

[72] FERRARI, SANDRO, IT

[73] WISE S.R.L., IT

[85] 2018-11-20

[86] 2017-05-24 (PCT/IB2017/053056)

[87] (WO2017/203441)

[30] IT (102016000053271) 2016-05-24

**Canadian Patents Issued  
January 16, 2024**

[11] **3,025,272**  
[13] C

[51] **Int.Cl. C10G 1/04 (2006.01)**  
[25] EN  
[54] **ENHANCED STEAM  
EXTRACTION OF BITUMEN  
FROM OIL SANDS**  
[54] **EXTRACTION A LA VAPEUR  
AMELIOREE DE BITUME A  
PARTIR DE SABLES  
BITUMINEUX**  
[72] WITHAM, COLE A., US  
[72] MUKHERJEE, BIPLAB, US  
[73] DOW GLOBAL TECHNOLOGIES  
LLC, US  
[85] 2018-11-22  
[86] 2017-05-18 (PCT/US2017/033322)  
[87] (WO2017/205179)  
[30] US (62/341,755) 2016-05-26

[11] **3,025,654**  
[13] C

[51] **Int.Cl. G01R 19/04 (2006.01) G01R  
17/02 (2006.01) G01R 19/175  
(2006.01) G01R 25/00 (2006.01) G06F  
17/12 (2006.01) G06F 17/16 (2006.01)  
G01P 3/14 (2006.01) G01P 15/18  
(2013.01) G06F 17/14 (2006.01)**  
[25] FR  
[54] **SYSTEM AND METHOD FOR  
PROVIDING THE AMPLITUDE  
AND PHASE DELAY OF A  
SINUSOIDAL SIGNAL**  
[54] **SYSTEME ET PROCEDE POUR  
FOURNIR L'AMPLITUDE ET LE  
RETARD DE PHASE D'UN SIGNAL  
SINUSOIDAL**  
[72] GUERARD, JEAN, FR  
[72] VERLHAC, BEATRICE, FR  
[72] LAVENUS, PIERRE, FR  
[72] LEVY, RAPHAEL, FR  
[73] OFFICE NATIONAL D'ETUDES ET  
DE RECHERCHES  
AEROSPATIALES, FR  
[85] 2018-11-26  
[86] 2017-06-09 (PCT/FR2017/051464)  
[87] (WO2017/212187)  
[30] FR (16 55330) 2016-06-10

[11] **3,025,953**  
[13] C

[51] **Int.Cl. A21D 8/04 (2006.01) A23K  
20/189 (2016.01) A23L 33/20 (2016.01)  
A23L 33/21 (2016.01) C12P 19/18  
(2006.01)**  
[25] EN  
[54] **METHOD OF PRODUCING ALPHA  
GLUCANS CONTAINING ALPHA  
1-3 LINKED D-GLUCOSE UNITS,  
AND ALPHA GLUCANS**  
[54] **METHODE DE PRODUCTION  
D'ALPHA-GLUCANES  
CONTENANT DES UNITES DE D-  
GLUCOSE A LIAISON ALPHA 1-3,  
ET ALPHA-GLUCANES**  
[72] DIJKHUIZEN, LUBBERT, NL  
[72] GANGOITI MUNECAS, JOANA, NL  
[72] VAN LEEUWEN, SANDER  
SEBASTIAAN, NL  
[72] VAFEIADI, CHRISTINA, CH  
[72] DUBOUX, STEPHANE, CH  
[73] SOCIETE DES PRODUITS NESTLE  
S.A., CH  
[85] 2018-11-29  
[86] 2017-05-31 (PCT/EP2017/063214)  
[87] (WO2017/207663)  
[30] EP (16172606.2) 2016-06-02

[11] **3,025,994**  
[13] C

[51] **Int.Cl. B01D 17/02 (2006.01) C02F  
1/40 (2006.01)**  
[25] EN  
[54] **HYDROCARBON-WATER  
SEPARATOR**  
[54] **SEPARATEUR EAU-  
HYDROCARBURES**  
[72] FOLKVANG, JORN, NO  
[73] STAUPER WATER TECHNOLOGIES  
AS, NO  
[85] 2018-11-28  
[86] 2017-02-16 (PCT/NO2017/000005)  
[87] (WO2017/164747)  
[30] NO (20160495) 2016-03-23  
[30] NO (20160769) 2016-05-06

[11] **3,026,438**  
[13] C

[51] **Int.Cl. A01B 21/08 (2006.01) A01B  
5/04 (2006.01) A01B 23/06 (2006.01)**  
[25] EN  
[54] **TOWED TILLAGE IMPLEMENT  
WITH ADJUSTABLE TOOLBARS**  
[54] **APPAREIL DE TRAVAIL DU SOL  
TIRE A TABLIERS AGRICOLES  
AJUSTABLES**  
[72] REDEKOP, JOHAN, CA  
[73] REDEKOP, JOHAN, CA  
[86] (3026438)  
[87] (3026438)  
[22] 2018-12-04  
[30] US (62/686,972) 2018-06-19

[11] **3,026,816**  
[13] C

[51] **Int.Cl. C22C 29/02 (2006.01) C22C  
33/04 (2006.01) C22C 33/08 (2006.01)  
C22C 37/06 (2006.01)**  
[25] EN  
[54] **EROSION AND CORROSION  
RESISTANT WHITE CAST IRONS**  
[54] **FONTES BLANCHES  
RESISTANTES A L'EROSION ET A  
LA CORROSION**  
[72] DOLMAN, KEVIN FRANCIS, AU  
[72] LUCEY, TIMOTHY JUSTIN, AU  
[73] WEIR MINERALS AUSTRALIA LTD,  
AU  
[85] 2018-12-06  
[86] 2017-06-26 (PCT/AU2017/050650)  
[87] (WO2017/219098)  
[30] AU (2016902490) 2016-06-24

**Brevets canadiens délivrés  
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[11] **3,026,817**  
[13] C

[51] **Int.Cl. B01J 29/072 (2006.01) B01D 53/56 (2006.01) B01J 29/85 (2006.01) C01B 39/00 (2006.01) C01B 39/54 (2006.01)**

[25] EN

[54] **COPPER-PROMOTED ZEOLITIC MATERIALS OF THE CHA FRAMEWORK STRUCTURE FROM ORGANOTEMPLATE-FREE SYNTHESIS AND USE THEREOF IN THE SELECTIVE CATALYTIC REDUCTION OF NOX**

[54] **MATERIAUX ZEOLITIQUES ACTIVES PAR LE CUIVRE DE LA STRUCTURE DE CADRE CHA ISSUS D'UNE SYNTHÈSE SANS MODELE ORGANIQUE, ET LEUR UTILISATION EN REDUCTION CATALYTIQUE SELECTIVE DE NOX**

[72] MAURER, STEFAN, CN  
[72] FEYEN, MATHIAS, DE  
[72] TRUKHAN, NATALIA, DE  
[72] MUELLER, ULRICH, DE  
[72] OEZKIRIM, FARUK, DE  
[73] BASF CORPORATION, US  
[85] 2018-12-06  
[86] 2017-06-02 (PCT/CN2017/087035)  
[87] (WO2017/211236)  
[30] CN (PCT/CN2016/085292) 2016-06-08

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[11] **3,027,007**  
[13] C

[51] **Int.Cl. A61F 13/00 (2024.01) A61F 13/15 (2006.01) C09K 5/00 (2006.01) C09K 5/08 (2006.01)**

[25] EN

[54] **ABSORBENT ARTICLE WITH MICROENCAPSULATED PHASE CHANGE MATERIAL**

[54] **ARTICLE ABSORBANT A MATERIAU A CHANGEMENT DE PHASE MICRO-ENCAPSULE**

[72] CREE, JAMES WILLIAM, US  
[73] FIRST QUALITY RETAIL SERVICES, LLC., US  
[85] 2018-12-07  
[86] 2017-02-03 (PCT/US2017/016443)  
[87] (WO2017/218052)  
[30] US (62/350,433) 2016-06-15

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[11] **3,027,363**  
[13] C

[51] **Int.Cl. G06K 7/08 (2006.01)**

[25] EN

[54] **MAGNETIC HELICAL PHYSICAL UNCLONABLE FUNCTION MEASURED ABOVE FLIGHT**

[54] **FONCTION PHYSIQUE NON CLONABLE HELICOIDALE MAGNETIQUE MESUREE AU-DESSUS D'UNE SPIRE**

[72] AHNE, ADAM J., US  
[72] DODSON, GRAYDON R., US  
[73] LEXMARK INTERNATIONAL, INC., US  
[85] 2018-12-11  
[86] 2016-11-28 (PCT/US2016/063832)  
[87] (WO2018/026383)  
[30] US (15/227,633) 2016-08-03

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[11] **3,027,494**  
[13] C

[51] **Int.Cl. C03C 25/28 (2018.01) B32B 13/02 (2006.01) E04C 2/06 (2006.01)**

[25] EN

[54] **SIZING COMPOSITION FOR WET USE CHOPPED STRAND GLASS FIBERS**

[54] **COMPOSITION D'ENCOLLAGE DESTINEE A DES FIBRES DE VERRE COUPEES PAR VOIE HUMIDE**

[72] HUANG, HELEN, US  
[72] TAZI, MOHAMMED, US  
[73] OWENS CORNING INTELLECTUAL CAPITAL, LLC, US  
[85] 2018-12-12  
[86] 2017-06-15 (PCT/US2017/037594)  
[87] (WO2017/218726)  
[30] US (62/351,618) 2016-06-17

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[11] **3,027,837**  
[13] C

[51] **Int.Cl. G01P 5/00 (2006.01) B64D 43/02 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR DETERMINING AIRSPEED OF AN AIRCRAFT**

[54] **METHODES ET SYSTEMES DE DETERMINATION DE LA VITESSE ANEMOMETRIQUE D'UN AERONEF**

[72] LUO, JIA, US  
[73] THE BOEING COMPANY, US  
[86] (3027837)  
[87] (3027837)  
[22] 2018-12-17  
[30] US (15/862703) 2018-01-05

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[11] **3,027,850**  
[13] C

[51] **Int.Cl. A61B 5/145 (2006.01) G01N 22/00 (2006.01)**

[25] EN

[54] **A NON-INVASIVE SENSING SYSTEM**

[54] **SYSTEME DE DETECTION NON INVASIF**

[72] LEATH, SHANE RICHARD, NZ  
[72] HOLDSWORTH, ROBIN, NZ  
[73] SENSORFLO LIMITED, NZ  
[85] 2018-12-13  
[86] 2016-12-23 (PCT/NZ2016/050209)  
[87] (WO2017/111623)  
[30] NZ (715630) 2015-12-24

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[11] **3,029,010**  
[13] C

[51] **Int.Cl. H04B 10/03 (2013.01)**

[25] EN

[54] **OPTICAL NETWORK UNIT RESET MESSAGE**

[54] **MESSAGE DE REINITIALISATION D'UNITE DE RESEAU OPTIQUE**

[72] GAO, BO, CN  
[72] LUO, YUANQIU, US  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2018-12-20  
[86] 2017-06-21 (PCT/US2017/038602)  
[87] (WO2017/223235)  
[30] US (62/352,888) 2016-06-21  
[30] US (15/627,746) 2017-06-20

**Canadian Patents Issued  
January 16, 2024**

[11] **3,029,344**  
[13] C

[51] **Int.Cl. E21B 44/00 (2006.01)**  
[25] EN  
[54] **DRILLING ENERGY CALCULATION BASED ON TRANSIENT DYNAMICS SIMULATION AND ITS APPLICATION TO DRILLING OPTIMIZATION**

[54] **CALCUL D'ENERGIE DE FORAGE BASE SUR UNE SIMULATION DE DYNAMIQUE TRANSITOIRE ET SON APPLICATION A L'OPTIMISATION DU FORAGE**

[72] CHEN, WEI, US  
[72] HARMER, RICHARD JOHN, US  
[72] DONG, YANI, CN  
[72] SHEN, YUELIN, US  
[72] HUANG, SUJIAN, CN  
[72] BOGATH, CHRISTOPHER, US  
[72] BIN, CHANHUI, CN  
[73] SCHLUMBERGER CANADA LIMITED, CA  
[85] 2018-12-27  
[86] 2016-06-29 (PCT/CN2016/087548)  
[87] (WO2018/000211)

[11] **3,029,605**  
[13] C

[51] **Int.Cl. C07K 14/58 (2006.01) A61K 47/60 (2017.01) A61K 47/68 (2017.01) A61K 38/22 (2006.01) A61K 39/395 (2006.01) A61P 9/04 (2006.01) A61P 9/12 (2006.01) A61P 13/12 (2006.01) C07K 16/00 (2006.01) C07K 19/00 (2006.01) C12N 15/09 (2006.01) C12P 1/00 (2006.01) C12P 19/18 (2006.01) C07K 16/12 (2006.01)**

[25] EN  
[54] **HANP-FC-CONTAINING MOLECULAR CONJUGATE**

[54] **CONJUGUE MOLECULAIRE CONTENANT DU HANP-FC**

[72] IWAMOTO, MITSUHIRO, JP  
[72] OISHI, SHOHEI, JP  
[72] SEKIGUCHI, YUKIKO, JP  
[72] CHAYA, HIROYUKI, JP  
[72] MIYAUCHI, RYUKI, JP  
[72] HONDA, TAKESHI, JP  
[73] DAIICHI SANKYO COMPANY, LIMITED, JP  
[85] 2018-12-31  
[86] 2017-06-30 (PCT/JP2017/024206)  
[87] (WO2018/003983)  
[30] JP (2016-131450) 2016-07-01

[11] **3,030,295**  
[13] C

[51] **Int.Cl. G21F 7/015 (2006.01)**  
[25] EN  
[54] **HEPA FILTER AIRFLOW DISTRIBUTION SYSTEMS**

[54] **SYSTEMES DE DISTRIBUTION DE FLUX D'AIR A FILTRE HEPA**

[72] VERMA, SUMIT, US  
[72] PETROFSKY, BRYAN S., US  
[72] GRAVES, KEVIN B., US  
[72] REESE, DONALD W., US  
[73] CURIUM US LLC, US  
[85] 2019-01-08  
[86] 2017-01-18 (PCT/US2017/013935)  
[87] (WO2018/026389)  
[30] US (62/369,443) 2016-08-01

[11] **3,031,133**  
[13] C

[51] **Int.Cl. G06Q 30/0601 (2023.01) G06F 16/23 (2019.01) G06F 16/27 (2019.01) H04L 9/40 (2022.01) H04L 9/00 (2022.01) H04L 9/32 (2006.01)**

[25] EN  
[54] **DISTRIBUTED LEDGER PLATFORM FOR VEHICLE RECORDS**

[54] **PLATE-FORME DE GRAND LIVRE DISTRIBUEE POUR ENREGISTREMENTS DE VEHICULES**

[72] NAGLA, GAURAV, CA  
[72] VINTILA, IUSTINA-MIRUNA, RO  
[73] ROYAL BANK OF CANADA, CA  
[85] 2019-01-17  
[86] 2017-07-18 (PCT/CA2017/050863)  
[87] (WO2018/014123)  
[30] US (62/363,788) 2016-07-18  
[30] US (62/433,293) 2016-12-13

[11] **3,031,926**  
[13] C

[51] **Int.Cl. C10G 75/02 (2006.01) B01D 53/10 (2006.01) C10G 29/00 (2006.01)**

[25] EN  
[54] **ENHANCED PERFORMANCE OF SULFIDE SCAVENGERS**

[54] **EFFICACITE AMELIOREE D'AGENTS D'EPURATION DE SULFURE**

[72] BAGARIA, HITESH GHANSHYAM, US  
[73] BL TECHNOLOGIES, INC., US  
[85] 2019-01-24  
[86] 2017-05-26 (PCT/US2017/034629)  
[87] (WO2018/026428)  
[30] US (62/370,308) 2016-08-03

[11] **3,032,915**  
[13] C

[51] **Int.Cl. C09D 11/32 (2014.01) C09D 11/36 (2014.01) B41J 2/01 (2006.01) B41M 5/00 (2006.01)**

[25] EN  
[54] **PHOTOCURABLE CLEAR INK COMPOSITION FOR INKJET PRINTING**

[54] **COMPOSITION D'ENCRE CLAIR PHOTOCURCISSEABLE POUR IMPRESSION A JET D'ENCRE**

[72] NAKASHIMA, OKINORI, JP  
[72] MYOSE, TAKUYA, JP  
[72] OKAMOTO, TAKUYA, JP  
[72] FUKE, KAZUHIRO, JP  
[72] NITTA, RYOICHI, JP  
[73] SAKATA INX CORPORATION, JP  
[85] 2019-02-04  
[86] 2017-06-30 (PCT/JP2017/024233)  
[87] (WO2018/030027)  
[30] JP (2016-156931) 2016-08-09

[11] **3,035,985**  
[13] C

[51] **Int.Cl. C08G 18/76 (2006.01) C08G 18/16 (2006.01) C08G 18/18 (2006.01) C08G 18/20 (2006.01) C08G 18/40 (2006.01) C08G 18/48 (2006.01) C08G 18/63 (2006.01)**

[25] EN  
[54] **POLYURETHANE FOAMS HAVING SUFFICIENT HARDNESS AND GOOD FLEXIBILITY**

[54] **MOUSSES DE POLYURETHANE AYANT UNE DURETE SUFFISANTE ET UNE BONNE FLEXIBILITE**

[72] ELEN, RAF, BE  
[72] VAN ESSCHE, LUC, BE  
[73] HUNTSMAN INTERNATIONAL LLC, US  
[85] 2019-03-05  
[86] 2017-08-22 (PCT/EP2017/071116)  
[87] (WO2018/054633)  
[30] EP (16190348.9) 2016-09-23

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[11] **3,037,288**  
[13] C

[51] **Int.Cl. C12N 15/113 (2010.01)**  
[25] EN  
[54] **MODULATION OF MICRORNAS AGAINST MYOTONIC DYSTROPHY TYPE 1 AND ANTAGONISTS OF MICRORNAS THEREFOR**  
[54] **MODULATION DE MICRO-ARN CONTRE LA DYSTROPHIE MYOTONIQUE DE TYPE 1 ET ANTAGONISTES DE MICRO-ARN ASSOCIES**  
[72] ARTERO ALLEPUZ, RUBEN D., ES  
[72] LLAMUSI TROISI, MARIA BEATRIZ, ES  
[72] CERRO HERREROS, ESTEFANIA, ES  
[72] FERNANDEZ COSTA, JUAN M., ES  
[72] AISHWARYA, VEENU, US  
[72] MOLLER, THORLEIF, DK  
[73] UNIVERSITAT DE VALENCIA, ES  
[73] AUM LIFE TECH, INC., US  
[85] 2019-03-18  
[86] 2017-09-19 (PCT/EP2017/073685)  
[87] (WO2018/050930)  
[30] ES (201631216) 2016-09-19

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[11] **3,037,696**  
[13] C

[51] **Int.Cl. E21B 7/08 (2006.01) E21B 17/20 (2006.01) E21B 44/02 (2006.01) E21B 44/04 (2006.01) E21B 47/024 (2006.01)**  
[25] EN  
[54] **DRILLING APPARATUS USING A SELF-ADJUSTING DEFLECTION DEVICE AND DEFLECTION SENSORS FOR DRILLING DIRECTIONAL WELLS**  
[54] **APPAREIL DE FORAGE UTILISANT UN DISPOSITIF DE DEVIATION A REGLAGE AUTOMATIQUE ET DES CAPTEURS DE DEVIATION DE FORAGE DE Puits DIRECTIONNELS**  
[72] PETERS, VOLKER, US  
[72] PETER, ANDREAS, US  
[72] FULDA, CHRISTIAN, US  
[72] EGGERS, HEIKO, US  
[72] GRIMMER, HARALD, US  
[73] BAKER HUGHES, A GE COMPANY, LLC, US  
[85] 2019-03-20  
[86] 2017-09-21 (PCT/US2017/052654)  
[87] (WO2018/057697)  
[30] US (15/274,851) 2016-09-23

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[11] **3,037,992**  
[13] C

[51] **Int.Cl. B62D 53/08 (2006.01) F16N 11/00 (2006.01)**  
[25] EN  
[54] **A FIFTH WHEEL TURNABLE LUBRICATION DEVICE**  
[54] **DISPOSITIF DE LUBRIFICATION DE PLAQUE TOURNANTE DE CINQUIEME ROUE**  
[72] JENSSEN, TORE, NO  
[73] FIFTH WHEEL AS, NO  
[85] 2019-03-22  
[86] 2017-10-02 (PCT/EP2017/074967)  
[87] (WO2018/065361)  
[30] NO (20161596) 2016-10-05

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[11] **3,038,334**  
[13] C

[51] **Int.Cl. G01N 29/265 (2006.01) G01N 29/04 (2006.01) G21C 17/017 (2006.01)**  
[25] EN  
[54] **IMPROVED ULTRASOUND INSPECTION**  
[54] **INSPECTION PAR ULTRASONS PERFECTIONNEE**  
[72] HONG, ANDREW, CA  
[72] SAKUTA, ALEX, CA  
[72] TEN GROTENHUIS, RAYMOND, CA  
[72] VERMA, YADAV, CA  
[73] ONTARIO POWER GENERATION INC., CA  
[86] (3038334)  
[87] (3038334)  
[22] 2014-12-17  
[62] 2,934,164  
[30] US (61/917,066) 2013-12-17

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[11] **3,039,360**  
[13] C

[51] **Int.Cl. B65G 39/09 (2006.01) B21D 43/00 (2006.01) B23Q 7/00 (2006.01) B65B 35/22 (2006.01) B65B 35/42 (2006.01) B65G 13/00 (2006.01)**  
[25] EN  
[54] **CONVEYOR IDLER SEAL APPARATUS, SYSTEMS, AND METHODS**  
[54] **APPAREIL, SYSTEMES ET PROCEDES DE JOINT D'ETANCHEITE DE ROULEAU LIBRE DE TRANSPORTEUR**  
[72] GRIMM, LAFE, US  
[72] SCHMIDGALL, PAUL, US  
[72] RUDE, OWEN GREG, US  
[73] SUPERIOR INDUSTRIES, INC., US  
[85] 2019-04-03  
[86] 2017-10-03 (PCT/US2017/054949)  
[87] (WO2018/067574)  
[30] US (62/403,228) 2016-10-03

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[11] **3,040,081**  
[13] C

[51] **Int.Cl. B60N 99/00 (2006.01) B60N 2/02 (2006.01) B60W 30/00 (2006.01) B60W 30/18 (2012.01) B60W 40/02 (2006.01)**  
[25] EN  
[54] **TRANSPORT FACILITATION SYSTEM FOR CONFIGURING A SERVICE VEHICLE FOR A USER**  
[54] **SYSTEME DE FACILITATION DE TRANSPORT SERVANT A CONFIGURER UN VEHICULE DE SERVICE POUR UN UTILISATEUR**  
[72] ZYCH, NOAH, US  
[72] DONNELLY, RICHARD, US  
[72] RANDER, PETER, US  
[73] UBER TECHNOLOGIES INC., US  
[86] (3040081)  
[87] (3040081)  
[22] 2017-03-21  
[62] 3,018,335  
[30] US (15/089,402) 2016-04-01  
[30] US (15/089,408) 2016-04-01  
[30] US (15/089,416) 2016-04-01

**Canadian Patents Issued  
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[11] **3,040,155**  
[13] C

[51] **Int.Cl. A61K 31/4184 (2006.01) A61K 47/68 (2017.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **COMPOUND FOR USE IN THE TREATMENT OF HODGKIN LYMPHOMA**  
[54] **COMPOSE D'UTILISATION DANS LE TRAITEMENT DU LYMPHOME DE HODGKIN**  
[72] MEHRLING, THOMAS, CH  
[72] DE FILIPPI, ROSARIA, IT  
[72] PINTO, ANTONELLO, IT  
[73] EURO-CELTIQUE S.A., LU  
[85] 2019-04-11  
[86] 2016-10-11 (PCT/EP2016/074331)  
[87] (WO2018/068832)

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[11] **3,040,937**  
[13] C

[51] **Int.Cl. G07F 19/00 (2006.01) G06F 3/048 (2013.01)**  
[25] EN  
[54] **AUTOMATED TELLER DEVICE HAVING ACCESSIBILITY CONFIGURATIONS**  
[54] **GUICHET AUTOMATIQUE BANCAIRE AYANT DES CONFIGURATIONS D'ACCESSIBILITE**  
[72] GERVAIS, STEVEN, CA  
[72] DURNING, SARA, CA  
[72] BUCHANAN, AMANDA, CA  
[72] PARK, NA-HYUN SOPHIE, CA  
[72] HAMILTON, GREGORY JAMES, CA  
[72] FLORENDO, MIGUEL MARTIN C., CA  
[72] FERNANDES, GARY JOSEPH, CA  
[72] MARKOV, NIKOLAY TZANKOV, CA  
[72] LENNON, BRIDGET, CA  
[72] RODZEN, TRISTAN, CA  
[72] GRIMMER, JAMES, CA  
[73] THE TORONTO-DOMINION BANK, CA  
[86] (3040937)  
[87] (3040937)  
[22] 2019-04-24

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[11] **3,041,355**  
[13] C

[51] **Int.Cl. B28B 3/00 (2006.01) B28B 7/24 (2006.01) B29C 43/18 (2006.01) B29C 43/32 (2006.01)**  
[25] EN  
[54] **CASTED BLOCK MOLDING APPARATUS AND METHOD**  
[54] **APPAREIL ET PROCEDE DE MOULAGE DE BLOCS COULES**  
[72] CICCARELLO, CHARLES, CA  
[72] HAVILL, IAN, CA  
[72] BRASSARD, JEAN-MICHEL, CA  
[73] TECO-BLOC INC., CA  
[85] 2019-04-23  
[86] 2016-12-15 (PCT/CA2016/051487)  
[87] (WO2017/100931)  
[30] US (62/269,653) 2015-12-18

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[11] **3,041,565**  
[13] C

[51] **Int.Cl. F02D 41/00 (2006.01) G01S 19/01 (2010.01) G01F 15/16 (2006.01)**  
[25] EN  
[54] **ENHANCED VEHICLE BAD FUEL SENSOR WITH CROWDSOURCING ANALYTICS**  
[54] **CAPTEUR DE MAUVAIS CARBURANT DE VEHICULE AMELIORE AVEC ANALYTIQUE A EXTERNALISATION OUVERTE**  
[72] SLUSAR, MARK, US  
[73] ALLSTATE INSURANCE COMPANY, US  
[85] 2019-04-23  
[86] 2017-10-24 (PCT/US2017/057955)  
[87] (WO2018/081034)  
[30] US (15/332,675) 2016-10-24

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[11] **3,041,945**  
[13] C

[51] **Int.Cl. E21B 19/14 (2006.01) F16L 3/00 (2006.01) G01C 9/08 (2006.01)**  
[25] EN  
[54] **SENSOR FOR A ROTATABLE ELEMENT**  
[54] **CAPTEUR DESTINE A UN ELEMENT ROTATIF**  
[72] FINLAY, ALAN PATRICK JOHN, GB  
[72] NEWTON, JOHN MARK, GB  
[72] LARKINS, ANDREW HENRY JOHN, GB  
[72] DAVIS, MATHEW WILLIAM, GB  
[72] NICHOLLS, GRANT, GB  
[73] SALUNDA LIMITED, GB  
[85] 2019-04-26  
[86] 2017-08-24 (PCT/GB2017/052494)  
[87] (WO2018/087511)  
[30] GB (1618910.2) 2016-11-09  
[30] GB (1701273.3) 2017-01-25  
[30] GB (1703269.9) 2017-02-28  
[30] GB (1705355.4) 2017-04-03  
[30] GB (1707923.7) 2017-05-17

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[11] **3,041,985**  
[13] C

[51] **Int.Cl. C07C 237/20 (2006.01) A61K 31/198 (2006.01) A61K 31/40 (2006.01) C07D 207/06 (2006.01)**  
[25] EN  
[54] **FUNCTIONAL DERIVATIVE COMPOUNDS OF ALANINE AND PROLINE AMINO ACIDS AND PHARMACEUTICAL COMPOSITION COMPRISING SAME**  
[54] **COMPOSES DERIVES FONCTIONNELS D'ACIDES AMINES D'ALANINE ET DE PROLINE ET COMPOSITION PHARMACEUTIQUE LES COMPRENANT**  
[72] PARK, KI DUK, KR  
[72] BAHN, YONG-SUN, KR  
[72] LEE, JONG-SEUNG, KR  
[72] LEE, KYUNG-TAE, KR  
[72] PAE, AE NIM, KR  
[72] YEON, SEUL KI, KR  
[72] KANG, YONG KOO, KR  
[72] PARK, JONG HYUN, KR  
[72] KIM, SIWON, KR  
[72] JANG, BO KO, KR  
[72] CHOI, JI WON, KR  
[73] AMTIXBIO CO., LTD., KR  
[85] 2019-04-26  
[86] 2017-10-30 (PCT/KR2017/012108)  
[87] (WO2018/080269)  
[30] KR (10-2016-0142266) 2016-10-28

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[11] **3,042,013**  
[13] C

[51] **Int.Cl. A61K 38/08 (2019.01) A61K 9/08 (2006.01) A61K 9/10 (2006.01) A61P 15/00 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL COMPOSITION AND METHOD OF TREATING FEMALE SEXUAL DYSFUNCTIONS**

[54] **COMPOSITION PHARMACEUTIQUE ET METHODE DE TRAITEMENT DE DYSFONCTIONS SEXUELLES FEMININES**

[72] MYASOEDOV, NIKOLAI FEDOROVICH, RU

[72] ANDREEVA, LYUDMILA ALEXANDROVNA, RU

[72] GOLIKOV, DMITRY VIKTOROVICH, RU

[72] LOMONOSOV, MIKHAIL YURIEVICH, RU

[73] OVB (IRELAND) LIMITED, IE

[85] 2019-04-18

[86] 2017-10-23 (PCT/RU2017/050112)

[87] (WO2018/080353)

[30] RU (2016112341) 2016-10-24

[11] **3,042,475**  
[13] C

[51] **Int.Cl. A61K 31/4545 (2006.01) A61K 31/506 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **COMBINATIONS OF FGFR4 INHIBITORS AND BILE ACID SEQUESTRANTS**

[54] **COMBINAISONS D'INHIBITEURS DE FGFR4 ET DE CHELATEURS DE L'ACIDE BILIAIRE**

[72] FAIRHURST, ROBIN ALEC, CH

[72] GRAUS PORTA, DIANA, CH

[72] KINYAMU-AKUNDA, JACQUELINE, US

[72] MAHL, ANDREAS JOERG, CH

[72] MANENTI, LUIGI, CH

[72] WEISS, ANDREAS, CH

[72] WOLF, ARMIN, CH

[72] WUERSCH, KUNO, CH

[73] NOVARTIS AG., CH

[85] 2019-05-01

[86] 2017-11-01 (PCT/IB2017/056787)

[87] (WO2018/083603)

[30] US (62/416,222) 2016-11-02

[11] **3,042,610**  
[13] C

[51] **Int.Cl. B01L 3/00 (2006.01) B01L 7/00 (2006.01) G05D 23/19 (2006.01) H05B 1/02 (2006.01)**

[25] EN

[54] **TEMPERATURE CONTROL DEVICE**

[54] **DISPOSITIF DE REGULATION DE TEMPERATURE**

[72] HAYES, MATTHEW JAMES, GB

[72] FERGUSON, ANDREW JAMES, GB

[72] JUNCU, VASILE DAN, GB

[72] TEMPLE, STEPHEN, GB

[73] EVONETIX LTD, GB

[85] 2019-05-02

[86] 2017-11-02 (PCT/GB2017/053297)

[87] (WO2018/104698)

[30] GB (1620982.7) 2016-12-09

[11] **3,044,138**  
[13] C

[51] **Int.Cl. A23C 9/154 (2006.01) A23C 9/156 (2006.01) A23G 1/56 (2006.01) A23G 3/34 (2006.01) A23J 1/20 (2006.01) A23J 3/08 (2006.01)**

[25] EN

[54] **A METHOD OF PRODUCING A DAIRY CONCENTRATE WITH FREE DIVALENT CATIONS PROTEIN AGGREGATION**

[54] **PROCEDE DE PRODUCTION DE CONCENTRE LAITIER AVEC AGREGATION PROTEIQUE PAR CATIONS DIVALENTS LIBRES**

[72] SCHMITT, CHRISTOPHE JOSEPH ETIENNE, CH

[72] BOVETTO, LIONEL JEAN RENE, CH

[72] SYRBE, AXEL, CH

[72] KREUSS, MARKUS, CH

[72] VAGHELA, MADANSINH NATHUSINH, US

[72] KOLODZIEJCZYK, ERIC STANISLAS, CH

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

[85] 2019-05-16

[86] 2017-12-18 (PCT/EP2017/083353)

[87] (WO2018/114826)

[30] EP (16205142.9) 2016-12-19

[11] **3,044,371**  
[13] C

[51] **Int.Cl. C07K 14/475 (2006.01) A61K 38/18 (2006.01) A61P 19/00 (2006.01) C07K 14/47 (2006.01) C07K 14/51 (2006.01) C12N 15/12 (2006.01) C12N 15/18 (2006.01)**

[25] EN

[54] **RECOMBINANT POLYPEPTIDES AND NUCLEIC ACID MOLECULES, COMPOSITIONS, AND METHODS OF MAKING AND USES THEREOF**

[54] **POLYPEPTIDES RECOMBINANTS ET MOLECULES D'ACIDE NUCLEIQUE, COMPOSITIONS ET PROCEDES DE FABRICATION ET D'UTILISATION DE CEUX-CI**

[72] SUN, DA-WEI, TW

[73] BIOGEND THERAPEUTICS CO., LTD., CN

[73] OSTEOPHARMA INC., JP

[85] 2019-05-17

[86] 2017-12-29 (PCT/IB2017/058516)

[87] (WO2018/122794)

[30] US (62/440,663) 2016-12-30

[30] US (62/562,515) 2017-09-25

[11] **3,044,505**  
[13] C

[51] **Int.Cl. H01C 3/06 (2006.01) H01C 3/12 (2006.01) H05B 3/02 (2006.01) H05B 3/36 (2006.01) H05B 3/58 (2006.01) H05K 1/16 (2006.01) H05K 1/18 (2006.01)**

[25] EN

[54] **FLEXIBLE CONDUCTIVE ELEMENT AND SHAPING METHOD THEREOF**

[54] **ELEMENT CONDUCTEUR SOUPLE ET SON PROCEDE DE MISE EN FORME**

[72] RISPOLI, OMAR, IT

[72] ZOPPAS, FEDERICO, IT

[73] I.R.C.A. S.P.A. INDUSTRIA RESISTENZE CORAZZATE E AFFINI, IT

[85] 2019-05-21

[86] 2017-11-28 (PCT/IB2017/057444)

[87] (WO2018/096520)

[30] IT (102016000120278) 2016-11-28

**Canadian Patents Issued  
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[11] **3,044,937**  
[13] C

[51] **Int.Cl. C08L 83/04 (2006.01) C08K 3/04 (2006.01) B41N 10/00 (2006.01)**

[25] EN

[54] **METHODS FOR PREPARING COMPOSITIONS COMPRISING CARBON BLACK**

[54] **PROCEDES POUR LA PREPARATION DE COMPOSITIONS COMPRENANT DU NOIR DE CARBONE**

[72] LANDA, BENZION, IL

[72] ABRAMOVICH, SAGI, IL

[72] LION, AMIR, IL

[72] HAVIV, AMIT, IL

[73] LANDA LABS (2012) LTD., IL

[85] 2019-05-24

[86] 2017-11-30 (PCT/IB2017/057557)

[87] (WO2018/100542)

[30] IB (PCT/IB2016/057226) 2016-11-30

---

[11] **3,045,022**  
[13] C

[51] **Int.Cl. G01N 30/72 (2006.01) G01N 33/483 (2006.01) G01N 33/68 (2006.01) H01J 49/26 (2006.01)**

[25] EN

[54] **MASS SPECTROMETRY ASSAY METHOD FOR DETECTION AND QUANTITATION OF KIDNEY FUNCTION METABOLITES**

[54] **METHODE DE DOSAGE PAR SPECTROMETRIE DE MASSE PERMETTANT UNE DETECTION ET UNE QUANTIFICATION DE METABOLITES DE LA FONCTION RENALE**

[72] FORD, LISA, US

[72] FREED, TIFFANY A., US

[72] HAUSER, DEIRDRE M., US

[72] GOODMAN, KELLI, US

[73] METABOLON, INC., US

[85] 2019-05-24

[86] 2017-12-14 (PCT/US2017/066364)

[87] (WO2018/118630)

[30] US (62/435,967) 2016-12-19

[30] US (62/526,043) 2017-06-28

[30] US (62/558,014) 2017-09-13

---

[11] **3,045,644**  
[13] C

[51] **Int.Cl. C07D 405/14 (2006.01) A61K 31/454 (2006.01) A61K 31/4545 (2006.01) A61P 3/04 (2006.01) A61P 3/10 (2006.01)**

[25] EN

[54] **GLP-1 RECEPTOR AGONISTS AND USES THEREOF**

[54] **ANTAGONISTES DU RECEPTEUR GLP-1 ET LEURS UTILISATIONS**

[72] ASPNES, GARY ERIK, DE

[72] BAGLEY, SCOTT W., US

[72] CURTO, JOHN M., US

[72] EDMONDS, DAVID JAMES, US

[72] FLANAGAN, MARK E., US

[72] FUTATSUGI, KENTARO, US

[72] GRIFFITH, DAVID A., US

[72] HUARD, KIM, US

[72] LIAN, YAJING, US

[72] LIMBERAKIS, CHRIS, US

[72] LONDREGAN, ALLYN T., US

[72] MATHIOWETZ, ALAN M., US

[72] PIOTROWSKI, DAVID W., US

[72] RIGGERI, ROGER B., US

[73] PFIZER INC., US

[86] (3045644)

[87] (3045644)

[22] 2019-06-10

[30] US (62/684696) 2018-06-13

[30] US (62/846944) 2019-05-13

[30] US (62/851206) 2019-05-22

---

[11] **3,045,733**  
[13] C

[51] **Int.Cl. A61K 31/436 (2006.01) A61K 9/00 (2006.01) A61K 47/06 (2006.01) A61P 27/02 (2006.01)**

[25] EN

[54] **COMPOSITIONS COMPRISING TACROLIMUS FOR THE TREATMENT OF INTRAOCULAR INFLAMMATORY EYE DISEASES**

[54] **COMPOSITIONS COMPRENANT DU TACROLIMUS POUR LE TRAITEMENT DE MALADIES OCULAIRES INFLAMMATOIRES INTRAOCULAIRES**

[72] GUNTHER, BERNHARD, DE

[72] SCHERER, DIETER, CH

[72] XU, HEPING, GB

[73] NOVALIQ GMBH, DE

[85] 2019-05-31

[86] 2017-12-14 (PCT/EP2017/082739)

[87] (WO2018/114557)

[30] EP (16206207.9) 2016-12-22

---

[11] **3,046,683**  
[13] C

[51] **Int.Cl. G01J 1/02 (2006.01) G01J 1/42 (2006.01) G01J 3/02 (2006.01) G01J 3/50 (2006.01)**

[25] EN

[54] **A METHOD FOR DETERMINING A SPATIAL LIGHT DISTRIBUTION IN AN ENVIRONMENT**

[54] **PROCEDE DE DETERMINATION D'UNE REPARTITION SPATIALE DE LA LUMIERE DANS UN ENVIRONNEMENT**

[72] NILSSON, DAN-ERIC, SE

[73] NILSSON, DAN-ERIC, SE

[85] 2019-06-11

[86] 2016-12-14 (PCT/EP2016/080901)

[87] (WO2018/108259)

---

[11] **3,046,881**  
[13] C

[51] **Int.Cl. C10L 1/02 (2006.01) C10L 1/16 (2006.01) C10L 1/185 (2006.01) C10L 10/02 (2006.01)**

[25] EN

[54] **A MULTICOMPONENT DIESEL COMPOSITION**

[54] **COMPOSITION DE DIESEL A CONSTITUANTS MULTIPLES**

[72] KIISKI, ULLA, FI

[72] KURONEN, MARKKU, FI

[72] LEHTO, KALLE, FI

[72] HARTIKKA, TUUKKA, FI

[73] NESTE OYJ, FI

[85] 2019-06-12

[86] 2017-12-14 (PCT/FI2017/050886)

[87] (WO2018/115574)

[30] FI (20165985) 2016-12-19



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16 janvier 2024**

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[11] **3,047,138**  
[13] C

[51] **Int.Cl. C07D 233/91 (2006.01) A61K 31/4168 (2006.01) A61P 3/04 (2006.01) A61P 3/10 (2006.01) A61P 9/00 (2006.01)**

[25] EN

[54] **5-[(2,4-DINITROPHENOXY)METHYL]-1-METHYL-2-NITRO-1H-IMIDAZOLE AND ITS USE IN THE TREATMENT OF MITOCHONDRIA-RELATED DISORDERS**

[54] **5-[(2,4-DINITROPHENOXY)METHYLE]-1-METHYLE-2-NITRO-1H-IMIDAZOLE ET UTILISATION DANS LE TRAITEMENT DES TROUBLES LIES A LA MITOCHONDRIE**

[72] KHAN, SHAHARYAR, US

[73] RIVUS PHARMACEUTICALS, INC., US

[85] 2019-06-13

[86] 2018-01-05 (PCT/US2018/012491)

[87] (WO2018/129258)

[30] US (62/443,244) 2017-01-06

[30] US (62/581,355) 2017-11-03

[30] US (62/585,326) 2017-11-13

---

[11] **3,047,617**  
[13] C

[51] **Int.Cl. E21B 41/02 (2006.01) E21B 41/00 (2006.01) E21B 47/12 (2012.01)**

[25] EN

[54] **DOWNHOLE ENERGY HARVESTING**

[54] **DISPOSITIF DE RECUPERATION D'ENERGIE EN FOND DE TROU**

[72] ROSS, SHAUN COMPTON, GB

[72] JARVIS, LESLIE DAVID, GB

[72] HUDSON, STEVEN MARTIN, GB

[73] METROL TECHNOLOGY LTD, GB

[85] 2019-06-19

[86] 2016-12-30 (PCT/GB2016/054093)

[87] (WO2018/122543)

---

[11] **3,047,828**  
[13] C

[51] **Int.Cl. C10L 3/10 (2006.01) C09K 8/52 (2006.01)**

[25] EN

[54] **GAS HYDRATE INHIBITORS**

[54] **INHIBITEURS D'HYDRATE DE GAZ**

[72] PARINI, MAURO, US

[72] BALESTRINI, ANDREA, US

[72] GIARDINI, LORENZO, IT

[72] FLORIDI, GIOVANNI, IT

[72] LI BASSI, GIUSEPPE, IT

[73] LAMBERTI S.P.A., IT

[85] 2019-06-20

[86] 2017-12-20 (PCT/EP2017/083935)

[87] (WO2018/115191)

[30] IT (102016000130571) 2016-12-23

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[11] **3,049,869**  
[13] C

[51] **Int.Cl. B29C 53/60 (2006.01)**

[25] EN

[54] **DRY LINERS FOR PIPE REPAIR AND METHODS FOR MANUFACTURING DRY LINERS**

[54] **GAINES SECHES POUR REPARATION DE TUYAU ET PROCEDES DE FABRICATION DE GAINES SECHES**

[72] BELTRAN, ANTONI SERAROLS, ES

[72] DEN BESTEN, KEES, NL

[73] OWENS CORNING INTELLECTUAL CAPITAL, LLC, US

[85] 2019-07-10

[86] 2018-01-05 (PCT/US2018/012452)

[87] (WO2018/132305)

[30] EP (17382006.9) 2017-01-11

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[11] **3,049,998**  
[13] C

[51] **Int.Cl. B60D 1/14 (2006.01) B60D 1/48 (2006.01)**

[25] EN

[54] **LOW PROFILE TROLLEY FOR A TOW SADDLE**

[54] **CHARIOT BAS POUR UNE SELLE DE REMORQUAGE**

[72] SCHUETTENBERG, DONALD W., US

[73] ATC TRANSPORTATION LLC, US

[86] (3049998)

[87] (3049998)

[22] 2019-07-17

[30] US (62/701,196) 2018-07-20

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[11] **3,050,903**  
[13] C

[51] **Int.Cl. H04N 19/55 (2014.01) H04N 19/172 (2014.01) H04N 19/513 (2014.01) H04N 19/96 (2014.01) G06T 9/00 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR ENCODING/DECODING IMAGES USING A MOTION VECTOR**

[54] **PROCEDE ET APPAREIL DE CODAGE/DECODAGE D'IMAGES A L'AIDE D'UN VECTEUR DE MOUVEMENT**

[72] LIM, SUNG CHANG, KR

[72] KIM, HUI YONG, KR

[72] JEONG, SE YOON, KR

[72] CHO, SUK HEE, KR

[72] JUN, DONG SAN, KR

[72] KIM, JONG HO, KR

[72] LEE, HA HYUN, KR

[72] LEE, JIN HO, KR

[72] CHOI, JIN SOO, KR

[72] KIM, JIN WOONG, KR

[73] ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE, KR

[86] (3050903)

[87] (3050903)

[22] 2012-01-31

[62] 2,826,157

[30] KR (10-2011-0009636) 2011-01-31

[30] KR (10-2011-0019166) 2011-03-03

[30] KR (10-2011-0050853) 2011-05-27

[30] KR (10-2011-0065707) 2011-07-01

[30] KR (10-2012-0010096) 2012-01-31

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[11] **3,050,982**  
[13] C

[51] **Int.Cl. A47C 12/00 (2006.01) A47K 17/00 (2006.01) E06C 7/00 (2006.01)**

[25] EN

[54] **HINGED STEP FOR SMALL PERSON**

[54] **MARCHE ARTICULEE POUR PETITE PERSONNE**

[72] REID, FREDERICK, CA

[72] LAFOND, JEAN-FRANCOIS, CA

[72] MAZAHÉRI-TEHRANI, BEHRANG, CA

[73] DEVELOPPEMENTS LAFOND ET REID INC., CA

[85] 2019-07-19

[86] 2017-01-20 (PCT/CA2017/000014)

[87] (WO2017/124180)

[30] US (62/286,301) 2016-01-22

**Canadian Patents Issued  
January 16, 2024**

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[11] **3,052,948**  
[13] C

[51] **Int.Cl. A61B 90/00 (2016.01) A61B 17/285 (2006.01) G01B 5/08 (2006.01)**

[25] EN

[54] **SURGICAL TOOL FOR TISSUE SIZING AND TRANSECTION**

[54] **OUTIL CHIRURGICAL POUR DIMENSIONNEMENT ET SECTIONNEMENT DE TISSU**

[72] DEISTER, CURT, US

[72] ORRICO, MICHAEL RAYMOND, US

[72] DRACH, GREGORY, US

[73] AXOGEN CORPORATION, US

[85] 2019-08-07

[86] 2017-02-07 (PCT/US2017/016803)

[87] (WO2018/147828)

---

[11] **3,053,178**  
[13] C

[51] **Int.Cl. C07J 71/00 (2006.01) A61K 31/58 (2006.01) A61K 31/7048 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **STEROID SAPONINS WITH ANTI-CANCER ACTIVITY**

[54] **SAPONINES STEROIDIENNES AYANT UNE ACTIVITE ANTICANCEREUSE**

[72] KELLY, PETER, NZ

[72] MARSHALL, PHILIP ANDREW, AU

[73] ONCOLOGY RESEARCH INTERNATIONAL LIMITED, AU

[85] 2019-08-09

[86] 2018-02-09 (PCT/AU2018/050099)

[87] (WO2018/145162)

[30] AU (2017900427) 2017-02-10

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[11] **3,053,280**  
[13] C

[51] **Int.Cl. G06Q 30/0201 (2023.01) G06Q 20/20 (2012.01) G06Q 30/0601 (2023.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR TRACKING PURCHASES**

[54] **SYSTEME ET PROCEDE DE SUIVI D'ACHATS**

[72] HARRIS, DAVID N., US

[73] HARRIS INTELLECTUAL PROPERTY, LP, US

[86] (3053280)

[87] (3053280)

[22] 2010-07-21

[62] 2,768,619

[30] US (12/460,527) 2009-07-21

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[11] **3,053,331**  
[13] C

[51] **Int.Cl. H04W 4/30 (2018.01) G07C 9/29 (2020.01) G07B 15/00 (2011.01) G07C 11/00 (2006.01)**

[25] EN

[54] **INSPECTION METHOD**

[54] **METHODE D'INSPECTION**

[72] MILLER, NORBERT, DE

[72] FEITER, MANFRED, DE

[72] BICHMANN, STEPHAN, DE

[72] NOLL, ELMAR, DE

[73] SCHEIDT & BACHMANN GMBH, DE

[86] (3053331)

[87] (3053331)

[22] 2019-08-28

[30] DE (10 2018 121 493.6) 2018-09-04

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[11] **3,053,354**  
[13] C

[51] **Int.Cl. E04F 19/02 (2006.01) E06B 1/36 (2006.01) E06B 1/56 (2006.01) E06B 5/00 (2006.01)**

[25] EN

[54] **BRICKMOULD WINDOW TRIM**

[54] **CADRAGE DE BOISERIE DE FENETRE**

[72] LUVISON, MICHAEL, US

[73] ASSOCIATED MATERIALS, LLC, US

[86] (3053354)

[87] (3053354)

[22] 2019-08-28

[30] US (16/130802) 2018-09-13

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[11] **3,055,344**  
[13] C

[51] **Int.Cl. G01N 29/22 (2006.01)**

[25] EN

[54] **APPARATUS AND DEVICE FOR TESTING A COMPONENT BY MEANS OF ULTRASOUND**

[54] **APPAREIL ET DISPOSITIF DE TEST D'UN COMPOSANT AU MOYEN D'ULTRASONS**

[72] GATTIKER, FELIX, CH

[72] OSTERWALDER, MARCO, CH

[72] POSER, MARCEL, CH

[73] PROCEQ SA, CH

[85] 2019-09-04

[86] 2016-10-11 (PCT/CH2016/000132)

[87] (WO2018/068156)

---

[11] **3,055,785**  
[13] C

[51] **Int.Cl. A61C 7/12 (2006.01) A61C 7/28 (2006.01)**

[25] EN

[54] **ADJUSTABLE HOOK FOR ORTHODONTIC BRACKETS**

[54] **CROCHET REGLABLE POUR BRACKETS ORTHODONTIQUES**

[72] RUIZ-VELA, ALBERTO, US

[73] WORLD CLASS TECHNOLOGY CORPORATION, US

[85] 2019-09-06

[86] 2018-03-20 (PCT/US2018/023400)

[87] (WO2018/175469)

[30] US (62/475,088) 2017-03-22

[30] US (15/729,525) 2017-10-10

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[11] **3,056,207**  
[13] C

[51] **Int.Cl. H01L 31/05 (2014.01) H01L 31/0475 (2014.01) H02S 40/00 (2014.01)**

[25] EN

[54] **SOLAR CELL STRIP, SOLAR CELL AND SOLAR CELL MODULE**

[54] **BANDE PHOTOVOLTAIQUE, PHOTOPILE ET MODULE PHOTOVOLTAIQUE**

[72] WANG, YONG, CN

[72] XU, JIE, CN

[72] YAN, XINCHUN, CN

[72] DING, ZENGQIAN, CN

[72] TAN, LIXIANG, CN

[72] XIA, ZHENGYUE, CN

[72] LIU, YAFENG, CN

[72] XING, GUOQIANG, CN

[73] CANADIAN SOLAR SOLUTIONS INC., CA

[86] (3056207)

[87] (3056207)

[22] 2019-09-20

[30] CN (201811109217.0) 2018-09-21

**Brevets canadiens délivrés  
16 janvier 2024**

[11] **3,056,685**

[13] C

- [51] **Int.Cl. A61K 31/336 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **COMBINATION THERAPY FOR THE TREATMENT OR PREVENTION OF TUMOURS**  
[54] **TRAITEMENT D'ASSOCIATION POUR LE TRAITEMENT OU LA PREVENTION DE TUMEURS**  
[72] REDDELL, PAUL WARREN, AU  
[72] CULLEN, JASON KINGSLEY, AU  
[72] BOYLE, GLEN MATHEW, AU  
[72] PARSONS, PETER GORDON, AU  
[72] GORDON, VICTORIA ANNE, AU  
[73] QBIOTICS PTY LTD, AU  
[85] 2019-09-16  
[86] 2018-03-23 (PCT/AU2018/050277)  
[87] (WO2018/170559)  
[30] AU (2017901027) 2017-03-23

[11] **3,057,179**

[13] C

- [51] **Int.Cl. G01N 33/28 (2006.01)**  
[25] EN  
[54] **WAX RISK ASSESSMENT AND MITIGATION USING ADVANCED DATA ANALYTICS AND PIPE FLOW MODELING**  
[54] **EVALUATION ET ATTENUATION DE RISQUE DE CIRE A L'AIDE D'UNE ANALYSE DE DONNEES AVANCEE ET D'UNE MODELISATION DE FLUX DE TUYAU**  
[72] PATEL, NIMESHKUMAR KANTILAL, US  
[72] BAGARIA, HITESH GHANSHYAM, US  
[72] WANG, GUOLIANG, CN  
[72] XIE, XIAOAN, CN  
[72] ZHANG, XIAO, CN  
[72] PENG, YUN, CN  
[72] PENG, WENQING, CN  
[72] ZHENG, SHENG, US  
[72] MCDERMOTT, JOHN BRIAN, US  
[72] PEREZ DIAZ, PETER LARRY, US  
[73] BL TECHNOLOGIES, INC., US  
[85] 2019-09-19  
[86] 2017-04-10 (PCT/CN2017/079875)  
[87] (WO2018/187898)

[11] **3,058,524**

[13] C

- [51] **Int.Cl. G01N 21/78 (2006.01) G01N 1/24 (2006.01) G01N 21/00 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR VISUAL AND ELECTRONIC READING OF COLORIMETRIC TUBES**  
[54] **SYSTEME DE LECTURE VISUELLE ET ELECTRONIQUE DE TUBES COLORIMETRIQUES**  
[72] TRUEX, BRYAN I., US  
[72] MIHAYLOV, GUEORGUI, US  
[73] NEXTTEQ LLC, US  
[86] (3058524)  
[87] (3058524)  
[22] 2011-09-07  
[62] 2,810,650  
[30] US (61/380,582) 2010-09-07

[11] **3,059,048**

[13] C

- [51] **Int.Cl. F21S 45/10 (2018.01) B60Q 1/02 (2006.01)**  
[25] EN  
[54] **LIGHT GUARD ASSEMBLY**  
[54] **ENSEMBLE PROTEGE-FEU**  
[72] GUTIERREZ, CARLOS, US  
[73] LUND MOTION PRODUCTS, INC., US  
[86] (3059048)  
[87] (3059048)  
[22] 2019-10-16  
[30] US (62/751,482) 2018-10-26  
[30] US (62/793,576) 2019-01-17  
[30] US (16/593,156) 2019-10-04

[11] **3,059,770**

[13] C

- [51] **Int.Cl. A23J 3/04 (2006.01) A23J 3/18 (2006.01)**  
[25] EN  
[54] **L-CYSTEINE-TREATED PROTEINS WITH ALTERED FUNCTIONALITIES AND PREPARATION THEREOF**  
[54] **PROTEINES TRAITÉES PAR L-CYSTEINE AYANT DES FONCTIONNALITES MODIFIÉES ET LEUR PREPARATION**  
[72] MANINGAT, CLODUALDO C., US  
[72] CAI, LIMING, US  
[72] GUTKOWSKI, SARAH MARIE, US  
[72] BUTTSHAW, MICHAEL, US  
[73] MGPI PROCESSING, INC., US  
[85] 2019-10-10  
[86] 2018-04-12 (PCT/US2018/027223)  
[87] (WO2018/191449)  
[30] US (62/485,048) 2017-04-13

[11] **3,060,818**

[13] C

- [51] **Int.Cl. B65F 1/14 (2006.01) B65F 1/00 (2006.01)**  
[25] EN  
[54] **FOLDABLE BIN**  
[54] **BAC PLIANT**  
[72] MUNARO, RAFAEL, US  
[72] DITTMANN, ANTHONY, US  
[73] MUNARO, RAFAEL, US  
[73] DITTMANN, ANTHONY, US  
[86] (3060818)  
[87] (3060818)  
[22] 2019-11-01  
[30] US (62/757435) 2018-11-08  
[30] US (16/433378) 2019-06-06

[11] **3,061,240**

[13] C

- [51] **Int.Cl. C12N 15/70 (2006.01) A61K 39/00 (2006.01) A61K 39/12 (2006.01) A61P 35/00 (2006.01) C07K 14/47 (2006.01) C12N 15/81 (2006.01)**  
[25] EN  
[54] **TARGETED NEOEPITOPE VECTORS AND METHODS THEREFOR**  
[54] **VECTEURS DE NEO-EPITOPES CIBLES ET PROCEDES ASSOCIES**  
[72] NIAZI, KAYVAN, US  
[73] NANTCELL, INC., US  
[85] 2019-10-21  
[86] 2018-04-23 (PCT/US2018/028889)  
[87] (WO2018/200389)  
[30] US (62/489,102) 2017-04-24

**Canadian Patents Issued  
January 16, 2024**

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[11] **3,061,511**  
[13] C

[51] **Int.Cl. F16F 7/00 (2006.01) B64G 1/66 (2006.01) F16F 13/00 (2006.01)**  
[25] EN  
[54] **ISOLATION COUPLER FOR A STRUCTURAL ASSEMBLY AND METHOD FOR ATTENUATING A LOAD**  
[54] **DISPOSITIF D'ACCOUPEMENT D'ISOLATION POUR UN ENSEMBLE STRUCTUREL ET PROCEDE POUR ATTENUER UNE CHARGE**  
[72] ASTON, RICHARD W., US  
[72] LANGMACK, MICHAEL JOHN, US  
[72] TOMZYNSKA, ANNA M., US  
[72] HERRMANN, MATTHEW, US  
[72] WOODS, EMILY C., US  
[73] THE BOEING COMPANY, US  
[86] (3061511)  
[87] (3061511)  
[22] 2019-11-12  
[30] US (16/214638) 2018-12-10

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[11] **3,062,115**  
[13] C

[51] **Int.Cl. F17C 13/00 (2006.01) B64G 1/22 (2006.01) F17C 1/00 (2006.01)**  
[25] EN  
[54] **STRUCTURAL JOINT OF TWO LOAD CARRYING WALLS OF A PRESSURIZED VESSEL**  
[54] **JOINT STRUCTURAL DE DEUX PAROIS PORTEUSES D'UN RESERVOIR SOUS PRESSION**  
[72] SIDIROPOULOS, ARISTIDIS, US  
[72] KEITH, WILLIAM P., US  
[73] THE BOEING COMPANY, US  
[86] (3062115)  
[87] (3062115)  
[22] 2019-11-19  
[30] US (16/242975) 2019-01-08

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[11] **3,062,120**  
[13] C

[51] **Int.Cl. B64C 25/42 (2006.01) B64C 9/32 (2006.01) B64D 17/80 (2006.01) B64D 25/00 (2006.01)**  
[25] EN  
[54] **BRAKE SYSTEMS FOR AIRCRAFT AND RELATED METHODS**  
[54] **SYSTEMES DE FREINAGE POUR AERONEF ET METHODES CONNEXES**  
[72] JASKLOWSKI, CHRISTOPHER T., US  
[72] MACKIN, STEVE G., US  
[73] THE BOEING COMPANY, US  
[86] (3062120)  
[87] (3062120)  
[22] 2019-11-19  
[30] US (16/222613) 2018-12-17

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[11] **3,063,263**  
[13] C

[51] **Int.Cl. A61N 1/32 (2006.01) A61N 1/05 (2006.01)**  
[25] EN  
[54] **DEVICE AND METHOD FOR SINGLE-NEEDLE IN VIVO ELECTROPORATION**  
[54] **DISPOSITIF ET PROCEDE POUR UNE ELECTROPORATION IN VIVO A AIGUILLE UNIQUE**  
[72] KJEKEN, RUNE, US  
[72] MATHIESEN, IACOB, US  
[72] TJELLE, TORUNN ELISABETH, US  
[72] MCHUGH, GEORGE, US  
[73] INOVIO PHARMACEUTICALS, INC., US  
[86] (3063263)  
[87] (3063263)  
[22] 2007-02-09  
[62] 2,635,437  
[30] US (60/772,255) 2006-02-11

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[11] **3,063,525**  
[13] C

[51] **Int.Cl. D21H 17/37 (2006.01) D21H 17/36 (2006.01) D21H 17/42 (2006.01) D21H 17/44 (2006.01) D21H 17/51 (2006.01) D21H 17/66 (2006.01) D21H 21/18 (2006.01) D21H 21/20 (2006.01)**  
[25] EN  
[54] **STRENGTH ADDITIVE SYSTEM AND METHOD FOR MANUFACTURING A WEB COMPRISING CELLULOSIC FIBRES**  
[54] **SYSTEME D'ADDITIF DE RESISTANCE ET PROCEDE DE FABRICATION D'UNE BANDE COMPRENANT DES FIBRES CELLULOSIQUES**  
[72] JACKSON, LOGAN, US  
[72] LU, CHEN, US  
[72] RABIDEAU, JENNA, US  
[73] KEMIRA OYJ, FI  
[85] 2019-11-13  
[86] 2018-06-15 (PCT/FI2018/050465)  
[87] (WO2018/229345)  
[30] US (62/520,657) 2017-06-16  
[30] FI (20175646) 2017-07-05

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[11] **3,064,016**  
[13] C

[51] **Int.Cl. C07C 2/00 (2006.01) C07C 2/76 (2006.01) C07C 2/82 (2006.01) C07C 2/84 (2006.01) C07C 7/00 (2006.01) C07C 11/06 (2006.01)**  
[25] EN  
[54] **INTEGRATION OF OXIDATIVE COUPLING OF METHANE PROCESSES**  
[54] **INTEGRATION DE PROCEDES DE COUPLAGE OXYDANT DU METHANE**  
[72] MCCORMICK, JAROD, US  
[72] RADAELLI, GUIDO, US  
[72] RAFIQUE, HUMERA ABDUL, US  
[72] HIDAJAT, JAMES, US  
[72] VUDDAGIRI, SRINIVAS R., US  
[72] MILES, JOSHUA RYAN, US  
[72] BLACK, RICHARD, US  
[73] LUMMUS TECHNOLOGY LLC, US  
[85] 2019-11-18  
[86] 2018-05-23 (PCT/US2018/034184)  
[87] (WO2018/217924)  
[30] US (62/510,065) 2017-05-23  
[30] US (62/536,876) 2017-07-25  
[30] US (62/584,441) 2017-11-10  
[30] US (62/644,098) 2018-03-16

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,064,405**  
[13] C

[51] **Int.Cl. B60R 3/02 (2006.01) B62D 25/22 (2006.01) B62D 33/027 (2006.01) B62D 37/02 (2006.01) F16C 33/04 (2006.01)**

[25] EN

[54] **COMPOSITE BUSHINGS WITHIN THE ARB PIVOT PIN LOCATIONS, INTEGRATED INTO AUTOMATED RUNNING BOARDS**

[54] **MANCHONS EN MATIERES COMPOSITES AYANT DES EMBLEMES D'AXE DE PIVOTEMENT ANTI-RECU, INTEGRES AUX PASSERELLES AUTOMATISEES**

[72] GODFREY, JERRY, CA

[73] MAGNA EXTERIORS INC., CA

[86] (3064405)

[87] (3064405)

[22] 2019-12-09

[30] US (62/776,760) 2018-12-07

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[11] **3,066,689**  
[13] C

[51] **Int.Cl. C07K 16/18 (2006.01) C12N 15/113 (2010.01) C12N 15/115 (2010.01) A61P 17/10 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **TREATMENT OF INFLAMMATORY DISEASES WITH INHIBITORS OF C5A ACTIVITY**

[54] **TRAITEMENT DE MALADIES INFLAMMATOIRES PAR DES INHIBITEURS DE L'ACTIVITE DE C5A**

[72] GUO, RENFENG, US

[72] RIEDEMANN, NIELS R., DE

[73] INFLARX GMBH, DE

[85] 2019-12-09

[86] 2018-06-13 (PCT/EP2018/065676)

[87] (WO2018/234118)

[30] EP (17177657.8) 2017-06-23

[30] EP (17189938.8) 2017-09-07

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[11] **3,067,215**  
[13] C

[51] **Int.Cl. E01C 11/22 (2006.01) E01D 19/08 (2006.01) E03F 5/04 (2006.01)**

[25] EN

[54] **DRAINAGE DEVICE AND METHODS FOR CONSTRUCTING AND USE**

[54] **DISPOSITIF DE DRAINAGE ET PROCES DE CONSTRUCTION ET D'UTILISATION**

[72] LOCKE, BLAKE, US

[72] WALLACE, TIM, US

[72] SIMON, TOM, US

[72] GUNTER, CHARLES, US

[73] ABT, INC., US

[85] 2019-12-12

[86] 2018-06-12 (PCT/US2018/037138)

[87] (WO2018/231852)

[30] US (62/518,427) 2017-06-12

[30] US (62/545,104) 2017-08-14

[30] US (62/545,112) 2017-08-14

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[11] **3,066,318**  
[13] C

[51] **Int.Cl. H04H 60/31 (2009.01) H04H 60/33 (2009.01) H04H 60/45 (2009.01) H04H 60/66 (2009.01)**

[25] EN

[54] **METHOD, APPARATUS, COMPUTER PROGRAM AND SYSTEM FOR DETERMINING INFORMATION RELATED TO THE AUDIENCE OF AN AUDIO-VISUAL CONTENT PROGRAM**

[54] **PROCEDE, APPAREIL, PROGRAMME INFORMATIQUE ET SYSTEME DE DETERMINATION D'INFORMATIONS RELATIVES AU PUBLIC D'UN PROGRAMME DE CONTENU AUDIOVISUEL**

[72] KRAUSS, CHRISTOPHER, DE

[72] SEELIGER, ROBERT, DE

[72] ARBANOWSKI, STEFAN, DE

[72] DUERAGER, ANDREA, AT

[72] REISSER, LUKAS, AT

[72] HINTERSTOISSER, SEBASTIAN, DE

[73] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE

[73] TV-INSIGHT GMBH, AT

[85] 2019-12-05

[86] 2018-06-22 (PCT/EP2018/066769)

[87] (WO2018/234548)

[30] EP (17193940.8) 2017-09-29

[30] EP (17177750.1) 2017-06-23

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[11] **3,067,067**  
[13] C

[51] **Int.Cl. A01M 25/00 (2006.01) A01N 25/00 (2006.01)**

[25] EN

[54] **PRODUCT AND DEVICE FOR CONTROLLING PESTS, IN PARTICULAR RODENTS**

[54] **PRODUIT ET DISPOSITIF DE LUTTE CONTRE LES ORGANISMES NUISIBLES, EN PARTICULIER LES RONGEURS**

[72] GASSER, KLAUS, IT

[73] UK3M GREEN RODENTICIDE GMBH, IT

[85] 2019-12-12

[86] 2017-06-30 (PCT/EP2017/066245)

[87] (WO2018/002292)

[30] AT (A50589/2016) 2016-06-30

[30] AT (A50956/2016) 2016-10-20

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[11] **3,067,678**  
[13] C

[51] **Int.Cl. G01H 17/00 (2006.01) G01M 3/00 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR DETECTING WHETHER AN ACOUSTIC EVENT HAS OCCURRED ALONG A FLUID CONDUIT**

[54] **PROCEDE ET SYSTEME PERMETTANT DE DETECTER SI UN EVENEMENT ACOUSTIQUE S'EST PRODUIT LE LONG D'UN CONDUIT DE FLUIDE**

[72] JALILIAN, SEYED EHSAN, CA

[72] DANKERS, ARNE, CA

[72] WESTWICK, DAVID, CA

[73] HIFI ENGINEERING INC., CA

[85] 2019-12-18

[86] 2018-06-29 (PCT/CA2018/050812)

[87] (WO2019/000107)

[30] US (62/527,847) 2017-06-30

**Canadian Patents Issued  
January 16, 2024**

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[11] **3,068,163**  
[13] C

[51] **Int.Cl. B01F 21/20 (2022.01) B01F 25/50 (2022.01)**  
[25] EN  
[54] **PROCESS FOR CONTINUOUS DISSOLUTION OF A SOLID IN A REACTION MEDIUM**  
[54] **PROCESSUS DE DISSOLUTION CONTINUE D'UN SOLIDE DANS UN MILIEU REACTIONNEL**  
[72] BROLL, DIRK, DE  
[72] NOLL, THORSTEN, DE  
[73] EVONIK OPERATIONS GMBH, DE  
[85] 2019-12-20  
[86] 2018-06-28 (PCT/EP2018/067357)  
[87] (WO2019/007786)  
[30] DE (10 2017 211 435.5) 2017-07-05

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[11] **3,068,573**  
[13] C

[51] **Int.Cl. B03D 1/14 (2006.01) B03D 1/02 (2006.01)**  
[25] EN  
[54] **FROTH FLOTATION UNIT**  
[54] **UNITE DE FLOTTATION PAR MOUSSE**  
[72] TUOMINEN, JERE, FI  
[72] GRAU, RODRIGO, FI  
[72] MIETTINEN, TATU, FI  
[72] MONKARE, ZAKARIA, FI  
[73] METSO OUTOTEC FINLAND OY, FI  
[85] 2019-12-27  
[86] 2017-07-04 (PCT/FI2017/050505)  
[87] (WO2019/008217)

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[11] **3,069,710**  
[13] C

[51] **Int.Cl. E21B 49/00 (2006.01)**  
[25] EN  
[54] **DATA ACQUISITION AND SIGNAL DETECTION THROUGH RFID SYSTEM AND METHOD**  
[54] **ACQUISITION DE DONNEES ET DETECTION DE SIGNAL PAR L'INTERMEDIAIRE D'UN SYSTEME RFID ET PROCEDE**  
[72] RAMJIT, AVINASH L., US  
[72] ZBRANEK, ZACHARY L., US  
[73] CONOCOPHILLIPS COMPANY, US  
[85] 2020-01-09  
[86] 2018-08-01 (PCT/US2018/044751)  
[87] (WO2019/028107)  
[30] US (62/539,625) 2017-08-01

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[11] **3,069,723**  
[13] C

[51] **Int.Cl. H01S 5/34 (2006.01) H01S 5/183 (2006.01)**  
[25] EN  
[54] **MID-INFRARED VERTICAL CAVITY LASER**  
[54] **LASER A CAVITE VERTICALE DANS L'INFRAROUGE MOYEN**  
[72] JAYARAMAN, VIJAYSEKHAR, US  
[72] LASCOLA, KEVIN, US  
[72] SEGAL, STEPHEN, US  
[72] TOWNER, FREDRICK, US  
[72] CABLE, ALEX, US  
[73] THORLABS, INC., US  
[73] PRAEVIUM RESEARCH, INC., US  
[85] 2020-01-10  
[86] 2018-07-17 (PCT/US2018/042512)  
[87] (WO2019/018411)  
[30] US (62/533,501) 2017-07-17

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[11] **3,070,827**  
[13] C

[51] **Int.Cl. H04L 43/0894 (2022.01) H04L 47/10 (2022.01) H04L 47/22 (2022.01) H04L 47/24 (2022.01) H04L 47/36 (2022.01)**  
[25] EN  
[54] **SCALABLE NETWORK OVERHEAD FOR CONTESTED ENVIRONMENTS**  
[54] **TETE DE RESEAU EXTENSIBLE POUR LES MILIEUX CONTESTES**  
[72] REIMANN, MATTHEW J., US  
[72] GIALLORENZI, THOMAS R., US  
[72] KENNEY, BRENT, US  
[72] KOMER, CHAD S., US  
[72] THORP, BRIAN, US  
[72] WILDEN, JASON, US  
[72] HIRZ, PHILIP M., US  
[73] L3HARRIS TECHNOLOGIES, INC., US  
[86] (3070827)  
[87] (3070827)  
[22] 2020-02-04  
[30] US (16/408,167) 2019-05-09

---

[11] **3,071,291**  
[13] C

[51] **Int.Cl. C07D 211/58 (2006.01) C07F 9/59 (2006.01) C08L 33/14 (2006.01) C08L 33/26 (2006.01) C08L 43/02 (2006.01) C09D 5/02 (2006.01) C09D 5/14 (2006.01) C09D 133/14 (2006.01) C09D 133/26 (2006.01) C09D 143/02 (2006.01)**  
[25] EN  
[54] **POLYMERIZABLE COMPOUNDS WITH ONE OR MORE SURFACTANT-LIKE PROPERTIES**  
[54] **COMPOSES POLYMERISABLES POSSEDANT UNE OU PLUSIEURS PROPRIETES DE TYPE TENSIOACTIF**  
[72] ARBATAN, TINA AKBARZADEH, CA  
[72] RAHMAN, AHMED ABDEL, CA  
[72] BINDRA, GURMEET SINGH, CA  
[72] DUBIEL, MARCELO, CA  
[72] WOLFF, ZACHARY, CA  
[72] NING, CHENXI, CA  
[73] UNIVERSITY OF MANITOBA, CA  
[85] 2020-01-28  
[86] 2018-07-31 (PCT/CA2018/050934)  
[87] (WO2019/023798)  
[30] US (62/539,041) 2017-07-31

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[11] **3,071,716**  
[13] C

[51] **Int.Cl. G06K 7/10 (2006.01) H04B 17/12 (2015.01) H03H 7/38 (2006.01)**  
[25] EN  
[54] **RFID READER WITH AUTOMATIC TUNING**  
[54] **LECTEUR RFID DOTE D'UN ACCORD AUTOMATIQUE**  
[72] BUTERA, JOHN C., US  
[72] PIDAPARTI, RAJANI, US  
[73] RF IDEAS, INC., US  
[85] 2020-01-29  
[86] 2018-08-16 (PCT/US2018/046808)  
[87] (WO2019/036540)  
[30] US (62/546,391) 2017-08-16  
[30] US (15/903,726) 2018-02-23

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16 janvier 2024**

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[11] **3,071,965**  
[13] C

[51] **Int.Cl. G06F 21/60 (2013.01) H04L 67/1097 (2022.01)**  
[25] EN  
[54] **METHOD FOR SECURING DATA UTILIZING MICROSHARD FRAGMENTATION**  
[54] **PROCEDE DE SECURISATION DE DONNEES UTILISANT UNE FRAGMENTATION MICROSHARD**  
[72] STEINBERG, LOUIS, US  
[72] LU, CHIHLI, US  
[73] SHARDSECURE, INC., US  
[85] 2019-12-31  
[86] 2018-08-07 (PCT/US2018/045563)  
[87] (WO2019/032556)  
[30] US (62/543,781) 2017-08-10

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[11] **3,072,301**  
[13] C

[51] **Int.Cl. A61M 25/06 (2006.01) A61M 25/01 (2006.01)**  
[25] EN  
[54] **DOUBLE STEERABLE SHEATH AND METHOD FOR DEPLOYMENT OF A MEDICAL DEVICE**  
[54] **GAINE ORIENTABLE DOUBLE ET PROCEDE POUR LE DEPLOIEMENT D'UN DISPOSITIF MEDICAL**  
[72] STAPPENBECK, NADINE, DE  
[72] STRAUBINGER, HELMUT, DE  
[73] TRICARES SAS, FR  
[85] 2020-02-06  
[86] 2018-08-22 (PCT/EP2018/072686)  
[87] (WO2019/038337)  
[30] EP (17001430.2) 2017-08-24

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[11] **3,072,521**  
[13] C

[51] **Int.Cl. H04W 60/00 (2009.01) H04W 36/00 (2009.01)**  
[25] EN  
[54] **RADIO ACCESS NETWORK-BASED NOTIFICATION AREA (RNA) ALLOCATION METHOD, NETWORK DEVICE, AND TERMINAL**  
[54] **METHODE DE REPARTITION DE ZONES DE NOTIFICATION DE RESEAU D'ACCES RADIO, DISPOSITIF RESEAU ET TERMINAL**  
[72] JIN, YINGHAO, CN  
[72] LI, HONG, CN  
[72] HAN, FENG, CN  
[72] TAN, WEI, CN  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2020-02-07  
[86] 2018-08-06 (PCT/CN2018/098897)  
[87] (WO2019/029465)  
[30] CN (201710677166.0) 2017-08-09

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[11] **3,072,633**  
[13] C

[51] **Int.Cl. E01C 3/00 (2006.01) E01C 5/00 (2006.01) E04F 15/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR DECKING TILES**  
[54] **SYSTEME ET PROCEDE DE TUILES A TERRASSE**  
[72] SCHNEIDER, CHRISTOPHER MICHAEL, US  
[72] MARIN, SIMON RAFAEL, US  
[72] BERTKE, PATRICK JOSEPH, US  
[73] BARRETTE OUTDOOR LIVING, INC., US  
[86] (3072633)  
[87] (3072633)  
[22] 2020-02-14  
[30] US (62/866,152) 2019-06-25

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[11] **3,073,111**  
[13] C

[51] **Int.Cl. G09B 5/02 (2006.01)**  
[25] EN  
[54] **COGNITIVE PLATFORM INCLUDING COMPUTERIZED ELEMENTS**  
[54] **PLATE-FORME COGNITIVE COMPRENANT DES ELEMENTS INFORMATISES**  
[72] ALAILIMA, TITIIMAEA, US  
[72] BOWER, JEFFREY, US  
[72] JOHNSON, JASON, US  
[72] MATEUS, ASHLEY, US  
[72] ESPINOSA, ELENA CANADAS, US  
[72] PIPER, ADAM, US  
[72] OMERNICK, MATTHEW, US  
[72] COLLINS, DAVID, US  
[73] AKILI INTERACTIVE LABS, INC., US  
[85] 2020-02-14  
[86] 2018-08-15 (PCT/US2018/000179)  
[87] (WO2019/035910)  
[30] US (62/545,968) 2017-08-15

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[11] **3,073,917**  
[13] C

[51] **Int.Cl. B60C 11/24 (2006.01) B60C 19/00 (2006.01) B60C 23/20 (2006.01) B60C 99/00 (2006.01) G01M 17/02 (2006.01) G07C 5/00 (2006.01)**  
[25] FR  
[54] **METHOD FOR EVALUATING THE PERFORMANCES OF A TYRE DURING USE**  
[54] **PROCEDE D'EVALUATION DES PERFORMANCES D'UN PNEUMATIQUE EN COURS D'UTILISATION**  
[72] SPINNLER, OLIVIER, FR  
[72] BESNARD, NICOLAS, FR  
[73] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR  
[85] 2020-02-25  
[86] 2018-10-25 (PCT/FR2018/052649)  
[87] (WO2019/081857)  
[30] FR (17/60083) 2017-10-26

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January 16, 2024**

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[11] **3,074,470**  
[13] C

[51] **Int.Cl. A61K 35/28 (2015.01) C12N 5/0775 (2010.01) A61P 11/06 (2006.01)**

[25] EN

[54] **METHOD FOR TREATING ALLERGIC AIRWAYS DISEASE (AAD)/ ASTHMA**

[54] **PROCEDE DE TRAITEMENT D'UNE MALADIE ALLERGIQUE DES VOIES RESPIRATOIRES (AAD)/DE L'ASTHME**

[72] SAMUEL, CHRISHAN, AU

[72] ROYCE, SIMON, AU

[73] CYNATA THERAPEUTICS LIMITED, AU

[85] 2020-03-02

[86] 2018-08-31 (PCT/AU2018/050937)

[87] (WO2019/051536)

[30] AU (2017903758) 2017-09-15

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[11] **3,075,372**  
[13] C

[51] **Int.Cl. A23L 3/28 (2006.01) A23C 3/07 (2006.01) A23L 2/50 (2006.01) B01J 19/12 (2006.01) C02F 1/32 (2006.01) C12M 1/12 (2006.01)**

[25] EN

[54] **A PHOTO BIOREACTOR FOR COLD PASTEURIZATION OF LIQUID FOOD PRODUCTS AND THE USE OF THE REACTOR**

[54] **PHOTO-BIOREACTEUR DE PASTEURISATION A FROID DE PRODUITS ALIMENTAIRES LIQUIDES ET UTILISATION DU REACTEUR**

[72] MORTENSEN, RASMUS, DK

[73] LYRAS DK APS, DK

[85] 2020-03-09

[86] 2018-09-19 (PCT/DK2018/050230)

[87] (WO2019/057257)

[30] DK (PA 2017 70708) 2017-09-21

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[11] **3,076,707**  
[13] C

[51] **Int.Cl. G02B 6/25 (2006.01) G02B 1/12 (2006.01) G02B 6/028 (2006.01) G02B 6/255 (2006.01)**

[25] EN

[54] **TECHNIQUE FOR OPTIMIZING THE COUPLING TO OPTICAL FIBERS**

[54] **TECHNIQUE D'OPTIMISATION DU COUPLAGE A DES FIBRES OPTIQUES**

[72] PAFCHEK, ROBERT M., US

[73] THORLABS, INC., US

[86] (3076707)

[87] (3076707)

[22] 2020-03-23

[30] US (62/823,229) 2019-03-25

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[11] **3,076,763**  
[13] C

[51] **Int.Cl. G01T 1/29 (2006.01)**

[25] EN

[54] **COMPRESSIVE IMAGING METHOD AND SYSTEM**

[54] **PROCEDE ET SYSTEME D'IMAGERIE COMPRESSIVE**

[72] BOARDMAN, DAVID, AU

[72] GUENETTE, MATHEW, AU

[72] FLYNN, ALISON, AU

[72] SARBUTT, ADAM, AU

[72] CHARTIER, LACHLAN, AU

[72] ILTER, JAYDEN, AU

[72] PROKOPOVICH, DALE, AU

[72] WATT, GEOFF, AU

[73] AUSTRALIAN NUCLEAR SCIENCE AND TECHNOLOGY ORGANISATION, AU

[85] 2020-03-23

[86] 2018-10-22 (PCT/AU2018/051144)

[87] (WO2019/075531)

[30] AU (2017904259) 2017-10-20

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[11] **3,076,793**  
[13] C

[51] **Int.Cl. C07K 14/62 (2006.01)**

[25] EN

[54] **INTEGRATED AUTOMATED FILTRATION FOR SEPARATION, WASHING AND DRYING OF PEPTIDE CRYSTALS**

[54] **FILTRATION AUTOMATISEE INTEGREE POUR LA SEPARATION, LE LAVAGE ET LE SECHAGE DE CRISTAUX DE PEPTIDES**

[72] KANDUKURI, SAI SRIKAR, IN

[72] SHUKLA, VIBHAVA, IN

[72] MARIMUTHU, ARUL, IN

[72] PATHY, MUKUL, IN

[72] HAZRA, PARTHA P., IN

[73] BIOCON BIOLOGICS INDIA LIMITED, IN

[85] 2020-03-23

[86] 2018-09-19 (PCT/IB2018/057204)

[87] (WO2019/064125)

[30] IN (201741034158) 2017-09-26

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[11] **3,076,849**  
[13] C

[51] **Int.Cl. C22C 23/00 (2006.01) C22F 1/06 (2006.01)**

[25] EN

[54] **MAGNESIUM OR MAGNESIUM ALLOY HAVING HIGH FORMABILITY AT ROOM TEMPERATURE AND MANUFACTURING METHOD THEREOF**

[54] **MAGNESIUM OU ALLIAGE DE MAGNESIUM AYANT UNE APTITUDE AU FORMAGE ELEVEE A LA TEMPERATURE AMBIANTE ET PROCEDE DE FABRICATION**

[72] NIE, JIANFENG, AU

[72] ZENG, ZHUORAN, AU

[72] XU, SHIWEI, CN

[72] BIRBILIS, NICK, AU

[72] DAVIES, CHRISTOPHER H.J., AU

[72] TANG, WEINENG, CN

[73] BAOSHAN IRON & STEEL CO., LTD., CN

[73] CHINA BAOWU STEEL GROUP CORPORATION LIMITED, CN

[85] 2020-03-24

[86] 2018-09-21 (PCT/CN2018/106867)

[87] (WO2019/057139)

[30] CN (201710875802.0) 2017-09-25



**Brevets canadiens délivrés  
16 janvier 2024**

[11] **3,077,883**  
[13] C

- [51] **Int.Cl. E21B 34/06 (2006.01) E21B 33/12 (2006.01) E21B 43/12 (2006.01) E21B 43/26 (2006.01)**  
[25] EN  
[54] **DOWNHOLE TOOL ASSEMBLY WITH DEBRIS RELIEF, AND METHOD FOR USING SAME**  
[54] **OUTILLAGE DE FOND AVEC SECURITE POUR DEBRIS, ET METHODE D'UTILISATION**  
[72] GETZLAF, DONALD, CA  
[72] NIPPER, ROBERT, US  
[72] STROMQUIST, MARTY, CA  
[73] NCS MULTISTAGE INC., CA  
[86] (3077883)  
[87] (3077883)  
[22] 2010-02-18  
[62] 2,999,324

[11] **3,078,307**  
[13] C

- [51] **Int.Cl. G06N 10/20 (2022.01)**  
[25] EN  
[54] **FERMIONIC SIMULATION GATES**  
[54] **PORTES DE SIMULATION FERMIONIQUES**  
[72] BABBUSH, RYAN, US  
[73] GOOGLE LLC, US  
[85] 2020-04-02  
[86] 2017-10-02 (PCT/US2017/054714)  
[87] (WO2019/070228)

[11] **3,078,746**  
[13] C

- [51] **Int.Cl. E21B 7/06 (2006.01)**  
[25] EN  
[54] **RETENTION SYSTEM FOR BOTTOM HOLE ASSEMBLY AND WHIPSTOCK**  
[54] **SYSTEME DE RETENUE POUR ENSEMBLE DE FOND DE TROU ET SIFFLET-DEVIATEUR**  
[72] KORF, JOSHUA MATTHEW, US  
[72] TEALE, DAVID W., US  
[72] HELBERT, THOMAS, US  
[73] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US  
[85] 2020-04-07  
[86] 2018-10-10 (PCT/US2018/055299)  
[87] (WO2019/075126)  
[30] US (15/730,455) 2017-10-11

[11] **3,079,028**  
[13] C

- [51] **Int.Cl. B32B 25/04 (2006.01) B32B 3/10 (2006.01) B32B 7/08 (2019.01)**  
[25] EN  
[54] **LAMINATE OF FILM WITH VAPOR-PERMEABLE BARRIER FUNCTION**  
[54] **STRATIFIE DE FILMS FONCTIONNEL DE TYPE BARRIERE PERMEABLE A LA VAPEUR**  
[72] LIN, YUWEI, CN  
[72] WU, YAOPEN, CN  
[73] FOSHAN KING WONDER HI-TECH CO., LTD., CN  
[85] 2020-04-14  
[86] 2017-04-28 (PCT/CN2017/082476)  
[87] (WO2018/192006)  
[30] CN (2017102618638) 2017-04-20

[11] **3,079,124**  
[13] C

- [51] **Int.Cl. E01C 11/26 (2006.01) F24D 13/02 (2006.01) H05B 3/36 (2006.01)**  
[25] EN  
[54] **SUSPENSION MOUNTED HEATING SYSTEM**  
[54] **SYSTEME DE CHAUFFAGE MONTE EN SUSPENSION**  
[72] THORAT, SUDHIR, US  
[72] LOGAN, STEPHEN, US  
[73] NVENT SERVICES GMBH, CH  
[85] 2020-04-15  
[86] 2018-10-16 (PCT/IB2018/001321)  
[87] (WO2019/077413)  
[30] US (62/572,923) 2017-10-16

[11] **3,082,418**  
[13] C

- [51] **Int.Cl. B21D 7/08 (2006.01) A61B 17/70 (2006.01)**  
[25] EN  
[54] **SURGICAL ROD BENDING SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE DE PLIAGE DE TIGE CHIRURGICALE**  
[72] CRAWFORD, NEIL R., US  
[72] THEODORE, NICHOLAS, US  
[72] NEWCOMB, ANNA G.U.S., US  
[72] BAEK, SEUNGWON, US  
[72] REYES, PHILIP M., US  
[73] DIGNITY HEALTH, US  
[86] (3082418)  
[87] (3082418)  
[22] 2012-12-05  
[62] 3,065,398  
[30] US (61/566,891) 2011-12-05

[11] **3,082,554**  
[13] C

- [51] **Int.Cl. G06F 17/00 (2019.01)**  
[25] EN  
[54] **DATABASE METADATA IN IMMUTABLE STORAGE**  
[54] **METADONNEES DE BASE DE DONNEES DANS UNE MEMOIRE IMMuable**  
[72] DAGEVILLE, BENOIT, US  
[72] HENTSCHEL, MARTIN, US  
[72] WADDINGTON, WILLIAM, US  
[73] SNOWFLAKE INC., US  
[85] 2020-05-12  
[86] 2018-11-14 (PCT/US2018/060922)  
[87] (WO2019/099446)  
[30] US (15/812,892) 2017-11-14

[11] **3,084,067**  
[13] C

- [51] **Int.Cl. A23J 3/00 (2006.01) A23L 13/00 (2016.01) A23P 30/20 (2016.01) A23J 3/14 (2006.01) A23J 3/22 (2006.01) A23J 3/26 (2006.01)**  
[25] EN  
[54] **FORMULATIONS AND METHODS OF PREPARING PRODUCTS WITH MEAT-LIKE TEXTURE WITH PLANT-BASED PROTEIN SOURCES**  
[54] **FORMULATIONS ET PROCEDES DE PREPARATION DE PRODUITS A TEXTURE DE TYPE VIANDE A L'AIDE DE SOURCES DE PROTEINES A BASE DE PLANTES**  
[72] MUDGAL, PRASHANT, US  
[72] SIRIS, SUPAPONG, US  
[73] THE HERSHEY COMPANY, US  
[85] 2020-05-29  
[86] 2019-01-17 (PCT/US2019/014079)  
[87] (WO2019/143859)  
[30] US (62/618,310) 2018-01-17  
[30] US (62/653,179) 2018-04-05

**Canadian Patents Issued  
January 16, 2024**

[11] **3,084,723**  
[13] C

[51] **Int.Cl. A61K 49/00 (2006.01)**  
[25] EN  
[54] **A BODY FLUID LEAKAGE  
DETECTION AQUEOUS  
COMPOSITION**  
[54] **COMPOSITION AQUEUSE DE  
DETECTION DE FUITE DE  
FLUIDE CORPOREL**  
[72] JOHANSSON, HENRIK, SE  
[72] SCHUISKY, PETER, SE  
[72] PAUSCH, THOMAS, DE  
[72] HACKERT, THILO, DE  
[73] MAGLE CHEMOSWED HOLDING  
AB, SE  
[73] UNIVERSITAT HEIDELBERG, DE  
[85] 2020-06-04  
[86] 2018-12-20 (PCT/EP2018/086183)  
[87] (WO2019/122120)  
[30] EP (17208850.2) 2017-12-20

[11] **3,085,645**  
[13] C

[51] **Int.Cl. C07D 207/16 (2006.01) A61K  
31/4025 (2006.01) A61P 35/00  
(2006.01) C07D 417/12 (2006.01)**  
[25] EN  
[54] **ALK PROTEIN DEGRADERS AND  
THEIR USE IN CANCER  
THERAPY**  
[54] **AGENT DE DEGRADATION DE  
PROTEINE ALK ET SON  
APPLICATION ANTITUMORALE**  
[72] YANG, XIAOBAO, CN  
[72] JIANG, BIAO, CN  
[72] SONG, XIAOLING, CN  
[72] LIN, HAIFAN, CN  
[72] SUN, NING, CN  
[72] CHEN, JINJU, CN  
[72] QIU, XING, CN  
[72] REN, CHAOWEI, CN  
[72] KONG, YING, CN  
[73] SHANGHAITECH UNIVERSITY, CN  
[85] 2020-06-12  
[86] 2018-12-12 (PCT/CN2018/120745)  
[87] (WO2019/114770)  
[30] CN (201711329773.4) 2017-12-13

[11] **3,087,832**  
[13] C

[51] **Int.Cl. B07B 11/06 (2006.01) B07B  
4/06 (2006.01) B07B 7/083 (2006.01)**  
[25] EN  
[54] **WIND CLASSIFIER**  
[54] **CLASSIFICATEUR A VENT**  
[72] KYTOLA, MATTI, FI  
[72] ROMPPAINEN, YRJO, FI  
[73] BMH TECHNOLOGY OY, FI  
[85] 2020-07-07  
[86] 2019-01-09 (PCT/FI2019/050011)  
[87] (WO2019/138159)  
[30] FI (20185026) 2018-01-10

[11] **3,088,408**  
[13] C

[51] **Int.Cl. H03K 3/38 (2006.01) G06N  
99/00 (2019.01) G11C 11/44 (2006.01)  
H03K 19/195 (2006.01)**  
[25] EN  
[54] **TRI-STABLE STORAGE LOOPS**  
[54] **BOUCLES DE STOCKAGE TRI-  
STABLES**  
[72] BRAUN, ALEXANDER LOUIS, US  
[73] NORTHROP GRUMMAN SYSTEMS  
CORPORATION, US  
[85] 2020-07-13  
[86] 2019-01-25 (PCT/US2019/015229)  
[87] (WO2019/152281)  
[30] US (15/886,652) 2018-02-01

[11] **3,088,759**  
[13] C

[51] **Int.Cl. F16B 1/00 (2006.01) B64C 1/06  
(2006.01) B64C 3/18 (2006.01)**  
[25] EN  
[54] **NUT PLATE ASSEMBLY**  
[54] **ASSEMBLAGE D'ECROU  
D'ANCRAGE**  
[72] WALKER, STEVEN PAUL, US  
[73] THE BOEING COMPANY, US  
[86] (3088759)  
[87] (3088759)  
[22] 2020-07-30  
[30] US (16/537,805) 2019-08-12

[11] **3,089,417**  
[13] C

[51] **Int.Cl. C07C 67/39 (2006.01) C07C  
51/16 (2006.01) C07C 59/105  
(2006.01) C07C 59/48 (2006.01) C07C  
69/675 (2006.01) C07C 69/732  
(2006.01)**  
[25] EN  
[54] **PROCESS OF PRODUCING  
ALPHA-HYDROXY COMPOUNDS  
AND USES THEREOF**  
[54] **PROCEDE DE PRODUCTION DE  
COMPOSES ALPHA-HYDROXY  
ET LEURS UTILISATIONS**  
[72] TAARNING, ESBEN, DK  
[72] TOLBORG, SOREN, JUAN  
[72] MARTINEZ ESPIN, JUAN  
SALVADOR, DK  
[73] TOPSOE A/S, DK  
[85] 2020-07-23  
[86] 2019-01-23 (PCT/EP2019/051632)  
[87] (WO2019/154624)  
[30] DK (PA 2018 00064) 2018-02-09

[11] **3,089,589**  
[13] C

[51] **Int.Cl. C08F 220/14 (2006.01) C10M  
119/12 (2006.01)**  
[25] EN  
[54] **VISCOSITY INDEX IMPROVER  
WITH IMPROVED SHEAR-  
RESISTANCE**  
[54] **AMELIORANT D'INDICE DE  
VISCOSITE A RESISTANCE AU  
CISAILLEMENT**  
[72] JUSTEL, REBECCA, DE  
[72] JANSSEN, DIETER, DE  
[73] EVONIK OPERATIONS GMBH, DE  
[86] (3089589)  
[87] (3089589)  
[22] 2020-08-10  
[30] EP (19 191 368) 2019-08-13

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,090,485**  
[13] C

[51] **Int.Cl. A61K 31/437 (2006.01) A61K 31/404 (2006.01) A61K 31/407 (2006.01) A61K 31/423 (2006.01) A61K 31/519 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **HETEROBICYCLIC CARBOXYLIC ACIDS FOR TREATING CANCER OR INFLAMMATORY DISEASES**

[54] **ACIDES CARBOXYLIQUES HETEROBICYCLIQUES POUR TRAITER LE CANCER OU DES MALADIES INFLAMMATOIRES**

[72] ZHOU, GANG, CN

[72] SUN, YONGKUI, CN

[72] WANG, ZHAOYIN, CN

[73] SHENZHEN IONOVA LIFE SCIENCE CO., LTD., CN

[73] FOSHAN IONOVA BIOTHERAPEUTICS CO., INC., CN

[85] 2020-08-05

[86] 2019-02-02 (PCT/CN2019/074618)

[87] (WO2019/149286)

[30] CN (PCT/CN2018/075198) 2018-02-05

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[11] **3,092,885**  
[13] C

[51] **Int.Cl. C07F 9/32 (2006.01) A61K 31/66 (2006.01) A61K 31/662 (2006.01) A61P 27/02 (2006.01) C07F 9/28 (2006.01) C07F 9/30 (2006.01) C07F 9/50 (2006.01)**

[25] EN

[54] **PHOSPHORUS-CONTAINING COMPOUND AND PREPARATION AND USE THEREOF**

[54] **COMPOSE CONTENANT DU PHOSPHORE, PREPARATION ET UTILISATION ASSOCIEES**

[72] SHEN, WANG, CN

[72] DING, YUE, CN

[72] JIANG, HAO, CN

[72] CHEN, FU LI, CN

[72] WANG, JIANGFENG, CN

[72] WU, XINGLONG, CN

[72] LI, CUNFEI, CN

[72] YANG, LIGUO, CN

[72] HU, BIAO, CN

[72] JIANG, QIYANG, CN

[72] AN, ZHIXING, CN

[72] DANG, KUIFENG, CN

[73] VIVAVISIONSHANGHAILTD, CN

[85] 2020-09-02

[86] 2018-05-21 (PCT/CN2018/087629)

[87] (WO2019/001171)

[30] CN (201710502653.3) 2017-06-27

[30] CN (201810291023.0) 2018-04-03

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[11] **3,092,897**  
[13] C

[51] **Int.Cl. E04G 11/48 (2006.01) E01D 21/00 (2006.01) E01D 21/06 (2006.01) E04G 5/06 (2006.01) E04G 13/06 (2006.01) E04G 17/16 (2006.01)**

[25] EN

[54] **METHOD FOR DISPLACING A CEILING FORMWORK, COLLISION PROTECTION ELEMENT, AND CEILING FORMWORK, SUPPORTING DEVICE AND INCREMENTAL LAUNCHING DEVICE COMPRISING SUCH A COLLISION PROTECTION ELEMENT**

[54] **PROCEDE POUR DEPLACER UN COFFRAGE DE DALLE, ELEMENT ANTI-TAMPONNAGE AINSI QUE COFFRAGE DE DALLE, DISPOSITIF SUPPORT ET DISPOSITIF DE DEPLACEMENT PAR CYCLE PRESENTANT UN TEL ELEMENT ANTI-TAMPONNAGE**

[72] STURM, FLORIAN, DE

[73] PERI SE, DE

[85] 2020-09-02

[86] 2019-03-06 (PCT/DE2019/100202)

[87] (WO2019/170197)

[30] DE (10 2018 203 612.8) 2018-03-09

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[11] **3,093,327**  
[13] C

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C12N 15/13 (2006.01)**

[25] EN

[54] **TARGETED CD73 ANTIBODY AND ANTIBODY-DRUG CONJUGATE, AND PREPARATION METHOD THEREFOR AND USES THEREOF**

[54] **ANTICORPS CD73 CIBLE ET CONJUGUE ANTICORPS-MEDICAMENT, PROCEDE DE PREPARATION ASSOCIE ET UTILISATIONS CORRESPONDANTES**

[72] YU, KE, CN

[72] JIN, RUI, CN

[72] LIU, LIANG, CN

[73] FUDAN UNIVERSITY, CN

[73] BLISS BIOPHARMACEUTICAL (HANGZHOU) CO., LTD., CN

[85] 2020-09-08

[86] 2019-03-07 (PCT/CN2019/077369)

[87] (WO2019/170131)

[30] CN (201810188351.8) 2018-03-07

[30] CN (201810506111.8) 2018-05-24

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[11] **3,094,567**  
[13] C

[51] **Int.Cl. H05B 3/20 (2006.01) C23C 4/134 (2016.01) B05B 7/22 (2006.01) C23C 4/02 (2006.01) H05B 3/03 (2006.01)**

[25] EN

[54] **APPARATUS FOR FEEDING AND DOSING POWDER, APPARATUS FOR PRODUCING A LAYER STRUCTURE ON A SURFACE AREA OF A DEVICE, PLANAR HEATING ELEMENT AND METHOD FOR PRODUCING A PLANAR HEATING ELEMENT**

[54] **DISPOSITIF DE TRANSPORT ET DE DOSAGE DE POUDRE, DISPOSITIF DE FABRICATION D'UNE STRUCTURE EN COUCHES SUR UNE SURFACE D'UN ELEMENT DE CONSTRUCTION, ELEMENT CHAUFFANT PLAT ET PROCEDE DE FABRICATION D'UN ELEMENT CHAUFFANT PLAT**

[72] RIEMENSPERGER, REINHOLD, DE

[72] FLADE, ENRICO, DE

[73] ECOCOAT GMBH, DE

[85] 2020-09-21

[86] 2019-03-22 (PCT/EP2019/057187)

[87] (WO2019/180190)

[30] DE (10 2018 204 429.5) 2018-03-22

[30] DE (10 2018 204 428.7) 2018-03-22

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[11] **3,095,372**  
[13] C

[51] **Int.Cl. B64D 15/12 (2006.01) B64D 15/08 (2006.01) B64D 15/16 (2006.01)**

[25] EN

[54] **ICE REMOVAL SYSTEM**

[54] **SYSTEME D'ELIMINATION DE GIVRE**

[72] GOODFELLOW-JONES, STEPHEN, GB

[72] BROOKS, ASHLEY, GB

[73] GKN AEROSPACE SERVICES LIMITED, GB

[85] 2020-09-28

[86] 2019-03-29 (PCT/GB2019/050936)

[87] (WO2019/186206)

[30] GB (1805284.5) 2018-03-29

**Canadian Patents Issued  
January 16, 2024**

[11] **3,095,640**  
[13] C

[51] **Int.Cl. B01F 35/213 (2022.01) H04W 4/38 (2018.01) H04W 4/80 (2018.01) B01F 27/9212 (2022.01) B01F 35/214 (2022.01) A01F 25/14 (2006.01) A23N 17/00 (2006.01) H04L 12/40 (2006.01) A01K 5/00 (2006.01)**

[25] EN  
[54] **FODDER MIXING WAGON**  
[54] **WAGON MELANGEUR DE FOURRAGE**

[72] LIET, ROBERT JAN, NL  
[73] TRIOLIET B.V., NL  
[86] (3095640)  
[87] (3095640)  
[22] 2020-10-08  
[30] DE (20 2019 106 424.2) 2019-11-19

[11] **3,096,979**  
[13] C

[51] **Int.Cl. C25B 11/073 (2021.01) C25B 3/26 (2021.01) B01J 23/72 (2006.01) H01M 8/06 (2016.01)**

[25] EN  
[54] **BORON-DOPED COPPER CATALYSTS FOR EFFICIENT CONVERSION OF CO2 TO MULTI-CARBON HYDROCARBONS AND ASSOCIATED METHODS**  
[54] **CATALYSEURS DE CUIVRE DOPES AU BORE PERMETTANT UNE CONVERSION EFFICACE DE CO2 EN HYDROCARBURES MULTI-CARBONE ET PROCEDES ASSOCIES**

[72] SARGENT, EDWARD, CA  
[72] DE LUNA, PHIL, CA  
[72] CHE, FANGLIN, CA  
[72] ZHOU, YANSONG, CA  
[73] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA  
[73] TOTALENERGIES ONETECH, FR  
[85] 2020-10-02  
[86] 2019-04-23 (PCT/EP2019/060329)  
[87] (WO2019/206882)  
[30] US (62/661,723) 2018-04-24

[11] **3,097,138**  
[13] C

[51] **Int.Cl. E06B 3/67 (2006.01) E06B 3/673 (2006.01)**

[25] EN  
[54] **INTEGRATED SASH ASSEMBLY**  
[54] **ASSEMBLAGE DE CHASSIS INTEGRE**

[72] SCHRODER, PAUL D., US  
[73] PELLA CORPORATION, US  
[86] (3097138)  
[87] (3097138)  
[22] 2020-10-27  
[30] US (62/927,021) 2019-10-28

[11] **3,097,513**  
[13] C

[51] **Int.Cl. B01D 53/44 (2006.01) B01D 53/94 (2006.01)**

[25] EN  
[54] **METHANE DESTRUCTION APPARATUS AND METHOD OF CONVERTING FUGITIVE METHANE EMISSIONS**  
[54] **APPAREIL DE DESTRUCTION DE METHANE ET METHODE DE CONVERSION D'EMISSIONS DE METHANE FUGITIVES**

[72] MALDONADO, ALEJANDRO, CA  
[73] THERMON CANADA INC., CA  
[86] (3097513)  
[87] (3097513)  
[22] 2020-10-30

[11] **3,097,823**  
[13] C

[51] **Int.Cl. C05D 9/02 (2006.01) C05C 7/00 (2006.01) C05G 3/00 (2020.01)**

[25] EN  
[54] **TIME-RELEASE MOLYBDENUM FERTILIZER INCLUDING A CALCIUM SOURCE**  
[54] **ENGRAIS DE MOLYBDENE A LIBERATION LENTE COMPRENANT UNE SOURCE DE CALCIUM**

[72] MARTIN, ELLIOTT, US  
[72] GEIGER, ROBERT A., US  
[72] GOODWIN, MARK, CA  
[73] KOCH AGRONOMIC SERVICES, LLC, US  
[85] 2020-10-20  
[86] 2018-05-03 (PCT/US2018/030926)  
[87] (WO2019/209352)  
[30] US (15/959,772) 2018-04-23

[11] **3,099,535**  
[13] C

[51] **Int.Cl. A23L 27/30 (2016.01) C08B 37/14 (2006.01) C12P 19/02 (2006.01) C12P 19/04 (2006.01) C12P 19/14 (2006.01)**

[25] EN  
[54] **COMPOSITIONS COMPRISING GLUCOSE AND HEMICELLULOSE AND THEIR USE**  
[54] **COMPOSITIONS COMPRENANT DU GLUCOSE ET DE L'HEMICELLULOSE ET LEUR UTILISATION**

[72] RICHARD, ANDREW, CA  
[72] D'AGOSTINO, DENNIS, CA  
[72] TROYER, RICHARD LLOYD, JR., US  
[73] COMET BIOREFINING INC., CA  
[85] 2020-11-05  
[86] 2019-05-10 (PCT/US2019/031760)  
[87] (WO2019/217844)  
[30] US (62/669,684) 2018-05-10

[11] **3,099,906**  
[13] C

[51] **Int.Cl. C12N 1/20 (2006.01) A61K 35/745 (2015.01) A61K 35/747 (2015.01) A23K 10/16 (2016.01) A23L 33/135 (2016.01) A61P 35/00 (2006.01)**

[25] EN  
[54] **NOVEL STRAIN HAVING PROPHYLACTIC OR THERAPEUTIC EFFECT ON CANCER**  
[54] **NOUVELLE SOUCHE AYANT UN EFFET PROPHYLACTIQUE OU THERAPEUTIQUE SUR LE CANCER**

[72] PARK, HANSOO, KR  
[72] PARK, SHINYOUNG, KR  
[72] LEE, EUN JU, KR  
[72] YEON, JAE-SUNG, KR  
[72] JEON, HYE HEE, KR  
[72] KIM, WONDUCK, KR  
[72] CHUNG, JOO-YEON, KR  
[72] JEONG, AREUM, KR  
[72] HOUH, YOUN KYUNG, KR  
[72] SOHN, JINYOUNG, KR  
[72] KIM, YUN YEON, KR  
[72] KIM, SANG GYUN, KR  
[72] LEE, SURO, KR  
[73] GENOME AND COMPANY, KR  
[85] 2020-11-10  
[86] 2019-05-08 (PCT/KR2019/005518)  
[87] (WO2019/216649)  
[30] KR (10-2018-0054195) 2018-05-11  
[30] KR (10-2018-0133030) 2018-11-01

**Brevets canadiens délivrés  
16 janvier 2024**

[11] **3,100,960**

[13] C

[51] **Int.Cl. H05B 45/30 (2020.01) H05B 45/10 (2020.01) H05B 45/20 (2020.01) H05B 45/40 (2020.01) H05B 47/175 (2020.01) H05B 47/19 (2020.01)**

[25] EN

[54] **LED LIGHTING DEVICE WITH LED BOARD ON NETWORK**

[54] **DISPOSITIF D'ECLAIRAGE A DEL DOTE D'UNE CARTE A DEL SUR RESEAU**

[72] BRADFORD, EVERETT, US

[73] IDEAL INDUSTRIES LIGHTING LLC, US

[85] 2020-11-19

[86] 2019-05-14 (PCT/US2019/032134)

[87] (WO2019/226411)

[30] US (15/987,965) 2018-05-24

[11] **3,102,494**

[13] C

[51] **Int.Cl. B60K 31/00 (2006.01)**

[25] EN

[54] **VEHICLE SPEED MANAGEMENT SYSTEMS AND METHODS**

[54] **SYSTEMES ET METHODES DE GESTION DE LA VITESSE D'UN VEHICULE**

[72] VRBA, MATTHEW, US

[72] KERNWEIN, JEFFREY, US

[73] WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION, US

[86] (3102494)

[87] (3102494)

[22] 2020-12-11

[30] US (16/728,753) 2019-12-27

[11] **3,103,016**

[13] C

[51] **Int.Cl. H01J 37/08 (2006.01) C23C 14/35 (2006.01) C23C 14/46 (2006.01) H01J 27/14 (2006.01) H01J 37/305 (2006.01) H01J 37/317 (2006.01) H01J 37/34 (2006.01)**

[25] EN

[54] **SINGLE BEAM PLASMA SOURCE**

[54] **SOURCE DE PLASMA A FAISCEAU UNIQUE**

[72] FAN, QI HUA, US

[72] SCHUELKE, THOMAS, US

[72] HAUBOLD, LARS, US

[72] PETZOLD, MICHAEL, US

[73] BOARD OF TRUSTEES OF MICHIGAN STATE UNIVERSITY, US

[73] FRAUNHOFER USA, US

[85] 2020-12-07

[86] 2019-06-19 (PCT/US2019/038034)

[87] (WO2019/246296)

[30] US (62/687,357) 2018-06-20

[11] **3,103,628**

[13] C

[51] **Int.Cl. F16K 31/06 (2006.01) F16K 31/08 (2006.01)**

[25] EN

[54] **LINEAR MAGNETIC VALVE ACTUATOR WITH EXTERNAL MAGNETS AND INTERNAL MAGNETIC FLUX PATH**

[54] **ACTIONNEUR A VANNE MAGNETIQUE LINEAIRE COMPRENANT DES AIMANTS EXTERNES ET CHEMIN DE FLUX MAGNETIQUE INTERNE**

[72] DAVIS, EDWARD P., US

[73] DAVIS, EDWARD P., US

[85] 2020-12-11

[86] 2019-06-14 (PCT/US2019/037338)

[87] (WO2019/241723)

[30] US (62/685,115) 2018-06-14

[11] **3,103,645**

[13] C

[51] **Int.Cl. C22B 23/00 (2006.01) C22B 3/08 (2006.01) C22B 3/10 (2006.01) C22B 7/00 (2006.01)**

[25] EN

[54] **METHOD FOR SEPARATING COPPER FROM NICKEL AND COBALT**

[54] **PROCEDE POUR SEPARER LE CUIVRE DU NICKEL ET DU COLBALT**

[72] HIGAKI, TATSUYA, JP

[72] TAKENOUCHI, HIROSHI, JP

[72] KOBAYASHI, HIROSHI, JP

[73] SUMITOMO METAL MINING CO., LTD., JP

[85] 2020-12-11

[86] 2019-06-21 (PCT/JP2019/024805)

[87] (WO2020/004285)

[30] JP (2018-121733) 2018-06-27

[11] **3,104,176**

[13] C

[51] **Int.Cl. C01B 3/04 (2006.01) B01D 53/22 (2006.01) B01D 53/52 (2006.01) C01B 3/02 (2006.01) C01B 3/50 (2006.01) C01B 17/02 (2006.01)**

[25] EN

[54] **PROCESS AND DEVICE FOR CONVERTING HYDROGEN SULFIDE INTO HYDROGEN GAS AND SULFUR**

[54] **PROCEDE ET DISPOSITIF POUR CONVERTIR DU SULFURE D'HYDROGENE EN HYDROGENEGAZEUX ET EN SULFURE**

[72] WASAS, JAMES, US

[72] WASAS, MARIAVICENTA, US

[73] STANDARD HYDROGEN COMPANY, INC., US

[85] 2020-12-18

[86] 2020-11-19 (PCT/US2020/061311)

[87] (WO2021/188161)

[30] US (16/905,204) 2020-06-18

[30] US (62/992,477) 2020-03-20

Canadian Patents Issued  
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[11] **3,105,250**  
[13] C

[51] **Int.Cl. E04D 1/12 (2006.01) E04D 1/36 (2006.01)**

[25] EN

[54] **ROOFING SHINGLES WITH REGISTERED SELF-SEAL STRIP PATTERNS**

[54] **BARDEAUX DE TOIT COMPORTANT DES MOTIFS DE BANDES AUTOETANCHES ENREGISTRES**

[72] LEITCH, OLAN T., US

[73] BUILDING MATERIALS INVESTMENT CORPORATION, US

[86] (3105250)

[87] (3105250)

[22] 2021-01-08

[30] US (62/959,236) 2020-01-10

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[11] **3,105,277**  
[13] C

[51] **Int.Cl. G06F 3/01 (2006.01)**

[25] EN

[54] **SPLIT-TYPE HEAD-MOUNTED DISPLAY SYSTEM AND INTERACTION METHOD**

[54] **SYSTEME DE VISIOCASQUE DE TYPE DIVISE ET PROCEDE D'INTERACTION**

[72] ZHU, GUANG, CN

[73] ZHU, GUANG, CN

[85] 2020-12-29

[86] 2019-04-26 (PCT/CN2019/084552)

[87] (WO2020/001151)

[30] CN (201810673525.X) 2018-06-26

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[11] **3,105,601**  
[13] C

[51] **Int.Cl. C12N 5/0783 (2010.01)**

[25] EN

[54] **GENERATING CIK NKT CELLS FROM CORD BLOOD**

[54] **GENERATION DE CELLULES CIK NKT A PARTIR DE SANG DE CORDON**

[72] DUGGAL, ROHIT, US

[72] SINHA, RANJEET, US

[73] IMMUNITYBIO, INC., US

[85] 2021-01-04

[86] 2019-07-01 (PCT/US2019/040145)

[87] (WO2020/014029)

[30] US (62/696,131) 2018-07-10

---

[11] **3,105,795**  
[13] C

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/395 (2006.01) A61K 31/5025 (2006.01) A61K 31/506 (2006.01) A61K 31/5377 (2006.01) A61P 29/00 (2006.01) A61P 37/06 (2006.01)**

[25] EN

[54] **PYRROLO[1,2-B]PYRIDAZINE DERIVATIVES AS IRAK4 INHIBITORS**

[54] **DERIVES DE PYRROLO [1,2-B] PYRIDAZINE EN TANT QU'INHIBITEURS D'IRAK4**

[72] AMMANN, STEPHEN, US

[72] BACON, ELIZABETH M., US

[72] BRIZGYS, GEDIMINAS, US

[72] CHIN, ELBERT, US

[72] CHOU, CHIENHUNG, US

[72] COTTELL, JEROMY J., US

[72] NDUKWE, MARILYN, US

[72] TAYLOR, JAMES G., US

[72] WRIGHT, NATHAN E., US

[72] YANG, ZHENG-YU, US

[72] ZIPFEL, SHEILA M., US

[73] GILEAD SCIENCES, INC., US

[85] 2021-01-05

[86] 2019-08-13 (PCT/US2019/046380)

[87] (WO2020/036979)

[30] US (62/718,273) 2018-08-13

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[11] **3,105,805**  
[13] C

[51] **Int.Cl. G01S 7/529 (2006.01) G01S 15/89 (2006.01)**

[25] EN

[54] **TIME-CORRECTED GAIN METHOD IMPLEMENTED IN AN ULTRASONIC SCANNER**

[54] **METHODE DE GAIN A CORRECTION TEMPORELLE MISE EN OEUVRE DANS UN BALAYEUR ULTRASONIQUE**

[72] SICARD, RENE, CA

[72] GRIMARD, NICOLAS, CA

[73] TECSCAN SYSTEMS INC., CA

[86] (3105805)

[87] (3105805)

[22] 2021-01-14

[30] US (63/017,949) 2020-04-30

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[11] **3,105,884**  
[13] C

[51] **Int.Cl. A61K 31/04 (2006.01) A61K 31/06 (2006.01) A61K 31/664 (2006.01) A61P 29/00 (2006.01) C07B 55/00 (2006.01) C07C 205/38 (2006.01) C07F 9/22 (2006.01) C07F 9/564 (2006.01)**

[25] EN

[54] **USE OF COMPOUND IN DRUG FOR PREVENTING, TREATING, OR ALLEVIATING PAIN**

[54] **UTILISATION D'UN COMPOSE DANS UN MEDICAMENT SERVANT A PREVENIR, A TRAITER OU A SOULAGER LA DOULEUR**

[72] DUAN, JIANXIN, CN

[72] LI, ANRONG, US

[72] MENG, FANYING, US

[72] JUNG, DONALD T., US

[73] OBI PHARMA, INC., TW

[85] 2021-01-06

[86] 2019-04-26 (PCT/CN2019/084604)

[87] (WO2020/010900)

[30] CN (201810745871.4) 2018-07-09

---

[11] **3,106,109**  
[13] C

[51] **Int.Cl. C11D 3/30 (2006.01) D06L 4/657 (2017.01) C11D 3/00 (2006.01) C11D 3/37 (2006.01) C11D 11/00 (2006.01) D06L 1/04 (2006.01) D06M 13/00 (2006.01) D06M 13/332 (2006.01)**

[25] EN

[54] **TREATMENT COMPOSITIONS COMPRISING LOW LEVELS OF AN OLIGOAMINE**

[54] **COMPOSITIONS DE TRAITEMENT COMPRENANT DE FAIBLES TAUX D'UNE OLIGOAMINE**

[72] RANDALL, SHERRI, LYNN, US

[72] MELI, FABRIZIO, US

[72] MIRACLE, GREGORY, SCOT, US

[72] STENGER, PATRICK, CHRISTOPHER, US

[72] VETTER, KERRY, ANDREW, US

[72] BIANCHETTI, GIULIA, OTTAVIA, BE

[73] THE PROCTER & GAMBLE COMPANY, US

[85] 2021-01-08

[86] 2019-08-14 (PCT/US2019/046479)

[87] (WO2020/041062)

[30] EP (18190606.6) 2018-08-24

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,107,004**  
[13] C

[51] **Int.Cl. G06F 11/36 (2006.01) H04W 24/00 (2009.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR FACILITATING PERFORMANCE TESTING**  
[54] **SYSTEME ET METHODE POUR FACILITER LES ESSAIS DE RENDEMENT**  
[72] SUBBUNARAYANAN, PERIYAKARUPPAN, CA  
[72] KATHURIA, AAYUSH, CA  
[72] AIRD, KEVIN, CA  
[73] THE TORONTO-DOMINION BANK, CA  
[86] (3107004)  
[87] (3107004)  
[22] 2021-01-26

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[11] **3,108,119**  
[13] C

[51] **Int.Cl. G01N 33/48 (2006.01) C12Q 1/6809 (2018.01) G01N 33/483 (2006.01) G01N 33/574 (2006.01)**  
[25] EN  
[54] **MARKERS OF ACUTE MYELOID LEUKEMIA STEM CELLS**  
[54] **MARQUEURS DES CELLULES SOUCHES DE LA LEUCEMIE MYELOIDE AIGUE**  
[72] MAJETI, RAVINDRA, US  
[72] WEISSMAN, IRVING L., US  
[73] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US  
[86] (3108119)  
[87] (3108119)  
[22] 2009-01-13  
[62] 2,965,198  
[30] US (61/011,324) 2008-01-15

---

[11] **3,108,441**  
[13] C

[51] **Int.Cl. B28B 1/26 (2006.01) B28B 7/34 (2006.01) B28B 7/36 (2006.01) C04B 28/00 (2006.01)**  
[25] EN  
[54] **CAST MOLD FORMING COMPOSITIONS AND USES THEREOF**  
[54] **COMPOSITIONS DE FORMATION DE MOULE DE COULEE ET LEURS UTILISATIONS**  
[72] SELLA, IDO, IL  
[72] FINKEL, SHIMRIT, IL  
[73] ECONCRETE TECH LTD, IL  
[85] 2021-02-02  
[86] 2019-08-14 (PCT/IL2019/050912)  
[87] (WO2020/035862)  
[30] US (62/718,407) 2018-08-14

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[11] **3,108,777**  
[13] C

[51] **Int.Cl. B01D 57/00 (2006.01) B01D 57/02 (2006.01) B01J 19/08 (2006.01) B01L 3/00 (2006.01) B05C 5/00 (2006.01) G01N 1/18 (2006.01) G01N 33/48 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR DETERMINING THE CONCENTRATION OF ANALYTES IN WHOLE BLOOD**  
[54] **PROCEDE ET DISPOSITIF POUR DETERMINER DE LA CONCENTRATION D'ANALYTE DANS LE SANG TOTAL**  
[72] MEHTA, KALPESH, IN  
[72] AZHAR, MOHIUDEEN, IN  
[73] SIEMENS HEALTHCARE DIAGNOSTICS INC., US  
[85] 2021-02-04  
[86] 2019-07-31 (PCT/US2019/044294)  
[87] (WO2020/033192)  
[30] US (62/715,019) 2018-08-06

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[11] **3,109,369**  
[13] C

[51] **Int.Cl. H04R 1/02 (2006.01) H01R 13/52 (2006.01) H04R 1/10 (2006.01) H04R 1/34 (2006.01) H04R 1/44 (2006.01) H04R 5/033 (2006.01) H04R 25/00 (2006.01)**  
[25] EN  
[54] **EARPLUG WITH WIRELESS AUDIO COMMUNICATION**  
[54] **OREILLETTE AVEC COMMUNICATION AUDIO SANS FIL**  
[72] BLUNDELL, MICHAEL PEARSON, US  
[72] HUDSON, CHRISTOPHER A., US  
[72] BRUTLER, ZOLTAN S., US  
[73] GENTEX CORPORATION, US  
[85] 2021-02-10  
[86] 2019-09-04 (PCT/US2019/049515)  
[87] (WO2020/051210)  
[30] US (62/727,327) 2018-09-05

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[11] **3,109,906**  
[13] C

[51] **Int.Cl. B03B 5/10 (2006.01) B03B 5/24 (2006.01) B03B 11/00 (2006.01)**  
[25] EN  
[54] **A SEPARATION APPARATUS AND METHOD**  
[54] **APPAREIL ET PROCEDE DE SEPARATION**  
[72] VERMEULEN, JOHANNES JACOBUS, ZA  
[73] PULSATING JIGS INTERNATIONAL (PTY) LTD, ZA  
[85] 2021-02-17  
[86] 2019-03-29 (PCT/IB2019/052598)  
[87] (WO2020/035746)  
[30] ZA (2018/05502) 2018-08-17

Canadian Patents Issued  
January 16, 2024

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[11] **3,110,398**  
[13] C  
[51] **Int.Cl. C22B 3/44 (2006.01) B01D 11/04 (2006.01) C22B 23/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR PREPARING A HIGH-PURITY HYDRATED NICKEL SULPHATE**  
[54] **PROCEDE POUR LA PREPARATION D'UN SULFATE DE NICKEL HYDRATE DE HAUTE PURETE**  
[72] OSTEN, KAREL JOHN, AU  
[72] GRASSI, ROSSANO ANTONIO, AU  
[72] GUTIERREZ CLAUDSDORFF, ARTURO, AU  
[72] HARRISON, RYAN COLIN, AU  
[73] IGO LIMITED, AU  
[85] 2021-02-22  
[86] 2019-09-26 (PCT/AU2019/051044)  
[87] (WO2020/061639)  
[30] AU (2018903643) 2018-09-27  
[30] AU (2019901760) 2019-05-23

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[11] **3,110,639**  
[13] C  
[51] **Int.Cl. G01R 33/48 (2006.01) G01R 33/485 (2006.01) G01R 33/561 (2006.01) G01R 33/24 (2006.01) G01R 33/44 (2006.01) G01R 33/50 (2006.01)**  
[25] EN  
[54] **A METHOD OF ANALYSING MAGNETIC RESONANCE IMAGING IMAGES**  
[54] **PROCEDE D'ANALYSE D'IMAGES D'IMAGERIE PAR RESONANCE MAGNETIQUE**  
[72] BAGUR, ALEXANDRE, GB  
[72] HUTTON, CHLOE, GB  
[72] IRVING, BEN, GB  
[72] GYNGELL, MICHAEL L., GB  
[72] ROBSON, MATTHEW, GB  
[72] BRADY, MICHAEL, GB  
[73] PERSPECTUM LIMITED, GB  
[85] 2021-02-24  
[86] 2019-09-04 (PCT/EP2019/073545)  
[87] (WO2020/049025)  
[30] GB (1814358.6) 2018-09-04

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[11] **3,110,852**  
[13] C  
[51] **Int.Cl. A45D 40/26 (2006.01)**  
[25] EN  
[54] **MASCARA APPLICATOR**  
[54] **APPLICATEUR DE MASCARA**  
[72] DEMPSEY, JILLIAN, US  
[73] JILFINITY AND BEYOND, LLC., US  
[85] 2021-02-25  
[86] 2019-08-26 (PCT/US2019/048119)  
[87] (WO2020/046803)  
[30] US (16/116,586) 2018-08-29

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[11] **3,111,243**  
[13] C  
[51] **Int.Cl. A23K 20/158 (2016.01) A23K 50/30 (2016.01) A23K 50/60 (2016.01)**  
[25] EN  
[54] **MONOGLYCERIDE USE IN ANIMALS**  
[54] **UTILISATION DE MONOGLYCERIDES CHEZ DES ANIMAUX**  
[72] FARIS, RICHARD JOEL, US  
[72] ZHAO, JUNMEI, US  
[73] CAN TECHNOLOGIES, INC., US  
[85] 2021-02-25  
[86] 2019-08-27 (PCT/US2019/048264)  
[87] (WO2020/046879)  
[30] US (62/724,979) 2018-08-30

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[11] **3,111,255**  
[13] C  
[51] **Int.Cl. A61B 1/303 (2006.01) G16H 50/20 (2018.01) A61B 1/05 (2006.01) A61B 1/06 (2006.01) A61B 10/04 (2006.01)**  
[25] EN  
[54] **MEDICAL DEVICE FOR CONDUCTING PAPANICOLAOU(PAP) TEST**  
[54] **APPAREIL MEDICAL POUR REALISER UN DEPISTAGE DU CANCER DU COL UTERIN**  
[72] AYAGH, KAMRAN, US  
[73] AYAGH, KAMRAN, US  
[86] (3111255)  
[87] (3111255)  
[22] 2021-03-04  
[30] US (17/147746) 2021-01-13

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[11] **3,111,729**  
[13] C  
[51] **Int.Cl. A61M 16/00 (2006.01) A61M 16/10 (2006.01) A61M 16/16 (2006.01)**  
[25] EN  
[54] **ZONE HEATING FOR RESPIRATORY CIRCUITS**  
[54] **CHAUFFAGE DE ZONE POUR CIRCUITS RESPIRATOIRES**  
[72] TONKIN, PAUL JAMES, NZ  
[72] BUSWELL, MATTHEW LIAM, NZ  
[72] CUDDY, HELEN, NZ  
[72] EDWARDS, THOMAS JAMES, NZ  
[72] MILLAR, GAVIN WALSH, NZ  
[72] OOSTHUYSEN, HELGARD, NZ  
[72] VAN SCHALKWYK, ANDRE, NZ  
[72] KWAN, IAN LEE WAI, NZ  
[72] SI, PING, NZ  
[72] ALNASHI, SINAA, NZ  
[72] ORCHARD, KIERAN MICHAEL, NZ  
[72] AL-TIAY, IBRAHIM, NZ  
[72] STOKS, ELMO BENSON, NZ  
[72] NORTH, CHARLES CHRISTOPHER, NZ  
[72] WILSON, MATTHEW ROBERT, NZ  
[73] FISHER & PAYKEL HEALTHCARE LIMITED, NZ  
[86] (3111729)  
[87] (3111729)  
[22] 2013-11-14  
[62] 2,891,699  
[30] US (61/726,532) 2012-11-14  
[30] US (61/786,141) 2013-03-14  
[30] US (61/877,566) 2013-09-13  
[30] US (61/877,622) 2013-09-13  
[30] US (61/877,784) 2013-09-13  
[30] US (61/877,736) 2013-09-13

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[11] **3,111,759**  
[13] C  
[51] **Int.Cl. A24F 40/10 (2020.01) A24B 15/16 (2020.01)**  
[25] EN  
[54] **DISPOSABLE LIQUID AEROSOL GENERATING ARTICLE AND AEROSOL GENERATING DEVICE**  
[54] **ARTICLE DE GENERATION D'AEROSOL LIQUIDE JETABLE ET DISPOSITIF DE GENERATION D'AEROSOL**  
[72] PARK, IN SU, KR  
[72] KO, DONG KYUN, KR  
[72] CHOI, SANG WON, KR  
[72] JUNG, SUN HWAN, KR  
[72] JEOUNG, EUN MI, KR  
[73] KT&G CORPORATION, KR  
[85] 2021-03-04  
[86] 2019-10-29 (PCT/KR2019/014394)  
[87] (WO2020/091393)  
[30] KR (10-2018-0131318) 2018-10-30



**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,111,970**  
[13] C

[51] **Int.Cl. E21B 43/12 (2006.01)**  
[25] EN  
[54] **GAS OPERATED, RETRIEVABLE WELL PUMP FOR ASSISTING GAS LIFT**  
[54] **POMPE DE Puits RECUPERABLE ACTIONNEE PAR GAZ POUR FACILITER L'EXTRACTION AU GAZ**  
[72] HANSEN, HENNING, NO  
[73] HANSEN DOWNHOLE PUMP SOLUTIONS AS, NO  
[85] 2021-03-05  
[86] 2019-09-16 (PCT/IB2019/057783)  
[87] (WO2020/058824)  
[30] US (62/732,412) 2018-09-17

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[11] **3,112,710**  
[13] C

[51] **Int.Cl. H04H 20/86 (2009.01) H03M 13/47 (2006.01) H04J 11/00 (2006.01)**  
[25] EN  
[54] **DYNAMIC CONFIGURATION OF A FLEXIBLE ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING PHY TRANSPORT DATA FRAME PREAMBLE**  
[54] **CONFIGURATION DYNAMIQUE D'UN PREAMBULE DE TRAME DE DONNEES DE TRANSPORT PHY DE MULTIPLEXAGE PAR REPARTITION ORTHOGONALE DE LA FREQUENCE SOUPLE**  
[72] SHELBY, KEVIN A., US  
[72] SIMON, MICHAEL J., US  
[72] EARNSHAW, MARK, CA  
[72] RAZA, ZAHIR JAFFER, CA  
[73] ONE MEDIA, LLC, US  
[86] (3112710)  
[87] (3112710)  
[22] 2015-08-25  
[62] 3,033,288  
[30] US (62/041,478) 2014-08-25

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[11] **3,112,738**  
[13] C

[51] **Int.Cl. B01D 45/12 (2006.01) B01D 46/02 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR REMOVING PARTICULATE MATTER FROM BIOMASS COMBUSTION EXHAUST GAS COMPRISING GAS CYCLONES AND BAGHOUSES**  
[54] **SYSTEME POUR RETIRER UNE MATIERE PARTICULAIRE D'UN GAZ D'ECHAPPEMENT DE COMBUSTION DE BIOMASSE COMPRENANT DES CYCLONES DE GAZ ET DES FILTRES A MANCHES**  
[72] MAENDEL, DAVID, CA  
[73] TRIPLE GREEN PRODUCTS INC., CA  
[86] (3112738)  
[87] (3112738)  
[22] 2021-03-22  
[30] US (63010187) 2020-04-15

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[11] **3,113,521**  
[13] C

[51] **Int.Cl. H04N 19/119 (2014.01) H04N 19/176 (2014.01)**  
[25] EN  
[54] **VIDEO CODING IN WHICH A BLOCK IS SPLIT INTO MULTIPLE SUB-BLOCKS IN A FIRST DIRECTION, WHEREBY INTERIOR SUB-BLOCKS ARE PROHIBITED FROM SPLITTING IN THE FIRST DIRECTION**  
[54] **CODAGE VIDEO DANS LEQUEL UN BLOC EST DIVISE EN PLUSIEURS SOUS-BLOCS DANS UN PREMIER SENS, OU IL EST INTERDIT DE DIVISER LES SOUS-BLOCS INTERIEURS DANS LE PREMIER SENS**  
[72] ABE, KIYOFUMI, JP  
[72] KANO, RYUICHI, JP  
[72] LI, JING YA, SG  
[72] LIAO, RU LING, SG  
[72] LIM, CHONG SOON, SG  
[72] NISHI, TAKAHIRO, JP  
[72] SHASHIDHAR, SUGHOSH PAVAN, SG  
[72] SUN, HAI WEI, SG  
[72] TEO, HAN BOON, SG  
[72] TOMA, TADAMASA, JP  
[73] PANASONIC INTELLECTUAL PROPERTY CORPORATION OF AMERICA, US  
[86] (3113521)  
[87] (3113521)  
[22] 2019-03-04  
[62] 3,093,204  
[30] US (62/638,620) 2018-03-05

**Canadian Patents Issued  
January 16, 2024**

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[11] **3,116,257**  
[13] C

[51] **Int.Cl. C08F 20/60 (2006.01) B29D 11/00 (2006.01) C08F 20/34 (2006.01) C08J 3/075 (2006.01) G02B 1/04 (2006.01) G02B 5/22 (2006.01) G02C 7/04 (2006.01)**

[25] EN

[54] **UV-ABSORBING VINYLIC MONOMERS AND USES THEREOF**

[54] **MONOMERES VINYLIQUES ABSORBANT LES UV ET LEURS UTILISATIONS**

[72] CHANG, FRANK, US  
[72] DESOUSA, RYAN, US  
[72] HOLLAND, TROY VERNON, US  
[72] PRUITT, JOHN DALLAS, US  
[72] NELSON, JARED, US  
[73] ALCON INC., CH  
[86] (3116257)  
[87] (3116257)  
[22] 2017-02-16  
[62] 3,010,331  
[30] US (62/298,137) 2016-02-22

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[11] **3,116,285**  
[13] C

[51] **Int.Cl. A23G 1/20 (2006.01) A23G 3/02 (2006.01)**

[25] EN

[54] **DEVICE FOR DOSING A FOODSTUFF**

[54] **DISPOSITIF DE DOSAGE D'UN PRODUIT A CONSOMMER**

[72] HEITER, UWE, DE  
[73] BAYER FEINWERK GMBH & CO.KG, DE  
[85] 2021-04-09  
[86] 2019-10-09 (PCT/EP2019/077280)  
[87] (WO2020/074548)  
[30] DE (10 2018 124 828.8) 2018-10-09

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[11] **3,117,522**  
[13] C

[51] **Int.Cl. E04B 1/98 (2006.01) F16F 7/10 (2006.01) E04H 9/02 (2006.01)**

[25] EN

[54] **MASS DAMPER FOR DAMPING VIBRATIONS OF A STRUCTURE, STRUCTURE WITH SUCH A MASS DAMPER AND METHOD FOR ADJUSTING THE NATURAL FREQUENCY OF A MASS DAMPER**

[54] **AMORTISSEUR A MASSE ACCORDEE POUR L'AMORTISSEMENT DE VIBRATIONS D'UNE STRUCTURE, STRUCTURE AVEC UN TEL AMORTISSEUR A MASSE ACCORDEE ET PROCEDE D'AJUSTEMENT DE LA FREQUENCE PROPRE D'UN AMORTISSEUR A MASSE ACCORDEE**

[72] DISTL, JOHANN, DE  
[73] MAURER ENGINEERING GMBH, DE  
[85] 2021-04-23  
[86] 2019-11-07 (PCT/EP2019/080587)  
[87] (WO2020/094807)  
[30] DE (10 2018 218 999.4) 2018-11-07

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[11] **3,117,991**  
[13] C

[51] **Int.Cl. B23K 11/00 (2006.01) B23K 11/31 (2006.01) B23K 11/36 (2006.01)**

[25] EN

[54] **RIVET DISPENSER RELOADING SYSTEMS AND METHODS OF USE THEREOF**

[54] **SYSTEMES DE RECHARGEMENT DE DISTRIBUTEUR DE RIVETS ET LEURS PROCEDES D'UTILISATION**

[72] COSGRAVE, STUART CAMERON, CA  
[72] WASYLINIUK, KYLE ALEXANDER, CA  
[72] SPINELLA, DONALD J., US  
[72] BERGSTROM, DANIEL, US  
[72] IASELLA, GINO N., US  
[73] HOWMET AEROSPACE INC., US  
[73] CENTERLINE (WINDSOR) LIMITED, CA  
[85] 2021-04-27  
[86] 2019-12-13 (PCT/US2019/066115)  
[87] (WO2020/123885)  
[30] US (62/778,938) 2018-12-13

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[11] **3,118,970**  
[13] C

[51] **Int.Cl. F16L 5/02 (2006.01) F16L 37/00 (2006.01) F16L 41/00 (2006.01) F28F 9/02 (2006.01)**

[25] EN

[54] **CONNECTOR SOCKET, CONNECTOR ASSEMBLY, COOLING PLATE AND COOLING SYSTEM INCLUDING A CONNECTOR SOCKET**

[54] **DOUILLE DE CONNECTEUR, ENSEMBLE CONNECTEUR, PLAQUE DE REFROIDISSEMENT ET SYSTEME DE REFROIDISSEMENT COMPRENANT UNE DOUILLE DE CONNECTEUR**

[72] RYMAN, MORGAN, SE  
[73] OETIKER SCHWEIZ AG, CH  
[85] 2021-05-06  
[86] 2018-11-29 (PCT/EP2018/083068)  
[87] (WO2020/108764)

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[11] **3,119,063**  
[13] C

[51] **Int.Cl. B41F 13/14 (2006.01) B41F 17/22 (2006.01) B41F 31/02 (2006.01) B41F 31/12 (2006.01) B41F 31/14 (2006.01) B41M 1/28 (2006.01)**

[25] EN

[54] **A METERING ROLLER FOR AN INK STATION ASSEMBLY OF A DECORATOR AND A METHOD OF DECORATING A CONTAINER WITH THE DECORATOR**

[54] **ROULEAU DOSEUR POUR ENSEMBLE DE STATION D'ENCRE D'UN DISPOSITIF DE DECORATION ET PROCEDE DE DECORATION D'UN RECIPIENT AVEC LA DECORATION**

[72] EFNER, JOHN D., US  
[72] HOLLAND, KURT J., US  
[73] BALL CORPORATION, US  
[85] 2021-05-06  
[86] 2019-11-08 (PCT/US2019/060450)  
[87] (WO2020/097451)  
[30] US (62/758,063) 2018-11-09

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**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,119,343**  
[13] C

[51] **Int.Cl. C07D 401/04 (2006.01) A61P 25/28 (2006.01) A61P 27/02 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01) C07D 405/14 (2006.01)**

[25] EN

[54] **SUBSTITUTED ISOINDOLINONES**

[54] **ISOINDOLINONES SUBSTITUEES**

[72] CHAN, KYLE W. H., US

[72] CHOURASIA, APARAJITA HOSKOTE, US

[72] ERDMAN, PAUL E., US

[72] FUNG, LEAH, US

[72] LAM, IMELDA, US

[72] MERCURIO, FRANK, US

[72] SULLIVAN, ROBERT, US

[72] TORRES, EDUARDO, US

[73] BIOTHERYX, INC., US

[85] 2021-05-10

[86] 2019-11-12 (PCT/US2019/060920)

[87] (WO2020/102195)

[30] US (62/760,813) 2018-11-13

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[11] **3,120,884**  
[13] C

[51] **Int.Cl. C10G 49/00 (2006.01) B01J 19/12 (2006.01) B01J 19/24 (2006.01) C10B 23/00 (2006.01) C10G 49/02 (2006.01) C10G 49/18 (2006.01)**

[25] EN

[54] **ELECTROMAGNETIC HYDROCARBON DEPOLYMERIZATION PROCESS**

[54] **PROCEDE ELECTROMAGNETIQUE DE DEPOLYMERISATION D'HYDROCARBURES**

[72] CHALIFOUX, GILBERT A., CA

[72] BERRY, DAVID ALLEN, US

[72] EBERTH, E. GORDON, CA

[73] AMERICARBON PRODUCTS, LLC, US

[85] 2021-05-25

[86] 2019-11-26 (PCT/CA2019/000160)

[87] (WO2020/107096)

[30] US (62/771,657) 2018-11-27

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[11] **3,120,921**  
[13] C

[51] **Int.Cl. D06M 11/73 (2006.01) B32B 5/02 (2006.01) B64B 1/58 (2006.01) D06M 11/76 (2006.01) D06M 15/41 (2006.01)**

[25] EN

[54] **GRAPHENE-OXIDE GRAFTED PBO FIBERS; METHOD FOR PRODUCTION AND APPLICATIONS TO AIRSHIP HULLS AND LIGHTER THAN AIR VEHICLES.**

[54] **FIBRES DE PBO GREFFEES A BASE D'OXYDE DE GRAPHENE; PROCEDE DE PRODUCTION ET APPLICATIONS A DES COQUES DE DIRIGEABLE ET A DES VEHICULES PLUS LEGERS QUE L'AIR.**

[72] VESTERGAARD FRANDSEN, MIKKEL, US

[72] KIM, DAVID, US

[72] FILLETER, TOBIN, CA

[72] PARAMBATH MUNDAYODAN, SUDEEP, US

[73] SCEYE SA, CH

[85] 2021-05-25

[86] 2019-11-25 (PCT/EP2019/082458)

[87] (WO2020/109247)

[30] US (62/771,224) 2018-11-26

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[11] **3,121,358**  
[13] C

[51] **Int.Cl. G01N 21/75 (2006.01) A61B 5/318 (2021.01)**

[25] EN

[54] **DEVICE AND METHOD FOR DETECTION OF ANALYTES**

[54] **DEPOSITIF ET METHODE DE DETECTION D'ANALYTES**

[72] AMIR, LEAH, US

[72] ANDERSON, GARY, US

[73] XCELLCURE, LLC, US

[86] (3121358)

[87] (3121358)

[22] 2013-03-26

[62] 2,867,298

[30] US (61/615,599) 2012-03-26

[30] US (61/790,686) 2013-03-15

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[11] **3,121,486**  
[13] C

[51] **Int.Cl. B64U 10/10 (2023.01) B64U 70/50 (2023.01) B64U 80/70 (2023.01)**

[25] EN

[54] **DUCTED FAN UNMANNED AERIAL VEHICLE DOCKING STATION**

[54] **STATION D'ACCUEIL DE VEHICULE AERIEN SANS PILOTE A SOUFFLANTE CANALISEE**

[72] STROBEL, ARMIN, CA

[73] STROBEL, ARMIN, CA

[86] (3121486)

[87] (3121486)

[22] 2017-08-29

[62] 3,035,588

[30] US (62/382,714) 2016-09-01

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[11] **3,121,722**  
[13] C

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01) C07K 14/705 (2006.01) C12N 9/12 (2006.01)**

[25] EN

[54] **PYRIMIDINE COMPOUND OR SALT THEREOF**

[54] **COMPOSE PYRIMIDINE OU SEL CORRESPONDANT**

[72] NAKAMURA, MASAYUKI, JP

[72] ASAI, TAKAHIRO, JP

[72] IGUCHI, SATORU, JP

[72] OGUCHI, KEI, JP

[73] TAIHO PHARMACEUTICAL CO., LTD., JP

[85] 2021-06-01

[86] 2020-01-10 (PCT/JP2020/000592)

[87] (WO2020/145374)

[30] JP (2019-003403) 2019-01-11

**Canadian Patents Issued  
January 16, 2024**

[11] **3,122,775**  
[13] C

[51] **Int.Cl. A61B 5/11 (2006.01) G16H 50/30 (2018.01) A61B 5/00 (2006.01) G01P 15/00 (2006.01) G06F 17/10 (2006.01) G06F 17/40 (2006.01) H03M 1/12 (2006.01) H03M 7/30 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR COMPRESSING AND SEGMENTING ACTIVITY DATA IN REAL-TIME**

[54] **SYSTEME ET PROCEDE DE COMPRESSION ET DE SEGMENTATION DE DONNEES D'ACTIVITE EN TEMPS REEL**

[72] KRISHNAN, SRIDHAR, CA  
[72] ATHAVALE, YASHODHAN, CA  
[73] KRISHNAN, SRIDHAR, CA  
[73] ATHAVALE, YASHODHAN, CA  
[85] 2021-06-10  
[86] 2019-06-28 (PCT/CA2019/050909)  
[87] (WO2020/118409)  
[30] US (62/777,543) 2018-12-10

[11] **3,123,319**  
[13] C

[51] **Int.Cl. H02G 1/08 (2006.01) H02G 3/04 (2006.01) H02G 9/06 (2006.01) H02G 15/013 (2006.01)**

[25] EN

[54] **IMPROVED VOLUME DONATING COMPRESSIBLE FILLER SYSTEM AND METHOD**

[54] **SYSTEME DE REMPLISSAGE COMPRESSIBLE A DON DE VOLUME AMELIORE ET METHODE**

[72] HAAGENSON, STEVEN, US  
[72] HUBER, JOHN, JR., US  
[73] HAAGENSON, STEVEN, US  
[73] HUBER, JOHN, JR., US  
[86] (3123319)  
[87] (3123319)  
[22] 2021-06-28  
[30] US (17/320,337) 2021-05-14

[11] **3,124,017**  
[13] C

[51] **Int.Cl. G10L 21/0308 (2013.01) G10L 25/30 (2013.01) G10L 25/60 (2013.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR SOURCE SEPARATION USING AN ESTIMATION AND CONTROL OF SOUND QUALITY**

[54] **APPAREIL ET PROCEDE DE SEPARATION DE SOURCE UTILISANT UNE ESTIMATION ET UN CONTROLE DE LA QUALITE SONORE**

[72] UHLE, CHRISTIAN, DE  
[72] TORCOLI, MATTEO, DE  
[72] DISCH, SASCHA, DE  
[72] PAULUS, JOUNI, DE  
[72] HERRE, JUERGEN, DE  
[72] HELLMUTH, OLIVER, DE  
[72] FUCHS, HARALD, DE  
[73] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2021-06-17  
[86] 2019-12-20 (PCT/EP2019/086565)  
[87] (WO2020/127900)  
[30] EP (18215707.3) 2018-12-21

[11] **3,124,034**  
[13] C

[51] **Int.Cl. B25B 13/06 (2006.01)**

[25] EN

[54] **SOCKET DRIVE IMPROVEMENT**

[54] **AMELIORATION DE DOUILLE**

[72] EGGERT, DANIEL M., US  
[72] THOMPSON, CHRISTOPHER D., US  
[72] OLSON, GENE E., US  
[72] ARENDT, JEFFREY M., US  
[73] SNAP-ON INCORPORATED, US  
[86] (3124034)  
[87] (3124034)  
[22] 2021-06-28  
[30] US (16/918,712) 2020-07-01

[11] **3,124,158**  
[13] C

[51] **Int.Cl. G10L 21/038 (2013.01) G10L 21/0316 (2013.01)**

[25] EN

[54] **AUDIO PROCESSOR AND METHOD FOR GENERATING A FREQUENCY ENHANCED AUDIO SIGNAL USING PULSE PROCESSING**

[54] **PROCESSEUR AUDIO ET PROCEDE DE PRODUCTION D'UN SIGNAL AUDIO AMELIORE EN FREQUENCE PAR TRAITEMENT D'IMPULSIONS**

[72] DISCH, SASCHA, DE  
[72] STURM, MICHAEL, DE  
[73] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2021-06-18  
[86] 2019-12-12 (PCT/EP2019/084974)  
[87] (WO2020/126857)  
[30] EP (18215691.9) 2018-12-21  
[30] EP (19166643.7) 2019-04-01

[11] **3,124,708**  
[13] C

[51] **Int.Cl. G01S 17/89 (2020.01) G01S 7/4913 (2020.01) G01S 7/481 (2006.01)**

[25] EN

[54] **EXTENDED LASER ACTIVE RANGING SYSTEM, METHOD AND COMPUTER READABLE PROGRAM PRODUCT**

[54] **SYSTEME DE TELEMETRIE ACTIVE A LASER ETENDU, PROCEDE ET PRODUIT PROGRAMME LISIBLE PAR ORDINATEUR**

[72] DOWNING, ANDREW M., US  
[73] LOCKHEED MARTIN CORPORATION, US  
[85] 2021-06-22  
[86] 2020-01-30 (PCT/US2020/015775)  
[87] (WO2020/163142)  
[30] US (16/268,730) 2019-02-06

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,125,272**  
[13] C

[51] **Int.Cl. B65D 25/14 (2006.01) B65D 51/00 (2006.01)**  
[25] EN  
[54] **CONTAINER END CLOSURE LINER AND METHODS OF PREPARING THE SAME**  
[54] **GARNITURE DE FERMETURE D'EXTREMITE DE RECEPTACLE ET SON PROCEDE DE PREPARATION**  
[72] CAMPBELL, IAN MUSSEN, DE  
[72] JURENDIC, SEBASTIJAN, DE  
[73] NOVELIS INC., US  
[85] 2021-06-28  
[86] 2019-12-20 (PCT/US2019/067812)  
[87] (WO2020/142265)  
[30] US (62/787,585) 2019-01-02

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[11] **3,125,365**  
[13] C

[51] **Int.Cl. H04L 41/0663 (2022.01) B61L 15/00 (2006.01)**  
[25] EN  
[54] **TRAIN NETWORK CONTROL SYSTEM, METHOD AND DEVICE AND TRAIN**  
[54] **SYSTEME, PROCEDE ET DISPOSITIF DE COMMANDE DE RESEAU FERROVIAIRE, ET TRAIN**  
[72] WANG, XIANG, CN  
[72] LIU, HAN, CN  
[72] WANG, LI, CN  
[72] WANG, BAIQING, CN  
[72] YANG, GUOYI, CN  
[72] WANG, GUANGMAO, CN  
[73] CRRC QINGDAO SIFANG CO., LTD., CN  
[85] 2021-06-29  
[86] 2019-10-29 (PCT/CN2019/113919)  
[87] (WO2020/168739)  
[30] CN (201910132635.X) 2019-02-22

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[11] **3,126,711**  
[13] C

[51] **Int.Cl. B62D 55/088 (2006.01) B62D 55/21 (2006.01) F16J 15/34 (2006.01)**  
[25] EN  
[54] **SEALING SYSTEM FOR A TRACK**  
[54] **SYSTEME D'ETANCHEITE POUR UNE CHENILLE**  
[72] WEISBRUCH, ERIC BERNARD, US  
[73] CATERPILLAR INC., US  
[85] 2021-07-13  
[86] 2020-01-21 (PCT/US2020/014315)  
[87] (WO2020/154239)  
[30] US (16/254,769) 2019-01-23

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[11] **3,126,790**  
[13] C

[51] **Int.Cl. F16B 19/02 (2006.01)**  
[25] EN  
[54] **A CONNECTOR AND AN ANTI THERMAL MISMATCH CONNECTING DEVICE**  
[54] **CONNECTEUR ET DISPOSITIF DE CONNEXION ANTI-DESADAPTATION THERMIQUE**  
[72] GUO, HONGBAO, CN  
[72] LI, KAIYUAN, CN  
[72] HONG, ZHILIANG, CN  
[73] AECC COMMERCIAL AIRCRAFT ENGINE CO., LTD., CN  
[85] 2021-08-04  
[86] 2020-11-27 (PCT/CN2020/132059)  
[87] (WO2021/227443)  
[30] CN (202010392432.7) 2020-05-11

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[11] **3,126,806**  
[13] C

[51] **Int.Cl. F16H 7/02 (2006.01) F02B 63/00 (2006.01) F02B 63/04 (2006.01) F16M 3/00 (2006.01)**  
[25] EN  
[54] **LOW NOISE POWER SYSTEMS AND ASSOCIATED METHOD**  
[54] **BLOCS D'ALIMENTATION SILENCIEUX ET METHODE CONNEXE**  
[72] JOCHMAN, NATHAN JOE, US  
[73] ILLINOIS TOOL WORKS INC., US  
[86] (3126806)  
[87] (3126806)  
[22] 2021-08-05  
[30] US (63/062,079) 2020-08-06  
[30] US (17/385,041) 2021-07-26

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[11] **3,126,938**  
[13] C

[51] **Int.Cl. B66F 7/04 (2006.01) B66F 1/06 (2006.01) B66F 3/46 (2006.01) B66F 7/12 (2006.01) B66F 7/28 (2006.01)**  
[25] EN  
[54] **THREE-LEVEL VEHICLE LIFT**  
[54] **PONT ELEVATEUR POUR VEHICULES A TROIS NIVEAUX**  
[72] KRITZER, JEFFREY S., US  
[73] BENDPAK, INC., US  
[85] 2021-07-15  
[86] 2020-01-17 (PCT/US2020/014129)  
[87] (WO2020/154200)  
[30] US (62/795,353) 2019-01-22

---

[11] **3,127,127**  
[13] C

[51] **Int.Cl. C07C 279/08 (2006.01) A61K 51/04 (2006.01) C07C 277/08 (2006.01)**  
[25] EN  
[54] **COMPOUND TARGETING NOREPINEPHRINE TRANSPORTER**  
[54] **COMPOSE CIBLANT UN TRANSPORTEUR DE NOREPINEPHRINE**  
[72] CHEN, XINYU, DE  
[72] DECKER, MICHAEL, DE  
[72] HIGUCHI, TAKAHIRO, DE  
[73] BEIJING LADO TECHNOLOGY CO., LTD., CN  
[85] 2021-07-19  
[86] 2020-01-09 (PCT/EP2020/050406)  
[87] (WO2020/148154)  
[30] EP (19152274.7) 2019-01-17

---

[11] **3,127,255**  
[13] C

[51] **Int.Cl. C07K 14/47 (2006.01) C07K 14/705 (2006.01) C07K 14/72 (2006.01) C12N 15/12 (2006.01)**  
[25] EN  
[54] **BETA-ARRESTIN MUTANTS**  
[54] **MUTANTS DE BETA-ARRESTINE**  
[72] OESTER, BENOIT, CH  
[72] OSTERMAIER, MARTIN KONRAD, DE  
[72] WALDHOER, MARIA, CH  
[72] BERGER, PHILIPP, CH  
[72] ZIMMERMANN, MIRJAM, CH  
[73] INTERAX BIOTECH AG, CH  
[73] PAUL SCHERRER INSTITUT, CH  
[85] 2021-07-20  
[86] 2020-01-21 (PCT/EP2020/051394)  
[87] (WO2020/152152)  
[30] EP (19153159.9) 2019-01-22

**Canadian Patents Issued  
January 16, 2024**

---

[11] **3,128,250**  
[13] C

[51] **Int.Cl. A61K 31/451 (2006.01)**  
[25] EN  
[54] **TREATMENT OF MITOCHONDRIAL ASSOCIATED DISEASES AND DISORDERS, INCLUDING SYMPTOMS THEREOF USING PRIDOPIDINE**  
[54] **TRAITEMENT DE MALADIES ET DE TROUBLES ASSOCIES AUX MITOCHONDRIES, Y COMPRIS LEURS SYMPTOMES A L'AIDE DE PRIDOPIDINE**  
[72] HAYDEN, MICHAEL, IL  
[72] GEVA, MICHAL, IL  
[72] CARVALHO REGO, ANA CRISTINA, PT  
[73] PRILENIA NEUROTHERAPEUTICS LTD., IL  
[85] 2021-08-20  
[86] 2020-03-15 (PCT/IL2020/050308)  
[87] (WO2020/188558)

---

[11] **3,128,628**  
[13] C

[51] **Int.Cl. B60D 1/48 (2006.01) B60D 1/42 (2006.01)**  
[25] EN  
[54] **A SYSTEM & METHOD FOR CONNECTING TRAILER TOWING COMPONENTS**  
[54] **SYSTEME ET METHODE POUR CONNECTER DES COMPOSANTES DE REMORQUAGE DE REMORQUE**  
[72] REYES, ROBERT WARREN, US  
[72] BRUNER, KEITH RAYMOND, US  
[72] KNICK-KOPPENHOFER, BRICE MELVIN, US  
[73] BIL-JAX, INC., US  
[86] (3128628)  
[87] (3128628)  
[22] 2021-08-18  
[30] US (63/068,532) 2020-08-21

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[11] **3,128,634**  
[13] C

[51] **Int.Cl. H05K 1/02 (2006.01) B25B 13/46 (2006.01) B25F 5/00 (2006.01)**  
[25] EN  
[54] **PCB WITH INTEGRATED SWITCHES**  
[54] **CARTE DE CIRCUITS IMPRIMES A COMMUTATEURS INTEGRES**  
[72] GENZ, JASON, US  
[72] RAJZER, MICHAEL T., US  
[72] BROUWERS, CRAIG, US  
[72] BEER, JOSHUA M., US  
[73] SNAP-ON INCORPORATED, US  
[86] (3128634)  
[87] (3128634)  
[22] 2021-08-19  
[30] US (17/003,440) 2020-08-26

---

[11] **3,129,684**  
[13] C

[51] **Int.Cl. C08G 18/10 (2006.01) C08G 18/50 (2006.01) C08G 18/61 (2006.01) C08G 18/72 (2006.01)**  
[25] EN  
[54] **ELASTOMERIC COMPOSITIONS AND METHODS OF USE**  
[54] **COMPOSITIONS ELASTOMERES ET PROCEDES D'UTILISATION**  
[72] KUTCHKO, CYNTHIA, US  
[72] CHIANG, BRIAN, US  
[72] WILKINSON, BRYAN W., US  
[72] EPSTEIN, ERIC S., US  
[72] BUBAS, MICHAEL A., US  
[73] PPG INDUSTRIES OHIO, INC., US  
[85] 2021-08-09  
[86] 2020-02-10 (PCT/US2020/017455)  
[87] (WO2020/167638)  
[30] US (62/803,664) 2019-02-11

---

[11] **3,129,701**  
[13] C

[51] **Int.Cl. A61B 34/00 (2016.01) A61F 2/95 (2013.01) A61F 2/24 (2006.01)**  
[25] EN  
[54] **ACTUATION LINE STORAGE SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES DE STOCKAGE DE LIGNE D'ACTIONNEMENT**  
[72] SHEPARD, MICHAEL J., US  
[72] SILVERMAN, JAMES D., US  
[73] W. L. GORE & ASSOCIATES, INC., US  
[85] 2021-08-10  
[86] 2019-02-22 (PCT/US2019/019131)  
[87] (WO2020/171819)

---

---

[11] **3,129,886**  
[13] C

[51] **Int.Cl. C21B 7/12 (2006.01) C21C 5/46 (2006.01) F27D 3/15 (2006.01)**  
[25] EN  
[54] **TAP HOLE PLUG GUN**  
[54] **CANON DE REBOUCHAGE DE TROU DE COULEE**  
[72] MORELLATO, FRANCK, FR  
[73] TMT TAPPING MEASURING TECHNOLOGY SARL, LU  
[85] 2021-08-11  
[86] 2019-03-13 (PCT/EP2019/056261)  
[87] (WO2020/182303)

---

[11] **3,130,032**  
[13] C

[51] **Int.Cl. A61K 38/19 (2006.01) A61P 7/00 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **A LONG-ACTING G-CSF FOR PREVENTING NEUTROPENIA OR REDUCING DURATION OF NEUTROPENIA**  
[54] **G-CSF A ACTION PROLONGEE POUR PREVENIR LA NEUTROPENIE OU REDUIRE LA DUREE DE NEUTROPENIE**  
[72] ERTAN-AHMED, SENEM, XX  
[72] SAHIN, ADEM, XX  
[72] ONCEL, HATICE, XX  
[72] PINARBASLI, ONUR, XX  
[72] SARRACOGU, NAGEHAN, XX  
[73] ILKOGEN ILAC SANAYI VE TICARET A.S.,  
[85] 2021-08-12  
[86] 2020-01-21 (PCT/IB2020/050447)  
[87] (WO2020/165664)  
[30] US (62/804,988) 2019-02-13

---

**Brevets canadiens délivrés  
16 janvier 2024**

---

[11] **3,130,389**  
[13] C

[51] **Int.Cl. A61K 31/685 (2006.01) C12N 5/0775 (2010.01) A23L 33/10 (2016.01) A61K 31/205 (2006.01) A61K 31/513 (2006.01) A61K 35/20 (2006.01) A61P 25/00 (2006.01) A61P 25/16 (2006.01) A61P 25/28 (2006.01) A61P 39/06 (2006.01)**

[25] EN

[54] **COMPOSITION FOR USE IN PREVENTION OR REDUCTION OF OXIDATIVE STRESS AND NEURODEGENERATIVE DISEASES**

[54] **COMPOSITION DESTINEE A ETRE UTILISEE DANS LA PREVENTION OU LA REDUCTION DU STRESS OXYDATIF ET DE MALADIES NEURODEGENERATIVES**

[72] RASI, SIMO, FI

[73] RASI, SIMO, FI

[85] 2021-09-13

[86] 2020-03-10 (PCT/FI2020/050150)

[87] (WO2020/212645)

[30] FI (20195318) 2019-04-18

---

[11] **3,130,559**  
[13] C

[51] **Int.Cl. F23C 99/00 (2006.01)**

[25] EN

[54] **POWDER FUEL COMBUSTION APPARATUS AND COMBUSTION METHOD**

[54] **APPAREIL DE COMBUSTION ET PROCEDE DE COMBUSTION DE COMBUSTIBLE PULVERULENT**

[72] MATSUSHITA, TAKAMICHI, JP

[72] KASHIWA, MIKIO, JP

[72] TANNO, NOBUTSUGU, JP

[73] ECO RESEARCH INSTITUTE LTD., JP

[73] NITTAI MACHINERY CO., LTD., JP

[85] 2021-08-17

[86] 2020-02-27 (PCT/JP2020/008123)

[87] (WO2020/175639)

[30] JP (2019-036448) 2019-02-28

---

[11] **3,130,891**  
[13] C

[51] **Int.Cl. B08B 9/04 (2006.01) B05B 1/06 (2006.01) B05B 13/06 (2006.01) B05C 7/00 (2006.01) B08B 9/043 (2006.01) B08B 9/055 (2006.01) F16L 55/00 (2006.01)**

[25] EN

[54] **HEADER DELIVERY SYSTEM**

[54] **SYSTEME DE POSE DE COLLECTEUR**

[72] BURGGRAAFF, MAARTEN CORNELIS, US

[72] MEERKERK, WILLEM, US

[73] QUEST INTEGRITY GROUP, LLC, US

[85] 2021-08-19

[86] 2020-02-19 (PCT/US2020/018837)

[87] (WO2020/172283)

[30] US (62/808,076) 2019-02-20

---

[11] **3,130,901**  
[13] C

[51] **Int.Cl. H04L 47/83 (2022.01) H04L 9/32 (2006.01)**

[25] EN

[54] **A SYSTEM FOR SECURE AUTOMATED AND ACCELERATED RESOURCE ALLOCATION**

[54] **SYSTEME POUR L'ATTRIBUTION SECURISEE AUTOMATISEE ET ACCELEREE DE RESSOURCES**

[72] TOMASELLI, MARK, US

[72] VERHELLE, WILLIAM, US

[73] TOMASELLI, MARK, US

[73] VERHELLE, WILLIAM, US

[86] (3130901)

[87] (3130901)

[22] 2021-09-15

[30] US (17/397,722) 2021-08-09

[30] US (63/166,041) 2021-03-25

---

[11] **3,131,035**  
[13] C

[51] **Int.Cl. H04N 19/13 (2014.01) H04N 19/103 (2014.01) H04N 19/159 (2014.01)**

[25] EN

[54] **CODING AND DECODING METHODS, CODER AND DECODER, AND STORAGE MEDIUM**

[54] **METHODES DE CODAGE ET DE DECODAGE, CODEUR-DECODEUR ET SUPPORT DE STOCKAGE**

[72] CAO, XIAOQIANG, CN

[72] CHEN, FANGDONG, CN

[72] WANG, LI, CN

[73] HANGZHOU HIKVISION DIGITAL TECHNOLOGY CO., LTD., CN

[85] 2021-08-20

[86] 2020-03-09 (PCT/CN2020/078486)

[87] (WO2020/182102)

[30] CN (201910177580.4) 2019-03-09

---

[11] **3,131,248**  
[13] C

[51] **Int.Cl. G01K 7/42 (2006.01) H01B 17/34 (2006.01) H01F 27/04 (2006.01)**

[25] EN

[54] **HIGH VOLTAGE SYSTEM COMPRISING A TEMPERATURE DISTRIBUTION DETERMINING DEVICE**

[54] **SYSTEME HAUTE TENSION COMPRENANT UN DISPOSITIF DE DETERMINATION DE DISTRIBUTION DE TEMPERATURE**

[72] LANERYD, TOR, SE

[72] SCHISSLING, JOACHIM, SE

[73] HITACHI ENERGY LTD, CH

[85] 2021-08-24

[86] 2020-02-28 (PCT/EP2020/055362)

[87] (WO2020/178202)

[30] EP (19160313.3) 2019-03-01

**Canadian Patents Issued  
January 16, 2024**

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[11] **3,131,427**  
[13] C

[51] **Int.Cl. E21B 34/10 (2006.01) E21B 23/04 (2006.01) E21B 41/00 (2006.01)**

[25] EN

[54] **HYDRAULIC LINE CONTROLLED DEVICE WITH DENSITY BARRIER**

[54] **DISPOSITIF COMMANDE PAR CONDUITE HYDRAULIQUE AVEC BARRIERE DE DENSITE**

[72] BREERWOOD, GLEN P., US

[73] HALLIBURTON ENERGY SERVICES, INC., US

[85] 2021-08-24

[86] 2019-04-30 (PCT/US2019/029993)

[87] (WO2020/222818)

---

[11] **3,131,857**  
[13] C

[51] **Int.Cl. G01D 21/00 (2006.01) A61B 5/0245 (2006.01)**

[25] EN

[54] **MEASUREMENT CONTROL APPARATUS AND MEASUREMENT CONTROL METHOD**

[54] **APPAREIL DE COMMANDE DE MESURE ET PROCEDE DE COMMANDE DE MESURE**

[72] HASHIMOTO, YUKI, JP

[72] KUWABARA, KEI, JP

[72] MATSUURA, NOBUAKI, JP

[73] NIPPON TELEGRAPH AND TELEPHONE CORPORATION, JP

[85] 2021-08-27

[86] 2020-02-21 (PCT/JP2020/007059)

[87] (WO2020/179499)

[30] JP (2019-041198) 2019-03-07

---

[11] **3,132,722**  
[13] C

[51] **Int.Cl. A61N 1/36 (2006.01) A61F 5/56 (2006.01) A61N 1/00 (2006.01) A61N 1/04 (2006.01) A61N 1/32 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR TREATING SLEEP DISORDERED BREATHING**

[54] **SYSTEMES ET PROCEDES DE TRAITEMENT DE TROUBLE RESPIRATOIRE DU SOMMEIL**

[72] KENT, DAVID, US

[73] VANDERBILT UNIVERSITY, US

[85] 2021-09-07

[86] 2020-03-06 (PCT/US2020/021359)

[87] (WO2020/185549)

[30] US (62/815,393) 2019-03-08

[30] US (62/843,641) 2019-05-06

---

[11] **3,132,807**  
[13] C

[51] **Int.Cl. E05B 17/00 (2006.01) G07F 17/12 (2006.01)**

[25] EN

[54] **KEY CAPTURE LOCK**

[54] **VERROU A CAPTURE DE CLE**

[72] IRWIN, DONALD EUGENE, US

[72] TARTAL, WILLIAM ALBERT, US

[73] UNITED STATES POSTAL SERVICE, US

[85] 2021-10-07

[86] 2020-04-09 (PCT/US2020/027414)

[87] (WO2020/210453)

[30] US (62/832,787) 2019-04-11

---

[11] **3,132,947**  
[13] C

[51] **Int.Cl. H04W 74/04 (2009.01) H04W 24/02 (2009.01) H04W 52/04 (2009.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR MOBILE BACKUP**

[54] **SYSTEMES ET METHODES DE SAUVEGARDE MOBILE**

[72] HARSTAD, TROY, US

[72] COTTLE, CHARLES, US

[72] HAMILTON, DAVID, US

[73] NEPTUNE TECHNOLOGY GROUP INC., US

[86] (3132947)

[87] (3132947)

[22] 2021-10-04

[30] US (63/089,574) 2020-10-09

---

[11] **3,134,156**  
[13] C

[51] **Int.Cl. A61K 31/47 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **CHIAURANIB FOR TREATMENT OF SMALL CELL LUNG CANCER**

[54] **CHIAURANIB POUR LE TRAITEMENT DU CANCER DU POUMON A PETITES CELLULES**

[72] LU, XIANPING, CN

[72] SHAN, SONG, CN

[72] PAN, DESI, CN

[72] NING, ZHIQIANG, CN

[73] SHENZHEN CHIPSCREEN BIOSCIENCES CO., LTD., CN

[85] 2021-09-20

[86] 2020-03-18 (PCT/CN2020/079822)

[87] (WO2020/192506)

[30] CN (201910229379.6) 2019-03-25

---

[11] **3,134,166**  
[13] C

[51] **Int.Cl. F24C 7/02 (2006.01) F24C 15/04 (2006.01)**

[25] EN

[54] **DRAWER TYPE MICROWAVE OVEN**

[54] **FOUR A MICRO-ONDES DE TYPE TIROIR**

[72] FENG, LIANGWANG, CN

[72] LI, FENG, CN

[73] GUANGDONG GALANZ ENTERPRISES CO., LTD., CN

[73] GUANGDONG GALANZ MICROWAVE ELECTRICAL APPLIANCES MANUFACTURING CO., LTD., CN

[85] 2021-09-17

[86] 2020-11-20 (PCT/CN2020/130655)

[87] (WO2021/115106)

[30] CN (201911269016.1) 2019-12-11

---

[11] **3,134,222**  
[13] C

[51] **Int.Cl. A61K 8/72 (2006.01) A61K 8/02 (2006.01) A61K 8/44 (2006.01) A61K 8/81 (2006.01) A61Q 5/02 (2006.01) A61Q 19/10 (2006.01)**

[25] EN

[54] **DISSOLVABLE SOLID FIBROUS ARTICLES CONTAINING ANIONIC SURFACTANTS**

[54] **ARTICLES FIBREUX SOLIDES SOLUBLES CONTENANT DES TENSIOACTIFS ANIONIQUES**

[72] SONG, BRIAN XIAOQING, US

[72] HILVERT, JENNIFER ELAINE, US

[72] MAO, MIN, US

[72] NYANGIRO, DINAH ACHOLA, US

[72] TAYLOR, BRANDON MICHAEL, US

[73] THE PROCTER & GAMBLE COMPANY, US

[85] 2021-09-17

[86] 2020-06-26 (PCT/US2020/070191)

[87] (WO2020/264574)

[30] US (62/867,990) 2019-06-28

[30] US (62/928,415) 2019-10-31



**Brevets canadiens délivrés  
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[11] **3,135,191**  
[13] C

[51] **Int.Cl. A61K 47/34 (2017.01) A61K 9/51 (2006.01) A61K 9/52 (2006.01)**

[25] EN

[54] **INJECTABLE AND BIODEGRADABLE POLYMER FORMULATIONS FOR CONTROLLED RELEASE OF BIOACTIVE AGENTS**

[54] **FORMULATIONS INJECTABLES DE POLYMERES BIODEGRADABLES POUR LA LIBERATION CONTROLEE D'AGENTS BIOACTIFS**

[72] BEGOVAC, PAUL C., US

[72] CLEEK, ROBERT L., US

[72] LI, MEI, US

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

[86] (3135191)

[87] (3135191)

[22] 2018-03-27

[62] 3,055,429

[30] US (62/476,900) 2017-03-27

[30] US (15/935,692) 2018-03-26

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[11] **3,135,274**  
[13] C

[51] **Int.Cl. H04W 4/90 (2018.01) H04W 88/18 (2009.01) H04W 4/021 (2018.01) H04W 4/024 (2018.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR EMERGENCY DATA INTEGRATION**

[54] **SYSTEMES ET PROCEDES D'INTEGRATION DE DONNEES D'URGENCE**

[72] PELLEGRINI, WILLIAM, US

[72] LEAVITT, LUCAS RICHARD EAGER, US

[72] SY, BINGJUN, US

[72] KATZ, HENRY, US

[72] MAHONEY, GABRIEL, US

[72] HWANG, ANDREW, US

[72] FERENTZ, ZVIKA, US

[72] PELLEGRINI, RICCARDO, US

[72] ORTHMEYER, ANGELA LYNN, US

[73] RAPIDSOS, INC., US

[85] 2021-09-27

[86] 2020-01-10 (PCT/US2020/013176)

[87] (WO2020/205033)

[30] US (62/826,680) 2019-03-29

[30] US (62/926,466) 2019-10-26

[30] US (62/946,961) 2019-12-11

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[11] **3,136,169**  
[13] C

[51] **Int.Cl. A61N 1/36 (2006.01) A61B 5/00 (2006.01) A61M 21/00 (2006.01)**

[25] EN

[54] **BRAIN REBALANCING THROUGH ACOUSTIC AND ELECTRIC MIRRORING**

[54] **REEQUILIBRAGE DU CERVEAU PAR REFLEXION ACOUSTIQUE ET ELECTRIQUE**

[72] GERDES, LEE, US

[72] SMITH, GILLAN, US

[72] LOUCKS, RUSSELL, US

[72] HASTINGS, PAUL, US

[72] CRITTENDEN, SONYA PARKER, US

[73] BRAIN STATE TECHNOLOGIES, LLC, US

[85] 2021-10-04

[86] 2020-05-20 (PCT/US2020/033693)

[87] (WO2020/236866)

[30] US (62/850,806) 2019-05-21

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[11] **3,136,216**  
[13] C

[51] **Int.Cl. A61K 31/336 (2006.01) A61K 35/00 (2006.01)**

[25] EN

[54] **METHOD OF TREATING TUMOURS**

[54] **PROCEDE DE TRAITEMENT DE TUMEURS**

[72] GORDON, VICTORIA ANNE, AU

[72] REDDELL, PAUL WARREN, AU

[72] BOYLE, GLEN MATHEW, AU

[72] CULLEN, JASON KINGSLEY, AU

[72] PARSONS, PETER GORDON, AU

[73] QBIOTICS PTY LTD, AU

[85] 2021-10-06

[86] 2020-04-09 (PCT/AU2020/050360)

[87] (WO2020/206504)

[30] AU (2019901280) 2019-04-12

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[11] **3,136,311**  
[13] C

[51] **Int.Cl. G01R 31/389 (2019.01) G01R 31/374 (2019.01) H01M 10/48 (2006.01) H02J 7/00 (2006.01)**

[25] EN

[54] **BATTERY PERFORMANCE EVALUATION METHOD AND BATTERY PERFORMANCE EVALUATION DEVICE**

[54] **PROCEDE D'EVALUATION DE PERFORMANCES DE BATTERIE ET DISPOSITIF D'EVALUATION DE PERFORMANCES DE BATTERIE**

[72] MUNAKATA, ICHIRO, JP

[72] IGARI, SHUNTARO, JP

[72] SHOJI, HIDEKI, JP

[73] TOYO SYSTEM CO., LTD., JP

[85] 2021-10-06

[86] 2020-12-16 (PCT/JP2020/046937)

[87] (WO2021/131957)

[30] JP (2019-237234) 2019-12-26

---

[11] **3,136,552**  
[13] C

[51] **Int.Cl. A61K 31/22 (2006.01) C07C 69/675 (2006.01)**

[25] EN

[54] **GLYCERYL TRIS (BETA-HYDROXYBUTYRATE) AND NEURONAL TRANSIENT ISCHEMIC ATTACKS**

[54] **TRIS(BETA-HYDROXYBUTYRATE) DE GLYCERYLE ET ATTAQUES ISCHEMIQUES TRANSITOIRES NEURONALES**

[72] HASHIM, SAMI, US

[73] NEUROENERGY VENTURES, INC., US

[85] 2021-11-03

[86] 2019-05-30 (PCT/US2019/034592)

[87] (WO2020/242478)

**Canadian Patents Issued  
January 16, 2024**

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[11] **3,137,000**  
[13] C

[51] **Int.Cl. A61C 7/00 (2006.01) G16H 10/60 (2018.01) G16H 20/00 (2018.01) G16H 30/00 (2018.01) G16H 80/00 (2018.01)**

[25] EN

[54] **ANALYSIS AND PREDICTION MODEL FOR ORTHODONTIC TREATMENT**

[54] **MODELE D'ANALYSE ET DE PREDICTION POUR TRAITEMENT ORTHODONTIQUE**

[72] GIEGERICH, GARY, US

[73] ALTA SMILES, LLC, US

[85] 2021-11-05

[86] 2020-05-14 (PCT/US2020/032838)

[87] (WO2020/232223)

[30] US (62/848,807) 2019-05-16

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[11] **3,137,107**  
[13] C

[51] **Int.Cl. F04D 29/047 (2006.01) E21B 47/07 (2012.01) E21B 43/12 (2006.01) F04D 1/06 (2006.01) F04D 13/10 (2006.01) F04D 15/00 (2006.01)**

[25] EN

[54] **PUMP BOTTOM BEARING WITH TEMPERATURE SENSOR IN ELECTRICAL SUBMERSIBLE WELL PUMP ASSEMBLY**

[54] **PALIER INFERIEUR DE POMPE AVEC CAPTEUR DE TEMPERATURE DANS UN ENSEMBLE POMPE DE Puits SUBMERSIBLE ELECTRIQUE**

[72] YE, ZHENG, US

[72] MARTINEZ, IGNACIO, US

[72] WILLIAMS, BRETT TAYLOR, US

[73] BAKER HUGHES OILFIELD OPERATIONS LLC, US

[85] 2021-10-15

[86] 2020-04-27 (PCT/US2020/030148)

[87] (WO2020/223175)

[30] US (62/842,233) 2019-05-02

[30] US (16/859,161) 2020-04-27

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[11] **3,138,062**  
[13] C

[51] **Int.Cl. G08G 1/00 (2006.01) B60W 40/02 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR OPTIMIZING ROUTE PLANS IN AN OPERATING ENVIRONMENT**

[54] **SYSTEMES ET METHODES POUR OPTIMISER LES TRAJETS DANS UN ENVIRONNEMENT OPERATIONNEL**

[72] LI, WEN ZHENG, JP

[73] ROPYUTA ROBOTICS CO., LTD., JP

[86] (3138062)

[87] (3138062)

[22] 2021-11-08

[30] US (16/953,415) 2020-11-20

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[11] **3,138,165**  
[13] C

[51] **Int.Cl. G02B 1/00 (2006.01) B82Y 30/00 (2011.01) B82Y 40/00 (2011.01) C01B 32/152 (2017.01) G02B 5/20 (2006.01)**

[25] EN

[54] **OPTICAL FILTER BASED ON LIGHT-MATTER COUPLING IN QUANTUM-CONFINED CAVITY SPACES**

[54] **FILTRE OPTIQUE BASEE SUR UN COUPLAGE DE MATIERE LEGERE DANS DES ESPACES CAVITAIRES CONFINES QUANTIQUES**

[72] KORUGA, DJURO, RS

[73] FIELDPOINT (CYPRUS) LIMITED, CY

[85] 2021-11-15

[86] 2019-06-12 (PCT/EP2019/065365)

[87] (WO2020/249207)

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[11] **3,138,232**  
[13] C

[51] **Int.Cl. B01J 19/18 (2006.01) A62D 3/40 (2007.01)**

[25] EN

[54] **REACTOR AND METHOD FOR ABLATIVE CENTRIFUGE PYROLYSIS**

[54] **REACTEUR ET PROCEDURE POUR UNE PYROLYSE CENTRIFUGE ABLATIVE**

[72] GUPTA, MURLIDHAR, CA

[72] MCFARLAN, ANDREW, CA

[72] PRETO, FERNANDO, CA

[72] KHOSA, KARAM, CA

[73] HER MAJESTY THE QUEEN IN RIGHT OF CANADA, AS REPRESENTED BY THE MINISTER OF NATURAL RESOURCES, CA

[85] 2021-06-30

[86] 2020-01-15 (PCT/CA2020/050040)

[87] (WO2020/146945)

[30] US (62/793,783) 2019-01-17

---

[11] **3,138,499**  
[13] C

[51] **Int.Cl. E21B 43/26 (2006.01) G06N 20/00 (2019.01) E21B 47/06 (2012.01)**

[25] EN

[54] **OFFSET PRESSURE PREDICTION BASED PUMPING SCHEDULE GENERATOR FOR WELL INTERFERENCE MITIGATION**

[54] **PREDICTION D'UNE PRESSION DE COMPENSATION EN FONCTION D'UN GENERATEUR D'HORAIRE DE POMPAGE POUR L'ATTENUATION D'UNE INTERFERENCE DE Puits**

[72] RAY, BAIDURJA, US

[72] PARSEGOV, SERGEI, US

[72] SWAMINATHAN, TIRUMANI, US

[72] STARK, DANIEL JOSHUA, US

[73] HALLIBURTON ENERGY SERVICES, INC., US

[86] (3138499)

[87] (3138499)

[22] 2021-11-10

[30] US (17/451,604) 2021-10-20

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,138,900**  
[13] C

[51] **Int.Cl. H04B 1/62 (2006.01) H04W 88/08 (2009.01)**

[25] EN

[54] **DUAL-BAND DIGITAL PRE-DISTORTION SYSTEM AND METHOD**

[54] **SYSTEME DE PREDISTORSION NUMERIQUE A DOUBLE BANDE ET METHODE**

[72] HE, TIAN, US

[72] YOUNG, CHAD, US

[72] KULARATNA, SHAVANTHA, US

[72] NOVAK, PETER, US

[72] LONGWELL, JACOB EDWARD, US

[73] NOKIA SOLUTIONS AND NETWORKS OY, FI

[86] (3138900)

[87] (3138900)

[22] 2021-11-12

[30] FI (20206233) 2020-12-01

---

[11] **3,139,591**  
[13] C

[51] **Int.Cl. A61F 2/02 (2006.01) A61K 9/00 (2006.01) A61K 35/39 (2015.01) A61K 38/28 (2006.01) A61L 27/54 (2006.01) A61P 3/10 (2006.01) B01D 69/02 (2006.01) C12N 5/071 (2010.01) C12M 3/06 (2006.01)**

[25] EN

[54] **A BIOCOMPATIBLE MEMBRANE COMPOSITE**

[54] **COMPOSITE A MEMBRANE BIOCOMPATIBLE**

[72] BRUHN, TIMOTHY M., US

[72] D'AMOUR, KEVIN, US

[72] FOLK, CHRISTOPHER, US

[72] KROON, EVERT, US

[72] MARTINSON, LAURA, US

[72] MCGREEVY, CRAIG, US

[72] RITROVATO, SCOTT A., US

[72] RUSCH, GREG, US

[72] SCOTT, MICHAEL, US

[72] ZAMBOTTI, LAUREN R., US

[72] ZHANG, QIANG (JOHN), US

[72] KAKKASSERY, JOSEPH, US

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

[73] VIACYTE, INC., US

[85] 2021-11-25

[86] 2020-05-30 (PCT/US2020/035447)

[87] (WO2020/243663)

[30] US (62/855,481) 2019-05-31

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[11] **3,140,628**  
[13] C

[51] **Int.Cl. E02D 31/02 (2006.01) B32B 7/12 (2006.01) B32B 9/00 (2006.01) E04B 1/62 (2006.01)**

[25] EN

[54] **DUAL WATERPROOFING MEMBRANE ASSEMBLY WITH BENTONITE SHEET WATERPROOFING MEMBRANE AND ADHESIVE SHEET MEMBRANE**

[54] **ASSEMBLAGE D'ETANCHEITE A DEUX MEMBRANES COMPOSE D'UNE MEMBRANE D'ETANCHEITE DE BENTONITE EN FEUILLE ET D'UNE MEMBRANE ADHESIVE EN FEUILLE**

[72] RUDYAN, AMIR, US

[73] RUDYAN, AMIR, US

[86] (3140628)

[87] (3140628)

[22] 2021-11-29

[30] US (17/404,964) 2021-08-17

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[11] **3,140,711**  
[13] C

[51] **Int.Cl. H05B 45/345 (2020.01) F21S 4/10 (2016.01) H05B 45/37 (2020.01) F21V 23/02 (2006.01)**

[25] EN

[54] **LIGHT STRING WITH CONSTANT-CURRENT RECTIFICATION**

[54] **BANDE DE LUMIERE AVEC REDRESSEMENT DE COURANT CONSTANT**

[72] LIN, XIONGZHONG, CN

[72] WANG, BIHAI, CN

[72] LIU, YAO, CN

[73] ZHANGZHOU GO WIN LIGHTING CO., LTD, CN

[86] (3140711)

[87] (3140711)

[22] 2021-11-29

[30] CN (202122704575.X) 2021-11-05

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[11] **3,140,770**  
[13] C

[51] **Int.Cl. A01K 57/00 (2006.01) A01K 59/00 (2006.01)**

[25] EN

[54] **AUTOMATIC BEE SEPARATION DEVICE**

[54] **DISPOSITIF DE SEPARATION AUTOMATIQUE D'ABEILLES**

[72] JEONG, HYUK, KR

[73] JEONG, HYUK, KR

[85] 2021-11-16

[86] 2020-09-21 (PCT/KR2020/012691)

[87] (WO2021/054795)

[30] KR (10-2019-0116107) 2019-09-20

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[11] **3,141,305**  
[13] C

[51] **Int.Cl. A61L 2/10 (2006.01) A61L 2/26 (2006.01)**

[25] EN

[54] **ANTIMICROBIAL SYSTEM WITH DISTRIBUTED USER AUTHENTICATED DISINFECTION CONTROLS AND AUTHENTICATED SAFE LOCKOUT PROTOCOL**

[54] **SYSTEME ANTIMICROBIEN AVEC CONTROLES REPARTIS DE LA DESINFECTION UTILISANT L'AUTHENTIFICATION D'UTILISATEUR ET PROTOCOLE DE VERROUILLAGE SECURITAIRE AUTHENTIFIE**

[72] WESTRICK, RICHARD L., JR., US

[72] SOLIMAN, SAMAR SHAKER, US

[73] ABL IP HOLDING, LLC, US

[86] (3141305)

[87] (3141305)

[22] 2021-12-08

[30] US (17/204,082) 2021-03-17

[30] US (17/314,655) 2021-05-07

**Canadian Patents Issued  
January 16, 2024**

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[11] **3,143,793**  
[13] C

[51] **Int.Cl. A61K 31/336 (2006.01) A61P 31/02 (2006.01) A61P 31/04 (2006.01) A61P 43/00 (2006.01)**

[25] EN

[54] **BIOFILM DISRUPTION**

[54] **PERTURBATION DE BIOFILM**

[72] THOMAS, DAVID WILLIAM, GB

[72] REDDELL, PAUL WARREN, AU

[72] BOYLE, GLEN MATHEW, AU

[72] CULLEN, JASON KINGSLEY, AU

[72] GORDON, VICTORIA ANNE, AU

[72] HILL, KATJA ETEL, GB

[72] POWELL, LYDIA CHARLOTTE, GB

[72] PRITCHARD, MANON F., GB

[72] PARSONS, PETER G., AU

[73] QBIOTICS PTY LTD, AU

[85] 2021-12-16

[86] 2020-06-19 (PCT/AU2020/050623)

[87] (WO2020/252535)

[30] AU (2019902144) 2019-06-19

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[11] **3,144,326**  
[13] C

[51] **Int.Cl. C08F 220/58 (2006.01) C08F 220/36 (2006.01) C08L 33/14 (2006.01) C09D 5/44 (2006.01) C25D 13/06 (2006.01)**

[25] EN

[54] **ADDITION POLYMER FOR ELECTRODEPOSITABLE COATING COMPOSITIONS**

[54] **POLYMERE D'ADDITION POUR COMPOSITIONS DE REVETEMENT ELECTRODEPOSABLES**

[72] DACKO, CHRISTOPHER A., US

[72] MAYO, MICHAEL A., US

[72] MCCOLLUM, GREGORY J., US

[73] PRC-DESOTO INTERNATIONAL, INC., US

[85] 2021-12-17

[86] 2020-06-29 (PCT/US2020/040051)

[87] (WO2020/264468)

[30] US (16/454,492) 2019-06-27

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[11] **3,144,439**  
[13] C

[51] **Int.Cl. H04L 9/40 (2022.01) H04L 12/40 (2006.01)**

[25] EN

[54] **ENFORCING ACCESS TO ENDPOINT RESOURCES**

[54] **CONTROLE DE L'ACCES AUX RESSOURCES DE POINT D'EXTREMITE**

[72] BROWN, SCOTT DALE, US

[72] KEATS, ANDREW, US

[72] ROCKEY, MATTHEW, US

[72] ESTES, JASON, US

[73] ITRON, INC., US

[86] (3144439)

[87] (3144439)

[22] 2021-12-29

[30] US (17/213145) 2021-03-25

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[11] **3,144,978**  
[13] C

[51] **Int.Cl. C05G 3/40 (2020.01) C05G 5/12 (2020.01) C05G 5/20 (2020.01) C05C 9/00 (2006.01) C05F 11/00 (2006.01) C05G 1/00 (2006.01) C05G 3/00 (2020.01)**

[25] EN

[54] **LIGNIN-UREA AGRICULTURAL FERTILIZER**

[54] **ENGRAIS AGRICOLE A BASE DE LIGNINE-UREE**

[72] LEWIS, MARK, US

[72] LEWIS, JESSICA, US

[72] BURKHARDT, SABRINA, US

[73] SUSTAINABLE FIBER TECHNOLOGIES, LLC, US

[85] 2021-12-22

[86] 2020-06-26 (PCT/US2020/039858)

[87] (WO2020/264322)

[30] US (62/868,361) 2019-06-28

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[11] **3,145,090**  
[13] C

[51] **Int.Cl. B60R 13/00 (2006.01) B60Q 1/26 (2006.01) B60Q 9/00 (2006.01) B60R 11/04 (2006.01)**

[25] EN

[54] **AUTOMOBILE ACCESSORY LIGHT FIXTURE MITIGATING RF EMISSIONS**

[54] **ACCESSOIRE D'ECLAIRAGE AUTOMOBILE ATTENUANT LES EMISSIONS DE RADIOFREQUENCE**

[72] TIAN, XIAO JUN, US

[72] SCHRAMM, CONNER, US

[72] ELWELL, JAMES P., US

[72] THOMPSON, MATTHEW, US

[72] HOOGENDOORN, SETH, US

[72] FREEMAN, PARKER, US

[73] PUTCO, INC., US

[86] (3145090)

[87] (3145090)

[22] 2022-01-07

[30] US (17/455154) 2021-11-16

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[11] **3,146,587**  
[13] C

[51] **Int.Cl. A01N 43/90 (2006.01) A01P 21/00 (2006.01)**

[25] EN

[54] **USE OF DIHYDROPORPHIN DERIVED FROM CHLOROPHYLL AS PLANT GROWTH REGULATOR**

[54] **UTILISATION DE DIHYDROPORPHINE DE CHLOROPHYLLE EN TANT QUE REGULATEUR DE LA CROISSANCE DES PLANTES**

[72] HUANG, JUNHAI, CN

[72] CHEN, LIMING, CN

[72] WANG, LETIAN, CN

[72] MENG, DONGFENG, CN

[72] LI, MING, CN

[72] HU, JIN, CN

[72] REN, YONG, CN

[73] ANQING BETTER BIOENGINEERING CO., LTD., CN

[85] 2021-12-24

[86] 2019-06-27 (PCT/CN2019/093380)

[87] (WO2020/258190)

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[11] **3,146,642**  
[13] C

[51] **Int.Cl. E21B 17/042 (2006.01) E21B 19/16 (2006.01)**  
[25] EN  
[54] **DOUBLE-SHOULDERED CONNECTION FOR DRILLING TUBULARS WITH LARGE INSIDE DIAMETER**  
[54] **RACCORD A DOUBLE EPAULEMENT POUR ELEMENTS TUBULAIRES DE FORAGE A GRAND DIAMETRE INTERIEUR**  
[72] COLLINS, ANTHONY LOUIS, US  
[73] NTS AMEGA WEST USA, INC., US  
[85] 2021-12-29  
[86] 2020-03-12 (PCT/US2020/022289)  
[87] (WO2020/263363)  
[30] US (62/868,561) 2019-06-28  
[30] US (16/815,330) 2020-03-11

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[11] **3,147,032**  
[13] C

[51] **Int.Cl. E06B 9/68 (2006.01) E06B 9/40 (2006.01)**  
[25] EN  
[54] **MOTORIZED ROLLER SHADE HAVING A SMART HEMBAR**  
[54] **STORE A ROULEAU MOTORISE A BARRE D'OURLET INTELLIGENTE**  
[72] PIERCE, REGINALD, US  
[72] POWELL, GARRETT, US  
[72] REBBERT, THOMAS F., US  
[73] LUTRON TECHNOLOGY COMPANY LLC, US  
[85] 2022-01-11  
[86] 2020-07-10 (PCT/US2020/041481)  
[87] (WO2021/011324)  
[30] US (62/873,294) 2019-07-12

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[11] **3,148,007**  
[13] C

[51] **Int.Cl. C01B 32/963 (2017.01) C01B 21/068 (2006.01) C01B 33/00 (2006.01) H01L 29/16 (2006.01) C30B 25/00 (2006.01) C30B 29/36 (2006.01) C30B 29/38 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR PRODUCING SILICON-CONTAINING MATERIALS**  
[54] **PROCEDE ET APPAREIL POUR PRODUIRE DES MATERIAUX CONTENANT DU SILICIUM**  
[72] SCHMID, CHRISTIAN, DE  
[72] PETRIK, GEORGIJ, DE  
[72] HAHN, JOCHEM, DE  
[72] FEINAUGLE, PETER, DE  
[73] SCHMID SILICON TECHNOLOGY GMBH, DE  
[85] 2022-01-19  
[86] 2020-07-30 (PCT/EP2020/071513)  
[87] (WO2021/023615)  
[30] DE (10 2019 211 921.2) 2019-08-08

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[11] **3,148,706**  
[13] C

[51] **Int.Cl. H04N 13/30 (2018.01) G06T 15/06 (2011.01) G06T 19/00 (2011.01) H04N 13/302 (2018.01) H04N 13/307 (2018.01) H04N 13/366 (2018.01) G02B 30/00 (2020.01) G02B 30/50 (2020.01) A61B 3/00 (2006.01) G02B 27/00 (2006.01) G09G 3/00 (2006.01)**  
[25] EN  
[54] **LIGHT FIELD VISION TESTING DEVICE, ADJUSTED PIXEL RENDERING METHOD THEREFOR, AND VISION TESTING SYSTEM AND METHOD USING SAME**  
[54] **DISPOSITIF DE TEST DE VISION DE CHAMP LUMINEUX, PROCEDE DE RENDU DE PIXELS AJUSTE POUR CELUI-CI, ET SYSTEME DE TEST DE VISION ET PROCEDE UTILISANT CELUI-CI**  
[72] GOTSCH, DANIEL, CA  
[72] LUSSIER, GUILLAUME, CA  
[72] GOC, MATEJ, CA  
[72] GARCIA, YAIZA, CA  
[72] MIHALI, RAUL, US  
[73] EVOLUTION OPTIKS LIMITED, BB  
[85] 2022-02-18  
[86] 2020-08-22 (PCT/IB2020/057887)  
[87] (WO2021/038421)  
[30] US (16/551,572) 2019-08-26  
[30] IB (PCT/IB2019/058955) 2019-10-21  
[30] US (62/929,639) 2019-11-01  
[30] US (16/810,143) 2020-03-05

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[11] **3,148,952**  
[13] C

[51] **Int.Cl. C07D 403/12 (2006.01) C07D 255/02 (2006.01) C07D 257/02 (2006.01) C07D 487/04 (2006.01)**  
[25] EN  
[54] **METHOD FOR SYNTHESIZING ZIRCONIUM COMPLEX**  
[54] **PROCEDE DE SYNTHESE D'UN COMPLEXE DE ZIRCONIUM**  
[72] IMURA, RYOTA, JP  
[73] JFE ENGINEERING CORPORATION, JP  
[85] 2022-01-27  
[86] 2020-06-25 (PCT/JP2020/025031)  
[87] (WO2021/019983)  
[30] JP (2019-139778) 2019-07-30

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[11] **3,150,127**  
[13] C

[51] **Int.Cl. D21C 3/00 (2006.01) D21C 3/02 (2006.01)**  
[25] EN  
[54] **COOKING ACCELERATOR FOR LIGNOCELLULOSE MATERIALS AND METHOD FOR PRODUCING PULP USING SAME**  
[54] **ACCELERATEUR DE CUISSON POUR MATERIAUX LIGNOCELLULOSIQUES ET PROCEDE DE PRODUCTION DE PATE A L'AIDE DE CELUI-CI**  
[72] TANAKA, TAKASHI, JP  
[72] TAKAI, KOUZI, JP  
[72] TOYOHARA, HARUHIKO, JP  
[73] NICCA CHEMICAL CO., LTD., JP  
[85] 2022-03-03  
[86] 2020-08-03 (PCT/JP2020/029628)  
[87] (WO2021/049204)  
[30] JP (2019-166367) 2019-09-12

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**Canadian Patents Issued  
January 16, 2024**

[11] **3,150,615**  
[13] C

[51] **Int.Cl. G05D 1/228 (2024.01) G05D 1/226 (2024.01) G05D 1/229 (2024.01) G05D 1/243 (2024.01) G05D 1/245 (2024.01) G05D 1/248 (2024.01) G05D 1/43 (2024.01) G05D 1/49 (2024.01) G05D 1/622 (2024.01) G05D 1/648 (2024.01) B60W 60/00 (2020.01) G01S 17/86 (2020.01)**

[25] EN

[54] **SYSTEM AND METHOD OF CONTROL FOR AUTONOMOUS OR REMOTE-CONTROLLED VEHICLE PLATFORM**

[54] **SYSTEME ET PROCEDE DE COMMANDE POUR PLATEFORME DE VEHICULE A COMMANDE AUTONOME OU A DISTANCE**

[72] CONNELL, RICHARD, US  
[72] MILLER, MICHAEL, US  
[72] LAWSON, JOSHUA, US  
[72] SAXENA, SURYANSH, US  
[72] LEVINE, MATTHEW, US  
[72] KINI, PRATHAMESH, US  
[72] BOUTERIGE, RAPHAEL, US  
[72] GLISSON, MATTHEW, US  
[72] RUSSELL, RAYMOND, US  
[72] KETTERER, JAMES, US  
[72] HERMAN, HERMAN, US  
[73] DEERE & COMPANY, US  
[73] CARNEGIE MELLON UNIVERSITY, US

[85] 2022-02-10  
[86] 2020-06-30 (PCT/US2020/040381)  
[87] (WO2021/040884)  
[30] US (62/894,685) 2019-08-30

[11] **3,150,888**  
[13] C

[51] **Int.Cl. C08F 8/32 (2006.01) C08G 59/40 (2006.01) C09D 5/44 (2006.01) C09D 201/02 (2006.01) C08K 5/25 (2006.01)**

[25] EN

[54] **CROSSLINKING COMPOSITIONS AND COATINGS FORMED THEREFROM**

[54] **COMPOSITIONS DE RETICULATION ET REVETEMENTS FORMES A PARTIR DE CELLES-CI**

[72] MACDONALD, MELISSA JOAN, US  
[72] ZHENG, QI, US  
[72] IBRAHIM, ABDULRAHMAN DAWOUD, US  
[72] LEE, SE RYEON, US  
[72] MIZUHARA, TSUKASA, US  
[72] GRENIER, CHRISTOPHE RENE GASTON, US  
[72] ESWARAKRISHNAN, VENKATACHALAM, US  
[73] PPG INDUSTRIES OHIO, INC., US  
[85] 2022-03-10  
[86] 2020-10-16 (PCT/US2020/055930)  
[87] (WO2021/076858)  
[30] US (16/655,662) 2019-10-17

[11] **3,151,141**  
[13] C

[51] **Int.Cl. H04W 76/15 (2018.01) H04W 8/02 (2009.01) H04W 60/00 (2009.01) H04W 76/10 (2018.01) H04L 67/141 (2022.01)**

[25] EN

[54] **POLICY CONTROL FOR MULTIPLE ACCESSES**

[54] **CONTROLE DE POLITIQUE POUR ACCES MULTIPLES**

[72] QIAO, WEIHUA, US  
[72] DINAN, ESMAEL, US  
[72] PARK, KYUNGMIN, US  
[72] RYU, JINSOOK, US  
[72] TALEBI FARD, PEYMAN, US  
[72] KIM, TAEHUN, US  
[73] OFINNO, LLC, US  
[85] 2022-02-14  
[86] 2020-08-24 (PCT/US2020/047598)  
[87] (WO2021/035206)  
[30] US (62/890,140) 2019-08-22

[11] **3,151,150**  
[13] C

[51] **Int.Cl. G06F 3/048 (2013.01)**

[25] EN

[54] **TECHNOLOGIES FOR VIRTUALLY TRYING-ON ITEMS**

[54] **TECHNOLOGIES POUR ESSAYER VIRTUELLEMENT DES ARTICLES**

[72] TASHJIAN, MARIA, US  
[73] TASHJIAN, MARIA, US  
[85] 2022-03-14  
[86] 2021-06-04 (PCT/US2021/036008)  
[87] (WO2021/248071)  
[30] US (63/035,346) 2020-06-05

[11] **3,151,673**  
[13] C

[51] **Int.Cl. G01N 21/25 (2006.01) G06Q 50/02 (2012.01) A01G 13/00 (2006.01)**

[25] EN

[54] **DYNAMIC AREA THRESHOLDING FOR AUTOMATIC CROP HEALTH CHANGE DETECTION AND ALERTING SYSTEM**

[54] **SEUILLAGE DE ZONE DYNAMIQUE POUR SYSTEME AUTOMATIQUE DE DETECTION ET D'ALERTE DE CHANGEMENT DE SANTE DE CULTURE AGRICOLE**

[72] LOGIE, GORDON STUART JAMES, CA  
[73] FARMERS EDGE INC., CA  
[85] 2022-02-17  
[86] 2020-11-16 (PCT/CA2020/051561)  
[87] (WO2021/097559)  
[30] US (62/939,373) 2019-11-22

[11] **3,151,905**  
[13] C

[51] **Int.Cl. H01M 8/04119 (2016.01) B01D 63/02 (2006.01)**

[25] EN

[54] **HUMIDIFIER FOR FUEL CELL**

[54] **HUMIDIFICATEUR DE PILE A COMBUSTIBLE**

[72] AHN, WOONG JEON, KR  
[72] OH, YOUNG SEOK, KR  
[72] KIM, IN HO, KR  
[73] KOLON INDUSTRIES, INC., KR  
[85] 2022-03-21  
[86] 2020-11-27 (PCT/KR2020/017045)  
[87] (WO2021/107668)  
[30] KR (10-2019-0156900) 2019-11-29

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,154,199**  
[13] C

[51] **Int.Cl. F04B 47/02 (2006.01) E21B 33/03 (2006.01) E21B 43/12 (2006.01) F04B 17/03 (2006.01)**

[25] EN  
[54] **LONG STROKE PUMPING UNIT**  
[54] **UNITE DE POMPAGE A LONGUE COURSE**

[72] ROBISON, CLARK E., US  
[72] THOMAS, BENSON, US  
[72] HALL, KEVIN, US  
[72] CHRISTIAN, SEAN, M, US  
[72] LEMBCKE, JEFFREY JOHN, US  
[73] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US

[86] (3154199)  
[87] (3154199)  
[22] 2016-01-29  
[62] 2,975,272  
[30] US (62/109,144) 2015-01-29  
[30] US (62/112,250) 2015-02-05  
[30] US (62/114,892) 2015-02-11  
[30] US (62/121,821) 2015-02-27

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[11] **3,154,949**  
[13] C

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/16 (2006.01) A61M 15/00 (2006.01)**

[25] EN  
[54] **A STABLE EFFERVESCENT CO-PROCESSED EXCIPIENT COMPOSITION AND A PROCESS FOR PREPARING THE SAME**  
[54] **COMPOSITION D'EXCIPIENT CO-TRAITE EFFERVESCENT STABLE ET SON PROCEDE DE PREPARATION**

[72] DESAI, MAHESH, US  
[72] MCCRIMLISK, ROBERT, US  
[72] SCHWING, QUYEN VO, US  
[73] ISP INVESTMENTS LLC, US

[85] 2022-04-14  
[86] 2020-10-13 (PCT/US2020/055400)  
[87] (WO2021/076506)  
[30] US (62/916,402) 2019-10-17

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[11] **3,154,990**  
[13] C

[51] **Int.Cl. C25C 3/08 (2006.01) B05D 1/00 (2006.01) B05D 7/24 (2006.01) C25C 7/02 (2006.01)**

[25] EN  
[54] **METHOD OF PROTECTION OF THE CATHODE BLOCKS OF ALUMINIUM REDUCTION CELLS WITH BAKED ANODES, PROTECTIVE COMPOSITE MIXTURE AND COATING**  
[54] **METHODE DE PROTECTION DES BLOCS CATHODIQUES D'ALVEOLES DE REDUCTION D'ALUMINIUM COMPRENANT DES ANODES CUITES, UN MELANGE COMPOSITE PROTECTEUR ET UN REVETEMENT**

[72] NAGIBIN, GENNADIJ EFIMOVICH, RU  
[72] FEDOROVA, ELENA NIKOLAEVNA, RU  
[72] DOBROSMYSLOV, SERGEJ SERGEEVICH, RU  
[72] KIRILLOVA, IRINA ANATOL'EVNA, RU  
[72] ZAVADYAK, ANDREJ VASIL'EVICH, RU  
[72] PUZANOV, IL'YA IVANOVICH, RU  
[73] OBSHCHESTVO S OGRANICHENNOY OTVETSTVENNOST'YU "OBEDINENNAYA KOMPANIYA RUSAL INZHENERNO-TEKHNOLOGICHESKIY TSENTR", RU

[85] 2022-03-17  
[86] 2020-08-25 (PCT/RU2020/050199)  
[87] (WO2021/061014)  
[30] RU (2019130350) 2019-09-24

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[11] **3,155,220**  
[13] C

[51] **Int.Cl. C07C 69/40 (2006.01) C07D 309/12 (2006.01) C07D 495/04 (2006.01) C12P 17/18 (2006.01) C12P 41/00 (2006.01)**

[25] EN  
[54] **SOLID FORMS OF A THIENOPYRIMIDINEDIONE ACC INHIBITOR AND METHODS FOR PRODUCTION THEREOF**  
[54] **FORMES SOLIDES D'UN INHIBITEUR DE THIENOPYRIMIDINEDIONE ACC ET LEURS PROCEDES DE PRODUCTION**

[72] ALEXANDER, KATY, US  
[72] AMEDIO, JR., JOHN C., US  
[72] CALIMSIZ, SELCUK, US  
[72] GEIER, MICHAEL, US  
[72] HARRIMAN, GERALDINE C., US  
[72] HU, SIJUN, US  
[72] LAWSON, JON P., US  
[72] MORRISON, HENRY, US  
[72] SABOURIN, KYLE, US  
[72] SCOTT, MARK E., US  
[72] VARGHESE, VIMAL, US  
[72] VARIA, KUNAL ARVIND, US  
[72] WANG, XIAOTIAN, US  
[72] YANG, XIAOWEI, US  
[73] GILEAD APOLLO, LLC, US

[86] (3155220)  
[87] (3155220)  
[22] 2017-03-01  
[62] 3,015,526  
[30] US (62/302,755) 2016-03-02  
[30] US (62/303,237) 2016-03-03

**Canadian Patents Issued  
January 16, 2024**

[11] **3,155,266**  
[13] C

[51] **Int.Cl. G09G 5/377 (2006.01) G06T 19/00 (2011.01) G06T 17/00 (2006.01) G06N 20/00 (2019.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR RENDERING A PORTION OF A 3D DISPLAY**  
[54] **SYSTEMES ET METHODES POUR RENDRE UNE PARTIE D'UN AFFICHAGE 3D**  
[72] MELLING, ALAN RICHARD, US  
[72] VELEZ SALAS, PEDRO DAMIAN, US  
[72] SCHINDLER, GRANT EVAN, US  
[72] FRANCOIS, BRUNO JEAN, US  
[72] CILIA, REMY TRISTAN, US  
[73] CARVANA, LLC, US  
[86] (3155266)  
[87] (3155266)  
[22] 2022-04-06  
[30] US (17/227,006) 2021-04-09

[11] **3,156,542**  
[13] C

[51] **Int.Cl. C08L 29/14 (2006.01) C08K 3/013 (2018.01) B32B 27/28 (2006.01) C08J 3/18 (2006.01) C08J 3/20 (2006.01) C08K 5/098 (2006.01) C08K 5/37 (2006.01) C08K 5/40 (2006.01)**  
[25] EN  
[54] **MODIFIED POLYVINYL BUTYRAL MATERIAL, AND PREPARATION AND APPLICATIONS THEREOF**  
[54] **MATERIAU DE POLYVINYL BUTYRAL MODIFIE ET PREPARATION ET APPLICATIONS CONNEXES**  
[72] CHANG, CHI-LO, TW  
[73] LEADER SHINING MATERIAL CO., LTD., TW  
[86] (3156542)  
[87] (3156542)  
[22] 2022-04-27

[11] **3,157,147**  
[13] C

[51] **Int.Cl. H01M 8/04119 (2016.01)**  
[25] EN  
[54] **FUEL CELL HUMIDIFIER**  
[54] **HUMIDIFICATEUR A PILE A COMBUSTIBLE**  
[72] KIM, DO WOO, KR  
[72] YANG, HYOUNG MO, KR  
[72] KIM, IN HO, KR  
[72] AHN, NA HYUN, KR  
[73] KOLON INDUSTRIES, INC., KR  
[85] 2022-04-05  
[86] 2020-11-27 (PCT/KR2020/017078)  
[87] (WO2021/107683)  
[30] KR (10-2019-0156903) 2019-11-29  
[30] KR (10-2019-0157111) 2019-11-29  
[30] KR (10-2019-0157214) 2019-11-29

[11] **3,157,412**  
[13] C

[51] **Int.Cl. A47L 7/00 (2006.01) A47L 9/00 (2006.01)**  
[25] EN  
[54] **CLEANING APPARATUS FOR CLEANING A ROTATABLE BRUSH ROLLER OF A CLEANING APPLIANCE, AND CLEANING SYSTEM**  
[54] **DISPOSITIF DE NETTOYAGE POUR LE NETTOYAGE D'UNE BROSE CYLINDRIQUE ROTATIVE D'UN APPAREIL DE NETTOYAGE ET SYSTEME DE NETTOYAGE**  
[72] BRUGORA, ALESSANDRO, IT  
[72] DICKEL, STEPHEN, US  
[73] CARL FREUDENBERG KG, DE  
[85] 2021-11-04  
[86] 2020-05-12 (PCT/EP2020/063119)  
[87] (WO2020/229442)  
[30] DE (10 2019 112 779.3) 2019-05-15

[11] **3,157,617**  
[13] C

[51] **Int.Cl. G01R 31/367 (2019.01) G01R 31/392 (2019.01)**  
[25] EN  
[54] **NEURAL NETWORK FOR ESTIMATING BATTERY HEALTH**  
[54] **RESEAU NEURONAL POUR ESTIMER L'ETAT DE SANTE D'UNE BATTERIE**  
[72] LEONARD, TIMOTHY JOSEPH, US  
[72] LEONARD, THOMAS J., US  
[73] BTECH INC., US  
[86] (3157617)  
[87] (3157617)  
[22] 2022-04-27  
[30] US (63/192,352) 2021-05-24  
[30] US (17/558,820) 2021-12-22

[11] **3,157,661**  
[13] C

[51] **Int.Cl. B01F 23/2375 (2022.01) B01F 23/233 (2022.01) B01F 27/1151 (2022.01)**  
[25] EN  
[54] **NANOBUBBLE GENERATION SYSTEM USING FRICTION**  
[54] **SYSTEME DE GENERATION DE NANOBULLES UTILISANT LE FROTTEMENT**  
[72] YOO, YOUNG HO, KR  
[72] YOO, TAE GEUN, KR  
[72] YOO, A RAM, KR  
[73] YOO, YOUNG HO, KR  
[73] FAWOO NANOTECH CO.,LTD., KR  
[85] 2022-04-08  
[86] 2020-07-30 (PCT/KR2020/010033)  
[87] (WO2021/071072)  
[30] KR (10-2019-0126340) 2019-10-11



**Brevets canadiens délivrés  
16 janvier 2024**

[11] **3,157,822**

[13] C

- [51] **Int.Cl. C22C 38/16 (2006.01)**  
[25] EN  
[54] **NORMALIZED UOE WELDED PIPE AND MANUFACTURING METHOD THEREOF**  
[54] **TUYAU UOE SOUDE NORMALISE ET SON PROCEDE DE FABRICATION**  
[72] SUN, LEILEI, CN  
[72] XIE, SHIQIANG, CN  
[72] ZHANG, CHUANGUO, CN  
[72] ZHENG, LEI, CN  
[72] WANG, BO, CN  
[72] SHEN, YAN, CN  
[73] BAOSHAN IRON & STEEL CO., LTD., CN  
[85] 2022-04-12  
[86] 2020-10-21 (PCT/CN2020/122336)  
[87] (WO2021/078131)  
[30] CN (201910998448.X) 2019-10-21

[11] **3,158,225**

[13] C

- [51] **Int.Cl. C25F 1/04 (2006.01) B21B 45/06 (2006.01)**  
[25] EN  
[54] **ELECTRO-ASSISTED PICKLING OF STEEL**  
[54] **DECAPAGE ELECTRO-ASSISTE DE L'ACIER**  
[72] KOLTSOV, ALEXEY, FR  
[72] ALEXANDRE, PATRICE, FR  
[72] THEYSSIER, MARIE-CHRISTINE, FR  
[73] ARCELORMITTAL, LU  
[85] 2022-04-14  
[86] 2019-11-25 (PCT/IB2019/060108)  
[87] (WO2021/105738)

[11] **3,158,356**

[13] C

- [51] **Int.Cl. G01S 7/00 (2006.01) G01S 7/41 (2006.01) G01S 13/28 (2006.01) G01S 13/58 (2006.01) G01S 13/72 (2006.01) G01S 13/89 (2006.01) G01S 13/90 (2006.01) G08G 3/02 (2006.01)**  
[25] EN  
[54] **MARITIME SURVEILLANCE RADAR**  
[54] **RADAR DE SURVEILLANCE MARITIME**  
[72] MARTINEZ, JOSE MARQUEZ, GB  
[73] AIRBUS DEFENCE AND SPACE LIMITED, GB  
[85] 2022-05-13  
[86] 2020-11-11 (PCT/GB2020/052860)  
[87] (WO2021/094740)  
[30] EP (19275122.0) 2019-11-13

[11] **3,158,395**

[13] C

- [51] **Int.Cl. A63B 53/04 (2015.01)**  
[25] EN  
[54] **GOLF CLUB HEADS WITH OPTIMIZED CHARACTERISTICS AND RELATED METHODS**  
[54] **TETES DE BATON DE GOLF A CARACTERISTIQUES OPTIMISEES ET METHODES ASSOCIEES**  
[72] SCHWEIGERT, BRADLEY, D., US  
[72] STOKKE, RYAN, M., US  
[73] KARSTEN MANUFACTURING CORPORATION, US  
[86] (3158395)  
[87] (3158395)  
[22] 2014-03-14  
[62] 3,074,956  
[30] US (13/804,859) 2013-03-14  
[30] US (13/804,917) 2013-03-14  
[30] US (13/826,111) 2013-03-14

[11] **3,159,704**

[13] C

- [51] **Int.Cl. B42D 25/00 (2014.01) B42D 25/328 (2014.01) B42D 25/346 (2014.01)**  
[25] FR  
[54] **SECURITY DOCUMENT HAVING A PERSONALISED IMAGE FORMED FROM A METAL HOLOGRAM AND METHOD FOR THE PRODUCTION THEREOF**  
[54] **UN DOCUMENT SECURISE AVEC UNE IMAGE PERSONNALISEE FORMEE A PARTIR D'UN HOLOGRAMME METALLIQUE ET SON PROCEDE DE FABRICATION**  
[72] DURIEZ, CHRISTOPHE, FR  
[72] AZUELOS, PAUL, FR  
[73] IDEMIA FRANCE, FR  
[85] 2022-05-26  
[86] 2020-11-10 (PCT/FR2020/052053)  
[87] (WO2021/105582)  
[30] FR (FR1913513) 2019-11-29

[11] **3,161,698**

[13] C

- [51] **Int.Cl. H04W 4/90 (2018.01) H04W 4/10 (2009.01) H04W 4/08 (2009.01) H04W 76/45 (2018.01) H04W 76/50 (2018.01)**  
[25] EN  
[54] **DEVICE, SYSTEM AND METHOD FOR EMERGENCY AUDIO TRANSMISSION**  
[54] **DISPOSITIF, SYSTEME ET PROCEDE DE TRANSMISSION AUDIO D'URGENCE**  
[72] GLICK, MORDECHAI, IL  
[72] BITTON, GABRIEL, IL  
[72] GEAN, NISSIM, IL  
[72] MASSOVER, ALEXANDER, IL  
[72] BLUTMAN, SAPIR, IL  
[73] MOTOROLA SOLUTIONS, INC., US  
[85] 2022-05-13  
[86] 2020-09-30 (PCT/US2020/053615)  
[87] (WO2021/108029)  
[30] US (16/699,022) 2019-11-28

**Canadian Patents Issued  
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[11] **3,161,978**  
[13] C

[51] **Int.Cl. E21B 33/128 (2006.01) E21B 33/124 (2006.01) E21B 33/129 (2006.01) E21B 33/13 (2006.01) E21B 33/134 (2006.01) E21B 34/14 (2006.01)**

[25] EN

[54] **ISOLATION DEVICE WITH INNER MANDREL REMOVED AFTER SETTING**

[54] **DISPOSITIF D'ISOLATION AVEC MANDRIN INTERNE RETIRE APRES DISPOSITION**

[72] SMITH, DONALD RAY, US

[73] HALLIBURTON ENERGY SERVICES, INC., US

[85] 2022-05-17

[86] 2021-02-15 (PCT/US2021/018102)

[87] (WO2021/188239)

[30] US (62/991,377) 2020-03-18

[30] US (17/175,781) 2021-02-15

[11] **3,162,615**  
[13] C

[51] **Int.Cl. A61K 9/30 (2006.01) A61K 31/195 (2006.01) A61K 47/12 (2006.01) A61K 47/22 (2006.01) A61K 47/26 (2006.01) A61K 47/38 (2006.01) A61P 25/00 (2006.01)**

[25] EN

[54] **FILM-COATED TABLETS HAVING SMOOTH SURFACE**

[54] **COMPRIMES PELLICULES AYANT UNE SURFACE LISSE**

[72] OZAKI, YURIKA, JP

[72] YAMAGUCHI, MINAKO, JP

[73] DAIICHI SANKYO COMPANY, LIMITED, JP

[85] 2022-06-21

[86] 2020-12-18 (PCT/JP2020/047412)

[87] (WO2021/132072)

[30] JP (2019-231824) 2019-12-23

[11] **3,162,779**  
[13] C

[51] **Int.Cl. H05F 7/00 (2006.01)**

[25] EN

[54] **ENERGY COLLECTION**

[54] **COLLECTE D'ENERGIE**

[72] MCCOWEN, CLINT, US

[73] ION POWER GROUP LLC, US

[86] (3162779)

[87] (3162779)

[22] 2014-05-22

[62] 2,953,654

[30] US (13/929,414) 2013-06-27

[11] **3,162,937**  
[13] C

[51] **Int.Cl. G01N 1/20 (2006.01)**

[25] EN

[54] **METHOD FOR SAMPLING SEA SURFACE MICROLAYER**

[54] **PROCEDE D'ECHANTILLONNAGE D'UNE MICROCOUCHE DE SURFACE DE MER**

[72] DING, HAIBING, CN

[72] LI, ZUNWEI, CN

[72] YIN, HANG, CN

[72] SHI, JINGWEN, CN

[72] CHAI, YING, CN

[72] ZHANG, LIXIN, CN

[73] OCEAN UNIVERSITY OF CHINA, CN

[85] 2022-05-26

[86] 2021-03-10 (PCT/CN2021/079960)

[87] (WO2021/190303)

[30] CN (202010213250.9) 2020-03-24

[11] **3,162,939**  
[13] C

[51] **Int.Cl. C25B 9/65 (2021.01) C25B 9/19 (2021.01) C25B 9/77 (2021.01) C25B 15/023 (2021.01) C25B 1/04 (2021.01)**

[25] EN

[54] **ELECTROLYSIS SYSTEM FOR BREAKING DOWN WATER INTO HYDROGEN AND OXYGEN AND A METHOD FOR OPERATING THE ELECTROLYSIS SYSTEM**

[54] **SYSTEME D'ELECTROLYSE POUR DECOMPOSER DE L'EAU EN HYDROGENE ET EN OXYGENE, ET PROCEDE DE FONCTIONNEMENT DU SYSTEME D'ELECTROLYSE**

[72] SCHACHERER, CHRISTIAN, DE

[72] WOLF, ERIK, DE

[73] SIEMENS ENERGY GLOBAL GMBH & CO. KG, DE

[85] 2022-05-26

[86] 2020-10-15 (PCT/EP2020/079046)

[87] (WO2021/104744)

[30] EP (19212114.3) 2019-11-28

[11] **3,164,681**  
[13] C

[51] **Int.Cl. G06K 7/14 (2006.01)**

[25] EN

[54] **A TWO DIMENSIONAL BARCODE WITH DYNAMIC ENVIRONMENTAL DATA SYSTEM, METHOD, AND APPARATUS**

[54] **SYSTEME, PROCEDE ET APPAREIL POUR CODE A BARRES BIDIMENSIONNEL A DONNEES ENVIRONNEMENTALES DYNAMIQUES**

[72] PRUSIK, THADDEUS, US

[72] ABDO, MOHANNAD, US

[72] HOHBERGER, CLIVE, US

[73] TEMPTIME CORPORATION, US

[86] (3164681)

[87] (3164681)

[22] 2018-03-19

[62] 3,057,307

[30] US (15/464,207) 2017-03-20

[11] **3,164,820**  
[13] C

[51] **Int.Cl. A01K 67/033 (2006.01) G05D 23/00 (2006.01)**

[25] EN

[54] **PRODUCTION LINE WITH FLOW-THROUGH FEED HEATING AND/OR COOLING SYSTEM AND HEATED SURFACE FOR BREEDING INSECTS, METHOD FOR BREEDING INSECTS AND USES THEREOF**

[54] **LIGNE DE PRODUCTION AVEC SYSTEME DE CHAUFFAGE ET/OU DE REFROIDISSEMENT DE NOURRITURE A ECOULEMENT CONTINU ET SURFACE CHAUFFEE POUR L'ELEVAGE D'INSECTES, PROCEDE D'ELEVAGE D'INSECTES ET UTILISATIONS ASSOCIEES**

[72] JOZEFIAK, DAMIAN, PL

[72] LUBIK, PIOTR, PL

[72] DUDEK, KRZYSZTOF, PL

[73] HIPROMINE S.A., PL

[85] 2022-06-14

[86] 2021-07-05 (PCT/PL2021/050052)

[87] (WO2021/235958)

[30] PL (P.435063) 2020-08-24

**Brevets canadiens délivrés  
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[11] **3,166,893**  
[13] C

[51] **Int.Cl. G01N 15/08 (2006.01)**  
[25] EN  
[54] **TIME-DOMAIN REFLECTOMETRY MATRIX SUCTION SENSOR**  
[54] **DÉTECTEUR DE POTENTIEL DE SUCCION PAR REFLECTOMETRIE DE DOMAINE TEMPOREL (RDT)**  
[72] SKALING, WHITNEY, US  
[73] SKALING, WHITNEY, US  
[85] 2022-07-05  
[86] 2020-12-21 (PCT/US2020/066363)  
[87] (WO2021/154424)  
[30] US (16/776,342) 2020-01-29

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[11] **3,169,188**  
[13] C

[51] **Int.Cl. G06Q 20/38 (2012.01) G06Q 20/40 (2012.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR RATE-LIMITING CONTROL OF TRANSACTION PROCESSING**  
[54] **METHODS ET SYSTEMES POUR LE CONTROLE DE LIMITATION DE TARIF DU TRAITEMENT DE TRANSACTIONS**  
[72] PELLAND, FRANCIS, CA  
[72] MEUNIER, DEVON, CA  
[72] HO, DENNIS, CA  
[73] SHOPIFY INC., CA  
[86] (3169188)  
[87] (3169188)  
[22] 2022-07-29  
[30] US (17/547,316) 2021-12-10

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[11] **3,170,090**  
[13] C

[51] **Int.Cl. F16B 39/30 (2006.01) F16B 35/00 (2006.01)**  
[25] EN  
[54] **DUAL-THREADED SCREW STRUCTURE AND FASTENING STRUCTURE THEREWITH**  
[54] **STRUCTURE A DOUBLE FILET ET ELEMENT DE FIXATION POUR CELLE-CI**  
[72] SHINBUTSU, TOSHINAKA, JP  
[72] TAKEMASU, TERUIE, JP  
[72] AMANO, SHUICHI, JP  
[73] FORM ROLL TECH CO., LTD., JP  
[86] (3170090)  
[87] (3170090)  
[22] 2019-03-27  
[62] 3,101,955  
[30] JP (2018-106434) 2018-06-01

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[11] **3,171,072**  
[13] C

[51] **Int.Cl. F04D 29/08 (2006.01) E21B 43/12 (2006.01) F04B 47/06 (2006.01) F04D 13/10 (2006.01)**  
[25] EN  
[54] **SEAL BLADDER BONDING SLEEVES FOR SUBMERSIBLE WELL PUMP ASSEMBLY**  
[54] **MANCHONS DE LIAISON DE VESSIE D'ETANCHEITE POUR ENSEMBLE POMPE DE Puits SUBMERSIBLE**  
[72] MCMANUS, DAVID FARNSWORTH, US  
[72] MEYER, ARON, US  
[72] SEMPLE, RYAN, US  
[72] THOMPSON, JOSEPH SCOTT, US  
[73] BAKER HUGHES HOLDINGS LLC, US  
[86] (3171072)  
[87] (3171072)  
[22] 2018-06-15  
[62] 3,072,071  
[30] US (62/541,546) 2017-08-04  
[30] US (15/973,699) 2018-05-08

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[11] **3,171,090**  
[13] C

[51] **Int.Cl. F04D 29/08 (2006.01) E21B 43/12 (2006.01) F04B 47/06 (2006.01) F04D 13/10 (2006.01)**  
[25] EN  
[54] **SEAL BLADDER BONDING SLEEVES FOR SUBMERSIBLE WELL PUMP ASSEMBLY**  
[54] **MANCHONS DE LIAISON DE VESSIE D'ETANCHEITE POUR ENSEMBLE POMPE DE Puits SUBMERSIBLE**  
[72] MCMANUS, DAVID FARNSWORTH, US  
[72] MEYER, ARON, US  
[72] SEMPLE, RYAN, US  
[72] THOMPSON, JOSEPH SCOTT, US  
[73] BAKER HUGHES HOLDINGS LLC, US  
[86] (3171090)  
[87] (3171090)  
[22] 2018-06-15  
[62] 3,072,071  
[30] US (62/541,546) 2017-08-04  
[30] US (15/973,699) 2018-05-08

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[11] **3,179,241**  
[13] C

[51] **Int.Cl. C10L 1/02 (2006.01) C10L 1/04 (2006.01)**  
[25] EN  
[54] **HIGH NAPHTHENIC CONTENT MARINE FUEL COMPOSITIONS**  
[54] **COMPOSITIONS DE COMBUSTIBLES MARINS A TENEUR ELEVEE EN COMPOSES NAPHTENIQUES**  
[72] KAR, KENNETH C.H., US  
[72] RUBIN-PITEL, SHERYL B., US  
[72] GUAY, LISA M., US  
[72] ANDERSON, TIMOTHY J., US  
[72] LUO, SHIFANG, US  
[72] DIEROLF, MARCIA E., US  
[73] EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY, US  
[85] 2022-11-17  
[86] 2021-05-21 (PCT/US2021/033576)  
[87] (WO2021/237040)  
[30] US (63/028,688) 2020-05-22  
[30] US (17/325,978) 2021-05-20

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[11] **3,183,286**  
[13] C

[51] **Int.Cl. G08C 17/02 (2006.01) H01F 27/02 (2006.01) H01F 27/40 (2006.01)**  
[25] EN  
[54] **ELECTROMAGNETIC DEVICE EQUIPPED WITH AT LEAST ONE WIRELESS SENSOR**  
[54] **DISPOSITIF ELECTROMAGNETIQUE DOTE D'AU MOINS UN CAPTEUR SANS FIL**  
[72] SCHIESSLING, JOACHIM, SE  
[72] FORSSEN, CECILIA, SE  
[73] HITACHI ENERGY LTD, CH  
[85] 2022-11-11  
[86] 2021-01-18 (PCT/EP2021/050961)  
[87] (WO2021/228439)  
[30] EP (20174319.2) 2020-05-13

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**Canadian Patents Issued  
January 16, 2024**

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[11] **3,186,302**  
[13] C

[51] **Int.Cl. C07D 471/08 (2006.01)**  
[25] FR  
[54] **COMPLEX OF GADOLINIUM AND A CHELATING LIGAND DERIVED OF A DIASTEREOISOMERICALLY ENRICHED PCTA AND SYNTHESIS METHOD**  
[54] **COMPLEXE DE GADOLINIUM ET D'UN LIGAND CHELATEUR DERIVE DE PCTA DIASTEREOISOMERIQUEMENT ENRICHI ET PROCEDE DE SYNTHESE**  
[72] LE GRENEUR, SOIZIC, FR  
[72] CHENEDE, ALAIN, FR  
[72] CERF, MARTINE, FR  
[72] DECROON, STEPHANE, FR  
[72] FRANCOIS, BRUNO, FR  
[73] GUERBET, FR  
[86] (3186302)  
[87] (3186302)  
[22] 2020-01-17  
[62] 3,126,337  
[30] FR (1900433) 2019-01-17

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[11] **3,186,477**  
[13] C

[51] **Int.Cl. H04N 21/2347 (2011.01) H04N 21/235 (2011.01) H04N 21/258 (2011.01) H04N 21/4405 (2011.01) H04N 21/61 (2011.01) H04N 21/6334 (2011.01)**  
[25] EN  
[54] **DISTRIBUTING DIGITAL CINEMA PACKAGE (DCP) OVER INTERNET**  
[54] **DISTRIBUTION D'OFFRE GROUPEE DE CINEMA NUMERIQUE (DCP) SUR INTERNET**  
[72] AKKARAJU, PREM, US  
[73] SR LABS, INC., US  
[85] 2022-12-06  
[86] 2021-08-31 (PCT/US2021/048508)  
[87] (WO2022/047408)  
[30] US (17/008,134) 2020-08-31

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[11] **3,189,727**  
[13] C

[51] **Int.Cl. A61L 2/20 (2006.01) A01N 59/00 (2006.01) A01P 1/00 (2006.01) A61L 2/18 (2006.01) C11D 3/48 (2006.01) C11D 7/04 (2006.01) C11D 11/00 (2006.01) C11D 17/06 (2006.01)**  
[25] EN  
[54] **OZONE DISINFECTING SYSTEM AND DEVICES CONFIGURED TO CONVERT WATER INTO OZONE FOR DISINFECTING, CLEANING, OR SANITIZING**  
[54] **SYSTEME ET DISPOSITIFS DE DESINFECTION A L'OZONE CONCUS POUR CONVERTIR DE L'EAU EN OZONE POUR LA DESINFECTION, LE NETTOYAGE OU L'ASEPTISATION**  
[72] CLAUSSNER, MARK, US  
[72] KAZMER, MARK, US  
[73] BLUE PENNY LLC, US  
[85] 2023-01-18  
[86] 2021-07-21 (PCT/US2021/042653)  
[87] (WO2022/020529)  
[30] US (63/054,546) 2020-07-21  
[30] US (17/137,867) 2020-12-30

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[11] **3,192,665**  
[13] C

[51] **Int.Cl. C25B 11/073 (2021.01) C25B 3/26 (2021.01) C25B 3/29 (2021.01) C25B 11/032 (2021.01) B01J 23/72 (2006.01)**  
[25] EN  
[54] **BORON-DOPED COPPER CATALYSTS FOR EFFICIENT CONVERSION OF CO2 TO MULTI-CARBON HYDROCARBONS AND ASSOCIATED METHODS**  
[54] **CATALYSEURS DE CUIVRE DOPES AU BORE PERMETTANT UNE CONVERSION EFFICACE DE CO2 EN HYDROCARBURES MULTI-CARBONE ET PROCEDES ASSOCIES**  
[72] SARGENT, EDWARD, CA  
[72] DE LUNA, PHIL, CA  
[72] CHE, FANGLIN, CA  
[72] ZHOU, YANSONG, CA  
[73] TOTALENERGIES ONETECH, FR  
[73] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA  
[86] (3192665)  
[87] (3192665)  
[22] 2019-04-23  
[62] 3,096,979  
[30] US (62/661,723) 2018-04-24

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[11] **3,192,705**  
[13] C

[51] **Int.Cl. H02J 9/06 (2006.01)**  
[25] EN  
[54] **AN UNINTERRUPTIBLE POWER SUPPLY ARRANGEMENT FOR SUBSEA APPLICATIONS**  
[54] **AGENCEMENT D'ALIMENTATION ELECTRIQUE SANS INTERRUPTION POUR APPLICATIONS SOUS-MARINES**  
[72] MIDTUN, PAUL, NO  
[72] PRETLOVE, JOHN, NO  
[72] NOTARI, NICOLA, CH  
[72] COLOMBI, SILVIO, CH  
[72] KOLSTAD, HELGE, NO  
[72] CATAPANE, PAOLO, CH  
[73] ABB SCHWEIZ AG, CH  
[85] 2023-03-14  
[86] 2021-09-13 (PCT/EP2021/075096)  
[87] (WO2022/058279)  
[30] EP (20196926.8) 2020-09-18

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[11] **3,192,899**  
[13] C

[51] **Int.Cl. C04B 28/00 (2006.01) B09B 3/27 (2022.01) C04B 7/12 (2006.01) C04B 7/147 (2006.01) C04B 7/26 (2006.01) C04B 12/04 (2006.01) C04B 18/12 (2006.01) C04B 28/02 (2006.01) C04B 28/26 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PREPARING COLD FUSION CONCRETE AND CEMENT COMPOSITIONS FROM METAL MINING AND PRODUCTION WASTE**  
[54] **PROCEDE DE PREPARATION DE COMPOSITIONS DE BETON ET DE CIMENT A FUSION FROIDE A PARTIR DE MINAGE DE METAUX ET DE DECHETS DE PRODUCTION**  
[72] ZUBROD, RODNEY, US  
[73] GEOPOLYMER SOLUTIONS, LLC, US  
[86] (3192899)  
[87] (3192899)  
[22] 2023-03-13  
[30] US (17/696,793) 2022-03-16

**Brevets canadiens délivrés  
16 janvier 2024**

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[11] **3,193,591**  
[13] C

[51] **Int.Cl. H01F 7/02 (2006.01) H01F 27/38 (2006.01) H01F 27/40 (2006.01) H01F 38/14 (2006.01)**

[25] EN

[54] **POWER TRANSFORMER**

[54] **TRANSFORMATEUR DE PUISSANCE**

[72] SALINAS, ENER, SE

[72] GIRLANDA, ORLANDO, SE

[72] RUSSBERG, GUNNAR, SE

[72] ERIKSSON, GORAN, SE

[72] PRADHAN, MANOJ, SE

[73] HITACHI ENERGY LTD, CH

[85] 2023-03-01

[86] 2021-06-07 (PCT/EP2021/065170)

[87] (WO2022/073658)

[30] EP (20200288.7) 2020-10-06

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[11] **3,198,055**  
[13] C

[51] **Int.Cl. F24F 1/58 (2011.01)**

[25] EN

[54] **COVER ASSEMBLY FOR A CONDENSER UNIT MOUNTED TO A STAND AND METHOD FOR INSTALLING THE SAME**

[54] **ENSEMBLE COUVERCLE POUR UNE UNITE DE CONDENSATEUR MONTÉE SUR UN SOCLE ET METHODE D'INSTALLATION**

[72] LANTHIER, FRANCOIS, CA

[73] INNOPRO HVAC INC, CA

[86] (3198055)

[87] (3198055)

[22] 2023-04-26

[30] US (63/343,139) 2022-05-18

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[11] **3,201,884**  
[13] C

[51] **Int.Cl. G06Q 10/06 (2023.01) G06Q 40/02 (2023.01)**

[25] EN

[54] **INTRADAY RESOURCE MANAGEMENT SYSTEM**

[54] **SYSTEME DE GESTION DE RESSOURCES INTRAJOURNALIERES**

[72] KADE, CARLOS ALEJANDRO, CA

[72] MORISSETTE, ANNE MARIE, CA

[72] KUMAR, VIJAY, CA

[72] BANDIERA, CAROLINE, CA

[72] COE, ADRIANN TERESA, CA

[73] THE TORONTO-DOMINION BANK, CA

[86] (3201884)

[87] (3201884)

[22] 2019-03-06

[62] 3,035,880

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[11] **3,202,292**  
[13] C

[51] **Int.Cl. H04W 36/36 (2009.01) H04W 36/08 (2009.01) H04W 36/32 (2009.01)**

[25] EN

[54] **CONTEXT-AWARE WIRELESS ROAMING**

[54] **ITINERANCE SANS FIL SENSIBLE AU CONTEXTE**

[72] HIRUDAYARAJ, SUDHIR, US

[72] BELATHUR SRINIVASA PRASAD, KRISHNA, IN

[73] FIRETIDE, INC., US

[86] (3202292)

[87] (3202292)

[22] 2013-11-03

[62] 2,889,813

[30] IN (3427/DEL/2012) 2012-11-06

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[11] **3,202,962**  
[13] C

[51] **Int.Cl. B60P 7/08 (2006.01) B60P 3/073 (2006.01) B61D 45/00 (2006.01) F16B 7/06 (2006.01) F16G 15/00 (2006.01)**

[25] EN

[54] **UNIVERSAL CHAIN TIE DOWN ASSEMBLY**

[54] **ENSEMBLE UNIVERSEL D'ARRIMAGE DE CHAINES**

[72] MAKI, BRIAN G., US

[72] FRECHETTE, JACE H., US

[73] IRECO, LLC, US

[86] (3202962)

[87] (3202962)

[22] 2019-10-07

[62] 3,057,767

[30] US (16/194,672) 2018-11-19

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[11] **3,205,371**  
[13] C

[51] **Int.Cl. A61K 39/00 (2006.01) A61P 33/14 (2006.01) A61P 43/00 (2006.01) C07K 14/435 (2006.01)**

[25] EN

[54] **METHOD TO REDUCE TICK POPULATION WITH A UNIVERSAL TICK ANTIGEN**

[54] **PROCEDE POUR REDUIRE LA POPULATION DE TIQUES AVEC UN ANTIGENE DE TIQUE UNIVERSEL**

[72] VAN OOTERWIJK, JOLIEKE GERDY, US

[72] RICHER, LUCIANA MEIRELLES, US

[72] ZATECHKA, DOUGLAS STEVEN, US

[73] US BIOLOGIC, INC., US

[85] 2023-07-14

[86] 2022-01-10 (PCT/US2022/011772)

[87] (WO2022/155084)

[30] US (63/138,315) 2021-01-15

**Canadian Patents Issued  
January 16, 2024**

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[11] **3,207,445**

[13] C

- [51] **Int.Cl. H02M 7/48 (2007.01)**  
[25] EN  
[54] **CONTROL DEVICE AND  
CONTROL METHOD FOR POWER  
CONVERSION DEVICE**  
[54] **DISPOSITIF DE COMMANDE ET  
PROCEDE DE COMMANDE POUR  
DISPOSITIF DE CONVERSION DE  
COURANT**  
[72] SUZUKI, TETSUJI, JP  
[72] KUMAMOTO, YOSHIHITO, JP  
[72] WAKAMATSU, TAKANORI, JP  
[73] MEIDENSHA CORPORATION, JP  
[85] 2023-08-03  
[86] 2022-01-06 (PCT/JP2022/000247)  
[87] (WO2022/168524)  
[30] JP (2021-016277) 2021-02-04

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[11] **3,209,671**

[13] C

- [51] **Int.Cl. A43B 13/38 (2006.01) A43B  
13/14 (2006.01) A43B 17/00 (2006.01)**  
[25] EN  
[54] **AUXILIARY OR INTEGRATED  
INNER SOLE STRUCTURE FOR  
FOOTWEAR**  
[54] **STRUCTURE DE SEMELLE  
INTERIEURE AUXILIAIRE OU  
INTEGREE POUR ARTICLE  
CHAUSSANT**  
[72] CORMIER, MARC, CA  
[73] CORMIER, MARC, CA  
[85] 2023-08-24  
[86] 2022-12-30 (PCT/CA2022/051908)  
[87] (WO2023/122836)  
[30] US (63/295,568) 2021-12-31  
[30] US (63/295,572) 2021-12-31

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[11] **3,213,619**

[13] C

- [51] **Int.Cl. A01K 63/04 (2006.01) A01K  
97/20 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEMS FOR  
OXYGENATION OF WATER  
BODIES**  
[54] **PROCEDE ET SYSTEMES  
D'OXYGENATION DE MASSES  
D'EAU**  
[72] GANTZER, PAUL, US  
[73] GANTZER WATER, LLC, US  
[85] 2023-09-14  
[86] 2021-09-21 (PCT/US2021/051351)  
[87] (WO2022/203715)  
[30] US (17/301,127) 2021-03-25

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[11] **3,214,670**

[13] C

- [51] **Int.Cl. A23K 10/00 (2016.01) A23K  
20/147 (2016.01) A23K 20/158  
(2016.01) A23K 20/163 (2016.01)**  
[25] EN  
[54] **FECES BINDER IN FEED FOR  
FISH**  
[54] **LIANT POUR MATIERES  
FECALES DANS UN ALIMENT  
POUR POISSONS**  
[72] NANTON, DOMINIC ANDRE, NO  
[72] RUGRODEN, PETER BJORN, US  
[72] RUOHONEN, KARI JUHANI, FI  
[72] TURANO, MARC, US  
[72] UTNE, TERJE, NO  
[73] CAN TECHNOLOGIES, INC., US  
[85] 2023-09-22  
[86] 2022-02-18 (PCT/US2022/070725)  
[87] (WO2022/178535)  
[30] US (63/151,269) 2021-02-19  
[30] US (63/158,772) 2021-03-09

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[11] **3,216,910**

[13] C

- [51] **Int.Cl. H01R 4/12 (2006.01) H01R  
4/70 (2006.01) H02G 15/00 (2006.01)**  
[25] EN  
[54] **ELECTRICAL CONNECTOR  
WITH CURE-IN-PLACE RESIN**  
[54] **CONNECTEUR ELECTRIQUE  
AVEC RESINE A DURCISSEMENT  
EN PLACE**  
[72] HARDIN, TAYLOR, US  
[73] HARDIN, TAYLOR, US  
[85] 2023-10-26  
[86] 2022-05-13 (PCT/US2022/072307)  
[87] (WO2022/251780)  
[30] US (17/333,730) 2021-05-28

# Canadian Applications Open to Public Inspection

December 31, 2023 to January 6, 2024

## Demandes canadiennes mises à la disponibilité du public

31 décembre 2023 au 6 janvier 2024

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[21] **3,166,670**  
[13] A1  
[51] **Int.Cl. A23L 33/105 (2016.01) A23L 27/30 (2016.01) A23L 29/10 (2016.01) A23L 33/10 (2016.01) A23L 2/52 (2006.01) A23L 2/60 (2006.01)**  
[25] EN  
[54] **CANNABINOID-INFUSED OLIGOSACCHARIDE LIQUID**  
[54] **OLIGOSACCHARIDE LIQUIDE INFUSE AUX CANNABINOIDES**  
[72] ZHOU, QINGRU, CA  
[71] ZHOU, QINGRU, CA  
[22] 2022-07-01  
[41] 2024-01-01

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[21] **3,166,671**  
[13] A1  
[51] **Int.Cl. C02F 1/52 (2006.01) C22B 3/44 (2006.01) C22B 7/00 (2006.01)**  
[25] EN  
[54] **ACID MINE DRAINAGE TREATMENT**  
[54] **TRAITEMENT DU DRAINAGE MINIER ACIDE**  
[72] TAVENGWA, NIKITA, ZA  
[72] MASINDI, VHAHANGWELE, ZA  
[72] NEPFUMBADA, COLLEN, ZA  
[71] UNIVERSITY OF VENDLA, ZA  
[22] 2022-07-04  
[41] 2024-01-04

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[21] **3,166,672**  
[13] A1  
[51] **Int.Cl. G01M 3/00 (2006.01) H04W 4/38 (2018.01) G01M 3/26 (2006.01) H04L 12/66 (2006.01)**  
[25] EN  
[54] **AN AUTOMATED SENSOR APPLICATION FOR DETECTING WATER LEAKAGE**  
[54] **APPLICATION POUR CAPTEUR AUTOMATISE SERVANT A LA DETECTION DES FUITES D-EAU**  
[72] DE OLIVA, JOSE, CA  
[72] DE OLIVA, RICARDO, CA  
[72] KHALAF, GEORGE, CA  
[71] DE OLIVA, JOSE, CA  
[71] DE OLIVA, RICARDO, CA  
[71] KHALAF, GEORGE, CA  
[22] 2022-07-04  
[41] 2024-01-04

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[21] **3,166,673**  
[13] A1  
[51] **Int.Cl. A47G 23/04 (2006.01) A47G 23/02 (2006.01)**  
[25] EN  
[54] **BEVERAGE CONTAINER INSULATION SYSTEM**  
[54] **SYSTEME ISOLANT DE RECIPIENTS A BOISSONS**  
[72] LEDREW, THOMAS, CA  
[71] LEDREW, THOMAS, CA  
[22] 2022-07-04  
[41] 2024-01-04

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[21] **3,166,677**  
[13] A1  
[51] **Int.Cl. A63F 1/00 (2006.01) A63F 1/06 (2006.01) A63F 9/24 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR PLAYING BRIDGE CARD GAME WITH ROBOT TEAM**  
[54] **APPAREIL POUR JOUER AU BRIDGE AVEC UNE EQUIPE DE ROBOTS**  
[72] MENG, YING, CA  
[71] MENG, YING, CA  
[22] 2022-07-04  
[41] 2024-01-04

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[21] **3,166,679**  
[13] A1  
[51] **Int.Cl. A63H 3/00 (2006.01) A63H 3/36 (2006.01)**  
[25] EN  
[54] **SCREEN MOUNTING HEAD ACCESSORY FOR LIFE-SIZED DOLLS**  
[54] **ACCESSOIRE DE TETE MONTE SUR UN ECRAN POUR POUPEES GRANDEUR NATURE**  
[72] NORD, JUSTIN J., CA  
[71] NORD, JUSTIN J., CA  
[22] 2022-07-02  
[41] 2024-01-02

**Canadian Applications Open to Public Inspection  
December 31, 2023 to January 6, 2024**

[21] **3,166,686**  
[13] A1

[51] **Int.Cl. B60J 11/04 (2006.01)**  
[25] FR  
[54] **RECREATIONAL VEHICLE CANVAS AWNING ON WHICH RETRACTABLE MODULAR PANELS ALSO DESIGNED FOR RVS ARE HUNG TO FORM A WATERPROOF PROTECTIVE SHELTER. THERE IS AN AWNING PORTION ON WHICH RETRACTABLE MODULAR PANELS DESIGNED MAINLY FOR RECREATIONAL VEHICLES ARE HUNG.**

[54] **TOITURE FABRIQUEE POUR LES VEHICULES RECREATIFS EN TOILE SUR LAQUELLE DES PANNEAUX DE TOILES RETRACTABLES ET MODULAIRES EGALEMENT CONCUS POUR LES VR SONT SUSPENDUES POUR FORMER UNE TOILE PROTECTRICE ETANCHE A L'EAU. IL Y A UNE PARTIE TOITURE SUR LAQUELLE SONT SUSPENDUE DES PANNEAUX MODULAIRES RETRACTABLES CONCUS PRINCIPALEMENT POUR LES VEHICULES RECREATIFS**

[72] ROBITAILLE, MARLENE, CA  
[71] 11266918 CANADA INC, CA  
[22] 2022-07-04  
[41] 2024-01-04

[21] **3,166,688**  
[13] A1

[51] **Int.Cl. A63B 57/10 (2015.01)**  
[25] EN  
[54] **GOLF TEE**  
[54] **TEE DE GOLF**

[72] PALAIRET, TREVOR, AU  
[71] PALAIRET, TREVOR, AU  
[22] 2022-07-04  
[41] 2024-01-04

[21] **3,166,695**  
[13] A1

[51] **Int.Cl. F41B 3/02 (2006.01) A63H 33/18 (2006.01)**  
[25] EN  
[54] **DART-LAUNCHING SLINGSHOT**  
[54] **FRONDE LANCE-FLECHETTES**

[72] KIELLAND, PETER, CA  
[71] KIELLAND, PETER, CA  
[22] 2022-07-04  
[41] 2024-01-04

[21] **3,166,740**  
[13] A1

[51] **Int.Cl. B60S 5/00 (2006.01) B60R 99/00 (2009.01)**  
[25] EN  
[54] **GLASS PASS**  
[54] **TRAVERSEE EN VERRE**

[72] PEREIRA, ASHLEY MARIE, CA  
[71] PEREIRA, ASHLEY MARIE, CA  
[22] 2022-07-04  
[41] 2024-01-04

[21] **3,166,745**  
[13] A1

[51] **Int.Cl. A23L 33/105 (2016.01) A23L 27/00 (2016.01) A23L 27/30 (2016.01) A23L 33/10 (2016.01) A23L 33/115 (2016.01) A23P 10/28 (2016.01) A23P 10/40 (2016.01) A23G 3/36 (2006.01) A23G 3/48 (2006.01) A23G 4/06 (2006.01) A23G 4/12 (2006.01) A23L 2/38 (2021.01) A23L 2/39 (2006.01) A61K 31/05 (2006.01) A61K 31/352 (2006.01) A61K 47/10 (2017.01) A61K 47/14 (2017.01)**

[25] EN  
[54] **CANNABINOID LIPID PREMIXTURE**  
[54] **PREMELANGE DE LIPIDES CANNABINOIDES**

[72] BOESEN, DORTHE SCHACKINGER, DK  
[72] LAURSEN, SIMON LYKKE ROEST, DK  
[72] JENSEN, SANNE SKOV, DK  
[71] NORDICCAN A/S, DK  
[22] 2022-07-05  
[41] 2024-01-05

[21] **3,166,750**  
[13] A1

[51] **Int.Cl. G01D 21/00 (2006.01) G01N 21/84 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR REVIEWING AN ABNORMAL OPERATING STATE OF AN EQUIPMENT OR AN APPARATUS**

[54] **SYSTEME D-EXAMEN D-UN ETAT DE FONCTIONNEMENT ANORMAL D-UN EQUIPEMENT OU D-UN APPAREIL**

[72] LEE, JAE SEONG, KR  
[72] JANG, YONG HAN, KR  
[71] SOFTCEN CO., LTD., KR  
[22] 2022-07-05  
[41] 2024-01-05

[21] **3,166,751**  
[13] A1

[51] **Int.Cl. E02F 5/00 (2006.01) E02F 5/30 (2006.01)**  
[25] EN  
[54] **ROCK DIGGER-HAULER ATTACHMENT**  
[54] **ACCESSOIRE POUR ARRACHEUSE-TRANSPORTEUSE DE BLOCS DE PIERRE**

[72] HUNDEBY, DAVID ROBERT, CA  
[71] HUNDEBY, DAVID ROBERT, CA  
[22] 2022-07-05  
[41] 2024-01-05

[21] **3,166,755**  
[13] A1

[51] **Int.Cl. H04L 67/2869 (2022.01) H04W 4/18 (2009.01) H04M 1/724 (2021.01)**  
[25] EN  
[54] **AUDIO INTERFACE TO RETRIEVE CONTENT FROM SOCIAL MEDIA PLATFORM**  
[54] **INTERFACE AUDIO POUR RECUPERER LE CONTENU D-UNE PLATEFORME DE MEDIAS SOCIAUX**

[72] LI, JAMY, CA  
[71] LI, JAMY, CA  
[22] 2022-07-05  
[41] 2024-01-05

[21] **3,166,829**  
[13] A1

[51] **Int.Cl. E06B 9/326 (2006.01) E06B 9/32 (2006.01)**  
[25] EN  
[54] **PROTECTIVE SHROUD FOR WINDOW BLIND PULL CHAIN**  
[54] **GAINE DE PROTECTION POUR CHAINETTE DE STORE POUR FENETRE**

[72] SIMOKOVIC, ZLATAN, CA  
[71] SIMOKOVIC, ZLATAN, CA  
[22] 2022-07-05  
[41] 2024-01-05



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[21] **3,166,868**  
[13] A1

[51] **Int.Cl. G01N 21/25 (2006.01) E21B 43/12 (2006.01) E21B 49/08 (2006.01)**  
[25] EN  
[54] **REMOVAL OF INTERFERENCES FROM PRODUCED WATER PRIOR TO COLOURMETRIC OR SPECTROPHOTOMETRIC ANALYSIS**  
[54] **ELIMINATION DES INTERFERENCES DE L~EAU PRODUITE AVANT L~ANALYSE COLORIMETRIQUE OU SPECTROPHOTOMETRIQUE**  
[72] SAVARIRAJ, KINGSLEY, CA  
[72] KEMPPI, TOM, CA  
[71] SUNCOR ENERGY INC., CA  
[71] CANADIAN NATURAL RESOURCES LIMITED, CA  
[71] CANADIAN NATURAL UPGRADING LIMITED, CA  
[71] CNOOC PETROLEUM NORTH AMERICA ULC, CA  
[71] CENOVUS ENERGY INC., CA  
[22] 2022-07-06  
[41] 2024-01-06

[21] **3,166,902**  
[13] A1

[51] **Int.Cl. B63B 19/26 (2006.01) B63B 19/24 (2006.01) F16J 15/12 (2006.01)**  
[25] EN  
[54] **FLUSH MOUNT DECK HATCH SEAL SYSTEM**  
[54] **DISPOSITIF D~ETANCHEITE POUR ECOUILLE DE PONT ENCASTREE**  
[72] GODIN, EMILE, CA  
[72] GODIN, DANIEL, CA  
[71] GODIN, EMILE, CA  
[71] GODIN, DANIEL, CA  
[22] 2022-07-06  
[41] 2024-01-04  
[30] US (17/857,109) 2022-07-04

[21] **3,168,050**  
[13] A1

[51] **Int.Cl. A01G 23/00 (2006.01)**  
[25] EN  
[54] **METHODS FOR ADAPTIVE SILVICULTURE OF THE CANADIAN BOREAL FOREST**  
[54] **METHODES DE SYLVICULTURE ADAPTATIVE DE LA FORET BOREALE CANADIENNE**  
[72] BOUDREAULT, RICHARD, CA  
[71] BOUDREAULT, RICHARD, CA  
[22] 2022-07-05  
[41] 2024-01-05

[21] **3,168,584**  
[13] A1

[51] **Int.Cl. B60R 9/00 (2006.01)**  
[25] EN  
[54] **VEHICLE SWING RACK**  
[54] **CREMAILLE OSCILLANTE POUR VEHICULE**  
[72] CUNNINGHAM, MICHAEL, CA  
[71] THI CANADA, INC., D/B/A BACKRACK, CA  
[22] 2022-07-22  
[41] 2024-01-01  
[30] US (17/856,045) 2022-07-01

[21] **3,168,627**  
[13] A1

[51] **Int.Cl. H04L 47/80 (2022.01) H04L 9/40 (2022.01) H04L 61/30 (2022.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR DYNAMIC TRAFFIC CONTROL AT A FIREWALL**  
[54] **SYSTEMES ET METHODES POUR LE CONTROLE DYNAMIQUE DU TRAFIC AU NIVEAU D~UN PARE-FEU**  
[72] HO, DENNIS, CA  
[72] MEUNIER, DEVON, CA  
[71] SHOPIFY INC., CA  
[22] 2022-07-25  
[41] 2024-01-06  
[30] US (17/858322) 2022-07-06

[21] **3,175,254**  
[13] A1

[51] **Int.Cl. B25B 11/02 (2006.01) E06B 7/00 (2006.01)**  
[25] EN  
[54] **JIG FOR USE IN CONFIGURING A DOOR FOR RECEIVING A DOOR LATCH ASSEMBLY AND DOOR HANDLES**  
[54] **GABARIT SERVANT A LA CONFIGURATION D~UNE PORTE DESTINEE A RECEVOIR UNE SERRURE ET DES POIGNEES DE PORTE**  
[72] IELASI, DOMENIC, CA  
[72] BOZZO, MICHAEL ANTHONY, CA  
[71] IELASI, DOMENIC, CA  
[71] BOZZO, MICHAEL ANTHONY, CA  
[22] 2022-09-22  
[41] 2024-01-05  
[30] US (63358466) 2022-07-05

[21] **3,188,038**  
[13] A1

[51] **Int.Cl. E02F 3/36 (2006.01) B65D 88/02 (2006.01) E02F 3/38 (2006.01)**  
[25] EN  
[54] **LIQUID STORAGE TANK THAT IS REVERSIBLY RIGIDLY ATTACHABLE TO THE LIFT ARMS OF A SKID STEER OR TRACK LOADER**  
[54] **RESERVOIR DE STOCKAGE DE LIQUIDE POUVANT ETRE FIXE DE MANIERE RIGIDE ET REVERSIBLE AUX BRAS DE LEVAGE D~UN CHARGEUR A DIRECTION A GLISSEMENT OU D~UNE CHARGEUSE A CHENILLES**  
[72] HENRY, DARREN SEAN, US  
[71] HENRY, DARREN SEAN, US  
[22] 2023-01-31  
[41] 2024-01-05  
[30] US (17/857,358) 2022-07-05

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[21] **3,193,842**  
[13] A1

[51] **Int.Cl. H01H 85/165 (2006.01) H01H 85/60 (2006.01) H01R 13/68 (2011.01)**  
[25] EN  
[54] **USE OF A HV HRC FUSE FOR A DROP-OUT FUSE SYSTEM**  
[54] **UTILISATION D~UN FUSIBLE HPC HAUTE TENSION POUR UN SYSTEME DE FUSIBLES A DECLenchEMENT**  
[72] WILHELM, DIRK, DE  
[71] SIBA FUSES GMBH, DE  
[22] 2023-03-22  
[41] 2024-01-05  
[30] DE (10 2022 002 431.4) 2022-07-05

[21] **3,197,764**  
[13] A1

[51] **Int.Cl. H02K 41/02 (2006.01) H01F 1/12 (2006.01) H01F 7/02 (2006.01)**  
[25] EN  
[54] **PERMANENT FIELD MAGNET AND LINEAR MOTOR**  
[54] **AIMANT A CHAMP PERMANENT ET MOTEUR LINEAIRE**  
[72] AKIYAMA, TERUKAZU, JP  
[72] IMAMORI, SATOSHI, JP  
[71] FUJI ELECTRIC CO., LTD., JP  
[22] 2023-04-24  
[41] 2024-01-04  
[30] JP (2022-107985) 2022-07-04

[21] **3,197,894**  
[13] A1

[51] **Int.Cl. A47G 23/04 (2006.01) A45F 3/00 (2006.01) A47G 19/26 (2006.01) B65D 77/04 (2006.01) B65D 81/38 (2006.01)**  
[25] EN  
[54] **BEVERAGE CONTAINER INSULATION SYSTEM**  
[54] **SYSTEME ISOLANT DE RECIPIENTS A BOISSONS**  
[72] LEDREW, THOMAS BRADLEY, CA  
[71] LEDREW, THOMAS BRADLEY, CA  
[22] 2023-04-19  
[41] 2024-01-04  
[30] CA (3,166,673) 2022-07-04

[21] **3,198,009**  
[13] A1

[51] **Int.Cl. B60T 17/00 (2006.01) F15B 21/048 (2019.01) B01D 53/26 (2006.01)**  
[25] EN  
[54] **AIR DRYER APPARATUS FOR A VEHICLE AIR BRAKE CHARGING SYSTEM**  
[54] **APPAREIL DESSICCATEUR D~AIR POUR SYSTEME D~ALIMENTATION DE FREIN A AIR DE VEHICULE**  
[72] HERNANDEZ LEYVA, NADIA CAROLINA, MX  
[72] AYALA SANCHEZ, JOSE GUADALUPE, MX  
[71] BENDIX COMMERCIAL VEHICLE SYSTEMS LLC, US  
[22] 2023-04-26  
[41] 2024-01-06  
[30] US (17/858,434) 2022-07-06

[21] **3,199,163**  
[13] A1

[51] **Int.Cl. A24F 40/485 (2020.01) A24F 40/40 (2020.01) A24F 40/42 (2020.01)**  
[25] EN  
[54] **ATOMIZATION ASSEMBLY, ATOMIZER, AND ELECTRONIC ATOMIZATION DEVICE**  
[54] **ENSEMBLE DE PULVERISATION, PULVERISATEUR ET DISPOSITIF DE PULVERISATION ELECTRONIQUE**  
[72] ZHOU, JIANGUANG, CN  
[71] SHENZHEN VERDEWELL TECHNOLOGY LIMITED, CN  
[22] 2023-05-10  
[41] 2024-01-06  
[30] CN (202221723101.8) 2022-07-06

[21] **3,201,997**  
[13] A1

[51] **Int.Cl. H04L 9/40 (2022.01) H04L 43/04 (2022.01) H04L 43/06 (2022.01)**  
[25] EN  
[54] **METHOD FOR AUTOMATIC SIGNATURE GENERATION FROM A PLURALITY OF SOURCES**  
[54] **METHODE DE GENERATION AUTOMATIQUE DE SIGNATURES A PARTIR D~UNE PLURALITE DE SOURCES**  
[72] KLEYMENOV, ALEXEY, CH  
[72] CARULLO, MORENO, IT  
[72] CARCANO, ANDREA, US  
[71] NOZOMI NETWORKS SAGL, CH  
[22] 2023-06-05  
[41] 2024-01-01  
[30] US (17/855,940) 2022-07-01

[21] **3,202,367**  
[13] A1

[51] **Int.Cl. B61D 17/08 (2006.01) B61D 3/00 (2006.01) B61D 17/10 (2006.01)**  
[25] EN  
[54] **GONDOLA RAILROAD CAR WAGON-TOMBEREAU**  
[72] SCHULLER, DANIEL J., US  
[72] JONES, PETER L., US  
[72] LU, XIAOYAN, US  
[71] GUNDERSON LLC, US  
[22] 2023-06-07  
[41] 2024-01-01  
[30] US (17/810410) 2022-07-01

[21] **3,203,003**  
[13] A1

[25] EN  
[54] **MECHANICAL GRAPPLE ASSEMBLY AND METHOD FOR USING**  
[54] **ENSEMBLE GRAPPIN MECANIQUE ET METHODE D~UTILISATION**  
[72] KOESTER, JAY, US  
[71] PALADIN BRANDS GROUP, INC., US  
[22] 2023-06-13  
[41] 2024-01-06  
[30] US (17/858546) 2022-07-06

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[21] **3,203,404**  
[13] A1

[25] EN  
[54] **GAS TURBINE INTAKE FOR AIRCRAFT ENGINE AND METHOD OF INSPECTION THEREOF**  
[54] **ADMISSION D~UNE TURBINE A GAZ POUR UN MOTEUR D~AERONEF ET METHODE D~INSPECTION DE CELLE-CI**  
[72] LEFEBVRE, GUY, CA  
[72] GOVER, CHRISTOPHER, CA  
[72] SYNNOTT, REMY, CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2023-06-14  
[41] 2024-01-06  
[30] US (17/858,289) 2022-07-06

[21] **3,203,499**  
[13] A1

[51] **Int.Cl. E04H 1/02 (2006.01) E04B 1/348 (2006.01) E04B 1/74 (2006.01)**  
[25] EN  
[54] **MODULAR FABRICATION OF STRUCTURES**  
[54] **FABRICATION MODULAIRE DE STRUCTURES**  
[72] COTE, JEAN, US  
[72] METHOT, ERIC, CA  
[71] 12832429 CANADA INC., CA  
[22] 2023-06-15  
[41] 2024-01-05  
[30] US (63/358,493) 2022-07-05

[21] **3,203,943**  
[13] A1

[51] **Int.Cl. C08L 77/00 (2006.01) C08K 7/14 (2006.01)**  
[25] EN  
[54] **POLYAMIDE PARTS WITH LOW FUEL PERMEATION**  
[54] **PIECES EN POLYAMIDE A FAIBLE INFILTRATION DE CARBURANT**  
[72] ABT, DORIS, CH  
[72] HOFFMANN, BOTHO, CH  
[71] EMS-CHEMIE AG, CH  
[22] 2023-06-19  
[41] 2024-01-06  
[30] EP (22 183 345.2) 2022-07-06

[21] **3,203,988**  
[13] A1

[51] **Int.Cl. H02H 3/00 (2006.01) H02H 1/04 (2006.01) H02H 3/26 (2006.01) H02H 3/50 (2006.01)**  
[25] EN  
[54] **A METHOD FOR PROTECTING A MAINS AGAINST A SUCCESSIVE ARC FAULT AND A DEVICE FOR PERFORMING THE CLAIMED METHOD**  
[54] **METHODE DE PROTECTION DE RESEAUX CONTRE UN DEFAUT D~ARC SUCCESSIF ET DISPOSITIF POUR LA MISE EN OEUVRE DE LA METHODE PRESENTEE**  
[72] OVCHARYK, IVAN, UA  
[72] PAVELKO, TARAS, UA  
[72] HAVRILOV, ANTON, UA  
[72] KHODAKOV, KOSTIANTYN, UA  
[71] OVCHARYK, IVAN, UA  
[71] PAVELKO, TARAS, UA  
[71] HAVRILOV, ANTON, UA  
[71] KHODAKOV, KOSTIANTYN, UA  
[22] 2023-06-19  
[41] 2024-01-04  
[30] UA (A 2022 02297) 2022-07-04

[21] **3,204,000**  
[13] A1

[25] EN  
[54] **DAMPER SEGMENT FOR PRESSURIZED GAS PIPE OF AIRCRAFT ENGINE**  
[54] **SEGMENT D~AMORTISSEUR POUR TUYAU DE GAZ SOUS PRESSION D~UN MOTEUR D~AERONEF**  
[72] LEFEBVRE, GUY, CA  
[72] SYNNOTT, REMY, CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2023-06-19  
[41] 2024-01-06  
[30] US (17/858,293) 2022-07-06

[21] **3,204,216**  
[13] A1

[51] **Int.Cl. B64D 37/00 (2006.01) F02C 7/28 (2006.01)**  
[25] EN  
[54] **ADAPTOR FOR A FUEL SYSTEM OF AN AIRCRAFT ENGINE**  
[54] **ADAPTATEUR POUR UN CIRCUIT DE CARBURANT D~UN MOTEUR D~AERONEF**  
[72] KISUN, GAVIN ROHITESHWAR, CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2023-06-20  
[41] 2024-01-04  
[30] US (17/810,624) 2022-07-04

[21] **3,204,303**  
[13] A1

[51] **Int.Cl. C10M 129/14 (2006.01) C10M 129/91 (2006.01)**  
[25] EN  
[54] **LUBRICATING OIL COMPOSITIONS**  
[54] **COMPOSITIONS D~HUILE DE LUBRIFICATION**  
[72] JACKSON, MARK, GB  
[72] MARSH, ADAM PAUL, GB  
[71] INFINEUM INTERNATIONAL LIMITED, GB  
[22] 2023-06-21  
[41] 2024-01-06  
[30] EP (22183288.4) 2022-07-06

[21] **3,204,548**  
[13] A1

[51] **Int.Cl. B64D 1/00 (2006.01) B64D 25/00 (2006.01) B66C 15/00 (2006.01) B66D 1/58 (2006.01) B66D 1/60 (2006.01)**  
[25] EN  
[54] **ELECTRO-PNEUMATIC CABLE CUTTER ASSEMBLY FOR AIRCRAFT HOIST**  
[54] **COUPE-CABLE ELECTROPNEUMATIQUE POUR TREUIL D~AERONEF**  
[72] MAHESHWARAPPA, RAMESH, IN  
[72] JOHN, POLY, IN  
[71] GOODRICH CORPORATION, US  
[22] 2023-06-22  
[41] 2024-01-01  
[30] US (17/950,987) 2022-09-22  
[30] IN (202241038043) 2022-07-01

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[21] **3,205,127**  
[13] A1

[51] **Int.Cl. F16L 58/00 (2006.01) F16C 19/02 (2006.01) F16L 27/08 (2006.01)**  
[25] EN  
[54] **SWIVEL ASSEMBLY FORMED OF A CORROSION-RESISTANT MATERIAL**  
[54] **ENSEMBLE PIVOTANT FORME D~UN MATERIAU RESISTANT A LA CORROSION**  
[72] BAYYOUK, JACOB, US  
[72] WITKOWSKI, BRIAN, US  
[71] SPM OIL & GAS INC., US  
[22] 2023-06-28  
[41] 2024-01-06  
[30] US (17/858282) 2022-07-06

[21] **3,205,141**  
[13] A1

[51] **Int.Cl. G07C 9/20 (2020.01)**  
[25] EN  
[54] **ACCESS REQUEST MODE FOR ACCESS CONTROL DEVICES**  
[54] **MODE DE DEMANDE D~ACCES POUR LES DISPOSITIFS DE CONTROLE D~ACCES**  
[72] BORISKIN, PETER, US  
[71] SARGENT MANUFACTURING COMPANY, US  
[22] 2023-06-28  
[41] 2024-01-01  
[30] US (63/357832) 2022-07-01

[21] **3,205,151**  
[13] A1

[51] **Int.Cl. G16Z 99/00 (2019.01) G06F 16/22 (2019.01) G06Q 30/0601 (2023.01)**  
[25] EN  
[54] **COMPUTER SYSTEMS AND METHODS TO IDENTIFY AND FACILITATE SELECTION OF CANNABIS STRAINS AND PRODUCTS**  
[54] **SYSTEMES INFORMATIQUES ET METHODES POUR IDENTIFIER ET FACILITER LA SELECTION DE SOUCHES ET DE PRODUITS DE CANNABIS**  
[72] ZSIGO, MICHAEL, US  
[71] ZSIGO, MICHAEL, US  
[22] 2023-06-29  
[41] 2024-01-01  
[30] US (18/343.207) 2023-06-28  
[30] US (63/358.067) 2022-07-01

[21] **3,205,232**  
[13] A1

[51] **Int.Cl. C07C 31/27 (2006.01) C07C 29/141 (2006.01) C07C 45/49 (2006.01) C07C 47/133 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PREPARING THE DIALDEHYDE OF VINYLCHYCLOHEXENE**  
[54] **PROCEDE DE PREPARATION DE DIALDEHYDE DE VINYLCHYCLOHEXENE**  
[72] FRANKE, ROBERT, DE  
[72] SCHNEIDER, CAROLIN, DE  
[72] JACKSTELL, RALF, DE  
[72] BELLER, MATTHIAS, DE  
[71] EVONIK OPERATIONS GMBH, DE  
[22] 2023-06-30  
[41] 2024-01-06  
[30] EP (22183349.4) 2022-07-06

[21] **3,205,234**  
[13] A1

[51] **Int.Cl. C07C 45/49 (2006.01) C07C 47/115 (2006.01)**  
[25] EN  
[54] **PROCESS FOR THE PREPARATION OF DICIDAL**  
[54] **PROCEDE DE PREPARATION DE DICIDAL**  
[72] FRANKE, ROBERT, DE  
[72] SCHNEIDER, CAROLIN, DE  
[72] JACKSTELL, RALF, DE  
[72] BELLER, MATTHIAS, DE  
[72] REUSCH, DIETER, DE  
[72] HAGER, HARALD, DE  
[71] EVONIK OPERATIONS GMBH, DE  
[22] 2023-06-30  
[41] 2024-01-06  
[30] EP (22183347.8) 2022-07-06

[21] **3,205,244**  
[13] A1

[51] **Int.Cl. B60W 60/00 (2020.01) B60W 20/50 (2016.01) B60W 30/00 (2006.01) G06F 3/01 (2006.01)**  
[25] EN  
[54] **GENERATING VIRTUAL REALITY (VR) ALERTS FOR CHALLENGING STREETS**  
[54] **PRODUCTION D~ALERTE DE REALITE VIRTUELLE (RV) POUR LES RUES DIFFICILES**  
[72] WILLIAMS, AARON, US  
[72] BRANNAN, JOSEPH ROBERT, US  
[72] DONOVAN, JOHN, US  
[72] HARVEY, BRIAN N., US  
[71] THE TORONTO-DOMINION BANK, CA  
[22] 2023-06-30  
[41] 2024-01-01  
[30] US (63/358,002) 2022-07-01  
[30] US (17/874,056) 2022-07-26

[21] **3,205,267**  
[13] A1

[25] EN  
[54] **VR ENVIRONMENT FOR REAL-TIME ROAD CONDITIONS**  
[54] **ENVIRONNEMENT DE REALITE VIRTUELLE (RV) POUR LES CONDITIONS ROUTIERES EN TEMPS REEL**  
[72] WILLIAMS, AARON, US  
[72] BRANNAN, JOSEPH ROBERT, US  
[72] DONOVAN, JOHN, US  
[72] HARVEY, BRIAN N., US  
[71] THE TORONTO-DOMINION BANK, CA  
[22] 2023-06-30  
[41] 2024-01-01  
[30] US (63/358,002) 2022-07-01  
[30] US (17/874,096) 2022-07-26  
[30] US (17/874,227) 2022-07-26

**Demandes canadiennes mises à la disponibilité du public**  
**31 décembre 2023 au 6 janvier 2024**

[21] <b>3,205,269</b> [13] A1	[21] <b>3,205,302</b> [13] A1	[21] <b>3,205,315</b> [13] A1
[25] EN [54] <b>ARRAY-BASED SYSTEM AND METHOD FOR OBJECT DETECTION NOISE REMOVAL</b> [54] <b>SYSTEME ET METHODE FONDES SUR UN RESEAU POUR LA DETECTION D-OBJETS ET L-ELIMINATION DU BRUIT</b> [72] HOLTNAM, ELLIOT MARK, CA [72] LENSINK, KEEGAN, CA [71] XTRACT ONE TECHNOLOGIES INC., CA [22] 2023-07-03 [41] 2024-01-03 [30] US (63/358,139) 2022-07-03 [30] US (63/388,668) 2022-07-13 [30] US (63/399,636) 2022-08-19 [30] US (63/400,060) 2022-08-23 [30] US (63/390,984) 2022-07-21	[25] EN [54] <b>A CHEERING STICK CONTROL SYSTEM INCLUDING A CHEERING STICK CONTROL MESSAGE TRANSMITTER, A CHEERING STICK CONTROL MESSAGE TRANSMITTER, AND A CHEERING STICK CONTROL METHOD USING A CHEERING STICK CONTROL MESSAGE TRANSMITTER</b> [54] <b>SYSTEME DE COMMANDE DE BATON D-ENCOURAGEMENT COMPRENANT UN EMETTEUR DE MESSAGE DE COMMANDE DE BATON D-ENCOURAGEMENT, UN EMETTEUR DE MESSAGE DE COMMANDE DE BATON D-ENCOURAGEMENT ET UNE METHODE DE COMMANDE DE BATON D-ENCOURAGEMENT UTILISANT UN EMETTEUR DE MESSAGE DE COMMANDE DE BATON D-ENCOURAGEMENT</b> [72] CHOI, BO YOON, KR [72] JEONG, SUNG JOO, KR [72] KIM, HYEONG GU, KR [72] SEO, DA HYE, KR [71] HYBE CO., LTD., KR [22] 2023-07-04 [41] 2024-01-04 [30] KR (10-2022-0081742) 2022-07-04	[51] <b>Int.Cl. H05B 47/165 (2020.01) H05B 47/155 (2020.01) H05B 47/175 (2020.01) H05B 47/19 (2020.01) G09F 9/30 (2006.01) G09F 9/33 (2006.01) G09F 19/00 (2006.01) G09G 5/36 (2006.01)</b> [25] EN [54] <b>METHOD AND SYSTEM FOR INTEGRATED CONTROLLING TO A PLURALITY OF LIGHTING DEVICES AND THE LIGHTING DEVICES</b> [54] <b>METHODE ET SYSTEME DE COMMANDE INTEGREE DE PLUSIEURS DISPOSITIFS D-ECLAIRAGE ET LES DISPOSITIFS D-ECLAIRAGE</b> [72] CHOI, BO YOON, KR [72] JEONG, SUNG JOO, KR [72] KIM, HYEONG GU, KR [72] SEO, DA HYE, KR [71] HYBE CO., LTD., KR [22] 2023-07-04 [41] 2024-01-04 [30] KR (10-2022-0081746) 2022-07-04
[21] <b>3,205,294</b> [13] A1		[21] <b>3,205,328</b> [13] A1
[25] EN [54] <b>SEAT LIBRARY PAIRING METHOD AND SYSTEM USING SHORT-DISTANCE WIRELESS COMMUNICATION</b> [54] <b>METHODE ET SYSTEME DE JUMELAGE DE SIEGES DE BIBLIOTHEQUES UTILISANT UNE COMMUNICATION SANS FIL A COURTE DISTANCE</b> [72] CHOI, BO YOON, KR [72] JEONG, SUNG JOO, KR [72] KIM, HYEONG GU, KR [72] SEO, DA HYE, KR [71] HYBE CO., LTD., KR [22] 2023-07-04 [41] 2024-01-04 [30] KR (10-2022-0081737) 2022-07-04		[51] <b>Int.Cl. H05B 47/165 (2020.01)</b> [25] EN [54] <b>LIGHTING DEVICE, AND METHOD AND SYSTEM FOR CONTROLLING THE SAME</b> [54] <b>DISPOSITIF D-ECLAIRAGE, METHODE ET SYSTEME POUR LE COMMANDER</b> [72] CHOI, BO YOON, KR [72] JEONG, SUNG JOO, KR [72] KIM, HYEONG GU, KR [72] SEO, DA HYE, KR [71] HYBE CO., LTD., KR [22] 2023-07-04 [41] 2024-01-04 [30] KR (10-2022-0081748) 2022-07-04

**Canadian Applications Open to Public Inspection  
December 31, 2023 to January 6, 2024**

[21] **3,205,341**  
[13] A1

[51] **Int.Cl. A63J 5/02 (2006.01) A63H 30/04 (2006.01) A63H 37/00 (2006.01) F21L 4/00 (2006.01)**

[25] EN

[54] **PEDESTAL ON WHICH A TERMINAL PROVIDING SEAT-LIBRARY PAIRING SERVICE IS MOUNTED, SEAT-LIBRARY PAIRING METHOD AND SYSTEM USING SHORT-DISTANCE WIRELESS COMMUNICATION**

[54] **BASE SUR LAQUELLE EST MONTE UN TERMINAL FOURNISSANT UN SERVICE DE JUMELAGE DE SIEGE-BIBLIOTHEQUE, METHODE ET SYSTEME DE JUMELAGE DE SIEGE-BIBLIOTHEQUE UTILISANT UNE COMMUNICATION SANS FIL A COURTE DISTANCE**

[72] CHOI, BO YOON, KR  
[72] JEONG, SUNG JOO, KR  
[72] KIM, HYEONG GU, KR  
[72] SEO, DA HYE, KR  
[71] HYBE CO., LTD., KR  
[22] 2023-07-04  
[41] 2024-01-04  
[30] KR (10-2022-0081737) 2022-07-04  
[30] KR (10-2022-0119232) 2022-09-21

[21] **3,205,408**  
[13] A1

[51] **Int.Cl. B21F 15/04 (2006.01) B65H 65/00 (2006.01) E04C 5/18 (2006.01)**

[25] EN

[54] **BINDING DEVICE**

[54] **DISPOSITIF DE FIXATION**

[72] KASAHARA, AKIRA, JP  
[72] ARAI, KENICHI, JP  
[72] SHINDOU, SHIGEKI, JP  
[71] MAX CO., LTD., JP  
[22] 2023-06-29  
[41] 2024-01-01  
[30] JP (2022-106761) 2022-07-01

[21] **3,205,444**  
[13] A1

[51] **Int.Cl. B01D 53/22 (2006.01)**

[25] EN

[54] **VALUABLE GAS RECOVERY APPARATUS**

[54] **APPAREIL DE RECUPERATION DE GAZ PRECIEUX**

[72] GAGNE, DANY, CA  
[72] PARADIS, LOUIS, CA  
[71] LDETEK INC., CA  
[22] 2023-07-05  
[41] 2024-01-05  
[30] US (63/367,680) 2022-07-05

[21] **3,205,390**  
[13] A1

[51] **Int.Cl. B29B 17/02 (2006.01) B29B 17/04 (2006.01)**

[25] EN

[54] **REMOVING VULCANIZED RUBBER FROM METAL COMPONENTS**

[54] **ELIMINATION DU CAOUTCHOUC VULCANISE DES COMPOSANTS METALLIQUES**

[72] HARRISON, BRIAN H., CA  
[72] HOOPER, HURDON A., CA  
[72] NESS, MATTHEW, CA  
[72] KYLE, ALEX, CA  
[71] CAN CLEANTECH, CA  
[22] 2023-07-05  
[41] 2024-01-05  
[30] US (63/358,304) 2022-07-05

[21] **3,205,437**  
[13] A1

[51] **Int.Cl. F16K 17/04 (2006.01) E03F 7/04 (2006.01) F16K 15/00 (2006.01)**

[25] EN

[54] **RELIEF VALVE ASSEMBLY**

[54] **ENSEMBLE DE SOUPAPES DE DECHARGE**

[72] ORR, WILLIAM M., US  
[71] ZURN INDUSTRIES, LLC, US  
[22] 2023-06-29  
[41] 2024-01-01  
[30] US (63/367,543) 2022-07-01

[21] **3,205,501**  
[13] A1

[51] **Int.Cl. D04H 1/55 (2012.01) D04H 1/558 (2012.01) D04H 1/56 (2006.01) E04D 5/02 (2006.01)**

[25] EN

[54] **NONWOVEN MATERIAL WITH IMPROVED MD/CD RATIO, METHOD FOR ITS MANUFACTURE AND ITS USE**

[54] **ETOFFE NON TISSEE A RAPPORT DANS LE SENS MACHINE ET DANS LE SENS TRAVERS AMELIORE, SON PROCEDE DE FABRICATION ET SON UTILISATION**

[72] WEIZENEGGER, HERMANN, DE  
[72] FROILAND, CHRISTOPHER WILLIAM, US  
[72] LEHNERT, JOERG, DE  
[71] JOHNS MANVILLE, US  
[22] 2023-07-05  
[41] 2024-01-05  
[30] EP (22183129.0) 2022-07-05

**Demandes canadiennes mises à la disponibilité du public**  
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[21] **3,205,536**  
[13] A1

[51] **Int.Cl. E21B 33/128 (2006.01) E21B 23/06 (2006.01) E21B 33/12 (2006.01) E21B 33/122 (2006.01) E21B 33/124 (2006.01) E21B 34/14 (2006.01) E21B 43/24 (2006.01)**

[25] EN

[54] **COIL SHIFTABLE PACKER**

[54] **PAQUET DEPLACABLE PAR BOBINE**

[72] ALDERS, RONALD, CA

[72] GOLINOWSKI, JEFFREY, CA

[72] LUPIEN, DANIEL, CA

[71] TIER 1 ENERGY SOLUTIONS INC., CA

[22] 2023-07-06

[41] 2024-01-06

[30] US (63/358,729) 2022-07-06

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[21] **3,205,546**  
[13] A1

[25] EN

[54] **RECONFIGURABLE DIGITAL BEAMFORMING NETWORK**

[54] **RESEAU DE FORMATION DE FAISCEAUX NUMERIQUES RECONFIGURABLE**

[72] ANGELETTI, PIERO, NL

[72] COSKUN, ADEM, GB

[72] KALE, IZZET, GB

[71] EUROPEAN SPACE AGENCY, FR

[22] 2023-07-04

[41] 2024-01-04

[30] EP (22182780.1) 2022-07-04

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[21] **3,205,550**  
[13] A1

[25] EN

[54] **BICYCLE SHOCK ABSORBER STRUCTURE AND BICYCLE**

[54] **STRUCTURE D~AMORTISSEUR DE CHOC POUR BICYCLETTE ET BICYCLETTE**

[72] SIE, ZONG-HAN, TW

[71] GIANT MANUFACTURING CO., LTD., TW

[22] 2023-07-06

[41] 2024-01-06

[30] TW (111125291) 2022-07-06

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[21] **3,205,895**  
[13] A1

[51] **Int.Cl. A61L 9/02 (2006.01) A01N 25/18 (2006.01) A01P 17/00 (2006.01)**

[25] EN

[54] **HEAT TRANSFER ADAPTER FOR INSECT REPELLENT SYSTEM**

[54] **ADAPTATEUR DE TRANSFERT DE CHALEUR POUR SYSTEME INSECTIFUGE**

[72] WANG, WENDER, US

[71] THERMACELL REPELLENTS, INC., US

[22] 2023-07-06

[41] 2024-01-06

[30] US (63/358,712) 2022-07-06

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[21] **3,205,982**  
[13] A1

[51] **Int.Cl. A01G 23/00 (2006.01)**

[25] EN

[54] **METHODS FOR ADAPTIVE SILVICULTURE OF THE CANADIAN BOREAL FOREST**

[54] **METHODES DE SYLVICULTURE ADAPTATIVE DE LA FORET BOREALE CANADIENNE**

[72] BOUDREAULT, RICHARD, CA

[71] BOUDREAULT, RICHARD, CA

[22] 2023-07-05

[41] 2024-01-05

[30] CA (3,168,050) 2022-07-05

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[21] **3,218,002**  
[13] A1

[51] **Int.Cl. B21H 1/06 (2006.01) B21B 31/16 (2006.01) B21D 22/00 (2006.01) B21D 22/16 (2006.01)**

[25] EN

[54] **DOWNWARDS-PRESSING RING ROLLING DEVICE FOR T-SHAPED WIND POWER FLANGE**

[54] **DISPOSITIF DE LAMINAGE CIRCULAIRE A PRESSION VERS LE BAS POUR BRIDE POUR EOLIENNES EN T**

[72] DAWEI, HU, CN

[72] TINGHAI, ZHI, CN

[72] LILIANG, WANG, CN

[72] ZHILONG, YAN, CN

[72] JINGYUN, FAN, CN

[72] JUNJIE, LIU, CN

[72] YONGQIANG, QIAO, CN

[72] SHAOHUG, SHI, CN

[72] YU, YAN, CN

[72] HUANPING, GUO, CN

[72] YANLING, ZHANG, CN

[71] SHANXI TIANBAO GROUP CO., LTD, CN

[22] 2023-10-30

[41] 2024-01-02

[30] CN (2023103640831) 2023-04-07

# PCT Applications Entering the National Phase

## Demands PCT entrant en phase nationale

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[21] **3,179,809**  
[13] A1

[51] **Int.Cl. A61C 19/05 (2006.01) G06V 10/764 (2022.01) G06V 10/82 (2022.01) G06N 3/08 (2023.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR DETERMINING AN ORTHODONTIC OCCLUSION CLASS**

[54] **SYSTEME ET METHODE POUR DETERMINER UNE CLASSE D'OCCLUSION ORTHODONTIQUE**

[72] FALLAHA, CHARLES, CA

[72] BACH, NORMAND, CA

[71] ORTHODONTIA VISION INC., CA

[85] 2022-11-22

[86] 2022-07-05 (PCT/CA2022/051058)

[87] (3179809)

[30] US (63/203,030) 2021-07-06

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[21] **3,194,464**  
[13] A1

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 40/40 (2020.01)**

[25] EN

[54] **AEROSOL GENERATING ARTICLE, SYSTEM AND METHOD OF MANUFACTURING AEROSOL GENERATING ARTICLE**

[54] **ARTICLE GENERANT UN AEROSOL, SYSTEME ET METHODE DE FABRICATION DE L'ARTICLE DE GENERATION D'AEROSOL**

[72] JUNG, HEE TAE, KR

[72] YOO, SANG YEON, KR

[72] AN, HWIKYEONG, KR

[72] HONG, HEE JEONG, KR

[72] SONG, DA BIN, KR

[71] KT&G CORPORATION, KR

[85] 2023-03-30

[86] 2023-01-04 (PCT/KR2023/000151)

[87] (3194464)

[30] KR (10-2022-0009776) 2022-01-24

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[21] **3,199,547**  
[13] A1

[51] **Int.Cl. A61K 47/44 (2017.01) A61K 31/05 (2006.01) A61K 47/12 (2006.01) A61P 9/12 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL COMPOSITIONS AND METHODS FOR TREATING HYPERTENSION**

[54] **COMPOSITIONS PHARMACEUTIQUES ET METHODES POUR LE TRAITEMENT DE L'HYPERTENSION**

[72] DOCHERTY, JOHN, CA

[72] BUNKO, CHRISTOPHER ANDREW, CA

[71] POVIVA CORP, US

[85] 2023-05-18

[86] 2023-04-25 (PCT/US2023/019782)

[87] (3199547)

[30] US (17/857,958) 2022-07-05

[30] US (17/857,970) 2022-07-05

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[21] **3,205,316**  
[13] A1

[51] **Int.Cl. G06Q 30/02 (2023.01) G06Q 30/0207 (2023.01) G06Q 30/0241 (2023.01) G06K 19/06 (2006.01) G06K 7/10 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR FACILITATING CIGARETTE SALES AND CIGARETTE TRACKING**

[54] **SYSTEME ET METHODE POUR FACILITER LES VENTES DE CIGARETTES ET LE SUIVI DE CIGARETTES**

[72] PHILLIPS, VICTOR ALBERT, ZA

[71] K61 BLAZER INVESTMENTS (PTY) LTD, ZA

[85] 2023-07-14

[86] 2023-05-26 (PCT/IB2023/055410)

[87] (3205316)

[30] ZA (2022/07286) 2022-07-01

[30] ZA (2022/09914) 2022-09-06

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[21] **3,206,696**  
[13] A1

[51] **Int.Cl. H05K 7/20 (2006.01) H01L 23/36 (2006.01) H05K 1/02 (2006.01)**

[25] EN

[54] **HEAT SINK, HEAT DISSIPATION UNIT, AND SERVER**

[54] **DISSIPATEUR DE CHALEUR, UNITE DE DISSIPATION THERMIQUE ET SERVEUR**

[72] YUAN, SHILEI, CN

[72] GUO, HAIFENG, CN

[72] LIU, FANGYU, CN

[72] WU, YUEFENG, CN

[71] SHENZHEN MICROBT ELECTRONICS TECHNOLOGY CO., LTD., CN

[85] 2023-07-27

[86] 2023-03-06 (PCT/CN2023/079827)

[87] (3206696)

[30] CN (202210781290.2) 2022-07-04

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[21] **3,212,513**  
[13] A1

[51] **Int.Cl. G06T 13/40 (2011.01)**

[25] EN

[54] **AVATAR-BASED BEHAVIOR CHANGING SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE DE CHANGEMENT COMPORTEMENTAL A BASE D'AVATARS**

[72] OBERLIN, BRANDON, US

[72] NELSON, ANDREW, US

[71] THE TRUSTEES OF INDIANA UNIVERSITY, US

[71] NELSON, ANDREW, US

[85] 2023-09-18

[86] 2022-04-01 (PCT/US2022/023052)

[87] (WO2022/216541)

[30] US (63/172,814) 2021-04-09

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## Demandes PCT entrant en phase nationale

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[21] **3,216,620**  
[13] A1

[25] EN  
[54] **COMPOSITE CROSSARM AND POWER TRANSMISSION TOWER**  
[54] **TRAVERSE COMPOSITE ET TOUR DE TRANSMISSION DE PUISSANCE**  
[72] GU, YANAN, CN  
[72] HUANG, QING, CN  
[72] WANG, WENJIE, CN  
[72] YU, JIE, CN  
[71] JIANGSU SHEMAR ELECTRIC CO., LTD., CN  
[85] 2023-10-24  
[86] 2023-06-29 (PCT/CN2023/103620)  
[87] (3216620)  
[30] CN (202210788989.1) 2022-07-06

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[21] **3,217,665**  
[13] A1

[51] **Int.Cl. A01G 31/00 (2018.01) A01G 22/00 (2018.01) A01G 24/00 (2018.01)**  
[25] EN  
[54] **PLANT CULTIVATION SYSTEM AND PLANT CULTIVATION METHOD**  
[54] **SYSTEME DE CULTURE DE PLANTES ET METHODE DE CULTURE DE PLANTES**  
[72] YOSHIOKA, HIROSHI, JP  
[71] MEBIOL INC., JP  
[85] 2023-10-20  
[86] 2023-02-17 (PCT/JP2023/005670)  
[87] (3217665)  
[30] JP (2022-106899) 2022-07-01

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[21] **3,217,693**  
[13] A1

[51] **Int.Cl. H02S 20/30 (2014.01) H02S 20/22 (2014.01) E06B 9/28 (2006.01) E06B 9/322 (2006.01)**  
[25] EN  
[54] **SOLAR WINDOW BLIND SYSTEMS**  
[54] **SYSTEMES DE STORES POUR FENETRES SOLAIRES**  
[72] TAMESHTIT, ALLAN, CA  
[72] MORGAN, JOHN PAUL, CA  
[71] MORGAN SOLAR INC., CA  
[85] 2023-11-02  
[86] 2022-12-19 (PCT/IB2022/062502)  
[87] (3217693)

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[21] **3,218,541**  
[13] A1

[51] **Int.Cl. G01R 33/50 (2006.01) A61B 5/055 (2006.01) A61K 49/10 (2006.01) G01R 33/56 (2006.01) G01R 33/563 (2006.01) A61B 5/00 (2006.01)**  
[25] EN  
[54] **MANGANESE-ENHANCED MAGNETIC RESONANCE IMAGING**  
[54] **IMAGERIE PAR RESONANCE MAGNETIQUE AMELIOREE PAR LE MANGANESE**  
[72] OSTENSEN, JONNY, NO  
[72] EIDSAUNET, WILLY, NO  
[71] IC TARGETS AS, NO  
[85] 2023-10-31  
[86] 2022-06-03 (PCT/EP2022/065181)  
[87] (WO2022/258517)  
[30] NO (20210734) 2021-06-07

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[21] **3,220,222**  
[13] A1

[51] **Int.Cl. G01M 3/22 (2006.01)**  
[25] EN  
[54] **A MONITORING SYSTEM, A METHOD FOR MONITORING, AND A ROOM**  
[54] **SYSTEME DE SURVEILLANCE, PROCEDE DE SURVEILLANCE ET PIECE**  
[72] HOLMAN, JAMES WILLIAM, BE  
[72] GABB, PHILLIP MICHAEL, GB  
[71] GE A PROCESS ENGINEERING NV, BE  
[85] 2023-11-23  
[86] 2022-05-27 (PCT/EP2022/064411)  
[87] (WO2022/248667)  
[30] EP (21176678.7) 2021-05-28

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[21] **3,220,724**  
[13] A1

[51] **Int.Cl. A61K 9/10 (2006.01) A61K 31/575 (2006.01) A61P 3/04 (2006.01)**  
[25] EN  
[54] **INJECTABLE COMPOSITION COMPRISING CYTOLYTIC COMPOUND IN GEL, GEL-FORMING SOLUTION OR GEL-FORMING SUSPENSION FOR REDUCTION OF FAT**  
[54] **COMPOSITION INJECTABLE COMPRENANT UN COMPOSE CYTOLYTIQUE DANS UN GEL, UNE SOLUTION FORMANT GEL OU UNE SUSPENSION FORMANT GEL POUR LA REDUCTION DES MATIERES GRASSES**  
[72] CHEW, YONGYU, CN  
[72] KAO, MINHSIUNG, CN  
[71] GLONOVA PHARMA CO., LTD., CN  
[85] 2023-11-28  
[86] 2022-07-05 (PCT/CN2022/103787)  
[87] (3220724)

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[21] **3,222,775**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/026 (2006.01) A61B 5/0275 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR IDENTIFYING AN ABNORMAL PERFUSION PATTERN**  
[54] **SYSTEME ET PROCEDE D'IDENTIFICATION D'UN MOTIF DE PERFUSION ANORMAL**  
[72] HOLST AAGAARD MADSEN, MADSD, DK  
[72] ASP VONSILD LUND, MORTEN, DK  
[72] BARENTSEN, ERIK, DK  
[71] PERFUSION TECH APS, DK  
[85] 2023-12-14  
[86] 2022-06-24 (PCT/EP2022/067381)  
[87] (WO2022/269051)  
[30] EP (21181561.8) 2021-06-24

## PCT Applications Entering the National Phase

[21] **3,223,322**  
[13] A1

[51] **Int.Cl. C07D 417/14 (2006.01) A61K 31/444 (2006.01) A61K 31/454 (2006.01) A61P 1/16 (2006.01) A61P 3/10 (2006.01) C07D 471/04 (2006.01) C07D 471/10 (2006.01)**

[25] EN

[54] **DEGRADER COMPOUNDS AND USES THEREOF**

[54] **COMPOSES DE DEGRADATION ET LEURS UTILISATIONS**

[72] VEITS, GESINE KERSTIN, US

[72] FITZGERALD, MARK E., US

[72] HIRD, ALEXANDER W., US

[72] SWEIS, RAMZI F., US

[72] KORT, MICHAEL E., US

[71] CALICO LIFE SCIENCES LLC, US

[71] ABBVIE INC., US

[85] 2023-12-18

[86] 2022-06-21 (PCT/US2022/034379)

[87] (WO2022/271727)

[30] US (63/213,086) 2021-06-21

[21] **3,223,325**  
[13] A1

[51] **Int.Cl. C12P 7/625 (2022.01) A61P 25/28 (2006.01) C08G 63/06 (2006.01)**

[25] EN

[54] **METHODS TO PRODUCE THERAPEUTIC FORMULATIONS COMPRISING HYDROXYBUTIRATE AND HYDROXYVALERATE, THERAPEUTIC FORMULATIONS AND USES THEREOF**

[54] **PROCEDES DE PRODUCTION DE FORMULATIONS THERAPEUTIQUES COMPRENANT DE L'HYDROXYBUTIRATE ET DE L'HYDROXYVALERATE, FORMULATIONS THERAPEUTIQUES ET LEURS UTILISATIONS**

[72] NONATO, ROBERTO VIANNA, BR

[72] PRICE, DEVON, US

[72] BAYNE, PETER, US

[71] PHB INDUSTRIAL S.A., BR

[71] VITANAV, INC., US

[85] 2023-12-18

[86] 2022-06-23 (PCT/US2022/034675)

[87] (WO2023/278240)

[30] US (63/215,711) 2021-06-28

[21] **3,223,558**  
[13] A1

[51] **Int.Cl. H04N 7/18 (2006.01) F41G 1/38 (2006.01) G02B 23/00 (2006.01) G02B 27/32 (2006.01) G09G 5/37 (2006.01)**

[25] EN

[54] **DIGITAL BOOSTER FOR SIGHTS**

[54] **AMPLIFICATEUR NUMERIQUE POUR VISEURS**

[72] SZAPIEL, STAN, CA

[72] WAGNER, KEVIN BURGESS, CA

[72] THORPE, MICHAEL, CA

[71] RAYTHEON CANADA LIMITED, CA

[85] 2023-12-20

[86] 2022-06-30 (PCT/CA2022/051048)

[87] (WO2023/272396)

[30] US (63/217,412) 2021-07-01

[30] US (17/741,122) 2022-05-10

[21] **3,223,568**  
[13] A1

[51] **Int.Cl. G02B 7/04 (2021.01) F41G 1/38 (2006.01) G02B 21/00 (2006.01) G02B 23/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR ELECTRONIC CORRECTION OF BORESIGHT ERRORS IN VARIABLE MAGNIFICATION OPTICAL SYSTEMS**

[54] **SYSTEME ET PROCEDE DE CORRECTION ELECTRONIQUE D'ERREURS DE POINTAGE DANS DES SYSTEMES OPTIQUES A GROSSISSEMENT VARIABLE**

[72] SZAPIEL, STAN, CA

[72] WAGNER, KEVIN BURGESS, CA

[71] RAYTHEON CANADA LIMITED, CA

[85] 2023-12-20

[86] 2022-06-30 (PCT/CA2022/051045)

[87] (WO2023/272393)

[30] US (63/217,308) 2021-07-01

[30] US (17/843,416) 2022-06-17

[21] **3,223,572**  
[13] A1

[51] **Int.Cl. G02B 7/04 (2021.01) F41G 1/38 (2006.01) G02B 7/10 (2021.01) G02B 23/00 (2006.01)**

[25] EN

[54] **COMPACT ZOOM RELAY SYSTEM AND METHOD WITH VARIFOCAL FREEFORM LENS**

[54] **SYSTEME ET PROCEDE DE RELAIS ZOOM COMPACT AVEC LENTILLE VARIFOCAL A FORME LIBRE**

[72] SZAPIEL, STAN, CA

[71] RAYTHEON CANADA LIMITED, CA

[85] 2023-12-20

[86] 2022-06-30 (PCT/CA2022/051050)

[87] (WO2023/272397)

[30] US (63/217,309) 2021-07-01

[30] US (17/851,605) 2022-06-28

[21] **3,223,580**  
[13] A1

[51] **Int.Cl. G02B 25/00 (2006.01) F41G 1/38 (2006.01) G02B 7/00 (2021.01) G02B 21/00 (2006.01) G02B 23/00 (2006.01) G02B 27/30 (2006.01)**

[25] EN

[54] **OPTICAL SYSTEM WITH ADJUSTABLE EYE RELIEF**

[54] **SYSTEME OPTIQUE A DEGAGEMENT OCULAIRE REGLABLE**

[72] SZAPIEL, STAN, CA

[72] ATALICK, STEFAN, CA

[71] RAYTHEON CANADA LIMITED, CA

[85] 2023-12-20

[86] 2022-06-30 (PCT/CA2022/051046)

[87] (WO2023/272394)

[30] US (63/217,413) 2021-07-01

[30] US (17/848,585) 2022-06-24

[21] **3,223,583**  
[13] A1

[51] **Int.Cl. G06Q 20/10 (2012.01) G06Q 20/40 (2012.01) G06Q 20/42 (2012.01)**

[25] EN

[54] **A TRANSACTION SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE DE TRANSACTION**

[72] HONEYWELL, SEAN WILLIAM, ZA

[71] HONEYWELL, SEAN WILLIAM, ZA

[85] 2023-12-20

[86] 2022-06-24 (PCT/IB2022/055893)

[87] (WO2022/269564)

[30] NL (2028536) 2021-06-24

[30] US (63/214,440) 2021-06-24

[30] ZA (2021/04342) 2021-06-24

## Demandes PCT entrant en phase nationale

[21] <b>3,223,584</b> [13] A1	[21] <b>3,223,599</b> [13] A1	[21] <b>3,223,604</b> [13] A1
[51] <b>Int.Cl. H02K 1/24 (2006.01)</b> [25] EN [54] <b>ROTOR, MANUFACTURING METHOD, SYNCHRONOUS ELECTRIC MACHINE, AND VEHICLE</b> [54] <b>ROTOR, PROCEDE DE FABRICATION, MACHINE ELECTRIQUE SYNCHRONE ET VEHICULE</b> [72] TASSI, ALESSANDRO, IT [71] SPIN APPLICAZIONI MAGNETICHE S.R.L., IT [85] 2023-12-20 [86] 2022-06-21 (PCT/IB2022/055756) [87] (WO2022/269490) [30] IT (102021000016667) 2021-06-24	[51] <b>Int.Cl. A01N 43/56 (2006.01) C07D 401/04 (2006.01) C07D 401/14 (2006.01) C07D 405/14 (2006.01)</b> [25] EN [54] <b>METHOD FOR CONTROLLING DIAMIDE RESISTANT PESTS &amp; COMPOUNDS THEREFOR</b> [54] <b>PROCEDE DE LUTTE CONTRE DES NUISIBLES RESISTANTS AU DIAMIDE ET COMPOSES ASSOCIES</b> [72] FINKBEINER, PETER, CH [72] BENFATTI, FIDES, CH [72] KOLLETH KRIEGER, AMANDINE, CH [72] HALL, ROGER GRAHAM, CH [72] MONACO, MATTIA RICCARDO, CH [72] RENDINE, STEFANO, CH [72] STOLLER, ANDRE, CH [71] SYNGENTA CROP PROTECTION AG, CH [85] 2023-12-20 [86] 2022-08-16 (PCT/EP2022/072830) [87] (WO2023/021020) [30] EP (21192177.0) 2021-08-19	[51] <b>Int.Cl. C07C 5/48 (2006.01) C07C 11/04 (2006.01) C07C 51/215 (2006.01) C07C 53/08 (2006.01) C07C 67/05 (2006.01) C07C 69/15 (2006.01)</b> [25] EN [54] <b>METHOD AND PLANT FOR THE PRODUCTION OF VINYL ACETATE</b> [54] <b>PROCEDE ET INSTALLATION POUR LA PRODUCTION D'ACETATE DE VINYLE</b> [72] DE VAL, RICARDO BERMEJO, DE [72] SCHUBERT, MARTIN, DE [72] MEISWINKEL, ANDREAS, DE [72] HAIDEGGER, ERNST, DE [71] LINDE GMBH, DE [85] 2023-12-20 [86] 2022-07-06 (PCT/EP2022/068799) [87] (WO2023/280947) [30] EP (21020352.7) 2021-07-06
[21] <b>3,223,594</b> [13] A1	[21] <b>3,223,600</b> [13] A1	[21] <b>3,223,606</b> [13] A1
[51] <b>Int.Cl. C10G 9/24 (2006.01) C01B 3/24 (2006.01)</b> [25] EN [54] <b>APPARATUS AND METHOD FOR THE PRODUCTION OF HYDROGEN</b> [54] <b>APPAREIL ET PROCEDE DESTINES A LA PRODUCTION DE PARTICULES</b> [72] GODAL, ARNE, NO [71] XGAS AS, NO [85] 2023-12-20 [86] 2022-06-22 (PCT/EP2022/067034) [87] (WO2022/268888) [30] GB (2108950.3) 2021-06-22	[51] <b>Int.Cl. F16B 13/00 (2006.01) F16B 13/08 (2006.01)</b> [25] EN [54] <b>WALL ANCHOR</b> [54] <b>ANCRAGE MURAL</b> [72] BROWN, PETER, GB [71] FORTH VIEW DESIGNS LIMITED, GB [85] 2023-12-20 [86] 2022-07-15 (PCT/GB2022/051840) [87] (WO2023/285837) [30] GB (2110255.3) 2021-07-16	[51] <b>Int.Cl. A61K 8/25 (2006.01) A61Q 19/00 (2006.01)</b> [25] EN [54] <b>PARTICULATE AEROGEL MATERIAL KIT FOR GRIP ENHANCEMENT</b> [54] <b>KIT DE MATERIAU D'AEROGEL PARTICULAIRE POUR AMELIORATION DE PREHENSION</b> [72] POPE, DAVID G., US [72] PIDHURNEY, JAMES M., US [72] STEINER, STEPHEN A., US [72] BUCKWALTER, MORIAH C., US [72] NELSON, RYAN T., US [71] CHALKLESS, INC., US [85] 2023-12-20 [86] 2022-07-01 (PCT/US2022/073334) [87] (WO2023/279074) [30] US (63/217,686) 2021-07-01
[21] <b>3,223,596</b> [13] A1		
[51] <b>Int.Cl. C07K 5/083 (2006.01) A61P 3/10 (2006.01) A61P 9/12 (2006.01) A61P 39/06 (2006.01) C07K 1/16 (2006.01) C07K 14/46 (2006.01)</b> [25] EN [54] <b>PEPTIDES FOR REGULATING GLUCOSE</b> [54] <b>PEPTIDES POUR REGULER LE GLUCOSE</b> [72] GILL, THOMAS A., CA [72] ROLIN, JONATHAN, CA [71] GILL, THOMAS A., CA [71] ROLIN, JONATHAN, CA [85] 2023-12-20 [86] 2022-06-29 (PCT/CA2022/051035) [87] (WO2023/272386) [30] US (63/216,080) 2021-06-29		

## PCT Applications Entering the National Phase

[21] **3,223,609**  
[13] A1

[51] **Int.Cl. C08J 11/24 (2006.01) C08G 71/04 (2006.01)**

[25] EN

[54] **METHOD FOR THE CHEMICAL RECYCLING OF POLYETHYLENE FURANOATE (PEF), PUR/PIR HARD FOAM, AND PROCESS FOR MANUFACTURING PUR/PIR HARD FOAMS**

[54] **PROCEDE DE RECYCLAGE CHIMIQUE DE POLYETHYLENE FURANOATE (PEF), MOUSSE RIGIDE PUR/PIR ET PROCEDE DE PRODUCTION DE MOUSSES RIGIDES PUR/PIR**

[72] BOMMER, THOMAS, DE  
[72] DEMHARTER, ANTON, DE  
[71] PUREN GMBH, DE  
[85] 2023-12-20  
[86] 2022-06-15 (PCT/EP2022/066387)  
[87] (WO2022/268615)  
[30] DE (10 2021 115 988.1) 2021-06-21

[21] **3,223,610**  
[13] A1

[51] **Int.Cl. A61K 31/519 (2006.01) A61K 31/675 (2006.01) A61K 31/704 (2006.01) A61K 45/00 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **INHIBITORS OF BRUTON'S TYROSINE KINASE AND METHODS OF THEIR USE**

[54] **INHIBITEURS DE LA TYROSINE KINASE DE BRUTON ET LEURS PROCEDES D'UTILISATION**

[72] BUSSOLARI, JACQUELINE CIRILLO, US  
[72] PHILIPPAR, ULRIKE, BE  
[72] STEELE, ANDREW, US  
[72] TICHENOR, MARK S., US  
[71] JANSSEN PHARMACEUTICA NV, BE  
[85] 2023-12-20  
[86] 2022-06-29 (PCT/EP2022/067957)  
[87] (WO2023/275173)  
[30] US (63/216,796) 2021-06-30

[21] **3,223,611**  
[13] A1

[51] **Int.Cl. C07D 401/12 (2006.01) C07C 211/55 (2006.01)**

[25] EN

[54] **FERROPTOSIS MODULATORS, PREPARATIONS, AND USES THEREOF**

[54] **MODULATEURS DE LA FERROPTOSE, PREPARATIONS ET UTILISATIONS ASSOCIEES**

[72] HAN, JIANGUANG, CN  
[72] ZHANG, ZHIYUAN, CN  
[72] HOU, WEIJIE, CN  
[72] JIANG, YIMIN, CN  
[72] XU, YANPING, CN  
[71] SIRONAX LTD., KY  
[85] 2023-12-20  
[86] 2022-07-08 (PCT/CN2022/104559)  
[87] (WO2023/280296)  
[30] CN (PCT/CN2021/105449) 2021-07-09

[21] **3,223,617**  
[13] A1

[51] **Int.Cl. B60C 25/01 (2006.01) B60C 25/04 (2006.01) B60C 25/132 (2006.01)**

[25] EN

[54] **PORTABLE TYRE CHANGING STAND**

[54] **SOCLE DE CHANGEMENT DE PNEU PORTATIF**

[72] KALLAST, TONU, EE  
[72] SAKS, JAKOB, EE  
[71] KALLAST, TONU, EE  
[71] SAKS, JAKOB, EE  
[85] 2023-12-20  
[86] 2022-08-25 (PCT/IB2022/057976)  
[87] (WO2023/026233)  
[30] EE (U202100033) 2021-08-25

[21] **3,223,618**  
[13] A1

[51] **Int.Cl. G01S 17/89 (2020.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR AN AIRBORNE MAPPING LIDAR**

[54] **SYSTEME ET PROCEDE POUR LIDAR DE CARTOGRAPHIE AEROPORTE**

[72] CALL, BRANDON R., US  
[72] FRIED, DALE G., US  
[72] KELLEY, DAVID, US  
[72] REICHERT, CHRISTOPHER, US  
[71] 3DEO, INC., US  
[85] 2023-12-20  
[86] 2022-06-22 (PCT/US2022/034432)  
[87] (WO2023/158456)  
[30] US (63/213,514) 2021-06-22  
[30] US (17/845,044) 2022-06-21

[21] **3,223,620**  
[13] A1

[51] **Int.Cl. G01R 31/382 (2019.01) H01M 10/48 (2006.01)**

[25] EN

[54] **BATTERY FAULT DETERMINATION**

[54] **DETERMINATION DE DEFAUT DE BATTERIE**

[72] CRYMBLE, TIMOTHY, GB  
[72] JONES, ADRIAN, GB  
[72] LEWORTHY, JOSH ROBERT, GB  
[72] SYLVESTER, JOEL, GB  
[71] DUKOSI LIMITED, GB  
[85] 2023-12-20  
[86] 2022-06-29 (PCT/EP2022/067995)  
[87] (WO2023/275203)  
[30] EP (21183301.7) 2021-07-01

[21] **3,223,621**  
[13] A1

[51] **Int.Cl. H02M 3/28 (2006.01)**

[25] EN

[54] **CONTROL APPARATUS FOR THREE-TERMINAL STATIC DC TRANSFORMER**

[54] **DISPOSITIF DE COMMANDE POUR TRANSFORMATEUR DE COURANT CONTINU STATIQUE A TROIS BORNES**

[72] KADO, YUICHI, JP  
[72] IMAI, TAKASHI, JP  
[72] GOTO, TAKAO, JP  
[71] IKS CO., LTD., JP  
[85] 2023-12-20  
[86] 2022-06-15 (PCT/JP2022/023941)  
[87] (WO2022/270377)  
[30] JP (2021-104379) 2021-06-23

## Demandes PCT entrant en phase nationale

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[21] **3,223,622**  
[13] A1

[51] **Int.Cl. C10G 11/18 (2006.01) C10G 45/08 (2006.01) C10G 69/04 (2006.01) C10G 69/06 (2006.01)**

[25] EN

[54] **FCC CO-PROCESSING OF BIOMASS OIL WITH HYDROGEN RICH CO-FEED**

[54] **CO-TRAITEMENT DE CRAQUAGE CATALYTIQUE FLUIDE D'UNE HUILE DE BIOMASSE AVEC UNE CO-ALIMENTATION RICHE EN HYDROGENE**

[72] KIM, HYUNG RAE, US

[72] DAKKA, JIHAD M., US

[72] XU, XIAOCHUN, US

[71] EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY, US

[85] 2023-12-20

[86] 2022-06-13 (PCT/US2022/033184)

[87] (WO2022/271471)

[30] US (63/202,714) 2021-06-22

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[21] **3,223,624**  
[13] A1

[51] **Int.Cl. G01N 1/02 (2006.01) G01N 1/04 (2006.01) G01N 35/00 (2006.01)**

[25] EN

[54] **AN AUTOMATED SYSTEM FOR COLLECTING TISSUE SAMPLES, AND CORRESPONDING METHOD AND COMPUTER-READABLE MEDIUM**

[54] **SYSTEME AUTOMATISE POUR COLLECTER DES ECHANTILLONS DE TISSUS, ET PROCEDE ET SUPPORT LISIBLE PAR ORDINATEUR CORRESPONDANTS**

[72] THOMAS, DAVID ROBERT, IE

[72] MEGHEN, CIARAN, IE

[72] PETERS, GREGORY ALAN, US

[72] DOUGLAS, AMY JOHANNA, GB

[72] GALBRAITH, ROBERT, GB

[72] WATSON, RYAN MICHAEL, GB

[71] IDENTIGEN LIMITED, IE

[85] 2023-12-20

[86] 2022-07-13 (PCT/EP2022/069580)

[87] (WO2023/285519)

[30] US (17/374,265) 2021-07-13

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[21] **3,223,626**  
[13] A1

[51] **Int.Cl. C07D 413/14 (2006.01) A61P 31/06 (2006.01) C07D 417/14 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **HETEROCYCLIC COMPOUNDS FOR THE TREATMENT OF TUBERCULOSIS**

[54] **COMPOSES HETEROCYCLIQUES POUR LE TRAITEMENT DE LA TUBERCULOSE**

[72] PARDAL FILIPE, AUGUSTO EUGENIO, PT

[72] DA COSTA PEREIRA ROSA, CARLA PATRICIA, PT

[72] CORDEIRO SIMOES, ANA VANESSA, PT

[72] RAMOS DAMIL, JOAO CARLOS, PT

[72] SILVA SERRA, JOAO PEDRO, PT

[72] ALMEIDA FERREIRA, ANA LUCIA, PT

[72] GOMES NEVES, RITA ISABEL, PT

[72] MARQUES HOMEM E SOUSA DOS SANTOS, SARA ALEXANDRA, PT

[71] TECNIMEDE - SOCIEDADE TECNICO-MEDICINAL, SA, PT

[85] 2023-12-20

[86] 2022-06-28 (PCT/IB2022/055995)

[87] (WO2023/275744)

[30] EP (21182608.6) 2021-06-29

[30] PT (117313) 2021-06-29

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[21] **3,223,627**  
[13] A1

[51] **Int.Cl. A47B 73/00 (2006.01) A47F 7/28 (2006.01) A47G 23/02 (2006.01) B65D 71/50 (2006.01) B67B 7/16 (2006.01)**

[25] EN

[54] **BOTTLE STORAGE DEVICE**

[54] **DISPOSITIF DE STOCKAGE DE BOUTEILLES**

[72] PAULICK, JOHN F., US

[71] WINE MASTER CELLARS, LLC, US

[85] 2023-12-20

[86] 2022-06-23 (PCT/US2022/073112)

[87] (WO2022/272280)

[30] US (63/213,802) 2021-06-23

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[21] **3,223,628**  
[13] A1

[51] **Int.Cl. A61J 1/03 (2023.01) B65D 83/04 (2006.01) B65D 83/08 (2006.01)**

[25] EN

[54] **A SACHET DISPENSER**

[54] **DISTRIBUTEUR DE SACHETS**

[72] GASCOIGNE, GARY, AU

[72] ALLEN, ROBERT, AU

[71] OPTIMAL VISION PLUS PTY LTD, AU

[85] 2023-12-20

[86] 2022-06-16 (PCT/AU2022/050596)

[87] (WO2023/000014)

[30] AU (2021902208) 2021-07-19

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[21] **3,223,631**  
[13] A1

[51] **Int.Cl. C25B 9/70 (2021.01) C25B 9/77 (2021.01) C25B 15/06 (2006.01) C25B 15/08 (2006.01)**

[25] EN

[54] **DEVICE AND METHOD FOR IONIC SHUNT CURRENT ELIMINATION**

[54] **DISPOSITIF ET PROCEDE D'ELIMINATION DE COURANT DE DERIVATION IONIQUE**

[72] ROM, IDAN, IL

[72] MOSHKOVICH, MORDECHAY, IL

[72] DOTAN, HEN, IL

[71] H2PRO LTD, IL

[85] 2023-12-20

[86] 2022-06-20 (PCT/IL2022/050657)

[87] (WO2022/269602)

[30] US (63/202,688) 2021-06-21

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[21] **3,223,632**  
[13] A1

[51] **Int.Cl. A01F 15/00 (2006.01) A01K 5/00 (2006.01)**

[25] EN

[54] **A RE-BALING APPARATUS, A BALE FORMER AND A RE-BALE FEEDER**

[54] **APPAREIL DE REMISE EN BALLES, TABLE DE FORMATION DE BALLES ET LIGNE D'ALIMENTATION EN BALLES**

[72] HUGHES, MICHAEL, GB

[71] SPREAD-A-BALE LIMITED, GB

[85] 2023-12-20

[86] 2022-06-29 (PCT/GB2022/051676)

[87] (WO2023/275549)

[30] GB (2109450.3) 2021-06-30

## PCT Applications Entering the National Phase

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[21] **3,223,634**  
[13] A1

[51] **Int.Cl. B65D 33/01 (2006.01)**  
[25] EN  
[54] **VENTILATION DEVICE AND METHOD FOR PRODUCING SAME**  
[54] **DISPOSITIF DE VENTILATION ET PROCEDE DE PRODUCTION D'UN TEL DISPOSITIF**  
[72] SCHUTTE, VOLKER, DE  
[72] EVERWAND, TORSTEN, DE  
[71] HAVER & BOECKER OHG, DE  
[85] 2023-12-20  
[86] 2022-06-27 (PCT/EP2022/067518)  
[87] (WO2023/274929)  
[30] DE (10 2021 117 166.0) 2021-07-02

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[21] **3,223,635**  
[13] A1

[51] **Int.Cl. A01D 34/69 (2006.01) A01D 34/68 (2006.01)**  
[25] EN  
[54] **BLADE ASSEMBLY, POWER HEAD AND LAWN MOWER**  
[54] **ENSEMBLE DISPOSITIF DE COUPE, TETE D'ALIMENTATION ET TONDEUSE PUSSEE**  
[72] FENG, SHOUCHUAN, CN  
[72] DONG, JIANHUA, CN  
[71] GLOBE (JIANGSU) CO., LTD., CN  
[85] 2023-12-20  
[86] 2022-06-20 (PCT/CN2022/099685)  
[87] (WO2022/268005)  
[30] CN (202121393386.9) 2021-06-22  
[30] CN (202110696169.5) 2021-06-22  
[30] CN (202122023414.4) 2021-08-25  
[30] CN (202110787992.7) 2021-07-13  
[30] CN (202121593898.X) 2021-07-13

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[21] **3,223,636**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01) C07D 401/14 (2006.01) C07D 417/14 (2006.01) C07D 471/04 (2006.01) C07K 14/47 (2006.01) C07K 14/725 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR SELECTIVE DEGRADATION OF ENGINEERED PROTEINS**  
[54] **COMPOSITIONS ET PROCEDES DE DEGRADATION SELECTIVE DE PROTEINES MODIFIEES**  
[72] CARROLL, CHRISTOPHER WALTON, US  
[72] D'AGOSTINO, LAURA AKULLIAN, US  
[72] LIU, HAIBO, US  
[72] SHANMUGASUNDARAM, VEERABAHU, US  
[72] BARAJAS, BROOK, US  
[71] CELGENE CORPORATION, US  
[85] 2023-12-20  
[86] 2022-08-05 (PCT/US2022/074589)  
[87] (WO2023/015283)  
[30] US (63/230,225) 2021-08-06

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[21] **3,223,637**  
[13] A1

[51] **Int.Cl. B60N 2/28 (2006.01)**  
[25] EN  
[54] **SAFETY SEAT**  
[54] **SIEGE DE SECURITE**  
[72] GUO, ZHENGWEN, CN  
[72] MO, XIAOLONG, CN  
[71] WONDERLAND SWITZERLAND AG, CH  
[85] 2023-12-20  
[86] 2022-06-21 (PCT/EP2022/066867)  
[87] (WO2022/268804)  
[30] CN (202110686926.0) 2021-06-21

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[21] **3,223,638**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) A61P 25/00 (2006.01) A61P 25/18 (2006.01) A61P 25/30 (2006.01)**  
[25] EN  
[54] **SCO-SPONDIN-DERIVED POLYPEPTIDES FOR ENHANCING SYNAPTIC TRANSMISSION**  
[54] **POLYPEPTIDES DERIVES DE SCO-SPONDINE DESTINES A AMELIORER LA TRANSMISSION SYNAPTIQUE**  
[72] LEMARCHANT, SIGHILD BRUNHILDE ADELINE, FR  
[72] GODFRIN, YANN, FR  
[72] SOURIOUX, MELISSA CHRISTINE, FR  
[71] AXOLTIS PHARMA, FR  
[85] 2023-12-20  
[86] 2022-06-17 (PCT/EP2022/066615)  
[87] (WO2023/280550)  
[30] EP (21305959.5) 2021-07-09  
[30] EP (21306694.7) 2021-12-02

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[21] **3,223,639**  
[13] A1

[51] **Int.Cl. G16B 15/10 (2019.01)**  
[25] EN  
[54] **METHODS FOR OPTIMISING PROTEIN PRODUCTION**  
[54] **PROCEDES D'OPTIMISATION DE LA PRODUCTION DE PROTEINES**  
[72] DUNKELMANN, DANIEL L., GB  
[72] OEHM, SEBASTIAN B., GB  
[72] BEATTIE, ADAM T., JP  
[72] CHIN, JASON W., GB  
[71] UNITED KINGDOM RESEARCH AND INNOVATION, GB  
[85] 2023-12-20  
[86] 2022-07-14 (PCT/EP2022/069744)  
[87] (WO2023/285596)  
[30] GB (2110137.3) 2021-07-14

## Demandes PCT entrant en phase nationale

[21] **3,223,640**  
[13] A1

[51] **Int.Cl. A23L 29/212 (2016.01) A21D 2/18 (2006.01) A21D 2/36 (2006.01)**

[25] FR

[54] **PEA STARCH HMT METHOD**

[54] **PROCEDE HMT DE L'AMIDON DE POIS**

[72] PARCQ, JULIEN, FR

[72] HASJIM, JOVIN, FR

[72] DUPONT, ALBAN, FR

[71] ROQUETTE FRERES, FR

[85] 2023-12-20

[86] 2022-07-05 (PCT/FR2022/051349)

[87] (WO2023/281213)

[30] FR (FR2107379) 2021-07-08

[21] **3,223,641**  
[13] A1

[51] **Int.Cl. C07D 401/12 (2006.01) A61K 31/444 (2006.01) A61K 31/497 (2006.01) C07D 401/14 (2006.01) C07D 409/14 (2006.01) C07D 411/14 (2006.01) C07D 417/14 (2006.01)**

[25] EN

[54] **SULFOXIMINE COMPOUND AND USE THEREOF**

[54] **COMPOSE SULFOXIMINE ET SON UTILISATION**

[72] QIAN, WENYUAN, CN

[72] YANG, CHUNDAO, CN

[71] MEDSHINE DISCOVERY INC., CN

[85] 2023-12-20

[86] 2022-06-22 (PCT/CN2022/100435)

[87] (WO2022/268119)

[30] CN (202110694497.1) 2021-06-22

[30] CN (202210002094.0) 2022-01-04

[30] CN (202210665753.9) 2022-06-13

[21] **3,223,642**  
[13] A1

[51] **Int.Cl. G01S 7/02 (2006.01) G01S 13/58 (2006.01)**

[25] EN

[54] **MIMO RADAR SIGNAL PROCESSING DEVICE AND RECEPTION SIGNAL PROCESSING DEVICE, AND METHOD FOR DISTINGUISHING PROPAGATION MODE OF RECEPTION SIGNAL VECTOR OF INTEREST**

[54] **DISPOSITIF DE TRAITEMENT DE SIGNAUX RADAR MIMO ET DISPOSITIF DE TRAITEMENT DE SIGNAUX DE RECEPTION, ET PROCEDE DESTINE A DISTINGUER LE MODE DE PROPAGATION D'UN VECTEUR DE SIGNAUX DE RECEPTION D'INTERE**

[72] TAKAHASHI, RYUHEI, JP

[71] MITSUBISHI ELECTRIC CORPORATION, JP

[85] 2023-12-20

[86] 2021-08-18 (PCT/JP2021/030092)

[87] (WO2023/021586)

[21] **3,223,643**  
[13] A1

[51] **Int.Cl. G06F 17/00 (2019.01)**

[25] EN

[54] **SCALABLE SYSTEM AND METHOD USING LOGICAL ENTITIES FOR PRODUCTION OF PROGRAMS THAT USE MULTI-MEDIA SIGNALS**

[54] **SYSTEME ET PROCEDE EVOLUTIFS UTILISANT DES ENTITES LOGIQUES POUR LA PRODUCTION DE PROGRAMMES QUI UTILISENT DES SIGNAUX MULTIMEDIA**

[72] EBERT, JOA DIEGO, DE

[72] JACOBI, ANDREAS, DE

[72] KHAN, MALIK, US

[71] LTN GLOBAL COMMUNICATIONS, INC., US

[85] 2023-12-20

[86] 2021-08-16 (PCT/US2021/030421)

[87] (WO2023/022697)

[21] **3,223,644**  
[13] A1

[51] **Int.Cl. C08L 67/02 (2006.01) C08L 3/02 (2006.01) C08L 97/02 (2006.01)**

[25] EN

[54] **BIODEGRADABLE POLYMER BASED BIOCOSITES**

[54] **BIOCOSITES A BASE DE POLYMERE BIODEGRADABLE**

[72] MEKONNEN, TIZAZU H., CA

[72] GUPTA, ARVIND, CA

[71] CTK RESEARCH AND DEVELOPMENT CANADA LTD., CA

[85] 2023-12-20

[86] 2022-07-07 (PCT/CA2022/051065)

[87] (WO2023/279206)

[30] US (63/219,344) 2021-07-07

[21] **3,223,646**  
[13] A1

[51] **Int.Cl. A01N 63/50 (2020.01) C12N 15/82 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR CONTROLLING INSECTS**

[54] **COMPOSITIONS ET PROCEDES DE LUTTE CONTRE LES INSECTES**

[72] LI, JIANQUAN, US

[72] HE, CHENGLUN, US

[72] CHEN, JENG SHONG, US

[71] SYNGENTA CROP PROTECTION AG, CH

[85] 2023-12-20

[86] 2022-07-20 (PCT/US2022/073912)

[87] (WO2023/004334)

[30] US (63/223,599) 2021-07-20

## PCT Applications Entering the National Phase

[21] **3,223,647**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS OF TREATING PLASMA CELL DISORDERS INCLUDING MULTIPLE MYELOMA WITH A VACCINE COMPOSITION AND MYELOMA-SPECIFIC CAR-T CELLS**  
[54] **COMPOSITIONS ET PROCÉDES DE TRAITEMENT DE TROUBLES PLASMOCYTAIRES COMPRENANT LE MYELOME MULTIPLE A L'AIDE D'UNE COMPOSITION VACCINALE ET DE LYMPHOCYTES CAR-T SPECIFIQUES AU MYELOME**  
[72] BORRELLO, IVAN M., US  
[72] AHLSTROM, JENNIFER MYERS, US  
[71] MERIDIAN THERAPEUTICS, INC., US  
[85] 2023-12-20  
[86] 2022-06-27 (PCT/US2022/035097)  
[87] (WO2023/278310)  
[30] US (63/215,708) 2021-06-28

[21] **3,223,649**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **A VACCINE COMPOSITION FOR PLASMA CELL DISORDERS INCLUDING MULTIPLE MYELOMA AND METHODS TO INDUCE IMMUNITY USING SAME**  
[54] **COMPOSITION DE VACCIN POUR TROUBLES DES CELLULES PLASMATIQUES, COMPRENANT LE MYELOME MULTIPLE, ET PROCÉDES POUR INDUIRE UNE IMMUNITÉ AU MOYEN DE CELLE-CI**  
[72] NOONAN, KIMBERLY A., US  
[72] BORRELLO, IVAN M., US  
[72] AHLSTROM, JENNIFER MYERS, US  
[71] MERIDIAN THERAPEUTICS, INC., US  
[85] 2023-12-20  
[86] 2022-06-27 (PCT/US2022/035094)  
[87] (WO2023/278307)  
[30] US (63/215,704) 2021-06-28

[21] **3,223,650**  
[13] A1

[51] **Int.Cl. C04B 28/18 (2006.01) C04B 40/02 (2006.01)**  
[25] EN  
[54] **HIGH-SILICA-CONTAINING SUPPLEMENTARY CEMENTITIOUS MATERIALS, AND METHOD OF PRODUCING SAME**  
[54] **MATERIAUX CIMENTAIRES SUPPLEMENTAIRES A TENEUR ELEVEE EN SILICE, ET LEUR PROCÉDE DE PRODUCTION**  
[72] SAHU, SADANANDA, US  
[72] ATAKAN, VAHIT, US  
[72] DECRISTOFARO, NICHOLAS, US  
[71] SOLIDIA TECHNOLOGIES, INC., US  
[85] 2023-12-20  
[86] 2022-06-30 (PCT/US2022/035737)  
[87] (WO2023/278710)  
[30] US (63/217,574) 2021-07-01

[21] **3,223,653**  
[13] A1

[51] **Int.Cl. C12Q 1/6806 (2018.01) C12Q 1/6827 (2018.01) C12Q 1/6869 (2018.01)**  
[25] EN  
[54] **CONCURRENT SEQUENCING OF FORWARD AND REVERSE COMPLEMENT STRANDS ON SEPARATE POLYNUCLEOTIDES FOR METHYLATION DETECTION**  
[54] **SEQUENCAGE SIMULTANÉ DE BRINS DE COMPLÉMENT AVANT ET INVERSE SUR DES POLYNUCLEOTIDES SÉPARÉS POUR LA DÉTECTION DE METHYLATION**  
[72] KARUNAKARAN, AATHAVAN, US  
[72] SRIDHARAN, SHAGESH, US  
[72] BOUTELL, JONATHAN, GB  
[72] VESSERE, GERY, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-20  
[86] 2023-03-15 (PCT/EP2023/056665)  
[87] (WO2023/175037)  
[30] US (63/269,383) 2022-03-15  
[30] US (63/328,444) 2022-04-07  
[30] US (63/439,415) 2023-01-17  
[30] US (63/439,417) 2023-01-17  
[30] US (63/439,438) 2023-01-17  
[30] US (63/439,443) 2023-01-17  
[30] US (63/439,466) 2023-01-17  
[30] US (63/439,491) 2023-01-17  
[30] US (63/439,501) 2023-01-17  
[30] US (63/439,519) 2023-01-17  
[30] US (63/439,522) 2023-01-17

[21] **3,223,654**  
[13] A1

[51] **Int.Cl. B60D 1/36 (2006.01)**  
[25] EN  
[54] **AUTONOMOUS TRAILER MANEUVERING**  
[54] **MAN?UVRE DE REMORQUE AUTONOME**  
[72] NETT, JEREMY, US  
[72] WOODARD, KY, US  
[72] CUTTER, MICHAEL, US  
[72] BAILEY, JAMES, US  
[72] BREKKEN, MATT, US  
[72] LIN, YU-CHENG, US  
[72] KLEIN, LAWRENCE, US  
[71] OUTRIDER TECHNOLOGIES, INC., US  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/US2022/034759)  
[87] (WO2022/271968)  
[30] US (63/214,229) 2021-06-23

[21] **3,223,655**  
[13] A1

[51] **Int.Cl. G01N 35/10 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND RELATED MANIFOLD ASSEMBLIES**  
[54] **SYSTEMES ET ENSEMBLES COLLECTEURS CORRESPONDANTS**  
[72] BREWER, EMERICO, US  
[72] BECKMAN, TRAVIS, US  
[72] DAVIDSON, JUSTIN, US  
[72] WANG, SHYUN LONG, SG  
[72] ANG, BENG KEONG, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-20  
[86] 2022-10-24 (PCT/US2022/047573)  
[87] (WO2023/076163)  
[30] US (63/273,608) 2021-10-29  
[30] US (63/344,872) 2022-05-23

[21] **3,223,657**  
[13] A1

[51] **Int.Cl. A01D 45/06 (2006.01) A01D 45/30 (2006.01) A01D 91/04 (2006.01)**  
[25] EN  
[54] **PROCESSING MACHINE FOR FIBER PLANTS**  
[54] **MACHINE DE TRAITEMENT POUR PLANTES A FIBRES**  
[72] BAERT, NIELS, BE  
[71] HYLER BV, BE  
[85] 2023-12-20  
[86] 2022-07-18 (PCT/IB2022/056598)  
[87] (WO2023/002345)  
[30] BE (2021/5564) 2021-07-19



## Demandes PCT entrant en phase nationale

[21] **3,223,658**  
[13] A1

[51] **Int.Cl. B62D 15/02 (2006.01) B60D 1/01 (2006.01) B60D 1/28 (2006.01) B62D 53/06 (2006.01) B62D 53/10 (2006.01) B60D 1/36 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DETERMINING AN ARTICULATED TRAILER ANGLE**

[54] **SYSTEMES ET PROCEDES POUR DETERMINER UN ANGLE DE REMORQUE ARTICULEE**

[72] RECORD, JONATHAN, US

[72] GRABBE, ROBERT, US

[72] KLEIN, LAWRENCE, US

[72] HENNING, FLOYD, US

[71] OUTRIDER TECHNOLOGIES, INC., US

[85] 2023-12-20

[86] 2022-06-23 (PCT/US2022/034773)

[87] (WO2022/271978)

[30] US (63/214,227) 2021-06-23

[30] US (63/327,723) 2022-04-05

[21] **3,223,659**  
[13] A1

[51] **Int.Cl. G01C 21/36 (2006.01) G05D 1/00 (2024.01)**

[25] EN

[54] **MOTOR STALL AND TRAILER LIFT**

[54] **CALAGE MOTEUR ET LEVE-REMORQUE**

[72] RONAN, TESSA, US

[72] ZIPARO, VITTORIO, US

[72] KLEIN, LAWRENCE, US

[72] WOODARD, KY, US

[71] OUTRIDER TECHNOLOGIES, INC., US

[85] 2023-12-20

[86] 2022-06-23 (PCT/US2022/034766)

[87] (WO2022/271973)

[30] US (63/214,225) 2021-06-23

[21] **3,223,663**  
[13] A1

[51] **Int.Cl. B65G 1/04 (2006.01) B65G 1/06 (2006.01)**

[25] EN

[54] **STORAGE SYSTEM WITH A MULTI-LEVEL STORAGE RACK, A VERTICAL LIFT CONNECTING THE LEVELS OF THE MULTI-LEVEL STORAGE RACK AND METHOD OF OPERATION**

[54] **SYSTEME DE STOCKAGE A RAYONNAGE DE STOCKAGE MULTI-NIVEAUX, ELEVATEUR VERTICAL RELIANT LES NIVEAUX DU RAYONNAGE DE STOCKAGE MULTI-NIVEAUX, ET PROCEDE DE FONCTIONNEMENT**

[72] YAMASHITA, SHIN, DE

[71] DEMATIC GMBH, DE

[85] 2023-12-20

[86] 2022-06-30 (PCT/EP2022/068175)

[87] (WO2023/280688)

[30] EP (21184872.6) 2021-07-09

[21] **3,223,665**  
[13] A1

[51] **Int.Cl. A23K 10/16 (2016.01) A23K 20/105 (2016.01) A23K 50/10 (2016.01) C12P 5/02 (2006.01)**

[25] EN

[54] **METHODS**

[54] **PROCEDES**

[72] AYLIFFE, MICHAEL ANTHONY, AU

[72] LOAN, THOMAS DAVID, AU

[72] LUO, MING, AU

[71] COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, AU

[85] 2023-12-20

[86] 2022-06-24 (PCT/AU2022/050653)

[87] (WO2022/266723)

[30] AU (2021901926) 2021-06-25

[21] **3,223,666**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01) C07K 14/54 (2006.01)**

[25] EN

[54] **SELECTION OF OPTIMAL CELL DONORS AND METHODS AND COMPOSITIONS FOR ENHANCED EXPANSION AND CYTOTOXICITY OF DONOR CELLS**

[54] **SELECTION DE DONNEURS DE CELLULES OPTIMALES ET PROCEDES ET COMPOSITIONS D'EXPANSION AMELIOREE ET DE CYTOTOXICITE DE CELLULES DONNEUSES**

[72] TRAGER, JAMES BARNABY, US

[72] LAZETIC, ALEXANDRA LEIDA LIANA, US

[72] CHAN, IVAN, US

[72] WHANG, MICHAEL, US

[72] XIE, MING-HONG, US

[72] LEMAR, HADIA, US

[72] VOHRA, ANMOL, US

[72] BRANDENBERGER, RALPH, US

[71] NKARTA, INC., US

[85] 2023-12-20

[86] 2022-07-26 (PCT/US2022/074164)

[87] (WO2023/010018)

[30] US (63/203,703) 2021-07-28

[30] US (63/262,544) 2021-10-14

[21] **3,223,668**  
[13] A1

[51] **Int.Cl. A61K 38/05 (2006.01) A61P 25/16 (2006.01) C07K 5/02 (2006.01) C07K 5/065 (2006.01)**

[25] EN

[54] **METHODS OF TREATING PARKINSON'S DISEASE AND/OR LEWY BODY DISEASE OR DISORDER(S)**

[54] **METHODES DE TRAITEMENT DE LA MALADIE DE PARKINSON ET/OU DE LA MALADIE A CORPS DE LEWY OU D'UN (DE) TROUBLE(S) ASSOCIE(S)**

[72] MOEBIUS, HANS J., US

[72] HUA, XUE, US

[72] CHURCH, KEVIN, US

[72] WALKER, WILLIAM, US

[72] KAWAS, LEEN, US

[71] ATHIRA PHARMA, INC., US

[85] 2023-12-20

[86] 2022-07-21 (PCT/US2022/074021)

[87] (WO2023/004393)

[30] US (PCT/US2021/042974) 2021-07-23

## PCT Applications Entering the National Phase

[21] <b>3,223,669</b> [13] A1	[21] <b>3,223,671</b> [13] A1	[21] <b>3,223,673</b> [13] A1
[51] <b>Int.Cl. C12Q 1/6806 (2018.01) C12Q 1/6827 (2018.01) C12Q 1/6869 (2018.01)</b>	[51] <b>Int.Cl. B01F 23/237 (2022.01) C01B 33/24 (2006.01) C04B 14/04 (2006.01) C04B 28/04 (2006.01)</b>	[51] <b>Int.Cl. A61B 5/00 (2006.01) A61B 5/363 (2021.01) A61B 5/0205 (2006.01) A61B 5/021 (2006.01) A61B 5/024 (2006.01) A61B 5/053 (2021.01) A61B 5/08 (2006.01) A61B 5/145 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>CONCURRENT SEQUENCING OF FORWARD AND REVERSE COMPLEMENT STRANDS ON CONCATENATED POLYNUCLEOTIDES FOR METHYLATION DETECTION</b>	[54] <b>PRODUCTION OF SUPPLEMENTARY CEMENTITIOUS MATERIALS THROUGH SEMI-WET CARBONATION, CYCLIC CARBONATION, NON-SLURRY CARBONATION, HIGH TEMPERATURE CARBONATION AND GRANULATION</b>	[54] <b>SYSTEM AND METHOD FOR AUTOMATIC DETECTION OF CLINICAL DETERIORATION EVENTS</b>
[54] <b>SEQUENCAGE SIMULTANE DE BRINS COMPLEMENTAIRES SENS ET ANTISENS SUR DES POLYNUCLEOTIDES CONCATENES POUR LA DETECTION DE METHYLATION</b>	[54] <b>PRODUCTION DE MATERIAUX CIMENTAIRES SUPPLEMENTAIRES PAR CARBONATATION SEMI-HUMIDE, CARBONATATION CYCLIQUE, CARBONATATION NON BOUEUSE, CARBONATATION A HAUTE TEMPERATURE ET CARBONATATION PAR GRANULATIO</b>	[54] <b>SYSTEME ET PROCEDE DE DETECTION AUTOMATIQUE D'EVENEMENTS DE DETERIORATION CLINIQUE</b>
[72] GORMLEY, NIALL, GB	[72] ATAKAN, VAHIT, US	[72] SORENSEN, HELGE BJARUP DISSING, DK
[72] BOUTELL, JONATHAN, GB	[72] TAS, AHMET CUNEYI, US	[72] AASVANG, ESKE K., DK
[72] KARUNAKARAN, AATHAVAN, US	[72] DAVIDSON, MARIO JORGE, US	[72] MEYHOFF, CHRISTIAN S., DK
[71] ILLUMINA, INC., US	[72] HU, XUDONG, US	[71] DANMARKS TEKNISKE UNIVERSITET, DK
[85] 2023-12-20	[72] SAHU, SADANANDA, US	[71] RIGSHOSPITALET, DK
[86] 2023-03-15 (PCT/EP2023/056668)	[71] SOLIDIA TECHNOLOGIES, INC., US	[71] BISPEBJERG HOSPITAL, DK
[87] (WO2023/175040)	[85] 2023-12-20	[85] 2023-12-20
[30] US (63/269,383) 2022-03-15	[86] 2022-06-30 (PCT/US2022/035731)	[86] 2022-07-11 (PCT/EP2022/069262)
[30] US (63/328,444) 2022-04-07	[87] (WO2023/278707)	[87] (WO2023/281116)
[30] US (63/439,415) 2023-01-17	[30] US (63/217,590) 2021-07-01	[30] EP (21184712.4) 2021-07-09
[30] US (63/439,417) 2023-01-17		[30] EP (21205557.8) 2021-10-29
[30] US (63/439,438) 2023-01-17		
[30] US (63/439,443) 2023-01-17		
[30] US (63/439,466) 2023-01-17		
[30] US (63/439,491) 2023-01-17		
[30] US (63/439,501) 2023-01-17		
[30] US (63/439,519) 2023-01-17		
[30] US (63/439,522) 2023-01-17		
		[21] <b>3,223,674</b> [13] A1
		[51] <b>Int.Cl. C08B 37/00 (2006.01) C08L 5/04 (2006.01)</b>
		[25] EN
		[54] <b>METHOD</b>
		[54] <b>PROCEDE</b>
		[72] GREEN, RICKY LEE, NO
		[72] DRAGET, KURT INGAR, NO
		[71] ALGINOR ASA, NO
		[85] 2023-12-20
		[86] 2022-07-06 (PCT/GB2022/051743)
		[87] (WO2023/281262)
		[30] GB (2109772.0) 2021-07-06

## Demandes PCT entrant en phase nationale

[21] **3,223,676**  
[13] A1

[51] **Int.Cl. G01N 21/00 (2006.01) G03F 7/075 (2006.01)**  
[25] EN  
[54] **CURABLE RESIN COMPOSITIONS**  
[54] **COMPOSITIONS A BASE DE RESINE DURCISSABLE**  
[72] SZEMJONOV, ALEXANDRA, GB  
[72] EDGE, PHILLIPPA K., GB  
[72] RICHEZ, ALEXANDRE, GB  
[71] ILLUMINA, INC., US  
[85] 2023-12-20  
[86] 2022-09-22 (PCT/EP2022/076319)  
[87] (WO2023/046814)  
[30] US (63/248,182) 2021-09-24

[21] **3,223,677**  
[13] A1

[51] **Int.Cl. A61B 5/151 (2006.01)**  
[25] EN  
[54] **CAPILLARY BLOOD COLLECTION DEVICE**  
[54] **DISPOSITIF DE PRELEVEMENT SANGUIN CAPILLAIRE**  
[72] TORRIS, ANTHONY V., US  
[72] BOKKA SRINIVASA RAO, KISHORE K., US  
[72] WENTZELL, SCOTT, US  
[72] YAKHNICH, VLAD, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/US2022/034619)  
[87] (WO2023/278220)  
[30] US (63/216,223) 2021-06-29

[21] **3,223,679**  
[13] A1

[51] **Int.Cl. A01N 25/24 (2006.01) A01N 63/50 (2020.01) A01N 25/30 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR IMPROVING THE RAINFASTNESS OF PROTEINS ON PLANT SURFACES**  
[54] **COMPOSITIONS ET PROCEDES POUR AMELIORER LA RESISTANCE A LA PLUIE DE PROTEINES SUR DES SURFACES DE PLANTES**  
[72] RUSSELL, CALLUM, US  
[72] TOFTGAARD PEDERSEN, ASBJOERN, DK  
[72] KELLAR, KENNETH EDMUND, US  
[72] FINDEISEN, ALEXANDER, DK  
[72] SUTTON, KATE SARAH BRANDON, US  
[72] KAASGAARD, SVEND GUNNAR, DK  
[72] MARQUES NUNES, INES, DK  
[72] MALONEY, GREGORY STEPHEN, US  
[72] RUARK-SEWARD, CASEY, US  
[72] STRINGER, MARY ANN, DK  
[72] QUINLAN, JASON, US  
[72] INCH, SHARON, US  
[71] NOVOZYMES A/S, DK  
[71] NOVOZYMES BIOAG A/S, DK  
[85] 2023-12-20  
[86] 2022-07-15 (PCT/US2022/073761)  
[87] (WO2023/288294)  
[30] US (63/222,612) 2021-07-16  
[30] US (63/222,620) 2021-07-16  
[30] US (63/342,064) 2022-05-14

[21] **3,223,680**  
[13] A1

[51] **Int.Cl. E04D 13/143 (2006.01) E04D 13/17 (2006.01)**  
[25] EN  
[54] **BUILDING VENTING SYSTEM**  
[54] **SYSTEME DE VENTILATION DE BATIMENT**  
[72] KOESTER, JOHN H., US  
[71] KOESTER, JOHN H., US  
[85] 2023-12-20  
[86] 2022-07-06 (PCT/US2022/036188)  
[87] (WO2023/283224)  
[30] US (63/219,177) 2021-07-07

[21] **3,223,681**  
[13] A1

[51] **Int.Cl. C02F 1/24 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR REMOVING PER- AND POLYFLUORINATED SULFONIC ACIDS (PFSAS) AND PER- AND POLYFLUORINATED CARBOXYLIC ACIDS (PFCAS) FROM CONTAMINATED WATER USING REGENERABLE ANION EXCHANGE RESIN**  
[54] **SYSTEME D'ELIMINATION DES ACIDES PERFLUOROSULFONIQUES (APFS) ET DES ACIDES PERFLUOROCARBOXYLIQUES (APFC) D'EAU CONTAMINEE A L'AIDE DE RESINES ECHANGEUSES D'ANIONS REGENERABLES**  
[72] SMITH, SEAN M., US  
[72] WOODARD, STEVEN E., US  
[72] BERRY, JOHN C., US  
[72] NICKELSEN, MICHAEL G., US  
[71] EMERGING COMPOUNDS TREATMENT TECHNOLOGIES, INC., US  
[85] 2023-12-20  
[86] 2022-05-06 (PCT/US2022/028014)  
[87] (WO2023/154076)  
[30] US (17/666,870) 2022-02-08

[21] **3,223,682**  
[13] A1

[51] **Int.Cl. A22B 5/00 (2006.01) A22C 17/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR SMART MANUFACTURING**  
[54] **SYSTEME ET PROCEDE DE FABRICATION INTELLIGENTE**  
[72] BIRKHOFFER, NATHANIEL J., US  
[72] FLETCHER, LEON, US  
[72] GILLIG, JARROD, US  
[72] SCHOONOVER, CADE W., US  
[72] WALTERS, BRETT, US  
[71] CARGILL, INCORPORATED, US  
[85] 2023-12-20  
[86] 2022-07-07 (PCT/US2022/073507)  
[87] (WO2023/283596)  
[30] US (63/219,477) 2021-07-08

## PCT Applications Entering the National Phase

[21] **3,223,683**  
[13] A1

[51] **Int.Cl. C01B 15/023 (2006.01)**  
[25] EN  
[54] **PROCESS AIR COMPRESSION FOR AO PROCESS**  
[54] **COMPRESSION D'AIR DE TRAITEMENT POUR UN PROCEDE AO**  
[72] LODE, FLORIAN, DE  
[72] MANGALAPALLY, HARI PRASAD, DE  
[72] WULLER, MARTIN, DE  
[72] AREVALO SAADE, EDUARDO FEDERICO, DE  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2023-12-20  
[86] 2022-09-06 (PCT/EP2022/074736)  
[87] (WO2023/036775)  
[30] EP (21196227.9) 2021-09-13

[21] **3,223,685**  
[13] A1

[51] **Int.Cl. G07F 9/10 (2006.01)**  
[25] EN  
[54] **SMART VENDING MACHINE WITH MODULAR CONTROL ASSEMBLY**  
[54] **DISTRIBUTEUR AUTOMATIQUE INTELLIGENT DOTE D'UN ENSEMBLE DE COMMANDE MODULAIRE**  
[72] LAU, CHEUK CHI, US  
[72] LI, XUEJUN, US  
[72] SEROCK, YONG JIN, US  
[72] BAJWA, BILAL, US  
[72] VANKADARI, NAGA, US  
[71] PEPSICO, INC., US  
[85] 2023-12-20  
[86] 2022-06-21 (PCT/US2022/034289)  
[87] (WO2023/278198)  
[30] US (17/360,483) 2021-06-28

[21] **3,223,686**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) C07K 1/00 (2006.01) C12N 15/85 (2006.01)**  
[25] EN  
[54] **FORMULATIONS FOR ORAL DELIVERY OF NUCLEIC ACIDS**  
[54] **FORMULATIONS POUR ADMINISTRATION ORALE D'ACIDES NUCLEIQUES**  
[72] MARBAN, EDUARDO, US  
[72] IBRAHIM, AHMED G., US  
[71] CEDARS-SINAI MEDICAL CENTER, US  
[85] 2023-12-20  
[86] 2022-06-30 (PCT/US2022/035870)  
[87] (WO2023/278802)  
[30] US (63/202,970) 2021-07-01

[21] **3,223,689**  
[13] A1

[25] EN  
[54] **DEVICE FOR MEASURING PHYSIOLOGICAL PARAMETERS**  
[54] **DISPOSITIF DE MESURE DE PARAMETRES PHYSIOLOGIQUES**  
[72] KREUZER, JOHANNES, DE  
[71] COSINUSS GMBH, DE  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/EP2022/067163)  
[87] (WO2022/268947)  
[30] DE (10 2021 206 461.2) 2021-06-23

[21] **3,223,690**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01) A61P 35/04 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **METHODS FOR TREATING NON-MUSCLE INVASIVE BLADDER CANCER (NMIBC) WITH ANTIBODY DRUG CONJUGATES (ADC) THAT BIND TO 191P4D12 PROTEINS**  
[54] **METHODES DE TRAITEMENT DU CANCER DE LA VESSIE INVASIF NON MUSCULAIRE AVEC DES CONJUGUES ANTICORPS-MEDICAMENT (ADC) QUI SE LIENT A DES PROTEINES 191P4D12**  
[72] CAROSINO, CHRISTOPHER, US  
[72] NARAYANAN, SUJATA, US  
[72] GARG, AMIT, US  
[71] AGENSYS, INC., US  
[71] SEAGEN INC., US  
[85] 2023-12-20  
[86] 2022-08-12 (PCT/US2022/074897)  
[87] (WO2023/019236)  
[30] US (63/233,048) 2021-08-13  
[30] US (63/242,380) 2021-09-09  
[30] US (63/328,441) 2022-04-07

[21] **3,223,691**  
[13] A1

[51] **Int.Cl. B05B 1/26 (2006.01) A62C 31/03 (2006.01) B05B 1/12 (2006.01)**  
[25] EN  
[54] **NOZZLE WITH ADJUSTABLE SPRAY**  
[54] **BUSE A PULVERISATION REGLABLE**  
[72] SETHI, SUNNY, US  
[72] MCKIBBEN, NICHOLAS, US  
[72] BHATIA, SAGAR, US  
[71] HEN NOZZLES INC., US  
[85] 2023-12-20  
[86] 2022-05-25 (PCT/US2022/030833)  
[87] (WO2022/271389)  
[30] US (PCT/US2021/038393) 2021-06-22  
[30] US (17/569,821) 2022-01-06  
[30] US (PCT/US2022/012242) 2022-01-13

## Demandes PCT entrant en phase nationale

[21] **3,223,692**  
[13] A1

[51] **Int.Cl. A61K 31/506 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **ERK1/2 INHIBITOR COMBINATION THERAPY**  
[54] **POLYTHERAPIE PAR UN INHIBITEUR DE ERK1/2**  
[72] GUPTA, SANDEEP, US  
[72] DENIS, LOUIS, US  
[72] REDDY, SANJEEVA, US  
[72] CORCORAN, RYAN B., US  
[71] ASANA BIOSCIENCES, LLC, US  
[71] THE GENERAL HOSPITAL CORPORATION, US  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/US2022/034702)  
[87] (WO2022/271935)  
[30] US (63/214,764) 2021-06-24

[21] **3,223,694**  
[13] A1

[51] **Int.Cl. A01K 11/00 (2006.01)**  
[25] EN  
[54] **ONE-PIECE TAG FOR IDENTIFYING AN ANIMAL.**  
[54] **ETIQUETTE MONOBLOC POUR L'IDENTIFICATION D'UN ANIMAL**  
[72] SALIOU, PIERRE, FR  
[72] DECALUWE, JOHAN, FR  
[71] ALLFLEX EUROPE SAS, FR  
[85] 2023-12-20  
[86] 2022-07-20 (PCT/EP2022/070303)  
[87] (WO2023/001873)  
[30] EP (21306025.4) 2021-07-21

[21] **3,223,695**  
[13] A1

[51] **Int.Cl. G16H 20/10 (2018.01) G16H 20/40 (2018.01) G16H 30/40 (2018.01)**  
[25] EN  
[54] **METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR DELIVERING A SUBSTANCE TO A SUBJECT**  
[54] **PROCEDES, SYSTEMES ET PRODUITS PROGRAMMES INFORMATIQUES DE DISTRIBUTION DE SUBSTANCE A UN SUJET**  
[72] GRENON, JOSHUA DAVID, US  
[72] ADAMS, JONATHAN M., US  
[71] TARGAN, INC., US  
[85] 2023-12-20  
[86] 2022-08-16 (PCT/US2022/075004)  
[87] (WO2023/023505)  
[30] US (63/234,034) 2021-08-17

[21] **3,223,696**  
[13] A1

[51] **Int.Cl. A61K 36/33 (2006.01) A23L 33/105 (2016.01) A23L 33/11 (2016.01) A23L 33/20 (2016.01) A23L 33/21 (2016.01) A23L 33/22 (2016.01) A61P 3/06 (2006.01) A61P 3/08 (2006.01) A61P 3/10 (2006.01) A61P 9/10 (2006.01)**  
[25] EN  
[54] **COMPOSITION BASED ON PLANT EXTRACTS AND USE THEREOF FOR THE PREVENTION AND/OR TREATMENT OF CARBOHYDRATE AND LIPID DYSMETABOLISM**  
[54] **COMPOSITION A BASE D'EXTRAITS VEGETAUX ET SON UTILISATION POUR LA PREVENTION ET/OU LE TRAITEMENT DU METABOLISME DES HYDRATES DE CARBONE ET DES LIPIDES**  
[72] RICCIONI, COSTANZA VALENTINA, IT  
[72] SQUILLACE GRECO, AMEDEO, IT  
[71] ESSERRE PHARMA SRL, IT  
[85] 2023-12-20  
[86] 2022-06-27 (PCT/EP2022/067514)  
[87] (WO2022/269099)  
[30] IT (102021000016787) 2021-06-25

[21] **3,223,698**  
[13] A1

[51] **Int.Cl. C07K 14/47 (2006.01)**  
[25] EN  
[54] **SYNTHESIS OF COVALENT PROTEIN DIMERS THAT CAN INHIBIT MYC-DRIVEN TRANSCRIPTION**  
[54] **SYNTHESE DE DIMERES DE PROTEINES COVALENTS POUVANT INHIBER LA TRANSCRIPTION INDUITE PAR MYC**  
[72] LOAS, ANDREI, US  
[72] PENTELUTE, BRADLEY L., US  
[72] POMPLUN, SEBASTIAN, US  
[72] JBARA, MUHAMMAD, US  
[72] SCHISSEL, CARLY KATHERINE, US  
[72] RODRIQUEZ, JACOB JOSHUA LEE, US  
[72] BUCHWALD, STEPHEN LEFFLER, US  
[72] BOIJA, ANN, US  
[72] KLEIN, ISAAC, US  
[72] HAWKEN, SUSANA WILSON, US  
[72] LI, CHARLES HAN, US  
[71] MASSACHUSETTS INSTITUTE OF TECHNOLOGY, US  
[71] WHITEHEAD INSTITUTE OF BIOMEDICAL RESEARCH, US  
[85] 2023-12-20  
[86] 2022-06-17 (PCT/US2022/033920)  
[87] (WO2022/271536)  
[30] US (63/213,024) 2021-06-21

[21] **3,223,699**  
[13] A1

[51] **Int.Cl. G16H 50/20 (2018.01) G16B 20/00 (2019.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR PERSONALIZED THERAPIES**  
[54] **METHODES ET SYSTEMES POUR THERAPIES PERSONNALISEES**  
[72] GHIASSIAN, SUSAN, US  
[72] AKMAEV, VIATCHESLAV R., US  
[72] VOITALOV, IVAN, US  
[71] SCIPHER MEDICINE CORPORATION, US  
[85] 2023-12-20  
[86] 2022-06-21 (PCT/US2022/034368)  
[87] (WO2022/271717)  
[30] US (63/213,428) 2021-06-22  
[30] US (63/329,008) 2022-04-08

## PCT Applications Entering the National Phase

[21] **3,223,700**  
[13] A1

[51] **Int.Cl. B01D 1/24 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR TREATING BIO-CONTAMINATED WASTEWATER AND PROCESS FOR DECONTAMINATING A WASTEWATER SOURCE**

[54] **SYSTEME DE TRAITEMENT D'EAUX USEES BIOCONTAMINEES ET PROCESSUS DE DECONTAMINATION D'UNE SOURCE D'EAUX USEES**

[72] RILEY, JOHN D., US  
[71] VERNO HOLDINGS, LLC, US  
[85] 2023-12-20  
[86] 2022-07-01 (PCT/US2022/035948)  
[87] (WO2023/283127)  
[30] US (17/369,097) 2021-07-07

[21] **3,223,702**  
[13] A1

[51] **Int.Cl. G21C 19/32 (2006.01) G21G 1/02 (2006.01)**  
[25] EN  
[54] **A METHOD AND DEVICE TO CONTROL THE MOVEMENT OF CAPSULES CONTAINING COBALT MATERIAL LOCATED INSIDE CONTAINERS MADE OF NON-FERROMAGNETIC MATERIALS USING THE APPLICATION OF ELECTROMAGNETIC FORCE**

[54] **PROCEDE ET DISPOSITIF POUR COMMANDER LE MOUVEMENT DE CAPSULES CONTENANT DU COBALT SITUEES DANS DES CONTENANTS EN MATERIAUX NON FERROMAGNETIQUES PAR L'APPLICATION DE FORCES ELECTROMAGNETIQUE**

[72] HEIBEL, MICHAEL D., US  
[72] HILDEBRAND, CORY, US  
[71] WESTINGHOUSE ELECTRIC COMPANY LLC, US  
[85] 2023-12-20  
[86] 2021-07-22 (PCT/US2021/042800)  
[87] (WO2022/271193)  
[30] US (17/356,309) 2021-06-23

[21] **3,223,703**  
[13] A1

[51] **Int.Cl. B60T 17/04 (2006.01) B61H 5/00 (2006.01) F16D 65/00 (2006.01) F16D 69/04 (2006.01)**  
[25] FR  
[54] **FRICTION ASSEMBLY WITH CONNECTOR BLOCK AND SUCTION CIRCUIT**

[54] **ENSEMBLE A FRICTION AVEC BLOC CONNECTEUR ET CIRCUIT D'ASPIRATION**

[72] ADAMCZAK, LOIC, FR  
[72] MAISTRE, ADRIEN, FR  
[72] BONNAUD, PASCAL, FR  
[71] TALLANO TECHNOLOGIES, FR  
[85] 2023-12-20  
[86] 2022-06-28 (PCT/EP2022/067690)  
[87] (WO2023/285130)  
[30] FR (FR2107701) 2021-07-16

[21] **3,223,704**  
[13] A1

[51] **Int.Cl. B01D 11/04 (2006.01) C01B 15/023 (2006.01)**  
[25] EN  
[54] **VALVE TRAYS IN EXTRACTION COLUMNS**

[54] **PLATEAUX DE SOUPAPE DANS DES COLONNES D'EXTRACTION**

[72] RYLL, MARCO, DE  
[72] KAMP, JOHANNES, DE  
[72] AREVALO SAADE, EDUARDO FEDERICO, DE  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2023-12-20  
[86] 2022-07-07 (PCT/EP2022/068833)  
[87] (WO2023/285257)  
[30] EP (21185585.3) 2021-07-14

[21] **3,223,706**  
[13] A1

[51] **Int.Cl. G06Q 30/06 (2023.01) G06Q 10/10 (2023.01)**  
[25] EN  
[54] **COLLABORATIVE VIDEO CHAT SCREEN SHARING USING A DIGITAL PRODUCT COLLABORATION PLATFORM**

[54] **PARTAGE D'ECRAN DE DISCUSSION EN LIGNE VIDEO COLLABORATIF A L'AIDE D'UNE PLATEFORME DE COLLABORATION DE PRODUIT NUMERIQUE**

[72] BEAVER III, ROBERT I., US  
[72] BEAVER, JEFFREY J., US  
[72] HARVILL, LESLIE YOUNG, US  
[71] ZAZZLE INC., US  
[85] 2023-12-20  
[86] 2022-05-06 (PCT/US2022/028190)  
[87] (WO2023/009194)  
[30] US (17/389,114) 2021-07-29

[21] **3,223,707**  
[13] A1

[51] **Int.Cl. C07K 14/435 (2006.01) A61K 38/30 (2006.01) C07K 14/65 (2006.01) C07K 19/00 (2006.01) C12N 15/12 (2006.01)**  
[25] EN  
[54] **REGENERATIVE POLYPEPTIDES AND USES THEREOF**

[54] **POLYPEPTIDES REGENERATEURS ET LEURS UTILISATIONS**

[72] YOUSEF, HANADIE, US  
[72] O'CONNELL, JEREMY, US  
[72] MAI, THACH, US  
[72] LI, ZHIHUA, US  
[71] JUVENA THERAPEUTICS, INC., US  
[85] 2023-12-20  
[86] 2022-06-10 (PCT/US2022/033059)  
[87] (WO2022/271466)  
[30] US (63/259,088) 2021-06-21

## Demandes PCT entrant en phase nationale

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[21] **3,223,708**  
[13] A1

[51] **Int.Cl. A01C 1/06 (2006.01)**  
[25] EN  
[54] **SEED UNIT COMPRISING BIOCHAR AND POLYMERIC SUPERABSORBENT**  
[54] **UNITE D'ENSEMENCEMENT COMPRENANT DU CHARBON VEGETAL ET UN SUPERABSORBANT POLYMERE**  
[72] SCHIERBECKER, TORBEN, DE  
[71] SCHIERBECKER HANDELS GMBH & CO. KG, DE  
[85] 2023-12-20  
[86] 2022-06-30 (PCT/EP2022/068107)  
[87] (WO2023/275271)  
[30] DE (10 2021 116 842.2) 2021-06-30  
[30] DE (10 2022 104 125.5) 2022-02-22

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[21] **3,223,710**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 38/26 (2006.01) A61P 19/02 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITIONS COMPRISING GLP-1R AGONISTS**  
[54] **COMPOSITIONS PHARMACEUTIQUES COMPRENANT DES AGONISTES DE GLP-1R**  
[72] RATTENBACH, REVITAL, FR  
[72] BERENBAUM, FRANCIS, FR  
[72] BISMUTH, KEREN, FR  
[72] MARTIN, CELINE, FR  
[72] MEUROT, CORALIE, FR  
[71] 4MOVING BIOTECH, FR  
[71] SORBONNE UNIVERSITE, FR  
[71] ASSISTANCE PUBLIQUE HOPITAUX DE PARIS, FR  
[71] INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, FR  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/EP2022/067269)  
[87] (WO2022/269001)  
[30] EP (21305865.4) 2021-06-23  
[30] EP (21306467.8) 2021-10-21

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[21] **3,223,711**  
[13] A1

[51] **Int.Cl. C07C 49/786 (2006.01) C07C 43/205 (2006.01) C07C 49/794 (2006.01) C07C 49/84 (2006.01) C08F 8/40 (2006.01) C08F 30/02 (2006.01) C08F 230/02 (2006.01) C08G 61/06 (2006.01) C08G 61/08 (2006.01) C08G 79/02 (2016.01) C08L 85/02 (2006.01)**  
[25] EN  
[54] **CATIONIC POLYMERS**  
[54] **POLYMERES CATIONIQUES**  
[72] HUGAR, KRISTINA, US  
[72] SELHORST, RYAN, US  
[72] POOLE, SARAH LOUISE, US  
[72] SIMONEAU, CHRISTOPHER, US  
[71] ECOLECTRO, INC., US  
[85] 2023-12-20  
[86] 2022-08-10 (PCT/US2022/039908)  
[87] (WO2023/018765)  
[30] US (63/231,491) 2021-08-10

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[21] **3,223,712**  
[13] A1

[51] **Int.Cl. F03D 3/00 (2006.01) F03D 3/04 (2006.01) F03D 3/06 (2006.01)**  
[25] EN  
[54] **ROTOR FOR A WIND POWER INSTALLATION AND METHOD FOR OPERATING A WIND POWER INSTALLATION**  
[54] **ROTOR D'EOLIENNE ET PROCEDE DE FONCTIONNEMENT D'UNE EOLIENNE**  
[72] OPITZ, MICHAEL, NL  
[71] LCG ENERGY HOLDING BV, NL  
[85] 2023-12-20  
[86] 2022-06-27 (PCT/EP2022/067547)  
[87] (WO2023/274946)  
[30] EP (21182852.0) 2021-06-30

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[21] **3,223,714**  
[13] A1

[51] **Int.Cl. C07D 209/44 (2006.01) C07D 405/06 (2006.01) C07D 405/14 (2006.01)**  
[25] EN  
[54] **PROCESS FOR THE PREPARATION OF A CYP11A1 INHIBITOR AND INTERMEDIATES THEREOF**  
[54] **PROCEDE DE PREPARATION D'UN INHIBITEUR DE CYP11A1 ET DE SES INTERMEDIAIRES**  
[72] KARJALAINEN, OSKARI, FI  
[72] KARJOMAA, MIKA, FI  
[71] ORION CORPORATION, FI  
[85] 2023-12-20  
[86] 2022-06-22 (PCT/FI2022/050446)  
[87] (WO2022/269134)  
[30] FI (20215736) 2021-06-23

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[21] **3,223,715**  
[13] A1

[51] **Int.Cl. A61B 5/151 (2006.01)**  
[25] EN  
[54] **CAPILLARY BLOOD COLLECTION DEVICE**  
[54] **DISPOSITIF DE PRELEVEMENT DE SANG CAPILLAIRE**  
[72] FRICKE, ALEX F., US  
[72] ALTHOFF, CHARLES PETER, US  
[72] TORRIS, ANTHONY V., US  
[72] YAKHNICH, VLAD, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/US2022/034630)  
[87] (WO2023/278227)  
[30] US (63/216,245) 2021-06-29

## PCT Applications Entering the National Phase

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[21] **3,223,716**  
[13] A1

[51] **Int.Cl. H02K 33/16 (2006.01) B63H 1/32 (2006.01)**  
[25] FR  
[54] **ELECTROMAGNETIC LINEAR MOTION MACHINE COMPRISING RODS ASSOCIATED WITH MAGNETIC ELEMENTS**  
[54] **MACHINE ELECTROMAGNETIQUE A MOUVEMENT LINEAIRE COMPRENANT DES TIGES ASSOCIEES A DES ELEMENTS MAGNETIQUES**  
[72] GUILLEMIN, HAROLD, FR  
[72] RANDON, VINCENT, FR  
[72] COMITI, LUCAS, FR  
[71] FINX, FR  
[85] 2023-12-20  
[86] 2022-06-28 (PCT/FR2022/051281)  
[87] (WO2023/275481)  
[30] FR (FR2106939) 2021-06-28

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[21] **3,223,717**  
[13] A1

[51] **Int.Cl. F04B 43/00 (2006.01) F04B 43/02 (2006.01) F04F 7/00 (2006.01)**  
[25] FR  
[54] **DEVICE FOR GENERATING A FLUID FLOW**  
[54] **DISPOSITIF GENERATEUR DE FLUX FLUIDIQUE**  
[72] GUILLEMIN, HAROLD, FR  
[72] RANDON, VINCENT, FR  
[72] COMITI, LUCAS, FR  
[71] FINX, FR  
[85] 2023-12-20  
[86] 2022-06-28 (PCT/FR2022/051282)  
[87] (WO2023/275482)  
[30] FR (FR2106940) 2021-06-28

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[21] **3,223,718**  
[13] A1

[51] **Int.Cl. A61B 18/00 (2006.01) A61B 18/12 (2006.01) A61B 18/14 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR TREATING JOINTS**  
[54] **SYSTEMES ET PROCEDES DE TRAITEMENT D'ARTICULATIONS**  
[72] NOLAN, TRAVIS JERED, US  
[72] HART, KEIR DAVID, US  
[72] HEMPSTEAD, RUSSELL DELMAR, US  
[71] ARTEZO, INC., US  
[85] 2023-12-20  
[86] 2022-07-06 (PCT/US2022/073450)  
[87] (WO2023/283567)  
[30] US (63/218,676) 2021-07-06

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[21] **3,223,719**  
[13] A1

[51] **Int.Cl. A61K 33/04 (2006.01) A61K 47/02 (2006.01) A61K 31/07 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR VISION IMPROVEMENT**  
[54] **COMPOSITIONS ET METHODES D'AMELIORATION DE LA VISION**  
[72] BOSWORTH, CHARLES, IL  
[72] ALSTER, YAIR, IL  
[72] EPSTEIN-BARASH, HILA, IL  
[72] RAFAELI, OMER, IL  
[72] GLEESON, MARC, IL  
[71] AZURA OPHTHALMICS LTD., IL  
[85] 2023-12-20  
[86] 2022-06-22 (PCT/IB2022/000343)  
[87] (WO2022/269348)  
[30] US (63/214,690) 2021-06-24

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[21] **3,223,720**  
[13] A1

[51] **Int.Cl. A61K 35/17 (2015.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR IMPROVED IMMUNOTHERAPIES**  
[54] **METHODES ET COMPOSITIONS POUR DES IMMUNOTHERAPIES AMELIOREES**  
[72] SANJANA, NEVILLE E., US  
[72] LEGUT, MATEUSZ, US  
[71] NEW YORK GENOME CENTER, INC., US  
[71] NEW YORK UNIVERSITY, US  
[85] 2023-12-20  
[86] 2022-06-30 (PCT/US2022/073294)  
[87] (WO2023/279049)  
[30] US (63/217,014) 2021-06-30  
[30] US (63/287,389) 2021-12-08  
[30] US (63/320,101) 2022-03-15

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[21] **3,223,721**  
[13] A1

[51] **Int.Cl. A61B 5/15 (2006.01) G09B 23/30 (2006.01)**  
[25] EN  
[54] **SIMULATION DEVICE FOR CAPILLARY BLOOD COLLECTION**  
[54] **DISPOSITIF DE SIMULATION POUR LA COLLECTE DE SANG CAPILLAIRE**  
[72] TORRIS, ANTHONY V., US  
[72] YAKHNICH, VLAD, US  
[72] ALTHOFF, CHARLES PETER, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/US2022/034634)  
[87] (WO2023/278229)  
[30] US (63/216,264) 2021-06-29



## Demandes PCT entrant en phase nationale

[21] 3,223,722 [13] A1	[21] 3,223,723 [13] A1	[21] 3,223,725 [13] A1
[51] <b>Int.Cl. C12N 9/78 (2006.01) C12Q 1/6806 (2018.01) C12Q 1/6869 (2018.01)</b>	[51] <b>Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6886 (2018.01) G16B 40/00 (2019.01)</b>	[51] <b>Int.Cl. D06M 15/263 (2006.01) D06M 11/48 (2006.01) D06M 11/72 (2006.01) D06M 11/74 (2006.01) D06M 13/432 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>ALTERED CYTIDINE DEAMINASES AND METHODS OF USE</b>	[54] <b>CIRCULATING MICRORNA SIGNATURES FOR PANCREATIC CANCER</b>	[54] <b>INFUSIBLE WATERBORNE PIGMENTED RESIN COMPOSITIONS AND METHODS OF PREPARING AND USING THE SAME</b>
[54] <b>CYTIDINE DESAMINASES MODIFIEES ET METHODES D'UTILISATION</b>	[54] <b>SIGNATURES DE MICROARN CIRCULANTS POUR LE CANCER DU PANCREAS</b>	[54] <b>COMPOSITIONS DE RESINES PIGMENTEES AQUEUSES A INFUSER ET LEURS PROCEDES DE PREPARATION ET D'UTILISATION</b>
[72] TOH, DEWEI JOEL, SG	[72] CHOWDHURY, DIPANJAN, US	[54] <b>COMPOSITIONS DE RESINES PIGMENTEES AQUEUSES A INFUSER ET LEURS PROCEDES DE PREPARATION ET D'UTILISATION</b>
[72] BEH, LESLIE YEE MING, SG	[72] FENDLER, WOJCIECH, PL	[72] HUGHES, JOHN E., US
[72] TAN, SHU TING, SG	[72] STAWISKI, KONRAD, PL	[72] FITZHUGH, GILBERT W., US
[72] TRACZYK, ANNA, SG	[71] DANA-FARBER CANCER INSTITUTE, INC., US	[72] KRICK, CHARLES G., US
[72] NIRANTAR, SAURABH, SG	[71] MEDICAL UNIVERSITY OF LODZ, PL	[72] WIKER, ANTHONY L., US
[72] BRUSTAD, ERIC, US	[85] 2023-12-20	[71] ARMSTRONG WORLD INDUSTRIES, INC., US
[72] GHOMI, HAMED TABATABAEI, GB	[86] 2022-07-09 (PCT/US2022/036608)	[85] 2023-12-20
[72] FAHMI, ZAHRA, GB	[87] (WO2023/283476)	[86] 2022-07-01 (PCT/US2022/036000)
[72] RAVICHANDRAPRABHU, LEKHA, SG	[30] US (63/220,195) 2021-07-09	[87] (WO2023/278863)
[72] BROWN, COLIN, US		[30] US (63/218,003) 2021-07-02
[72] BUSBY, KAYLA, US	[21] 3,223,724 [13] A1	
[72] GROSS, STEPHEN, US	[51] <b>Int.Cl. A61B 34/20 (2016.01)</b>	
[72] KARADEEMA, REBEKAH, US	[25] EN	
[72] LAM, HUY, US	[54] <b>AUGMENTED REALITY SYSTEM AND METHODS FOR STEREOSCOPIC PROJECTION AND CROSS-REFERENCING OF LIVE X-RAY FLUOROSCOPIC AND COMPUTED TOMOGRAPHIC C-ARM IMAGING DURING SURGERY</b>	
[72] MATHONET, PASCALE, GB	[54] <b>SYSTEME DE REALITE AUGMENTEE ET PROCEDES DE PROJECTION STEREOSCOPIQUE ET DE REFERENCEMENT CROISE D'IMAGERIE FLUOROSCOPIQUE ASSISTEE PAR RAYONS X EN DIRECT ET D'IMAGERIE TOMOGRAPHIQUE PAR ARCEAU PENDANT UNE INTERVENTION CHIRURGICAL</b>	
[72] SHULTZABERGER, SARAH E., US	[72] YANOF, JEFFREY H., US	
[72] TZENG, KATHLEEN, US	[72] BRAIDO, PETER NICHOLAS, US	
[72] YUNGHANS, ALLISON KATHLEEN, US	[71] MEDIVIEW XR, INC., US	
[71] ILLUMINA, INC., US	[85] 2023-12-20	
[85] 2023-12-20	[86] 2022-08-11 (PCT/US2022/040057)	
[86] 2023-04-07 (PCT/US2023/017846)	[87] (WO2023/018871)	
[87] (WO2023/196572)	[30] US (63/231,866) 2021-08-11	
[30] US (63/328,444) 2022-04-07		
[30] US (63/350,068) 2022-06-08		

## PCT Applications Entering the National Phase

[21] **3,223,727**  
[13] A1

[51] **Int.Cl. A61G 17/08 (2006.01)**  
[25] EN  
[54] **TACTILE AND NESTED CREMATION CONTAINER**  
[54] **RECIPIENT DE CREMATION TACTILE ET EMBOITE**

[72] RAWLINGS, BRITTANY, US  
[72] ENGHOLM, BRANDON, US  
[71] BLVE LLC, US  
[85] 2023-12-20  
[86] 2022-06-27 (PCT/US2022/035098)  
[87] (WO2023/278311)  
[30] US (63/215,479) 2021-06-27

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[21] **3,223,728**  
[13] A1

[51] **Int.Cl. C07D 405/04 (2006.01) A61K 31/343 (2006.01) A61K 31/4025 (2006.01) A61K 31/4439 (2006.01) A61K 31/444 (2006.01) A61K 31/5383 (2006.01) A61P 35/00 (2006.01) C07D 307/81 (2006.01) C07D 401/14 (2006.01) C07D 405/14 (2006.01) C07D 407/04 (2006.01) C07D 491/107 (2006.01) C07D 498/04 (2006.01)**

[25] EN  
[54] **AROMATIC COMPOUND, PHARMACEUTICAL COMPOSITION, AND APPLICATION THEREOF**  
[54] **COMPOSE AROMATIQUE, COMPOSITION PHARMACEUTIQUE ET APPLICATION ASSOCIEE**

[72] CHEN, JIAN, CN  
[72] SHI, YUFANG, CN  
[72] ZHANG, YONG, CN  
[71] SHANGHAI KYGENT PHARMACEUTICAL CO., LTD, CN  
[85] 2023-12-20  
[86] 2022-12-01 (PCT/CN2022/135909)  
[87] (WO2023/098815)  
[30] CN (202111458624.4) 2021-12-02  
[30] CN (202210864227.5) 2022-07-20  
[30] CN (202211195846.6) 2022-09-28

[21] **3,223,729**  
[13] A1

[51] **Int.Cl. C12Q 1/6806 (2018.01) C12Q 1/6869 (2018.01)**

[25] EN  
[54] **FUNCTIONALIZED NANOSTRUCTURES AND FLOW CELL DEPRESSIONS**  
[54] **NANOSTRUCTURES FONCTIONNALISEES ET DEPRESSIONS DE CUVE A CIRCULATION**

[72] ARTIOLI, GIANLUCA ANDREA, GB  
[72] REDIVO, LUCA, GB  
[72] RICHEZ, ALEXANDRE, GB  
[72] VON HATTEN, XAVIER, GB  
[71] ILLUMINA, INC., US  
[85] 2023-12-20  
[86] 2023-03-01 (PCT/EP2023/055109)  
[87] (WO2023/166024)  
[30] US (63/315,353) 2022-03-01

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[21] **3,223,730**  
[13] A1

[51] **Int.Cl. A23L 7/104 (2016.01) A23L 29/30 (2016.01) A23L 33/125 (2016.01) A23J 1/14 (2006.01) A23J 3/14 (2006.01) A23J 3/20 (2006.01) A23J 3/34 (2006.01) C12P 13/08 (2006.01) C12P 19/14 (2006.01)**

[25] EN  
[54] **METHOD FOR PROCESSING A STARCH HYDROLYSATE, AND STARCH HYDROLYSATE**  
[54] **PROCEDE DE TRANSFORMATION D'UN HYDROLYSAT D'AMIDON ET HYDROLYSAT D'AMIDON**

[72] LUDOVICI, KARL, DE  
[72] HANFT, SEBASTIAN, DE  
[72] HASSLER, THOMAS, DE  
[72] KOCH, TIMO, DE  
[72] KAUFMANN, BIRGIT, DE  
[71] FOOD'OR INTERNATIONAL GMBH, DE  
[85] 2023-12-20  
[86] 2022-07-12 (PCT/EP2022/069509)  
[87] (WO2023/285485)  
[30] DE (10 2021 117 932.7) 2021-07-12  
[30] DE (10 2022 101 408.8) 2022-01-21

[21] **3,223,731**  
[13] A1

[51] **Int.Cl. C12Q 1/6818 (2018.01)**

[25] EN  
[54] **DETECTION OF ANALYTES USING TARGETED EPIGENETIC ASSAYS, PROXIMITY-INDUCED TAGMENTATION, STRAND INVASION, RESTRICTION, OR LIGATION**  
[54] **DETECTION D'ANALYTES A L'AIDE DE DOSAGES EPIGENETIQUES CIBLES, D'UNE TAGMENTATION INDUITE PAR LA PROXIMITE, D'UNE INVASION DE BRINS, D'UNE RESTRICTION OU D'UNE LIGATURE**

[72] KENNEDY, ANDREW, US  
[72] SHULTZABERGER, SARAH, US  
[72] BUSBY, KAYLA, US  
[72] BROWN, COLIN, US  
[72] PRICE, ANDREW, US  
[72] VERMAAS, ERIC, US  
[72] PANTOJA, RIGOBERTO, US  
[72] FEELEY, MATTHEW, US  
[72] ZOU, JENNIFER, US  
[72] LI, YONG, US  
[72] ALMASI, SEPIDEH, US  
[72] DUTTA, ANINDITA, US  
[72] ALVAREZ, MICHELLE, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-20  
[86] 2022-08-09 (PCT/US2022/039853)  
[87] (WO2023/018730)  
[30] US (63/231,970) 2021-08-11  
[30] US (63/250,574) 2021-09-30

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[21] **3,223,732**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/14 (2006.01) A61K 31/155 (2006.01) A61M 5/00 (2006.01) A61M 37/00 (2006.01)**

[25] EN  
[54] **MICRONEEDLE ARRAY WITH ANTISEPTICS**  
[54] **RESEAU DE MICRO-AIGUILLES COMPRENANT DES ANTISEPTIQUES**

[72] WINTERBERG, MARKUS, DE  
[71] LTS LOHMANN THERAPIE-SYSTEME AG, DE  
[85] 2023-12-20  
[86] 2022-07-11 (PCT/EP2022/069218)  
[87] (WO2023/001607)  
[30] DE (10 2021 118 997.7) 2021-07-22

## Demandes PCT entrant en phase nationale

[21] **3,223,733**  
[13] A1

[51] **Int.Cl. C07F 9/6558 (2006.01)**  
[25] EN  
[54] **A PROCESS FOR THE SYNTHESIS OF 4-((R)-2-{{6-((S)-3-METHOXY-PYRROLIDIN-1-YL)-2-PHENYL-PYRIMIDINE-4-CARBONYL}-AMINO}-3-PHOSPHONO-PROPIONYL)-PIPERAZINE-1-CARBOXYLIC ACID BUTYL ESTER**

[54] **PROCEDE DE SYNTHESE D'ESTER DE BUTYLE D'ACIDE 4-((R)-2-{{6-((S)-3-METHOXY-PYRROLIDIN-1-YL)-2-PHENYL-PYRIMIDINE-4-CARBONYL}-AMINO}-3-PHOSPHONO-PROPIONYL)-PIPERAZINE-1-CARBOXYLIQUE**

[72] BLUMER, NICOLE, CH  
[72] CLAVEAU, ROMAIN, GB  
[72] FEYEN, FABIAN, CH  
[72] HALL, LEANNE, GB  
[72] HUGHES, STEPHEN, GB  
[72] REBER, STEFAN, CH  
[71] IDORSIA PHARMACEUTICALS LTD, CH  
[85] 2023-12-20  
[86] 2022-07-11 (PCT/EP2022/069238)  
[87] (WO2023/285342)  
[30] EP (PCT/EP2021/069486) 2021-07-13

[21] **3,223,734**  
[13] A1

[51] **Int.Cl. G10L 19/26 (2013.01) G10L 19/005 (2013.01) G10L 21/003 (2013.01) G10L 21/0316 (2013.01) G10L 19/02 (2013.01)**

[25] EN  
[54] **APPARATUS AND METHOD FOR REMOVING UNDESIREED AUDITORY ROUGHNESS**

[54] **APPAREIL ET PROCEDE POUR ELIMINER UNE RUGOSITE AUDITIVE INDESIRABLE**

[72] DISCH, SASCHA, DE  
[72] VAN DE PAR, STEVEN, DE  
[72] NIEDERMEIER, ANDREAS, DE  
[72] EDLER, BERND, DE  
[71] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[85] 2023-12-20  
[86] 2021-09-20 (PCT/EP2021/075816)  
[87] (WO2022/268347)  
[30] EP (21181590.7) 2021-06-24

[21] **3,223,735**  
[13] A1

[51] **Int.Cl. H01H 19/11 (2006.01) H01H 19/64 (2006.01)**

[25] EN  
[54] **DISCONNECTOR, PARTICULARLY FOR PHOTOVOLTAIC APPLICATIONS**

[54] **SECTIONNEUR, EN PARTICULIER POUR APPLICATIONS PHOTOVOLTAIQUES**

[72] MATTARELLI, ANDREA, IT  
[71] BREMAS ERSCE S.P.A., IT  
[85] 2023-12-20  
[86] 2022-07-21 (PCT/EP2022/070499)  
[87] (WO2023/006574)  
[30] IT (102021000020222) 2021-07-29

[21] **3,223,736**  
[13] A1

[51] **Int.Cl. H02M 3/335 (2006.01)**

[25] EN  
[54] **CURRENT BOOSTER**

[54] **SURVOLTEUR DE COURANT**

[72] STANISIC, ZORAN, SE  
[71] ZS ELECTRIC AB, SE  
[85] 2023-12-20  
[86] 2022-07-07 (PCT/SE2022/050700)  
[87] (WO2023/282841)  
[30] SE (2150913-8) 2021-07-08

[21] **3,223,737**  
[13] A1

[51] **Int.Cl. G01S 17/58 (2006.01) G01S 7/484 (2006.01) G01S 17/95 (2006.01)**

[25] FR  
[54] **PULSED LIDAR WITH SEMICONDUCTOR OPTICAL AMPLIFIER CONTROLLED BY A MODULATED SIGNAL**

[54] **LIDAR IMPULSIONNEL A AMPLIFICATEUR OPTIQUE A SEMI-CONDUCTEUR PILOTE PAR UN SIGNAL MODULE**

[72] PUREUR, VINCENT, FR  
[72] CASALE, MARCO, FR  
[72] MILEVSKY, BORISLAV, FR  
[72] LOMBARD, LAURENT, FR  
[72] GOULAR, DIDIER, FR  
[71] LEOSPHERE, FR  
[71] ONERA, FR  
[85] 2023-12-20  
[86] 2022-06-30 (PCT/EP2022/068209)  
[87] (WO2023/275332)  
[30] FR (FR2107164) 2021-07-01

[21] **3,223,738**  
[13] A1

[51] **Int.Cl. G16H 30/20 (2018.01) G16H 30/40 (2018.01)**

[25] EN  
[54] **SYSTEMS AND METHODS FOR MEDICAL IMAGE PRESENTATION IN MULTIPLE CONTEXTS**

[54] **SYSTEMES ET PROCEDES DE PRESENTATION D'IMAGES MEDICALES DANS DE MULTIPLES CONTEXTES**

[72] TAERUM, TORIN ARNI, US  
[71] ARTERYS INC., US  
[85] 2023-12-20  
[86] 2022-06-27 (PCT/US2022/035155)  
[87] (WO2023/278343)  
[30] US (63/216,218) 2021-06-29

[21] **3,223,739**  
[13] A1

[51] **Int.Cl. G16B 30/00 (2019.01) G06N 20/00 (2019.01) G16B 40/20 (2019.01)**

[25] EN  
[54] **MACHINE-LEARNING MODEL FOR RECALIBRATING NUCLEOTIDE-BASE CALLS**

[54] **MODELE D'APPRENTISSAGE AUTOMATIQUE POUR REETALONNER DES APPELS DE BASE DE NUCLEOTIDES**

[72] PARNABY, GAVIN DEREK, US  
[72] VISVANATH, ARUN, US  
[72] DEJONG, ANTOINE JEAN, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-20  
[86] 2022-07-19 (PCT/US2022/073899)  
[87] (WO2023/004323)  
[30] US (17/384,423) 2021-07-23

[21] **3,223,740**  
[13] A1

[51] **Int.Cl. B01D 61/02 (2006.01)**

[25] EN  
[54] **NANOFILTRATION SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE DE NANOFILTRATION**

[72] ZHAI, JIANWEN, CN  
[72] XU, XIAOJUN, CN  
[72] YANG, LINGLU, CN  
[71] BL TECHNOLOGIES INC., US  
[85] 2023-12-20  
[86] 2022-06-30 (PCT/US2022/035757)  
[87] (WO2023/283101)  
[30] CN (202110772265.3) 2021-07-08

## PCT Applications Entering the National Phase

[21] **3,223,741**  
[13] A1

[51] **Int.Cl. C01B 3/30 (2006.01) C01B 32/18 (2017.01) B01J 29/48 (2006.01)**  
[25] EN  
[54] **HYDROGEN PRODUCING DEVICE AND HYDROGEN PRODUCING METHOD**  
[54] **HYDROGEN PRODUCING DEVICE AND HYDROGEN PRODUCING METHOD**  
[54] **HYDROGEN PRODUCING DEVICE AND HYDROGEN PRODUCING METHOD**  
[72] MIYAKOSHI, AKIHIKO, JP  
[72] KODERA, FUMIHIRO, JP  
[72] KOSAKA, MASAKI, JP  
[72] UOE, KOUSUKE, JP  
[71] NATIONAL INSTITUTE OF TECHNOLOGY, JP  
[71] SUMITOMO CHEMICAL COMPANY, LIMITED, JP  
[85] 2023-12-20  
[86] 2022-06-16 (PCT/JP2022/024048)  
[87] (WO2023/276677)  
[30] JP (2021-108088) 2021-06-29

[21] **3,223,743**  
[13] A1

[51] **Int.Cl. B01L 9/06 (2006.01) A61B 5/151 (2006.01)**  
[25] EN  
[54] **CAPILLARY BLOOD COLLECTION DEVICE**  
[54] **DISPOSITIF DE COLLECTE DE SANG CAPILLAIRE**  
[54] **DISPOSITIF DE COLLECTE DE SANG CAPILLAIRE**  
[72] TORRIS, ANTHONY V., US  
[72] ALTHOFF, CHARLES PETER, US  
[72] YAKHNICH, VLAD, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/US2022/034650)  
[87] (WO2023/278234)  
[30] US (63/216,287) 2021-06-29

[21] **3,223,744**  
[13] A1

[51] **Int.Cl. C12Q 1/6869 (2018.01) G16B 30/20 (2019.01)**  
[25] EN  
[54] **SEQUENCING POLYNUCLEOTIDES USING NANOPORES**  
[54] **SEQUENCAGE DE POLYNUCLEOTIDES A L'AIDE DE NANOPORES**  
[54] **SEQUENCAGE DE POLYNUCLEOTIDES A L'AIDE DE NANOPORES**  
[72] MANDELL, JEFFREY, US  
[72] KILLIAN, JESSICA, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-20  
[86] 2022-09-19 (PCT/US2022/076673)  
[87] (WO2023/049682)  
[30] US (63/247,155) 2021-09-22

[21] **3,223,745**  
[13] A1

[51] **Int.Cl. B60L 1/02 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR DYNAMIC FLUID HEATING IN ELECTRIC VEHICLES**  
[54] **SYSTEME ET PROCEDE DE CHAUFFAGE DE FLUIDE DYNAMIQUE DANS DES VEHICULES ELECTRIQUES**  
[54] **SYSTEME ET PROCEDE DE CHAUFFAGE DE FLUIDE DYNAMIQUE DANS DES VEHICULES ELECTRIQUES**  
[72] ISRAELSOHN, CEDRIC, AU  
[72] HERNADI, BRETT, AU  
[72] TAIG, IAN WILLIAM, AU  
[71] MICROHEAT TECHNOLOGIES PTY LTD, AU  
[85] 2023-12-20  
[86] 2022-04-08 (PCT/AU2022/050316)  
[87] (WO2023/272334)  
[30] AU (2021901956) 2021-06-28

[21] **3,223,746**  
[13] A1

[51] **Int.Cl. G16B 30/00 (2019.01) G16B 40/20 (2019.01)**  
[25] EN  
[54] **QUALITY SCORE CALIBRATION OF BASECALLING SYSTEMS**  
[54] **ETALONNAGE DE SCORE DE QUALITE DE SYSTEMES D'APPEL DE BASES**  
[54] **ETALONNAGE DE SCORE DE QUALITE DE SYSTEMES D'APPEL DE BASES**  
[72] PAUL, ROHAN, US  
[72] KASHEFHAGHIGHI, DORNA, US  
[72] VIECELL, JOHN S., US  
[71] ILLUMINA, INC., US  
[85] 2023-12-20  
[86] 2022-07-28 (PCT/US2022/038729)  
[87] (WO2023/009758)  
[30] US (63/226,707) 2021-07-28  
[30] US (17/839,387) 2022-06-13

[21] **3,223,747**  
[13] A1

[51] **Int.Cl. B65G 59/04 (2006.01)**  
[25] EN  
[54] **AUTOMATED WAREHOUSE SYSTEMS, ASSEMBLIES, APPARATUS, AND METHODS FOR ASSEMBLING MIXED PALLETS AND FACILITATING ORDER PICKING**  
[54] **SYSTEMES, ENSEMBLES, APPAREILS ET PROCEDES D'ENTREPOT AUTOMATISES, ET PROCEDES D'ASSEMBLAGE DE PALLETTES MELANGEES ET DE FACILITATION DE PREPARATION DE COMMANDES**  
[54] **SYSTEMES, ENSEMBLES, APPAREILS ET PROCEDES D'ENTREPOT AUTOMATISES, ET PROCEDES D'ASSEMBLAGE DE PALLETTES MELANGEES ET DE FACILITATION DE PREPARATION DE COMMANDES**  
[72] EIL, HANS, NL  
[71] NEWTEQ HOLDING B.V., NL  
[85] 2023-12-20  
[86] 2022-07-13 (PCT/IB2022/056439)  
[87] (WO2023/285975)  
[30] US (63/221,770) 2021-07-14  
[30] US (17/863,104) 2022-07-12

[21] **3,223,748**  
[13] A1

[51] **Int.Cl. A01D 45/06 (2006.01)**  
[25] EN  
[54] **PICKING UNIT AND MACHINE FOR PICKING FIBRE PLANTS**  
[54] **UNITE DE RECOLTE ET MACHINE POUR RECOLTER DES PLANTES A FIBRES**  
[54] **UNITE DE RECOLTE ET MACHINE POUR RECOLTER DES PLANTES A FIBRES**  
[72] BAERT, NIELS, BE  
[71] HYLER BV, BE  
[85] 2023-12-20  
[86] 2022-07-18 (PCT/IB2022/056597)  
[87] (WO2023/002344)  
[30] BE (2021/5565) 2021-07-19

## Demandes PCT entrant en phase nationale

[21] **3,223,750**  
[13] A1

[51] **Int.Cl. A61K 8/9783 (2017.01) A61K 8/9789 (2017.01) A61K 8/34 (2006.01) A61K 8/66 (2006.01) A61K 8/73 (2006.01)**

[25] EN

[54] **CANNABINOID-CONTAINING FORMULA FOR SKIN CARE**

[54] **FORMULE CONTENANT UN CANNABINOÏDE POUR LE SOIN DE LA PEAU**

[72] MAYHOUB, ABDELRAHMAN S., EG

[72] MOUSTAFA, MAHMOUD MOHAMED ABDRABO, CA

[71] LONDON PHARMACEUTICALS AND RESEARCH CORPORATION, CA

[85] 2023-12-20

[86] 2022-06-23 (PCT/CA2022/051012)

[87] (WO2022/266767)

[30] US (63/213,812) 2021-06-23

[21] **3,223,752**  
[13] A1

[51] **Int.Cl. A01D 45/06 (2006.01)**

[25] EN

[54] **MACHINE AND METHOD FOR PROCESSING FIBRE PLANTS**

[54] **MACHINE ET PROCEDE DE TRAITEMENT DE PLANTES A FIBRES**

[72] BAERT, NIELS, BE

[71] HYLER BV, BE

[85] 2023-12-20

[86] 2022-07-18 (PCT/IB2022/056596)

[87] (WO2023/002343)

[30] BE (2021/5566) 2021-07-19

[21] **3,223,753**  
[13] A1

[51] **Int.Cl. A63F 13/70 (2014.01)**

[25] EN

[54] **COMPUTER IMPLEMENTED SYSTEMS AND METHODS FOR TRACKING USER ACTIVITY AND MANAGING QUESTS**

[54] **SYSTEMES ET PROCEDES MIS EN OEUVRE PAR ORDINATEUR POUR SUIVRE L'ACTIVITE D'UN UTILISATEUR ET GERER DES QUESTES**

[72] DORRIS, JAMES F., US

[72] BELL, BRIAN FRANKLIN, US

[72] ROHMAN III, KENNETH, US

[72] ANDERSON, PETER, US

[72] NESBITT, RONALD, US

[72] CONNELLY, PETER A., US

[71] POARCH BAND OF CREEK INDIANS, DBA PCI GAMING AUTHORITY, US

[85] 2023-12-20

[86] 2022-07-20 (PCT/US2022/037762)

[87] (WO2023/003978)

[30] US (63/224,393) 2021-07-21

[21] **3,223,754**  
[13] A1

[51] **Int.Cl. A61K 31/7125 (2006.01) C12N 15/113 (2010.01) C12N 15/115 (2010.01)**

[25] EN

[54] **G- QUADRUPLEX- CONTAINING OLIGONUCLEOTIDES FOR PREVENTIVE AND THERAPEUTIC TREATMENT**

[54] **OLIGONUCLEOTIDES CONTENANT UN G- QUADRUPLEXE POUR TRAITEMENT PREVENTIF ET THERAPEUTIQUE**

[72] KIPPENBERGER, STEFAN, DE

[72] STEINHORST, KATJA, DE

[72] CINATL, JINDRICH, DE

[72] BOJKOVA, DENISA, DE

[72] KONIG, VERONIKA, DE

[72] KLEEMANN, JOHANNES, DE

[71] JOHANN WOLFGANG GOETHE-UNIVERSITAT FRANKFURT, DE

[85] 2023-12-20

[86] 2022-06-23 (PCT/EP2022/067290)

[87] (WO2022/269013)

[30] EP (21181596.4) 2021-06-24

[21] **3,223,755**  
[13] A1

[51] **Int.Cl. C08J 11/24 (2006.01) C08J 11/28 (2006.01)**

[25] EN

[54] **METHOD AND REACTOR SYSTEM FOR DEPOLYMERIZING A TEREPHTHALATE-POLYMER INTO REUSABLE RAW MATERIAL**

[54] **PROCEDE ET SYSTEME DE REACTEUR POUR LA DEPOLYMERISATION D'UN POLYMERE DE TEREPHTHALATE EN UNE MATIERE PREMIERE REUTILISABLE**

[72] FUFACHEV, EGOR VASILYEVICH, NL

[72] WOLTERS, ALEXANDER THOMAS, NL

[72] DE HAAN, ANDRE BANIER, NL

[72] WOLTERS, JOOST ROBERT, NL

[71] IONIQ TECHNOLOGIES B.V., NL

[85] 2023-12-20

[86] 2022-06-20 (PCT/NL2022/050347)

[87] (WO2022/271013)

[30] NL (2028500) 2021-06-21

[21] **3,223,757**  
[13] A1

[51] **Int.Cl. A61K 35/747 (2015.01) A23L 33/135 (2016.01)**

[25] EN

[54] **COMPOSITION FOR TREATMENT OF AUTOIMMUNE DISEASES COMPRISING LACTOBACILLUS SAKEI OR EXTRACELLULAR VESICLES DERIVED THEREFROM AS ACTIVE INGREDIENT**

[54] **COMPOSITION POUR LE TRAITEMENT DE MALADIES AUTO-IMMUNES COMPRENANT LACTOBACILLUS SAKEI OU DES VESICULES EXTRACELLULAIRES DERIVEES DE CELUI-CI EN TANT QUE PRINCIPE ACTIF**

[72] CHIN, HWA SUP, KR

[71] LISCURE BIOSCIENCES INC., KR

[85] 2023-12-20

[86] 2022-07-06 (PCT/KR2022/009760)

[87] (WO2023/282622)

[30] KR (10-2021-0088901) 2021-07-07

[30] KR (10-2022-0082279) 2022-07-05

## PCT Applications Entering the National Phase

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[21] **3,223,758**  
[13] A1

[51] **Int.Cl. C08J 11/24 (2006.01) C08J 11/28 (2006.01)**  
[25] EN  
[54] **METHOD AND REACTOR SYSTEM FOR DEPOLYMERIZING A TEREPHTHALATEPOLYMER INTO REUSABLE RAW MATERIAL**  
[54] **PROCEDE ET SYSTEME DE REACTEUR POUR LA DEPOLYMERISATION D'UN POLYMERE DE TEREPHTALATE EN UNE MATIERE PREMIERE REUTILISABLE**  
[72] FUFACHEV, EGOR VASILYEVICH, NL  
[72] WOLTERS, ALEXANDER THOMAS, NL  
[72] WOLTERS, JOOST ROBERT, NL  
[72] DE HAAN, ANDRE BANIER, NL  
[71] IONIQ TECHNOLOGIES B.V., NL  
[85] 2023-12-20  
[86] 2022-06-20 (PCT/NL2022/050348)  
[87] (WO2022/271014)  
[30] NL (2028499) 2021-06-21

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[21] **3,223,759**  
[13] A1

[51] **Int.Cl. G06F 21/31 (2013.01) G06F 21/36 (2013.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR VALIDATING CUSTOMER INTERACTIONS**  
[54] **SYSTEMES ET PROCEDES DE VALIDATION D'INTERACTIONS CLIENT**  
[72] WURMFELD, DAVID KELLY, US  
[71] CAPITAL ONE SERVICES, LLC, US  
[85] 2023-12-20  
[86] 2022-06-15 (PCT/US2022/033566)  
[87] (WO2022/271500)  
[30] US (17/358,762) 2021-06-25  
[30] US (17/539,350) 2021-12-01  
[30] US (17/730,487) 2022-04-27

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[21] **3,223,761**  
[13] A1

[51] **Int.Cl. G08B 13/196 (2006.01)**  
[25] EN  
[54] **VIDEO CAMERA WITH ALIGNMENT FEATURE**  
[54] **CAMERA VIDEO DOTEE DE CARACTERISTIQUE D'ALIGNEMENT**  
[72] CHEN, GUO WEI, US  
[72] TRAN, CHI T., US  
[72] SAMSUDIN, IMADI SAFWAN, MY  
[71] MOTOROLA SOLUTIONS, INC., US  
[85] 2023-12-20  
[86] 2022-06-29 (PCT/US2022/035415)  
[87] (WO2023/283081)  
[30] US (17/368,388) 2021-07-06

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[21] **3,223,762**  
[13] A1

[51] **Int.Cl. A47B 96/20 (2006.01)**  
[25] EN  
[54] **TRANSPARENT PANEL FOR A REFRIGERABLE MULTI-SHELF CABINET AND RELATED REFRIGERABLE MULTI-SHELF CABINET**  
[54] **PANNEAU TRANSPARENT POUR UNE ARMOIRE FRIGORIFIQUE MULTI-ETAGERES ET ARMOIRE FRIGORIFIQUE MULTI-ETAGERES ASSOCIEE**  
[72] GIOVAGNOLI, LORIS, IT  
[72] SEMPRINI, EDGARDO, IT  
[71] LENARI ITALIA S.R.L., IT  
[85] 2023-12-20  
[86] 2022-06-27 (PCT/IB2022/055931)  
[87] (WO2023/281350)  
[30] IT (102021000017801) 2021-07-06

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[21] **3,223,763**  
[13] A1

[25] EN  
[54] **SYSTEM AND METHOD FOR ACQUIRING MARINE SEISMIC DATA USING A VIBRATOR**  
[54] **SYSTEME ET PROCEDE POUR L'ACQUISITION DE DONNEES SISMQUES MARINES A L'AIDE D'UN VIBRATEUR**  
[72] ELBOTH, THOMAS, NO  
[72] AUNE, HAKON, NO  
[72] IRANPOUR, KAMBIZ, NO  
[72] JAFARGANDOMI, ARASH, GB  
[72] LAWS, ROBERT MONTGOMERY, GB  
[72] NILSEN, TORE ANDRE, NO  
[71] REFLECTION MARINE NORGE AS, NO  
[85] 2023-12-20  
[86] 2022-07-29 (PCT/NO2022/050184)  
[87] (WO2023/009011)  
[30] US (63/227,636) 2021-07-30

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[21] **3,223,765**  
[13] A1

[51] **Int.Cl. A61B 17/32 (2006.01) A61B 18/12 (2006.01)**  
[25] EN  
[54] **ULTRASONIC SCALPEL, ENERGY INSTRUMENT FOR SURGICAL USE, AND CONTROL METHOD THEREFOR**  
[54] **SCALPEL ULTRASONIQUE, INSTRUMENT ENERGETIQUE A USAGE CHIRURGICAL ET PROCEDE DE COMMANDE ASSOCIE**  
[72] LI, LI, CN  
[72] WU, ZHIXIN, CN  
[71] ENSURGE MEDICAL (SUZHOU) CO., LTD., CN  
[85] 2023-12-20  
[86] 2022-09-15 (PCT/CN2022/118955)  
[87] (WO2023/040939)  
[30] CN (202111096716.2) 2021-09-18

## Demandes PCT entrant en phase nationale

[21] **3,223,766**  
[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01)**  
[25] EN  
[54] **MICROFLUIDIC DEVICE AND METHOD OF MANUFACTURING THE SAME**  
[54] **DISPOSITIF MICROFLUIDIQUE ET SON PROCEDE DE FABRICATION**  
[72] HAWKINS, JEFF, US  
[72] KLEINEMOLEN, IAN, US  
[72] LEE, FLORENCE, US  
[72] GRANT, MATTHEW TYSON, US  
[72] MARRINUCCI, DENA, US  
[72] ZHAO, XIAODONG, US  
[71] TRUVIAN SCIENCES, INC., US  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/US2022/034722)  
[87] (WO2022/271948)  
[30] US (63/214,615) 2021-06-24

[21] **3,223,767**  
[13] A1

[51] **Int.Cl. A47F 3/04 (2006.01) F16B 5/00 (2006.01) A47B 96/20 (2006.01)**  
[25] EN  
[54] **REFRIGERABLE MULTI-SHELF CABINET**  
[54] **ARMOIRE A ETAGERES MULTIPLES POUVANT ETRE REFRIGEREE**  
[72] GIOVAGNOLI, LORIS, IT  
[72] SEMPRINI, EDGARDO, IT  
[71] LENARI ITALIA S.R.L., IT  
[85] 2023-12-20  
[86] 2022-06-27 (PCT/IB2022/055930)  
[87] (WO2023/281349)  
[30] IT (102021000017807) 2021-07-06

[21] **3,223,768**  
[13] A1

[51] **Int.Cl. F03B 17/02 (2006.01) F03B 17/04 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR IMPROVING THE PERFORMANCE OF A GAS-DRIVEN GENERATOR USING A PHASE CHANGE REFRIGERANT**  
[54] **SYSTEMES ET PROCEDES D'AMELIORATION DES PERFORMANCES D'UN GENERATEUR ENTRAINE PAR UN GAZ A L'AIDE D'UN REFRIGERANT A CHANGEMENT DE PHASE**  
[72] MAYNARD, MARK J., US  
[71] MAYNARD, MARK J., US  
[85] 2023-12-20  
[86] 2022-06-21 (PCT/US2022/034421)  
[87] (WO2022/271758)  
[30] US (63/212,914) 2021-06-21

[21] **3,223,769**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) C07D 413/14 (2006.01) C07D 417/14 (2006.01) C07D 471/04 (2006.01)**  
[25] EN  
[54] **BRUTON'S TYROSINE KINASE AND MUTANT DEGRADER, COMPOSITION AND APPLICATION THEREOF**  
[54] **TYROSINE KINASE DE BRUTON ET AGENT DE DEGRADATION MUTANT, COMPOSITION ET UTILISATION ASSOCIEES**  
[72] ZHOU, XINGLU, CN  
[72] LI, JIA, CN  
[72] LIU, XINGGUO, CN  
[72] ZHOU, YUBO, CN  
[72] HU, MIAO, CN  
[72] LUO, XIAOMIN, CN  
[72] XIE, JIANGFENG, CN  
[72] KAN, WEIJUAN, CN  
[72] SU, MINGBO, CN  
[72] WU, YIZHE, CN  
[71] HANGZHOU HEALZEN THERAPEUTICS CO., LTD., CN  
[71] SHANGHAI INSTITUTE OF MATERIA MEDICA, CHINESE ACADEMY OF SCIENCES, CN  
[85] 2023-12-20  
[86] 2022-06-30 (PCT/CN2022/103155)  
[87] (WO2023/274390)  
[30] CN (202110743897.7) 2021-07-01  
[30] CN (202210103330.8) 2022-01-27

[21] **3,223,770**  
[13] A1

[51] **Int.Cl. B01D 69/10 (2006.01) B01D 69/14 (2006.01) B01D 71/44 (2006.01) B01D 71/68 (2006.01)**  
[25] EN  
[54] **COMPOSITE MATERIAL FOR MECHANICAL FILTRATION AND CHEMICAL BINDING OF SUBSTANCES, BACTERIA AND VIRUSES FROM SOLUTIONS**  
[54] **MATERIAU COMPOSITE POUR FILTRATION MECANIQUE ET LIAISON CHIMIQUE DE SUBSTANCES, BACTERIES ET VIRUS A PARTIR DE SOLUTIONS**  
[72] WELTER, MARTIN, DE  
[72] MEYER, CHRISTIAN, DE  
[72] LUNGFIEL, KRISTIAN, DE  
[71] INSTRACTION GMBH, DE  
[85] 2023-12-20  
[86] 2022-06-23 (PCT/EP2022/067097)  
[87] (WO2023/274819)  
[30] DE (10 2021 116 595.4) 2021-06-28

[21] **3,223,772**  
[13] A1

[51] **Int.Cl. C10B 25/10 (2006.01) F16K 3/18 (2006.01) F16K 3/32 (2006.01) F16K 3/34 (2006.01)**  
[25] EN  
[54] **SLIDE GATE VALVE, OPERATING METHOD AND USE**  
[54] **SOUPAPE A TIROIR COULISSANT, PROCEDE DE FONCTIONNEMENT ET UTILISATION**  
[72] BREUER, HOLGER, DE  
[72] CREMER, LISA, DE  
[71] Z & J TECHNOLOGIES GMBH, DE  
[85] 2023-12-20  
[86] 2022-07-13 (PCT/EP2022/069551)  
[87] (WO2023/285506)  
[30] DE (10 2021 118 135.6) 2021-07-14  
[30] DE (10 2022 105 939.1) 2022-03-15

## PCT Applications Entering the National Phase

[21] **3,223,773**  
[13] A1

[51] **Int.Cl. B01D 53/22 (2006.01) C10L 3/10 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR SIMULTANEOUS TREATMENT OF DIFFERENT FLUCTUATING GAS STREAMS**  
[54] **APPAREIL ET PROCEDE DE TRAITEMENT SIMULTANE DE DIFFERENTS FLUX DE GAZ FLUCTUANTS**  
[72] PRISKE, MARKUS, AT  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2023-12-20  
[86] 2022-07-20 (PCT/EP2022/070296)  
[87] (WO2023/011919)  
[30] EP (21189420.9) 2021-08-03

[21] **3,223,774**  
[13] A1

[51] **Int.Cl. B60L 53/22 (2019.01) G01R 31/54 (2020.01) H02J 7/02 (2016.01)**  
[25] EN  
[54] **ON-BOARD CHARGER AND ELECTRIC VEHICLE**  
[54] **CHARGEUR EMBARQUE ET VEHICULE ELECTRIQUE**  
[72] WANG, XINGHUI, CN  
[72] WANG, CHAO, CN  
[72] LIU, WEIDONG, CN  
[71] BYD COMPANY LIMITED, CN  
[85] 2023-12-20  
[86] 2022-06-17 (PCT/CN2022/099422)  
[87] (WO2023/050899)  
[30] CN (202111157823.1) 2021-09-29

[21] **3,223,775**  
[13] A1

[51] **Int.Cl. A23P 20/10 (2016.01) A61K 8/9794 (2017.01) A61K 8/25 (2006.01) A61K 8/36 (2006.01) A61K 8/365 (2006.01) A61K 8/37 (2006.01) A61K 8/73 (2006.01) A61K 8/81 (2006.01) A61K 31/522 (2006.01) A61K 47/14 (2017.01)**  
[25] EN  
[54] **COMPOSITION COMPRISING A (METH)ACRYLATE COPOLYMER, AN ALKALI OR AMMONIUM SALT OF A SATURATED ALIPHATIC MONOCARBOXYLIC ACID AND SPECIFIC GLIDANTS**  
[54] **COMPOSITION COMPRENANT UN COPOLYMER DE (METH)ACRYLATE, UN SEL ALCALIN OU D'AMMONIUM D'UN ACIDE MONOCARBOXYLIQUE ALIPHATIQUE SATURE ET DES AGENTS GLISSANTS SPECIFIQUES**  
[72] ROTH, ERNA, DE  
[72] NIEPOTH, PETER, DE  
[72] ENGEL, ANDREA, US  
[72] GUTTLER, LISA, DE  
[72] KLOSENDORF, ANDREAS, DE  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2023-12-20  
[86] 2022-07-07 (PCT/EP2022/068831)  
[87] (WO2023/280962)  
[30] EP (21184702.5) 2021-07-09

[21] **3,223,776**  
[13] A1

[51] **Int.Cl. A23P 20/10 (2016.01) A23P 20/20 (2016.01) A61K 8/25 (2006.01) A61K 8/36 (2006.01) A61K 8/365 (2006.01) A61K 8/37 (2006.01) A61K 8/49 (2006.01) A61K 8/73 (2006.01) A61K 8/81 (2006.01) A61K 9/48 (2006.01) A61K 31/522 (2006.01) A61Q 19/00 (2006.01)**  
[25] EN  
[54] **HARD SHELL CAPSULES HAVING IMPROVED COLON RELEASE**  
[54] **CAPSULES A ENVELOPPE DURE AYANT UNE LIBERATION AMELIOREE DANS LE COLON**  
[72] ABMUS, MANFRED, DE  
[72] ROTH, ERNA, DE  
[72] BRUNS, JESSICA, DE  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2023-12-20  
[86] 2022-06-29 (PCT/EP2022/067846)  
[87] (WO2023/280649)  
[30] EP (21184696.9) 2021-07-09

[21] **3,223,777**  
[13] A1

[51] **Int.Cl. A01D 45/06 (2006.01)**  
[25] EN  
[54] **PROCESSING MACHINE FOR PROCESSING FIBRE PLANTS**  
[54] **MACHINE DE TRAITEMENT POUR LE TRAITEMENT DE PLANTES A FIBRES**  
[72] BAERT, NIELS, BE  
[71] HYLER BV, BE  
[85] 2023-12-20  
[86] 2022-07-18 (PCT/IB2022/056599)  
[87] (WO2023/002346)  
[30] BE (2021/5563) 2021-07-19

[21] **3,223,804**  
[13] A1

[51] **Int.Cl. H04L 45/488 (2022.01) H04L 45/03 (2022.01)**  
[25] EN  
[54] **DEADLOCK-FREE MULTIPATH ROUTING FOR DIRECT INTERCONNECT NETWORKS**  
[54] **ROUTAGE PAR CHEMINS MULTIPLES SANS IMPASSE POUR DES RESEAUX D'INTERCONNEXION DIRECTE**  
[72] DE SOUZA, EVANDRO, CA  
[71] ROCKPORT NETWORKS INC., CA  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/IB2022/000359)  
[87] (WO2022/269357)  
[30] US (63/214,061) 2021-06-23



## Demandes PCT entrant en phase nationale

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[21] **3,223,805**  
[13] A1

[51] **Int.Cl. A62C 31/00 (2006.01) A62C 35/02 (2006.01)**  
[25] EN  
[54] **DEVICE, SYSTEM AND METHOD FOR REMOTE FIREFIGHTING**  
[54] **DISPOSITIF, SYSTEME ET PROCEDE DE LUTTE CONTRE L'INCENDIE A DISTANCE**  
[72] DICRISTOFARO, VINCENZO, CA  
[71] FERRO INTERNATIONAL INC., CA  
[85] 2023-12-21  
[86] 2022-07-18 (PCT/CA2022/051110)  
[87] (WO2023/000087)  
[30] US (63/223,017) 2021-07-18

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[21] **3,223,810**  
[13] A1

[51] **Int.Cl. H04W 48/18 (2009.01) H04W 60/04 (2009.01)**  
[25] EN  
[54] **REGISTRATION TO A NETWORK SLICE SUBJECT TO ADMISSION CONTROL**  
[54] **ENREGISTREMENT AUPRES D'UNE TRANCHE DE RESEAU SOUMISE A UNE COMMANDE D'ADMISSION**  
[72] ATARIUS, ROOZBEH, US  
[72] VELEV, GENADI, DE  
[71] LENOVO (SINGAPORE) PTE. LTD., SG  
[85] 2023-12-21  
[86] 2022-08-05 (PCT/IB2022/057337)  
[87] (WO2023/012759)  
[30] US (63/230,599) 2021-08-06

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[21] **3,223,812**  
[13] A1

[51] **Int.Cl. H04W 52/36 (2009.01) H04W 52/38 (2009.01) H04W 52/46 (2009.01)**  
[25] EN  
[54] **TRANSMITTING A MAC CE MESSAGE BY AN IAB NODE**  
[54] **TRANSMISSION D'UN MESSAGE MAC CE PAR UN N?UD IAB**  
[72] GHANBARINEJAD, MAJID, US  
[72] NANGIA, VIJAY, US  
[72] JUNG, HYEJUNG, US  
[71] LENOVO (SINGAPORE) PTE. LTD., SG  
[85] 2023-12-21  
[86] 2022-08-04 (PCT/IB2022/057272)  
[87] (WO2023/012725)  
[30] US (63/229,908) 2021-08-05

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[21] **3,223,814**  
[13] A1

[51] **Int.Cl. H01M 8/0656 (2016.01)**  
[25] EN  
[54] **ENERGY PRODUCTION SYSTEM**  
[54] **SYSTEME DE PRODUCTION D'ENERGIE**  
[72] BRANDTZÆG, BJORN, NO  
[72] VOLLESTAD, EINAR, NO  
[71] PHOTONCYCLE AS, NO  
[85] 2023-12-21  
[86] 2022-06-28 (PCT/EP2022/067762)  
[87] (WO2023/275069)  
[30] EP (21182145.9) 2021-06-28

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[21] **3,223,815**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2023.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR DETERMINING LIKELIHOOD OF TASK DELEGATION**  
[54] **SYSTEMES ET PROCEDES POUR DETERMINER UNE PROBABILITE DE DELEGATION DE TACHE**  
[72] MATSUOKA, YOKY, US  
[72] VISWANATHAN, NITIN, US  
[72] LIU, LINGYUN, US  
[72] DEMING, BENJAMIN, US  
[72] PATERSON, SEAN, US  
[72] VAN DER LINDEN, GWENDOLYN W., US  
[72] CIVELEKOGLU, DEFNE, US  
[72] BEAULIEU, MALIA, US  
[71] YOHANA LLC, US  
[85] 2023-12-21  
[86] 2022-08-04 (PCT/US2022/074525)  
[87] (WO2023/015246)  
[30] US (63/229,088) 2021-08-04

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[21] **3,223,816**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2023.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR USER INTERFACES INCLUDING TASK DELEGATION CONTROLS**  
[54] **SYSTEMES ET PROCEDES POUR INTERFACES UTILISATEUR COMPRENANT DES COMMANDES DE DELEGATION DE TACHES**  
[72] PATERSON, SEAN, US  
[72] MATSUOKA, YOKY, US  
[72] VISWANATHAN, NITIN, US  
[72] LIU, LINGYUN, US  
[72] DEMING, BENJAMIN, US  
[72] VAN DER LINDEN, GWENDOLYN W., US  
[72] CIVELEKOGLU, DEFNE, US  
[72] BEAULIEU, MALIA, US  
[71] YOHANA LLC, US  
[85] 2023-12-21  
[86] 2022-07-21 (PCT/US2022/074022)  
[87] (WO2023/004394)  
[30] US (63/224,435) 2021-07-22

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[21] **3,223,817**  
[13] A1

[51] **Int.Cl. B62D 59/02 (2006.01) B60D 1/24 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR TRAILER PROPULSION**  
[54] **SYSTEME ET PROCEDE DE PROPULSION DE REMORQUE**  
[72] RUST, IAN C., US  
[71] ANAMNESIS CORPORATION, US  
[85] 2023-12-21  
[86] 2022-06-24 (PCT/US2022/034923)  
[87] (WO2022/272076)  
[30] US (63/214,688) 2021-06-24

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[21] **3,223,822**  
[13] A1

[51] **Int.Cl. E05D 3/18 (2006.01) E05D 3/06 (2006.01) E05D 3/16 (2006.01)**  
[25] EN  
[54] **HINGE**  
[54] **CHARNIERE**  
[72] PEER, ROBERT, AT  
[71] PEER, ROBERT, AT  
[85] 2023-12-21  
[86] 2021-07-28 (PCT/AT2021/000016)  
[87] (WO2022/020867)  
[30] AT (A 168/2020) 2020-07-29

## PCT Applications Entering the National Phase

[21] **3,223,826**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2023.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR OPERATING MODULAR FOOD LOCKERS**  
[54] **SYSTEMES ET PROCEDES POUR FAIRE FONCTIONNER DES CASIERS A ALIMENTS MODULAIRES**  
[72] HAN, DARAN, US  
[72] NGUYEN, KRISTEN, US  
[72] PARKIN, ERIC, US  
[72] SHRADER, NATHAN PATRICK, US  
[71] SWARTS, JARED HANSEN, US  
[71] CARGILL, INCORPORATED, US  
[85] 2023-12-21  
[86] 2022-06-21 (PCT/US2022/073053)  
[87] (WO2022/272242)  
[30] US (63/213,402) 2021-06-22

[21] **3,223,830**  
[13] A1

[51] **Int.Cl. A61B 5/151 (2006.01) A61L 33/04 (2006.01) A61B 5/155 (2006.01)**  
[25] EN  
[54] **CAPILLARY BLOOD COLLECTION DEVICE**  
[54] **DISPOSITIF DE PRELEVEMENT DE SANG CAPILLAIRE**  
[72] TORRIS, ANTHONY V., US  
[72] YAKHNICH, VLAD, US  
[72] WENTZELL, SCOTT, US  
[72] BOKKA SRINIVASA RAO, KISHORE K., US  
[72] MARCHIARULLO, DANIEL J., US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/US2022/034626)  
[87] (WO2023/278225)  
[30] US (63/216,239) 2021-06-29

[21] **3,223,833**  
[13] A1

[25] EN  
[54] **APPLIANCE OUTLET BOX**  
[54] **BOITE DE SORTIE D'APPAREIL**  
[72] COSLEY, JAMES, US  
[72] HART, DENNIS, US  
[72] O'NEIL, VIRGIL, US  
[71] RELIANCE WORLDWIDE CORPORATION, US  
[85] 2023-12-21  
[86] 2022-07-07 (PCT/US2022/036405)  
[87] (WO2023/283370)  
[30] US (63/219,640) 2021-07-08

[21] **3,223,835**  
[13] A1

[51] **Int.Cl. A61B 5/151 (2006.01) A61J 1/16 (2006.01) A61J 1/20 (2006.01)**  
[25] EN  
[54] **CAPILLARY BLOOD COLLECTION DEVICE**  
[54] **DISPOSITIF DE PRELEVEMENT DE SANG CAPILLAIRE**  
[72] TORRIS, ANTHONY V., US  
[72] YAKHNICH, VLAD, US  
[72] WENTZELL, SCOTT, US  
[72] PORSCHEN, LESLIE, US  
[72] FRICKE, ALEX F., US  
[72] BOKKA SRINIVASA RAO, KISHORE K., US  
[72] ALTHOFF, CHARLES PETER, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/US2022/034633)  
[87] (WO2023/278228)  
[30] US (63/216,252) 2021-06-29

[21] **3,223,837**  
[13] A1

[51] **Int.Cl. G16B 20/40 (2019.01) G16B 20/10 (2019.01)**  
[25] EN  
[54] **SYSTEM, METHOD, AND APPARATUS FOR PREDICTING GENETIC ANCESTRY**  
[54] **SYSTEME, PROCEDE ET APPAREIL POUR PREDIRE L'ASCENDANCE GENETIQUE**  
[72] GARRIGAN, DANIEL, US  
[72] HUFF, JASON, US  
[72] CHODROFF FORAN, REBECCA, US  
[71] MARS, INCORPORATED, US  
[85] 2023-12-21  
[86] 2022-07-07 (PCT/US2022/036384)  
[87] (WO2023/283355)  
[30] US (63/219,349) 2021-07-07

[21] **3,223,840**  
[13] A1

[51] **Int.Cl. A61L 2/28 (2006.01) G01N 21/78 (2006.01)**  
[25] EN  
[54] **BIOLOGICAL INDICATOR FOR DETERMINING THE EFFICACY OF AN OXIDATIVE STERILIZATION PROCESS AND METHODS OF USE**  
[54] **INDICATEUR BIOLOGIQUE POUR DETERMINER L'EFFICACITE D'UN PROCEDE DE STERILISATION PAR OXYDATION ET PROCEDES D'UTILISATION**  
[72] LOMBARDIA, ESTEBAN, AR  
[72] ROVETTO, ADRIAN JESUS, AR  
[72] RAVASI, PABLO, AR  
[72] RODRIGUEZ, CARLOS ERNESTO, AR  
[71] TERRAGENE LLC, US  
[85] 2023-12-21  
[86] 2022-06-30 (PCT/IB2022/056130)  
[87] (WO2023/275830)  
[30] US (17/367,224) 2021-07-02

[21] **3,223,841**  
[13] A1

[51] **Int.Cl. A61B 5/151 (2006.01)**  
[25] EN  
[54] **CAPILLARY BLOOD COLLECTION DEVICE**  
[54] **DISPOSITIF DE PRELEVEMENT DE SANG CAPILLAIRE**  
[72] TORRIS, ANTHONY V., US  
[72] ALTHOFF, CHARLES PETER, US  
[72] BOKKA SRINIVASA RAO, KISHORE K., US  
[72] YAKHNICH, VLAD, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/US2022/034638)  
[87] (WO2023/278230)  
[30] US (63/216,268) 2021-06-29

## Demandes PCT entrant en phase nationale

[21] **3,223,842**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01)**  
[25] EN  
[54] **ANTI-CD40 ANTIBODY, ANTIGEN-BINDING FRAGMENT AND MEDICAL USE THEREOF**  
[54] **ANTICORPS ANTI-CD40, FRAGMENT DE LIAISON A L'ANTIGENE ET SON UTILISATION MEDICALE**  
[72] LIN, YUAN, CN  
[72] SU, LU, CN  
[72] LIN, KAN, CN  
[72] LIAO, CHENG, CN  
[71] JIANGSU HENGRUI PHARMACEUTICALS CO., LTD., CN  
[71] SHANGHAI SHENGDI PHARMACEUTICAL CO., LTD, CN  
[85] 2023-12-21  
[86] 2022-06-28 (PCT/CN2022/101780)  
[87] (WO2023/274201)  
[30] CN (202110722124.0) 2021-06-28

[21] **3,223,843**  
[13] A1

[51] **Int.Cl. E21C 35/18 (2006.01)**  
[25] EN  
[54] **REBUILDABLE HARD SURFACE CUTTING TIP FOR MINING BIT**  
[54] **POINTE DE COUPE DE SURFACE DURE RECONSTRUCTIBLE POUR TREPAN DE MINE**  
[72] BAHR, SCOTT, CA  
[72] CHESHUK, IAN, CA  
[71] BIT SERVICE COMPANY LTD., CA  
[85] 2023-12-21  
[86] 2021-07-15 (PCT/CA2021/050983)  
[87] (WO2023/283718)

[21] **3,223,844**  
[13] A1

[25] EN  
[54] **PIKFYVE ANTISENSE OLIGONUCLEOTIDES**  
[54] **OLIGONUCLEOTIDES ANTISENS PIKFYVE**  
[72] CHANG, WEN-HSUAN, US  
[72] LEE, EMILY ELIZABETH, US  
[71] ACURASTEM, INC., US  
[85] 2023-12-21  
[86] 2022-06-22 (PCT/US2022/034539)  
[87] (WO2022/271836)  
[30] US (63/202,717) 2021-06-22

[21] **3,223,849**  
[13] A1

[51] **Int.Cl. C10B 49/16 (2006.01) C10B 53/04 (2006.01) C10B 57/06 (2006.01) C10J 3/12 (2006.01)**  
[25] EN  
[54] **PROCESS OF TREATING CARBONACEOUS MATERIAL AND APPARATUS THEREFOR**  
[54] **PROCEDE DE TRAITEMENT D'UN MATERIAU CARBONE ET APPAREILLAGE ASSOCIE**  
[72] WINTER, JOHN DAVID, AU  
[71] SEATA HOLDINGS PTY LTD, AU  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/AU2022/050636)  
[87] (WO2022/266713)  
[30] AU (2021901894) 2021-06-23

[21] **3,223,852**  
[13] A1

[51] **Int.Cl. E06B 9/46 (2006.01)**  
[25] EN  
[54] **PROFILE FOR CONNECTING A BLIND TO A ROLLER TUBE, TRANSPORT KIT OF SUCH PROFILE AND SYSTEM FOR ANCHORING A BLIND TO A SUPPORT WALL**  
[54] **PROFILE DE LIAISON D'UN STORE A UN TUBE DE ROULEAU, KIT DE TRANSPORT D'UN TEL PROFILE ET SYSTEME D'ANCRAGE D'UN STORE A UN MUR PORTEUR**  
[72] LOMBARDINI, MARCO, CH  
[71] PLASTEX SA, CH  
[71] LOMBARDINI, MARCO, CH  
[85] 2023-12-21  
[86] 2022-06-27 (PCT/IB2022/055933)  
[87] (WO2022/269578)  
[30] IT (102021000016799) 2021-06-25  
[30] IT (102021000016805) 2021-06-25

[21] **3,223,853**  
[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01) G16B 20/00 (2019.01) G16B 30/00 (2019.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR IDENTIFYING MICROBIAL SIGNATURES**  
[54] **SYSTEMES ET PROCEDES D'IDENTIFICATION DE SIGNATURES MICROBIENNES**  
[72] JAIN, SUNEER, US  
[72] PHAN, JOANN LIEU, US  
[72] NAIR, DIVYA BALACHANDRAN, US  
[72] MONTAGNE, THIBAUT, US  
[71] SUN GENOMICS, INC., US  
[85] 2023-12-21  
[86] 2022-06-27 (PCT/US2022/035173)  
[87] (WO2023/278352)  
[30] US (63/215,845) 2021-06-28  
[30] US (63/237,436) 2021-08-26  
[30] US (63/297,638) 2022-01-07

[21] **3,223,855**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) C12N 15/113 (2010.01) C12N 15/63 (2006.01)**  
[25] EN  
[54] **NON-NATURAL 5'-UNTRANSLATED REGION AND 3'-UNTRANSLATED REGION AND USE THEREOF**  
[54] **REGION NON TRADUITE EN 5' NON NATURELLE ET REGION NON TRADUITE EN 3' ET SON UTILISATION**  
[72] HAN, SEUNG SU, KR  
[72] PARK, DA HYEON, KR  
[72] OH, EUH LIM, KR  
[72] HEO, YONG HO, KR  
[72] LEE, JIN BONG, KR  
[72] DONG, JOO YOUNG, KR  
[72] SHIN, SEUNG HYUN, KR  
[72] LIM, CHANG GYU, KR  
[71] HANMI PHARM. CO., LTD., KR  
[85] 2023-12-21  
[86] 2022-06-24 (PCT/KR2022/009020)  
[87] (WO2022/270969)  
[30] KR (10-2021-0082600) 2021-06-24  
[30] KR (10-2021-0185375) 2021-12-22

## PCT Applications Entering the National Phase

[21] **3,223,856**  
[13] A1

[51] **Int.Cl. C12Q 1/6883 (2018.01) G16H 20/10 (2018.01) G16H 50/20 (2018.01) G16H 10/60 (2018.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR THERAPY MONITORING AND TRIAL DESIGN**

[54] **PROCEDES ET SYSTEMES POUR LE SUIVI THERAPEUTIQUE ET LA CONCEPTION D'ESSAIS CLINIQUES**

[72] GHIASSIAN, SUSAN, US

[72] AKMAEV, VIATCHESLAV R., US

[72] VOITALOV, IVAN, US

[71] SCIPHER MEDICINE CORPORATION, US

[85] 2023-12-21

[86] 2022-06-21 (PCT/US2022/034375)

[87] (WO2022/271724)

[30] US (63/213,431) 2021-06-22

[30] US (63/329,008) 2022-04-08

[21] **3,223,859**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) C07C 51/43 (2006.01) C07C 55/10 (2006.01) C07C 55/12 (2006.01) C07C 57/15 (2006.01)**

[25] EN

[54] **SALT AND CRYSTAL FORMS OF AN EPIDERMAL GROWTH FACTOR RECEPTOR INHIBITOR**

[54] **FORMES DE SEL ET FORMES CRISTALLINES D'UN INHIBITEUR DU RECEPTEUR DU FACTEUR DE CROISSANCE EPIDERMIQUE**

[72] BUTLER, ERIKA, CA

[72] KINKEMA, CAITLIN N., US

[72] LEE, CHRISTOPHER, US

[71] BLUEPRINT MEDICINES CORPORATION, US

[85] 2023-12-21

[86] 2022-06-22 (PCT/US2022/034550)

[87] (WO2022/271846)

[30] US (63/214,089) 2021-06-23

[21] **3,223,861**  
[13] A1

[51] **Int.Cl. H01H 3/28 (2006.01) H01H 3/30 (2006.01) H01H 47/12 (2006.01) H01H 47/16 (2006.01) H01H 47/18 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR HANDLING CONTACTOR/RELAY CONTACT BOUNCE UNDER TRANSIENT CONDITIONS**

[54] **PROCEDE ET APPAREIL POUR GERER UN REBONDISSEMENT DE CONTACT DE CONTACTEUR/RELAIS DANS DES CONDITIONS TRANSITOIRES**

[72] POTTER, FREDERICK J., US

[72] MILLS, PATRICK, US

[71] ASTRONICS ADVANCED ELECTRONIC SYSTEMS CORP., US

[85] 2023-12-21

[86] 2022-07-08 (PCT/US2022/036571)

[87] (WO2023/283455)

[30] US (63/219,684) 2021-07-08

[21] **3,223,857**  
[13] A1

[51] **Int.Cl. A61L 2/14 (2006.01) A61L 9/20 (2006.01) C01B 15/01 (2006.01)**

[25] EN

[54] **PEROXIDE-ENHANCED GERMICIDAL IRRADIATION FOR THE TREATMENT OF AIRBORNE AND SURFACE-ASSOCIATED CONTAMINANTS**

[54] **IRRADIATION GERMICIDE AMELIOREE PAR PEROXYDE DESTINEE AU TRAITEMENT DE CONTAMINANTS EN SUSPENSION DANS L'AIR ET ASSOCIES A UNE SURFACE**

[72] HERNANDEZ, MARK, US

[72] BIESIADA, EMMALEE, US

[71] REGENTS OF THE UNIVERSITY OF COLORADO, US

[85] 2023-12-21

[86] 2022-06-27 (PCT/US2022/035156)

[87] (WO2022/272169)

[30] US (63/214,919) 2021-06-25

[21] **3,223,860**  
[13] A1

[51] **Int.Cl. F21V 7/09 (2006.01) F21V 11/10 (2006.01) F21V 14/08 (2006.01)**

[25] EN

[54] **LIGHTING DEVICE**

[54] **DISPOSITIF D'ECLAIRAGE**

[72] IINO, KOHHEI, JP

[71] DAI-ICHI SHOMEI CO., LTD, JP

[85] 2023-12-21

[86] 2022-07-25 (PCT/JP2022/028615)

[87] (WO2023/026741)

[30] JP (2021-135655) 2021-08-23

[21] **3,223,862**  
[13] A1

[51] **Int.Cl. A61N 7/02 (2006.01)**

[25] EN

[54] **SYSTEMS FOR APPLYING ENERGY TO DENERVATE A PULMONARY ARTERY**

[54] **SYSTEMES ET PROCEDES D'APPLICATION D'ENERGIE POUR DENERVER UNE ARTERE PULMONAIRE**

[72] AMAOUA, DAVID, FR

[72] GRASSE, MARTIN, CH

[72] MISCHO, CHIARA, IE

[72] CANNON, WILLIAM, IE

[72] MAXWELL, ADAM DOUGLAS, US

[71] GRADIENT DENERVATION TECHNOLOGIES SAS, FR

[85] 2023-12-21

[86] 2022-06-23 (PCT/IB2022/055854)

[87] (WO2022/269545)

[30] EP (21305873) 2021-06-24

## Demandes PCT entrant en phase nationale

[21] **3,223,864**  
[13] A1

[51] **Int.Cl. B65D 71/42 (2006.01) B65B 17/02 (2006.01) B65D 71/46 (2006.01)**

[25] EN

[54] **PACKAGING**

[54] **EMBALLAGE**

[72] LIMOUSIN, FREDERIC, FR

[72] BONNAIN, JEAN-CHRISTOPHE, FR

[72] ZACHERLE, MATTHEW E., US

[72] MERZEAU, JULIEN, FR

[72] PORTRAIT, GERALD, FR

[72] PERRIN, DOMINIQUE, FR

[71] WESTROCK PACKAGING SYSTEMS, LLC, US

[85] 2023-12-21

[86] 2022-06-21 (PCT/US2022/034305)

[87] (WO2022/271672)

[30] US (63/213,420) 2021-06-22

[30] US (63/287,476) 2021-12-08

[30] US (63/250,821) 2021-09-30

[21] **3,223,866**  
[13] A1

[51] **Int.Cl. B29D 11/00 (2006.01) B29D 11/02 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR THE AUTOMATED TRANSFER OF AN INTRAOCULAR LENS**

[54] **PROCEDE ET APPAREIL POUR LE TRANSFERT AUTOMATISE D'UNE LENTILLE INTRAOCULAIRE**

[72] KIM, DAVID HEEMYUNG, DE

[72] LUDWIG, CHRISTOPH, DE

[72] KLOKOW, GERHARD, DE

[71] ALCON, INC., CH

[85] 2023-12-21

[86] 2022-08-10 (PCT/IB2022/057459)

[87] (WO2023/021374)

[30] US (63/233,420) 2021-08-16

[21] **3,223,867**  
[13] A1

[51] **Int.Cl. C12Q 1/6806 (2018.01) C12Q 1/6858 (2018.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR ENRICHMENT OF NUCLEIC ACIDS USING LIGHT-MEDIATED CROSS-LINKING**

[54] **COMPOSITIONS ET PROCEDES D'ENRICHISSEMENT D'ACIDES NUCLEIQUES A L'AIDE D'UNE RETICULATION INDUITE PAR LA LUMIERE**

[72] MAKRIGIORGOS, GERASSIMOS, US

[72] LEONG, KA WAI, US

[72] YU, FANGYAN, US

[71] DANA-FARBER CANCER INSTITUTE, INC., US

[85] 2023-12-21

[86] 2022-06-30 (PCT/US2022/035727)

[87] (WO2023/278704)

[30] US (63/216,837) 2021-06-30

[30] US (63/327,013) 2022-04-04

[21] **3,223,868**  
[13] A1

[51] **Int.Cl. B01D 17/02 (2006.01) B01D 35/02 (2006.01) B01D 35/30 (2006.01) E03F 5/16 (2006.01)**

[25] EN

[54] **FILTER MEDIA INSERT STRUCTURES AND METHODS OF INSTALLATION**

[54] **STRUCTURES D'INSERT DE MILIEU FILTRANT ET PROCEDES D'INSTALLATION**

[72] GANNON, WILLIAM J., US

[72] MELACCIO, PAUL, US

[71] SOLIDIFICATION PRODUCTS INTERNATIONAL, INC., US

[85] 2023-12-21

[86] 2022-06-24 (PCT/US2022/034887)

[87] (WO2022/272051)

[21] **3,223,870**  
[13] A1

[51] **Int.Cl. G01N 30/34 (2006.01) B01D 15/16 (2006.01) B01D 15/36 (2006.01) G01N 30/88 (2006.01) G01N 30/96 (2006.01)**

[25] EN

[54] **MASS SPECTROMETRY-COMPATIBLE PH GRADIENT BUFFER SYSTEM**

[54] **SYSTEME DE TAMPON A GRADIENT DE PH COMPATIBLE AVEC LA SPECTROMETRIE DE MASSE**

[72] SANCHEZ, AVELINO C., US

[71] PHENOMENEX, INC., US

[85] 2023-12-21

[86] 2022-06-22 (PCT/US2022/034559)

[87] (WO2022/271853)

[30] US (63/213,562) 2021-06-22

[30] US (63/325,392) 2022-03-30

[21] **3,223,872**  
[13] A1

[51] **Int.Cl. H04W 84/12 (2009.01) H04W 28/06 (2009.01)**

[25] EN

[54] **ACCESS POINT, STATION, AND WIRELESS COMMUNICATION METHOD**

[54] **POINT D'ACCES, STATION ET PROCEDE DE COMMUNICATION SANS FIL**

[72] HUANG, LEI, SG

[72] LUO, CHAOMING, CN

[71] GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., CN

[85] 2023-12-21

[86] 2021-06-24 (PCT/CN2021/102224)

[87] (WO2022/266977)

## PCT Applications Entering the National Phase

[21] **3,223,874**  
[13] A1

[51] **Int.Cl. C07F 9/53 (2006.01)**  
[25] EN  
[54] **PYRIMIDINE COMPOUNDS FOR USE AS MAP4K1 INHIBITORS**  
[54] **COMPOSES DE PYRIMIDINE DESTINES A ETRE UTILISES EN TANT QU'INHIBITEURS DE MAP4K1**  
[72] IYER, PRAVIN, IN  
[72] DAS, SANJIB, IN  
[72] CHINNAPATTU, MURUGAN, IN  
[72] CHAUDHARI, SACHIN, IN  
[72] SAINI, JAGMOHAN, IN  
[72] MANDADI, SRAVAN, IN  
[72] GOWDA, NAGARAJ, IN  
[72] DAHALE, DNYANESHWAR, IN  
[72] PATIL, SANDIP, IN  
[72] KADLAG, NANASAHEB, IN  
[72] MISRA, CHANDRASEKHAR, IN  
[72] PANGARE, PRIYANKA, IN  
[71] GLENMARK SPECIALTY S.A., CH  
[85] 2023-12-21  
[86] 2022-07-06 (PCT/IB2022/056248)  
[87] (WO2023/281417)  
[30] IN (202121030204) 2021-07-06

[21] **3,223,875**  
[13] A1

[51] **Int.Cl. C07D 413/04 (2006.01) A61K 31/454 (2006.01) A61P 31/12 (2006.01) C07D 413/14 (2006.01)**  
[25] EN  
[54] **HETEROCYCLOALKYL-SUBSTITUTED POLYHETEROAZOLE DERIVATIVES AS MEDICAMENTS FOR TREATING AND/OR PREVENTING RS VIRUS INFECTIONS**  
[54] **DERIVE DE POLYHETEROAZOLE SUBSTITUEE PAR HETEROCYCLOALKYLE UTILISE EN TANT QUE MEDICAMENT POUR LE TRAITEMENT ET/OU LA PREVENTION D'UNE MALADIE INFECTIEUSE A VIRUS RS**  
[72] MATSUOKA, SHIGERU, JP  
[72] TSUCHIKAWA, HIROSHI, JP  
[72] YAMADA, KENTARO, JP  
[72] KATO, AKIRA, JP  
[71] ALBIUS SCIENCES ALPHA PRIVATE LIMITED, SG  
[85] 2023-12-21  
[86] 2022-06-24 (PCT/JP2022/025361)  
[87] (WO2022/270628)  
[30] JP (2021-106034) 2021-06-25

[21] **3,223,876**  
[13] A1

[51] **Int.Cl. G16B 30/00 (2019.01)**  
[25] EN  
[54] **OLIGONUCLEOTIDES AND COMPOSITIONS THEREOF FOR NEUROMUSCULAR DISORDERS**  
[54] **OLIGONUCLEOTIDES ET COMPOSITIONS DE CEUX-CI POUR DES TROUBLES NEUROMUSCULAIRES**  
[72] SALEH, ANTHONY, US  
[72] BELGARD, GRANT, US  
[72] MUNZ, MARTON, ES  
[72] MARUSAK, CHARLES, US  
[72] PLACE, ROBERT, US  
[71] MIRECULE, INC., US  
[85] 2023-12-21  
[86] 2022-07-14 (PCT/US2022/073754)  
[87] (WO2023/288289)  
[30] US (63/221,568) 2021-07-14

[21] **3,223,877**  
[13] A1

[51] **Int.Cl. E21B 33/038 (2006.01)**  
[25] EN  
[54] **ROTATING CONTROL DEVICE HAVING IMPROVED SEAL**  
[54] **DISPOSITIF DE COMMANDE ROTATIF AYANT UN JOINT D'ETANCHEITE AMELIORE**  
[72] LYLE, ORLAN, US  
[71] NOBLE RIG HOLDINGS LIMITED, US  
[85] 2023-12-21  
[86] 2022-06-21 (PCT/US2022/034391)  
[87] (WO2022/271737)  
[30] US (63/213,451) 2021-06-22

[21] **3,223,878**  
[13] A1

[51] **Int.Cl. A01K 91/06 (2006.01)**  
[25] EN  
[54] **ELECTRICAL TRANSMISSION LINE CABLE**  
[54] **CABLE DE LIGNE DE TRANSMISSION ELECTRIQUE**  
[72] ALINGER, DUSTIN, US  
[71] REELVIEW FISHING, INC., US  
[85] 2023-12-21  
[86] 2022-06-24 (PCT/US2022/034883)  
[87] (WO2022/272048)  
[30] US (63/214,692) 2021-06-24

[21] **3,223,880**  
[13] A1

[51] **Int.Cl. G01N 33/549 (2006.01) H01L 21/62 (2006.01)**  
[25] EN  
[54] **CONDUCTOMETRIC SENSOR FOR DETECTING A BIOANALYTE AND A METHOD FOR THE DETECTION THEREOF**  
[54] **CAPTEUR DE CONDUCTOMETRIQUE POUR DETECTION D'UN BIOANALYTE ET PROCEDE DE DETECTION ASSOCIE**  
[72] SRIRAM, SHARATH, AU  
[72] PERERA, GANGANATH, AU  
[72] BHASKARAN, MADHU, AU  
[71] ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY, AU  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/AU2022/050633)  
[87] (WO2022/266710)  
[30] AU (2021901897) 2021-06-23

[21] **3,223,881**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 37/00 (2006.01) C07K 16/06 (2006.01) C07K 16/42 (2006.01)**  
[25] EN  
[54] **METHOD OF PURIFYING IMMUNOGLOBULIN G AND USES THEREOF**  
[54] **PROCEDE DE PURIFICATION D'IMMUNOGLOBULINE G ET SES UTILISATIONS**  
[72] ANAND, ROOPSEE, DE  
[72] DOLLINGER, PETER, DE  
[72] HOLLER, LAURA, US  
[72] NEUENFELDT, MARTIN, DE  
[72] POLATYNSKA, MAGDALENA, DE  
[72] WILKA, HEIKE NICOLE, DE  
[72] ANDERS, KATRIN, DE  
[72] SCHULZE, NORBERT, DE  
[72] BOEREMA, DAVID, US  
[71] CSL BEHRING AG, CH  
[85] 2023-12-21  
[86] 2022-07-29 (PCT/IB2022/057039)  
[87] (WO2023/007445)  
[30] AU (2021902332) 2021-07-29  
[30] US (63/227,329) 2021-07-29  
[30] US (63/365,530) 2022-05-31

## Demandes PCT entrant en phase nationale

[21] **3,223,883**  
[13] A1

[51] **Int.Cl. B02C 13/28 (2006.01) A01G 23/06 (2006.01) B02C 18/18 (2006.01) B02C 18/36 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR A MULCHER**  
[54] **SYSTEME POUR UN BROYEUR**  
[72] FRATINI, FRANCESCO, IT  
[71] FEMAC S.R.L., IT  
[85] 2023-12-21  
[86] 2022-08-09 (PCT/IB2022/057405)  
[87] (WO2023/017408)  
[30] IT (102021000021689) 2021-08-10

[21] **3,223,885**  
[13] A1

[51] **Int.Cl. H04W 4/38 (2018.01) G06Q 10/08 (2023.01) H04W 4/029 (2018.01)**  
[25] EN  
[54] **CONTROL MONITORING USING WIRELESS TRACKING DEVICES**  
[54] **SURVEILLANCE DE COMMANDE A L'AIDE DE DISPOSITIFS DE SUIVI SANS FIL**  
[72] VOLKERINK, HENDRIK J., US  
[72] KHOCHÉ, AJAY, US  
[72] GREGOIRE-WRIGHT, TAYLOR, US  
[72] STORRS, AARON, US  
[71] TRACKONOMY SYSTEMS, INC., US  
[85] 2023-12-21  
[86] 2022-06-24 (PCT/US2022/035004)  
[87] (WO2022/272137)  
[30] US (63/215,379) 2021-06-25  
[30] US (63/291,467) 2021-12-20

[21] **3,223,887**  
[13] A1

[51] **Int.Cl. C08G 18/24 (2006.01) C07C 263/10 (2006.01) C08G 18/18 (2006.01) C08G 18/48 (2006.01) C08G 18/76 (2006.01)**  
[25] EN  
[54] **RECOVERING DI- AND/OR POLYISOCYANATES FROM PU-DEPOLYMERISATION PROCESSES**  
[54] **RECUPERATION DE DIPOLYISOCYANATES ET/OU DE POLYISOCYANATES A PARTIR DE PROCEDES DE DEPOLYMERISATION DE POLYURETHANES (PU)**  
[72] MARQUARDT, RALPH, DE  
[72] HUBEL, ROLAND, DE  
[72] TERHEIDEN, ANNEGRET, DE  
[72] MUHLHAUS, FELIX, DE  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2023-12-21  
[86] 2022-06-28 (PCT/EP2022/067705)  
[87] (WO2023/275036)  
[30] EP (21183452.8) 2021-07-02

[21] **3,223,889**  
[13] A1

[51] **Int.Cl. A61K 9/20 (2006.01) A61K 31/00 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITIONS OF AN EPIDERMAL GROWTH FACTOR RECEPTOR INHIBITOR**  
[54] **COMPOSITIONS PHARMACEUTIQUES D'UN INHIBITEUR DU RECEPTEUR DU FACTEUR DE CROISSANCE EPIDERMIQUE**  
[72] KINKEMA, CAITLIN N., US  
[72] MAZAIK, DEBRA L., US  
[72] MEDENDORP, CLARE AUBREY, US  
[72] VAZE, ONKAR SHRIPAD, US  
[71] BLUEPRINT MEDICINES CORPORATION, US  
[85] 2023-12-21  
[86] 2022-06-22 (PCT/US2022/034433)  
[87] (WO2022/271765)  
[30] US (63/214,099) 2021-06-23

[21] **3,223,890**  
[13] A1

[51] **Int.Cl. A01C 7/04 (2006.01)**  
[25] EN  
[54] **AGRICULTURAL IMPLEMENT AND METHOD FOR FEEDING GRANULAR MATERIAL**  
[54] **OUTIL AGRICOLE ET PROCEDE D'ALIMENTATION EN MATERIAU GRANULAIRE**  
[72] GILSTRING, GERT, SE  
[71] VADERSTAD HOLDING AB, SE  
[85] 2023-12-21  
[86] 2022-07-05 (PCT/SE2022/050686)  
[87] (WO2023/282830)  
[30] SE (2150888-2) 2021-07-06

[21] **3,223,893**  
[13] A1

[51] **Int.Cl. F02G 1/043 (2006.01)**  
[25] EN  
[54] **HEAT PUMP SYSTEM AND A METHOD OF OPERATING A HEAT PUMP SYSTEM**  
[54] **SYSTEME DE POMPE A CHALEUR ET PROCEDE DE COMMANDE D'UN SYSTEME DE POMPE A CHALEUR**  
[72] WHITTAKER, KENNETH, GB  
[72] WATT, KEITH GRAHAM, GB  
[72] GRAESSNER, MATTHIAS, GB  
[71] WHITTAKER ENGINEERING (STONEHAVEN) LIMITED, GB  
[85] 2023-12-21  
[86] 2022-07-08 (PCT/GB2022/051772)  
[87] (WO2023/281277)  
[30] GB (2109915.5) 2021-07-09

[21] **3,223,894**  
[13] A1

[51] **Int.Cl. E01C 13/08 (2006.01)**  
[25] EN  
[54] **SPORTS SURFACE, ITS USE AND ITS METHOD OF MANUFACTURING**  
[54] **SURFACE DE SPORT, SON UTILISATION ET SON PROCEDE DE FABRICATION**  
[72] YOUNG, COLIN, NL  
[72] SETHUNATH, SALIL, NL  
[72] HEERINK, HEIN ANTON, NL  
[72] VOGEL, MICHAEL RENE, NL  
[72] KOLKMAN, NIELS GERHARDUS, NL  
[71] TEN CATE THIOLON B.V., NL  
[85] 2023-12-21  
[86] 2022-07-08 (PCT/EP2022/069067)  
[87] (WO2023/281056)  
[30] NL (2028688) 2021-07-09

## PCT Applications Entering the National Phase

[21] **3,223,895**  
[13] A1

[51] **Int.Cl. C08G 18/24 (2006.01) C08G 18/28 (2006.01) C08G 18/48 (2006.01) C08G 18/76 (2006.01)**

[25] EN

[54] **PRODUCTION OF PU FOAMS USING RECYCLED POLYOLS**

[54] **PRODUCTION DE MOUSSES DE PU A L'AIDE DE POLYOLS RECYCLES**

[72] HUBEL, ROLAND, DE

[72] TERHEIDEN, ANNEGRET, DE

[72] MUHLHAUS, FELIX, DE

[71] EVONIK OPERATIONS GMBH, DE

[85] 2023-12-21

[86] 2022-06-28 (PCT/EP2022/067704)

[87] (WO2023/275035)

[30] EP (21183448.6) 2021-07-02

[21] **3,223,896**  
[13] A1

[51] **Int.Cl. A61B 5/1486 (2006.01)**

[25] EN

[54] **ANALYTE SENSOR AND METHOD FOR MANUFACTURING AN ANALYTE SENSOR**

[54] **CAPTEUR D'ANALYTE ET PROCEDE DE FABRICATION D'UN CAPTEUR D'ANALYTE**

[72] SLIOZBERG, KIRILL, DE

[72] STECK, ALEXANDER, DE

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

[85] 2023-12-21

[86] 2022-06-30 (PCT/US2022/035650)

[87] (WO2023/283096)

[30] US (63/218,510) 2021-07-06

[30] EP (21183849.5) 2021-07-06

[21] **3,223,897**  
[13] A1

[25] EN

[54] **METHOD AND DEVICES FOR LIQUID UNLOADING OF GAS WELLS**

[54] **PROCEDE ET DISPOSITIFS DE DECHARGEMENT DE LIQUIDE DE Puits DE GAZ**

[72] MALEKZADEH, REZA, NL

[72] SISOUW DE ZILWA, MARK GILBERT, NL

[71] ENERGY TRANSITION TECHNOLOGIES B.V., NL

[85] 2023-12-21

[86] 2022-07-04 (PCT/NL2022/050381)

[87] (WO2023/277693)

[30] NL (1044081) 2021-07-02

[21] **3,223,899**  
[13] A1

[51] **Int.Cl. H04L 9/32 (2006.01) H04W 12/069 (2021.01) H04W 12/47 (2021.01) H04L 9/40 (2022.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR SCALABLE CRYPTOGRAPHIC AUTHENTICATION OF CONTACTLESS CARDS**

[54] **SYSTEMES ET PROCEDES POUR AUTHENTICATION CRYPTOGRAPHIQUE EVOLUTIVE DE CARTES SANS CONTACT**

[72] OSBORN, KEVIN, US

[72] EDWARDS, SAMUEL PATRICK, US

[71] CAPITAL ONE SERVICES, LLC, US

[85] 2023-12-21

[86] 2022-06-16 (PCT/US2022/033729)

[87] (WO2022/271519)

[30] US (17/353,556) 2021-06-21

[21] **3,223,901**  
[13] A1

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

[25] EN

[54] **OPTOACOUSTIC PROBE**

[54] **SONDE OPTOACOUSTIQUE**

[72] FELDMAN, SAMUEL HENRY, US

[72] SAENZ, XAVIER, US

[72] HARRIS, JEFFREY NELSON, US

[72] LAMBERSON, GEORGE, US

[71] SENO MEDICAL INSTRUMENTS, INC., US

[85] 2023-12-21

[86] 2022-07-27 (PCT/US2022/074177)

[87] (WO2023/010029)

[30] US (17/387,743) 2021-07-28

[21] **3,223,902**  
[13] A1

[51] **Int.Cl. A24B 13/00 (2006.01) A24B 15/16 (2020.01) A24B 15/30 (2006.01)**

[25] EN

[54] **ORAL PRODUCTS AND METHOD OF MANUFACTURE**

[54] **PRODUITS POUR VOIE BUCCALE ET PROCEDE DE FABRICATION**

[72] SVENSSON, RICHARD, SE

[71] NICOVENTURES TRADING LIMITED, GB

[85] 2023-12-21

[86] 2022-06-24 (PCT/IB2022/055877)

[87] (WO2022/269556)

[30] US (63/215,204) 2021-06-25

[21] **3,223,903**  
[13] A1

[51] **Int.Cl. H01M 4/134 (2010.01) H01M 10/052 (2010.01) H01M 10/44 (2006.01)**

[25] EN

[54] **LITHIUM BATTERY AND PREPARATION METHOD THEREFOR, CHARGING METHOD, AND POWER VEHICLE**

[54] **BATTERIE AU LITHIUM, SON PROCEDE DE PREPARATION, PROCEDE DE CHARGE ET VEHICULE ELECTRIQUE**

[72] PAN, YI, CN

[72] MA, YONGJUN, CN

[72] GUO, ZIZHU, CN

[72] WANG, LIANGJUN, CN

[72] SUN, HUAJUN, CN

[71] BYD COMPANY LIMITED, CN

[85] 2023-12-21

[86] 2022-05-30 (PCT/CN2022/095952)

[87] (WO2023/273760)

[30] CN (202110730852.6) 2021-06-29

[21] **3,223,904**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01)**

[25] EN

[54] **COMPOUND AND METHOD FOR AN ALLELE-SPECIFIC EDITING OF THE ELANE GENE**

[54] **COMPOSE ET PROCEDE POUR UNE EDITION SPECIFIQUE D'UN ALLELE DU GENE ELANE**

[72] SKOKOWA, JULIA, DE

[72] NASRI, MASOUD, DE

[72] MIR, PERIHAN, DE

[71] EBERHARD KARLS UNIVERSITAET TUEBINGEN MEDIZINISCHE FAKULTAET, DE

[85] 2023-12-21

[86] 2022-07-08 (PCT/EP2022/069149)

[87] (WO2023/281083)

[30] EP (21184589.6) 2021-07-08



## Demandes PCT entrant en phase nationale

[21] **3,223,905**  
[13] A1

[51] **Int.Cl. A61K 9/48 (2006.01) A61K 31/00 (2006.01) A61K 31/33 (2006.01) A61K 31/435 (2006.01)**

[25] EN

[54] **METHOD TO CONTROL ADMINISTRATION OF ACTIVE SUBSTANCE TO THE DIGESTIVE TRACT**

[54] **PROCEDE DE CONTROLE DE L'ADMINISTRATION D'UNE SUBSTANCE ACTIVE DANS LE TUBE DIGESTIF**

[72] BELLAMINE, AOUATEF, US  
[72] WHITE, TYLER, US  
[72] DURKEE, SHANE, US  
[71] LONZA GREENWOOD LLC, US  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/US2022/034683)  
[87] (WO2022/271922)  
[30] US (63/214,438) 2021-06-24

[21] **3,223,908**  
[13] A1

[51] **Int.Cl. G06N 10/60 (2022.01)**

[25] EN

[54] **PERFORMING UNBIASED FERMIONIC QUANTUM MONTE CARLO CALCULATIONS USING QUANTUM COMPUTERS AND SHADOW TOMOGRAPHY**

[54] **REALISATION DE CALCULS DE MONTE CARLO QUANTIQUES NON BIAISES UTILISANT DES ORDINATEURS QUANTIQUES ET UNE TOMOGRAPHIE D'OMBRE**

[72] HUGGINS, WILLIAM, US  
[72] LEE, JOONHO, US  
[72] BABBUSH, RYAN, US  
[71] GOOGLE LLC, US  
[85] 2023-12-21  
[86] 2022-06-28 (PCT/US2022/035334)  
[87] (WO2023/278462)  
[30] US (63/215,842) 2021-06-28

[21] **3,223,911**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/0205 (2006.01) A61B 5/021 (2006.01) A61B 5/12 (2006.01) A61B 5/0537 (2021.01) A61B 5/085 (2006.01) A61B 5/087 (2006.01) A61B 5/117 (2016.01) A61B 5/1455 (2006.01)**

[25] FR

[54] **DEVICE FOR PHYSIOLOGICAL MEASUREMENTS, AND ASSOCIATED SET-UP METHOD**

[54] **DISPOSITIF DE MESURES PHYSIOLOGIQUES ET PROCEDE D'INSTALLATION ASSOCIE**

[72] COUTARD, PATRICE, FR  
[71] MATRIX, FR  
[85] 2023-12-21  
[86] 2022-06-22 (PCT/FR2022/051215)  
[87] (WO2022/269192)  
[30] FR (FR2106678) 2021-06-23

[21] **3,223,906**  
[13] A1

[51] **Int.Cl. G06T 7/00 (2017.01) G16H 30/40 (2018.01) G06V 10/74 (2022.01) G06T 5/00 (2024.01) G06T 5/10 (2006.01)**

[25] EN

[54] **CLASSIFICATION AND IMPROVEMENT OF QUALITY OF VASCULAR IMAGES**

[54] **CLASSIFICATION ET AMELIORATION DE LA QUALITE D'IMAGES VASCULAIRES**

[72] LAVOIE, BENJAMIN R., CA  
[72] RANGAYYAN, RANGARAJ M., CA  
[72] OLOUMI, FARAZ, CA  
[71] 2438799 ALBERTA LTD., CA  
[85] 2023-12-21  
[86] 2022-06-30 (PCT/CA2022/051047)  
[87] (WO2023/272395)  
[30] EP (21182973.4) 2021-06-30

[21] **3,223,909**  
[13] A1

[51] **Int.Cl. C02F 11/123 (2019.01) A47K 11/02 (2006.01)**

[25] EN

[54] **BUFFER TANK SEPARATION AND HOMOGENIZATION SYSTEM**

[54] **SYSTEME DE SEPARATION ET D'HOMOGENEISATION DE RESERVOIR TAMPON**

[72] YEE, SHANNON, US  
[72] HASLER, DAVID, CH  
[72] LEHMANN, ROLAND, CH  
[72] SEILER, CHRISTIAN, CH  
[72] FORRER, CHRISTIAN, CH  
[72] FARRER, CHRISTOPH, CH  
[72] STAUB, ANDREAS, CH  
[72] CADUFF, MARCO, CH  
[72] GLATTHARD, JANINE, CH  
[72] SCHLAURI, MATHIAS, CH  
[72] GEMPERLI, ADRIAN, CH  
[72] FISCHER, FLORIAN, CH  
[72] RUDISULI, DANIEL, CH  
[72] FRASSON, VALDINEI, CH  
[71] GEORGIA TECH RESEARCH CORPORATION, US  
[85] 2023-12-21  
[86] 2022-07-15 (PCT/US2022/037396)  
[87] (WO2023/288114)  
[30] US (63/222,726) 2021-07-16

[21] **3,223,912**  
[13] A1

[51] **Int.Cl. A61K 9/16 (2006.01) A61K 9/20 (2006.01) A61K 9/48 (2006.01) A61K 9/50 (2006.01)**

[25] EN

[54] **HIGH-THROUGHPUT PREPARATION OF MICROPARTICLES WITH PULSATILE RELEASE**

[54] **PREPARATION A HAUT RENDEMENT DE MICROPARTICULES A LIBERATION PULSATILE**

[72] MCHUGH, KEVIN, US  
[72] GRAF, TYLER, US  
[71] WILLIAM MARSH RICE UNIVERSITY, US  
[85] 2023-12-21  
[86] 2022-06-21 (PCT/US2022/073058)  
[87] (WO2022/272247)  
[30] US (63/213,082) 2021-06-21

## PCT Applications Entering the National Phase

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[21] **3,223,916**  
[13] A1

[51] **Int.Cl. H01S 3/067 (2006.01)**  
[25] EN  
[54] **COHERENT BEAM COMBINATION SYSTEM AND CONTROL METHOD THEREOF**  
[54] **SYSTEME DE COMBINAISON DE FAISCEAU COHERENT ET PROCEDE DE COMMANDE ASSOCIE**  
[72] BISESTO, FABRIZIO GIUSEPPE, IT  
[72] PERNA, ALESSANDRO, IT  
[72] COPPOLA, FRANCESCO, IT  
[72] COSENTINO, ALBERTO, IT  
[71] LEONARDO S.P.A., IT  
[85] 2023-12-21  
[86] 2023-04-05 (PCT/IB2023/053454)  
[87] (WO2023/194921)  
[30] EP (22425015.9) 2022-04-05  
[30] IT (102022000013186) 2022-06-22

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[21] **3,223,917**  
[13] A1

[51] **Int.Cl. A61K 8/11 (2006.01) A61K 9/48 (2006.01) A61K 8/06 (2006.01)**  
[25] EN  
[54] **LIQUID FILLED CAPSULE WITH TWO PHASE LIQUID FILL**  
[54] **CAPSULE REMPLIE DE LIQUIDE AVEC REMPLISSAGE DE LIQUIDE A DEUX PHASES**  
[72] SINGLETARY, SCARLETT, US  
[72] GLAB, STANISLAW, US  
[72] FOWLER, KELLI, US  
[72] WHITE, TYLER, US  
[71] LONZA GREENWOOD LLC, US  
[85] 2023-12-21  
[86] 2022-06-24 (PCT/US2022/034866)  
[87] (WO2023/278265)  
[30] US (63/215,601) 2021-06-28

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[21] **3,223,920**  
[13] A1

[51] **Int.Cl. A23L 33/135 (2016.01)**  
[25] EN  
[54] **BIFIDOBACTERIUM LONGUM TRANSITIONAL MICROORGANISMS, COMPOSITIONS AND USES THEREOF**  
[54] **MICRO-ORGANISMES TRANSITOIRES DE BIFIDOBACTERIUM LONGUM, COMPOSITIONS ET UTILISATIONS DE CEUX-CI**  
[72] XAVIER, RAMNIK, US  
[72] VLAMAKIS, HERA, US  
[72] VATANEN, TOMMI, US  
[72] SAKWINSKA, OLGA, CH  
[72] SIEGWALD, LEA, CH  
[72] DUBOUX, STEPHANE, CH  
[72] NGOM-BRU, CATHERINE, CH  
[71] THE BROAD INSTITUTE, INC., US  
[71] THE GENERAL HOSPITAL CORPORATION, US  
[71] SOCIETE DES PRODUITS NESTLE, S.A., CH  
[85] 2023-12-21  
[86] 2022-06-28 (PCT/US2022/035310)  
[87] (WO2023/278441)  
[30] US (63/216,127) 2021-06-29

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[21] **3,223,922**  
[13] A1

[51] **Int.Cl. A61K 31/496 (2006.01) A61P 25/28 (2006.01)**  
[25] EN  
[54] **MEDICAMENTS COMPRISING GLYCOSIDASE INHIBITORS**  
[54] **MEDICAMENTS COMPRENANT DES INHIBITEURS DE GLYCOSIDASE**  
[72] BEHER, DIRK, CH  
[72] PERMANNE, BRUNO, FR  
[72] POKORNY, ROLF, CH  
[72] QUATTROPANI, ANNA, CH  
[71] ASCENEURON SA, CH  
[85] 2023-12-21  
[86] 2021-07-05 (PCT/EP2021/068532)  
[87] (WO2023/280381)

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[21] **3,223,924**  
[13] A1

[51] **Int.Cl. E21B 23/04 (2006.01) E21B 33/04 (2006.01) E21B 43/10 (2006.01)**  
[25] EN  
[54] **DEBRIS EXCLUSIVE-PRESSURE INTENSIFIED-PRESSURE BALANCED SETTING TOOL FOR LINER HANGER**  
[54] **OUTIL DE REGLAGE A EQUILIBRAGE DE PRESSION INTENSIFIEE-PRESSION EXCLUSIVE DE DEBRIS POUR DISPOSITIF DE SUSPENSION DE COLONNE PERDUE**  
[72] KALB, FRANK D., US  
[72] ALONZO, ERIC D., US  
[72] PETRENKO, ALEXEY, US  
[71] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US  
[85] 2023-12-21  
[86] 2022-06-29 (PCT/US2022/035606)  
[87] (WO2023/009272)  
[30] US (17/386,177) 2021-07-27

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[21] **3,223,925**  
[13] A1

[51] **Int.Cl. B65D 21/08 (2006.01) B65D 1/44 (2006.01)**  
[25] EN  
[54] **CONTAINERS**  
[54] **CONTENANTS**  
[72] DRECHSLER, ALFONSE, US  
[71] INSTANT BRANDS HOLDINGS INC., US  
[85] 2023-12-21  
[86] 2022-06-30 (PCT/US2022/035671)  
[87] (WO2023/278662)  
[30] US (63/217,548) 2021-07-01

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[21] **3,223,926**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **CLAMPING INSTRUMENT**  
[54] **INSTRUMENT DE SERRAGE**  
[72] WANG, BAO, CN  
[72] XU, JUN, CN  
[72] LIN, LIN, CN  
[71] SHANGHAI HUIHE MEDICAL CO., LTD, CN  
[71] SHANGHAI HUIHE HEALTHCARE TECHNOLOGY CO., LTD., CN  
[85] 2023-12-21  
[86] 2022-08-02 (PCT/CN2022/109793)  
[87] (WO2023/029861)  
[30] CN (202110999729.4) 2021-08-30

## Demandes PCT entrant en phase nationale

[21] **3,223,930**  
[13] A1

[51] **Int.Cl. C02F 11/08 (2006.01) C02F 11/13 (2019.01)**

[25] EN

[54] **MICRO SUPER CRITICAL WATER OXIDATION SOLIDS TREATMENT SYSTEM**

[54] **SYSTEME DE TRAITEMENT DE SOLIDES PAR OXYDATION D'EAU MICROSUPERCRITIQUE**

[72] YEE, SHANNON, US  
[72] HASLER, DAVID, CH  
[72] LEHMANN, ROLAND, CH  
[72] SEILER, CHRISTIAN, CH  
[72] FORRER, CHRISTIAN, CH  
[72] FARRER, CHRISTOPH, CH  
[72] STAUB, ANDREAS, CH  
[72] CADUFF, MARCO, CH  
[72] GLATTHARD, JANINE, CH  
[72] GEMPERLI, ADRIAN, CH  
[72] FISCHER, FLORIAN, CH  
[72] RUDISULI, DANIEL, CH  
[72] FRASSON, VALDINEL, CH  
[72] FISCHER, JOSEF, CH  
[72] BLEIKER, TOBIAS, CH  
[71] GEORGIA TECH RESEARCH CORPORATION, US

[85] 2023-12-21  
[86] 2022-07-15 (PCT/US2022/073815)  
[87] (WO2023/288329)  
[30] US (63/222,736) 2021-07-16

[21] **3,223,932**  
[13] A1

[51] **Int.Cl. C01B 17/22 (2006.01) H01M 10/0562 (2010.01)**

[25] EN

[54] **PROCESS OF OBTAINING A POWDER OF LITHIUM SULFIDE, AND USE THEREOF TO PREPARE A LPS COMPOUND**

[54] **PROCEDE D'OBTENTION D'UNE POUDRE DE SULFURE DE LITHIUM ET SON UTILISATION POUR PREPARER UN COMPOSE LPS**

[72] JUS, SEBASTIEN, FR  
[72] D'ALENCON, LAURIANE, FR  
[72] LE MERCIER, THIERRY, FR  
[71] SPECIALTY OPERATIONS FRANCE, FR

[85] 2023-12-21  
[86] 2022-07-05 (PCT/EP2022/068495)  
[87] (WO2023/280797)  
[30] EP (21315122.8) 2021-07-07

[21] **3,223,933**  
[13] A1

[51] **Int.Cl. A24B 15/30 (2006.01) A01H 3/02 (2006.01)**

[25] EN

[54] **METHOD**

[54] **PROCEDE**

[72] MONTSERRAT SANCHEZ PENA, MARIA, GB  
[72] GELINAS, MARTINE, CA  
[72] RENTON, CARLA, ZA  
[71] NICOVENTURES TRADING LIMITED, GB

[85] 2023-12-21  
[86] 2022-07-14 (PCT/GB2022/051827)  
[87] (WO2023/285828)  
[30] GB (2110266.0) 2021-07-16

[21] **3,223,934**  
[13] A1

[51] **Int.Cl. G06F 21/62 (2013.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR ELECTRONIC DATA PRIVACY, CONSENT, AND CONTROL IN ELECTRONIC TRANSACTIONS**

[54] **SYSTEMES ET PROCEDES DE CONFIDENTIALITE, CONSENTEMENT ET CONTROLE DE DONNEES ELECTRONIQUES DANS DES TRANSACTIONS ELECTRONIQUES**

[72] REDNISS, JESSE, US  
[72] REDNISS, SETH, US  
[72] KIM, STEPHANO, US  
[72] SCIBELLI, MARC, US  
[72] LOWRY, WILL., US  
[71] QONSENT INC., US

[85] 2023-12-21  
[86] 2022-05-20 (PCT/US2022/030302)  
[87] (WO2022/271361)  
[30] US (63/215,320) 2021-06-25

[21] **3,223,935**  
[13] A1

[51] **Int.Cl. H04W 8/18 (2009.01) H04W 8/20 (2009.01) H04W 88/18 (2009.01)**

[25] EN

[54] **FLEXIBLE REMOTE SIM PROVISIONING**

[54] **FOURNITURE DE SIM A DISTANCE FLEXIBLE**

[72] NITSCH, NILS, DE  
[72] LI, HARRY, SE  
[72] THORSTENSSON, TOMMY, SE  
[72] THOREN, DAN, SE  
[72] HAUBNER, MARKUS, DE  
[72] KITZMANN, ANDREAS, DE  
[71] GIESECKE+DEVRIENT EPAYMENTS GMBH, DE

[85] 2023-12-21  
[86] 2022-06-30 (PCT/EP2022/025300)  
[87] (WO2023/274583)  
[30] DE (10 2021 003 391.4) 2021-07-01

[21] **3,223,936**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01)**

[25] EN

[54] **CONJUGATES COMPRISING PHOSPHOANTIGENS AND THEIR USE IN THERAPY**

[54] **CONJUGUES COMPRENANT DES PHOSPHOANTIGENES ET LEUR UTILISATION A DES FINS THERAPEUTIQUES**

[72] ELGERSMA, RONALD CHRISTIAAN, NL  
[72] WAALBOER, DENNIS CHRISTIAN JOHANNES, NL  
[71] BYONDIS B.V., NL

[85] 2023-12-21  
[86] 2022-06-28 (PCT/EP2022/067693)  
[87] (WO2023/275025)  
[30] EP (21182160.8) 2021-06-28

## PCT Applications Entering the National Phase

[21] **3,223,937**  
[13] A1

[51] **Int.Cl. C01G 15/00 (2006.01) C01G 25/00 (2006.01) C01G 35/00 (2006.01) C30B 29/22 (2006.01)**

[25] EN

[54] **LITHIUM LANTHANUM ZIRCONIUM OXIDE (LLZO) MATERIALS**

[54] **MATERIAUX A BASE D'OXYDE DE LITHIUM DE LANTHANE ET DE ZIRCONIUM (LLZO)**

[72] HOLMAN, RICHARD K., US

[72] WROBEL, GREGORY M., US

[71] 6K INC., US

[85] 2023-12-21

[86] 2022-07-21 (PCT/US2022/037867)

[87] (WO2023/009380)

[30] US (63/203,810) 2021-07-30

[30] US (63/273,833) 2021-10-29

[21] **3,223,938**  
[13] A1

[51] **Int.Cl. E04H 12/10 (2006.01) E04H 12/08 (2006.01)**

[25] EN

[54] **TOWER HAVING LIGHTWEIGHT AND WEATHERPROOF CONSTRUCTION**

[54] **TOUR A CONSTRUCTION LEGERE ET RESISTANTE AUX INTEMPERIES**

[72] POULIN, ANDRE, CA

[71] LMO INC., CA

[85] 2023-12-21

[86] 2022-09-02 (PCT/CA2022/051324)

[87] (WO2023/028710)

[30] US (63/240,010) 2021-09-02

[21] **3,223,939**  
[13] A1

[51] **Int.Cl. A01B 76/00 (2006.01) H02J 7/00 (2006.01) H02M 7/44 (2006.01)**

[25] EN

[54] **SYSTEM FOR POWERING A PLURALITY OF IMPLEMENTS**

[54] **SYSTEME D'ALIMENTATION D'UNE PLURALITE D'OUTILS**

[72] BALDASSARE, FRED, CA

[71] GAMOTECH INC., CA

[85] 2023-12-21

[86] 2022-06-28 (PCT/IB2022/056008)

[87] (WO2023/275751)

[30] US (63/216,474) 2021-06-29

[21] **3,223,940**  
[13] A1

[51] **Int.Cl. A24F 40/42 (2020.01)**

[25] EN

[54] **REFILLING APPARATUS**

[54] **APPAREIL DE RECHARGE**

[72] TRAN, MY-LINH, GB

[72] POTTER, STEPHEN, GB

[72] KERSEY, ROBERT, GB

[71] NICOVENTURES TRADING LIMITED, GB

[85] 2023-12-21

[86] 2022-07-01 (PCT/GB2022/051700)

[87] (WO2023/281245)

[30] GB (2109686.2) 2021-07-05

[30] GB (2109693.8) 2021-07-05

[21] **3,223,941**  
[13] A1

[51] **Int.Cl. G01V 5/10 (2006.01)**

[25] EN

[54] **PULSED NEUTRON LOGGING FOR PETROLITHIUM**

[54] **DIAGRAPHIE PAR NEUTRONS PULSES POUR LA PRODUCTION DE PETROLE**

[72] SCHMID, GREGORY, US

[72] PEMPER, RICHARD, US

[72] MEKIC, NATASA, US

[71] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US

[85] 2023-12-21

[86] 2022-05-10 (PCT/US2022/072231)

[87] (WO2023/023416)

[30] US (17/406,379) 2021-08-19

[21] **3,223,942**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01)**

[25] EN

[54] **ANTI-OX40 MONOCLONAL ANTIBODY AND METHODS OF USE THEREOF**

[54] **ANTICORPS MONOCLONAL ANTI-OX40 ET SES PROCEDES D'UTILISATION**

[72] ADRIAN, FRANCISCO, US

[72] SCHWEIZER, LIANG, US

[72] ZHANG, QIAN, US

[72] LU, YUN-YUEH, CN

[72] RAUE, ANDREAS, US

[71] HIFIBIO (HK) LIMITED, CN

[85] 2023-12-21

[86] 2022-06-28 (PCT/IB2022/000372)

[87] (WO2023/275616)

[30] US (63/216,189) 2021-06-29

[21] **3,223,943**  
[13] A1

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

[25] EN

[54] **COMPOSITIONS AND METHODS FOR TREATMENT OF MELANOMA**

[54] **COMPOSITIONS ET METHODES DE TRAITEMENT DU MELANOME**

[72] SAHIN, UGUR, DE

[72] JABULOWSKY, ROBERT A., DE

[72] SCHWARCK-KOKARAKIS, DOREEN, DE

[72] TURECI, OZLEM, DE

[71] BIONTECH SE, DE

[85] 2023-12-21

[86] 2022-07-28 (PCT/EP2022/071276)

[87] (WO2023/006920)

[30] US (63/227,323) 2021-07-29

[30] US (63/256,377) 2021-10-15

[21] **3,223,944**  
[13] A1

[51] **Int.Cl. G12B 17/02 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR BLOCKING AND DELIVERING ELECTROMAGNETIC ENERGY**

[54] **APPAREIL ET PROCEDE DE BLOCAGE ET DE DISTRIBUTION D'ENERGIE ELECTROMAGNETIQUE**

[72] DURIEUX, PAUL, CA

[71] DURIEUX, PAUL, CA

[85] 2023-12-21

[86] 2022-06-21 (PCT/CA2022/050995)

[87] (WO2022/266755)

[30] US (63/202,701) 2021-06-21

## Demandes PCT entrant en phase nationale

[21] **3,223,946**  
[13] A1

[51] **Int.Cl. C12Q 1/6841 (2018.01) C12Q 1/6804 (2018.01)**  
[25] EN  
[54] **SINGLE-CELL PROFILING OF RNA TRANSLATION STATUS**  
[54] **PROFILAGE UNICELLULAIRE DE L'ETAT DE TRADUCTION D'ARN**  
[72] WANG, XIAO, US  
[72] ZENG, HU, US  
[72] REN, JINGYI, US  
[71] THE BROAD INSTITUTE, INC., US  
[71] MASSACHUSETTS INSTITUTE OF TECHNOLOGY, US  
[85] 2023-12-21  
[86] 2022-06-28 (PCT/US2022/035271)  
[87] (WO2023/278409)  
[30] US (63/216,315) 2021-06-29

[21] **3,223,947**  
[13] A1

[51] **Int.Cl. F28D 9/00 (2006.01)**  
[25] FR  
[54] **AIRCRAFT ENGINE SUSPENSION PYLON PROVIDED WITH A COUNTERFLOW COOLING EXCHANGER**  
[54] **PYLONE DE SUSPENSION D'UN MOTEUR D'AERONEF EQUIPE D'UN ECHANGEUR DE REFROIDISSEMENT A CONTRE-COURANT**  
[72] RICARD, DIDIER, FR  
[72] BONNIVARD, FLORIAN, FR  
[71] LIEBHERR-AEROSPACE TOULOUSE SAS, FR  
[85] 2023-12-21  
[86] 2022-07-12 (PCT/EP2022/069394)  
[87] (WO2023/285426)  
[30] FR (FR2107724) 2021-07-16

[21] **3,223,948**  
[13] A1

[51] **Int.Cl. G16H 50/70 (2018.01) G16H 10/40 (2018.01) G16H 20/10 (2018.01) G16H 50/20 (2018.01)**  
[25] EN  
[54] **ANOMALY DETECTION BASED ON COMPLETE BLOOD COUNTS USING MACHINE LEARNING**  
[54] **DETECTION D'ANOMALIES BASEE SUR DES NUMERATIONS GLOBULAIRES COMPLETES A L'AIDE DE L'APPRENTISSAGE AUTOMATIQUE**  
[72] GLEADALL, NICHOLAS STEPHEN, GB  
[72] ROBERTS, MICHAEL THOMAS, GB  
[71] THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE, GB  
[85] 2023-12-21  
[86] 2022-07-01 (PCT/GB2022/051710)  
[87] (WO2023/275568)  
[30] GB (2109560.9) 2021-07-01

[21] **3,223,949**  
[13] A1

[51] **Int.Cl. B65G 27/04 (2006.01)**  
[25] EN  
[54] **VIBRATORY MOTION CONVEYOR SYSTEM FOR SYRINGE PLUNGERS**  
[54] **SYSTEME DE TRANSPORTEUR A MOUVEMENT VIBRATOIRE POUR PISTONS DE SERINGUE**  
[72] BENINCASA, JOHN S., US  
[72] LAROSE, ERIK M., US  
[71] W. L. GORE & ASSOCIATES, INC., US  
[85] 2023-12-21  
[86] 2022-07-19 (PCT/US2022/037540)  
[87] (WO2023/003841)  
[30] US (63/223,159) 2021-07-19

[21] **3,223,950**  
[13] A1

[51] **Int.Cl. G07F 11/16 (2006.01) G07F 17/00 (2006.01)**  
[25] EN  
[54] **METHOD, FEEDER UNIT AND DISPENSING SYSTEM FOR DISPENSING DISCRETE MEDICAMENTS**  
[54] **PROCEDE, UNITE D'ALIMENTATION ET SYSTEME DE DISTRIBUTION POUR DISTRIBUER DES MEDICAMENTS DISCRETS**  
[72] WIJNIA, AALF, NL  
[72] 'T LAM, HENDRIK LEENDERT, NL  
[72] VAN VOORN, PATRICK, NL  
[72] SCHEIDE, ROGIER, NL  
[71] VMI HOLLAND B.V., NL  
[85] 2023-12-21  
[86] 2022-06-22 (PCT/NL2022/050361)  
[87] (WO2022/271026)  
[30] US (17/353,964) 2021-06-22

[21] **3,223,951**  
[13] A1

[51] **Int.Cl. C07K 7/06 (2006.01) A61P 3/10 (2006.01) C07K 7/08 (2006.01)**  
[25] EN  
[54] **PEPTIDE HAVING ANTIDIABETIC ACTIVITY AND USE THEREOF**  
[54] **PEPTIDE AYANT UNE ACTIVITE ANTIDIABETIQUE ET SON UTILISATION**  
[72] SHIN, MIN JEONG, KR  
[72] JEONG, IN HYEOK, KR  
[71] MEDI&GENE INC., KR  
[85] 2023-12-21  
[86] 2022-06-28 (PCT/KR2022/009198)  
[87] (WO2023/277508)  
[30] KR (10-2021-0084286) 2021-06-28

## PCT Applications Entering the National Phase

[21] **3,223,952**  
[13] A1

[51] **Int.Cl. H01M 10/052 (2010.01) H01M 10/0562 (2010.01) C01B 17/22 (2006.01) C01B 25/14 (2006.01)**

[25] EN

[54] **NEW METHOD FOR THE PREPARATION OF A LI-P-S-O PRODUCT AND CORRESPONDING PRODUCTS**

[54] **NOUVEAU PROCEDE DE PREPARATION D'UN PRODUIT LI-P-S-O ET PRODUITS CORRESPONDANTS**

[72] BRAIDA, MARC-DAVID, FR

[72] LE MERCIER, THIERRY, FR

[72] KUDU, OMER ULAS, FR

[72] MASQUELIER, CHRISTIAN, FR

[71] SOLVAY SA, BE

[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR

[71] UNIVERSITE DE PICARDIE JULES VERNE, FR

[85] 2023-12-21

[86] 2022-07-04 (PCT/EP2022/068407)

[87] (WO2023/280757)

[30] EP (21315121.0) 2021-07-06

[21] **3,223,953**  
[13] A1

[25] EN

[54] **RNAYLATION**

[54] **RNAYLATION**

[72] HOFER, KATHARINA, DE

[72] JASCHKE, ANDRES, DE

[71] MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN E.V., DE

[71] UNIVERSITAT HEIDELBERG, DE

[85] 2023-12-21

[86] 2022-04-21 (PCT/EP2022/060525)

[87] (WO2023/006264)

[30] EP (PCT/EP2021/071295) 2021-07-29

[21] **3,223,954**  
[13] A1

[51] **Int.Cl. C04B 28/04 (2006.01)**

[25] EN

[54] **DRY MORTAR COMPOSITION**

[54] **COMPOSITION DE MORTIER SEC**

[72] CARDOSO DA SILVA, LUIS, PT

[72] MARTY-BOUCHAR, MARIE, FR

[72] YAMMINE-MALESYS, JOUMANA, FR

[72] PEREIRA FERNANDES, VERA LUCIA, PT

[71] SAINT-GOBAIN WEBER FRANCE, FR

[85] 2023-12-21

[86] 2022-07-13 (PCT/EP2022/069538)

[87] (WO2023/285501)

[30] EP (21186031.7) 2021-07-16

[21] **3,223,955**  
[13] A1

[51] **Int.Cl. A61F 13/02 (2024.01)**

[25] EN

[54] **A NEGATIVE PRESSURE WOUND THERAPY (NPWT) DRESSING**

[54] **PANSEMENT POUR TRAITEMENT DE PLAIE PAR PRESSION NEGATIVE (NPWT)**

[72] HOLMEN, MALIN, SE

[72] BOLYOS, ELINOR, SE

[71] MOLNLYCKE HEALTH CARE AB, SE

[85] 2023-12-21

[86] 2022-06-20 (PCT/EP2022/066759)

[87] (WO2022/268737)

[30] EP (21180831.6) 2021-06-22

[21] **3,223,956**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61P 17/04 (2006.01)**

[25] EN

[54] **ANTI-CANINE INTERLEUKINE-31-RECEPTOR A (IL-31RA) ANTIBODIES AND THE USES THEREOF**

[54] **ANTICORPS ANTI-RECEPTEUR A DE L'INTERLEUKINE-31 CANIN (IL-31RA) ET LEURS UTILISATIONS**

[72] LEGER, OLIVIER, FR

[71] VETOQUINOL SA, FR

[85] 2023-12-21

[86] 2022-12-20 (PCT/EP2022/087135)

[87] (WO2023/118241)

[30] EP (21306860.4) 2021-12-20

[21] **3,223,957**  
[13] A1

[51] **Int.Cl. A61K 8/64 (2006.01)**

[25] EN

[54] **CYSTEINE REACTIVE PEPTIDES**

[54] **PEPTIDES REACTIFS A LA CYSTEINE**

[72] PALONI, JUSTIN, US

[71] PURVALA BIOSCIENCE, INC., US

[71] PALONI, JUSTIN, US

[85] 2023-12-21

[86] 2022-09-01 (PCT/US2022/037632)

[87] (WO2023/003906)

[21] **3,223,958**  
[13] A1

[51] **Int.Cl. B29C 70/16 (2006.01) B29C 70/20 (2006.01) B29C 70/22 (2006.01) B29C 70/88 (2006.01) B64D 45/02 (2006.01) D04B 1/12 (2006.01)**

[25] FR

[54] **KNITTED THREE-DIMENSIONAL ELECTROCONDUCTIVE MAT FOR USE AS A LIGHTNING-RESISTANT WALL**

[54] **NAPPE ELECTROCONDUCTRICE TRIDIMENSIONNELLE TRICOTEE POUR CONSTITUER UNE PAROI RESISTANT A LA Foudre**

[72] DUMONT, NICOLAS, FR

[72] MAO, GAETAN, FR

[71] SAINT-GOBAIN PERFORMANCE PLASTICS FRANCE, FR

[85] 2023-12-21

[86] 2022-06-22 (PCT/FR2022/051221)

[87] (WO2023/281180)

[30] FR (FR2107293) 2021-07-06

[21] **3,223,959**  
[13] A1

[51] **Int.Cl. A61K 31/155 (2006.01) A61K 45/00 (2006.01) A61K 47/26 (2006.01) A61K 47/32 (2006.01) A61L 2/18 (2006.01) A61P 17/00 (2006.01)**

[25] EN

[54] **DISINFECTING COMPOSITION**

[54] **COMPOSITION DESINFECTANTE**

[72] SHIOZAKI, MARI, JP

[72] HAGI, AKIFUMI, JP

[72] NISHIOKA, HISAE, JP

[71] OTSUKA PHARMACEUTICAL FACTORY, INC., JP

[85] 2023-12-21

[86] 2022-08-02 (PCT/JP2022/029618)

[87] (WO2023/013627)

[30] JP (2021-129996) 2021-08-06

## Demandes PCT entrant en phase nationale

[21] **3,223,960**  
[13] A1

[51] **Int.Cl. A61K 8/34 (2006.01) A61K 8/36 (2006.01) A61K 8/37 (2006.01) A61K 8/42 (2006.01) A61K 8/44 (2006.01) A61K 8/46 (2006.01)**

[25] EN

[54] **ESTER COMPRISING HYDRATABLE CONCENTRATED SURFACTANT COMPOSITION**

[54] **ESTER COMPRENANT UNE COMPOSITION DE TENSIOACTIF CONCENTREE HYDRATABLE**

[72] HIBAN, DOUGLAS JOHN, NL  
[72] MOADDEL, TEANOOSH, NL  
[72] VASUDEVAN, TIRUCHERAI VARAHAN, NL  
[72] KWAN, THOMAS ALAN, NL  
[71] UNILEVER GLOBAL IP LIMITED, GB  
[85] 2023-12-21  
[86] 2022-06-30 (PCT/EP2022/068162)  
[87] (WO2023/275299)  
[30] EP (21183528.5) 2021-07-02

[21] **3,223,961**  
[13] A1

[51] **Int.Cl. E04C 2/288 (2006.01) E04C 2/296 (2006.01)**

[25] FR

[54] **PREFABRICATED INSULATING PANEL**

[54] **PANNEAU ISOLANT PREFABRIQUE**

[72] LUIS, DAVID, FR  
[72] MICHEL, ALEXIA, FR  
[72] JOP, PIERRE, FR  
[71] SAINT-GOBAIN ISOVER, FR  
[85] 2023-12-21  
[86] 2022-07-06 (PCT/FR2022/051357)  
[87] (WO2023/281218)  
[30] FR (FR2107432) 2021-07-08

[21] **3,223,962**  
[13] A1

[51] **Int.Cl. G01N 21/71 (2006.01)**

[25] EN

[54] **LASER INDUCED BREAKDOWN SPECTROSCOPY FOR GEOLOGICAL ANALYSIS**

[54] **SPECTROMETRIE D'EMISSION OPTIQUE DE PLASMA INDUIT PAR LASER DESTINEE A UNE ANALYSE GEOLOGIQUE**

[72] SANDEN, GRANT I., CA  
[72] SEGAL, YANNAI Z.R., CA  
[72] KOSTOUSOV, MIKHAIL, CA  
[71] ENERSOFT INC., CA  
[85] 2023-12-21  
[86] 2022-06-25 (PCT/CA2022/051025)  
[87] (WO2022/266779)  
[30] US (63/215,005) 2021-06-25

[21] **3,223,963**  
[13] A1

[51] **Int.Cl. G08B 13/196 (2006.01) G06V 10/82 (2022.01) G06V 20/00 (2022.01) G06V 20/52 (2022.01) G06V 20/62 (2022.01) G06V 40/16 (2022.01) H04L 67/12 (2022.01) G07B 15/02 (2011.01) G07C 1/30 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR MONITORING URBAN AREAS**

[54] **SYSTEMES ET PROCEDES DE SURVEILLANCE DE ZONES URBAINES**

[72] DETMOLD, HENRY, AU  
[72] CHALLA, SUBHASH, AU  
[72] HRIT, SATISH, AU  
[71] SENSEN NETWORKS GROUP PTY LTD, AU  
[85] 2023-12-21  
[86] 2022-08-09 (PCT/AU2022/050869)  
[87] (WO2023/015344)  
[30] AU (2021902481) 2021-08-10

[21] **3,223,964**  
[13] A1

[51] **Int.Cl. A61K 47/18 (2017.01)**

[25] EN

[54] **RECOMBINANT PROTEINS, COMPOSITIONS AND METHODS OF STABILIZATION THEREOF**

[54] **PROTEINES RECOMBINANTES, COMPOSITIONS ET PROCEDES DE STABILISATION DE CELLES-CI**

[72] SATHE, DHANANJAY, IN  
[72] MISHRA, VIVEK, IN  
[72] IYAPPAN, SARAVANAKUMAR, IN  
[72] JOG, SUNIL, IN  
[71] UNICHEM LABORATORIES LTD, IN  
[85] 2023-12-21  
[86] 2022-07-07 (PCT/IB2022/056276)  
[87] (WO2023/281432)  
[30] IN (202121030619) 2021-07-08

[21] **3,223,965**  
[13] A1

[51] **Int.Cl. C01D 15/04 (2006.01) C01D 15/06 (2006.01)**

[25] EN

[54] **LITHIUM RECOVERY AND PURIFICATION**

[54] **RECUPERATION ET PURIFICATION DE LITHIUM**

[72] GHAHREMANINEZHAD, AHMAD, CA  
[72] HILL, GREGG, CA  
[72] MUINONEN, MIKA, CA  
[71] XPS EXPERT PROCESS SOLUTIONS - GLENCORE CANADA CORPORATION, CA  
[71] AG HYDROMETALLURGY SERVICES INC., CA  
[71] FRONTIER LITHIUM INC., CA  
[85] 2023-12-21  
[86] 2021-06-11 (PCT/CA2021/050797)  
[87] (WO2022/256903)

[21] **3,223,966**  
[13] A1

[51] **Int.Cl. B60N 2/20 (2006.01)**

[25] EN

[54] **REMOTE HANDLE ASSEMBLY**

[54] **ENSEMBLE POIGNEE A DISTANCE**

[72] TOUTANT, EVAN, US  
[72] ZANG, CRESTON A., US  
[71] MAGNA SEATING INC., CA  
[85] 2023-12-21  
[86] 2022-06-24 (PCT/US2022/034913)  
[87] (WO2022/272069)  
[30] US (63/215,034) 2021-06-25

## PCT Applications Entering the National Phase

[21] **3,223,967**  
[13] A1

[51] **Int.Cl. C01B 32/318 (2017.01) C01B 32/324 (2017.01)**  
[25] EN  
[54] **CARBONACEOUS MATERIALS FOR USE IN METHODS OF MANUFACTURING ACTIVATED CARBON**  
[54] **MATERIAUX CARBONES DESTINES A ETRE UTILISES DANS DES METHODES DE FABRICATION DE CHARBON ACTIF**  
[72] PASPEK, STEPHEN CARL, US  
[72] UNSWORTH, JOHN FRANCIS, GB  
[72] ADAMS, JERAMIE JOSEPH, GB  
[72] BASSHAM, SETH TAYLOR, GB  
[72] RODRIGUEZ, REGINA, GB  
[72] MAZYCK, DAVID, GB  
[71] ARQ IP LIMITED, GB  
[85] 2023-12-21  
[86] 2022-06-29 (PCT/US2022/035480)  
[87] (WO2023/278545)  
[30] US (63/216,641) 2021-06-30

[21] **3,223,968**  
[13] A1

[51] **Int.Cl. C01B 33/26 (2006.01) C01F 7/68 (2006.01)**  
[25] EN  
[54] **A RADIATION SENSING MATERIAL**  
[54] **MATERIAU DE DETECTION DE RAYONNEMENT**  
[72] LASTUSAARI, MIKA, FI  
[72] PONKKA, ISABELLA, FI  
[72] BYRON, HANNAH, FI  
[72] KREIVILA, TEPPON, FI  
[71] TURUN YLIOPISTO, FI  
[85] 2023-12-21  
[86] 2022-06-17 (PCT/FI2022/050422)  
[87] (WO2022/269128)  
[30] FI (20215742) 2021-06-23

[21] **3,223,970**  
[13] A1

[51] **Int.Cl. C12N 9/02 (2006.01) C12N 9/10 (2006.01) C12N 15/70 (2006.01) C12P 13/06 (2006.01) C12P 13/12 (2006.01)**  
[25] EN  
[54] **RECOMBINANT MICROORGANISM IN WHICH EXPRESSION OF NADH:QUINONE OXYDOREDUCTASE IS CONTROLLED, AND METHOD FOR PRODUCING O-PHOSPHOSERINE, CYSTEINE, AND DERIVATIVE THEREOF BY USING SAME**  
[54] **MICRO-ORGANISME RECOMBINANT DANS LEQUEL L'EXPRESSION DE NADH:QUINONE OXYDOREDUCTASE EST CONTROLEE, ET PROCEDE DE PRODUCTION D'O-PHOSPHOSERINE, DE CYSTEINE ET D'UN DERIVE DE CYSTEINE-CI A L'AIDE DE CELUI-C**  
[72] JUNG, HWI-MIN, KR  
[72] PARK, HYE MIN, KR  
[72] SIM, HEE-JIN, KR  
[72] LEE, JIN NAM, KR  
[71] CJ CHEILJEDANG CORPORATION, KR  
[85] 2023-12-21  
[86] 2022-06-21 (PCT/KR2022/008745)  
[87] (WO2022/270857)  
[30] KR (10-2021-0081785) 2021-06-23

[21] **3,223,971**  
[13] A1

[51] **Int.Cl. B25J 11/00 (2006.01) G16H 20/13 (2018.01) B65B 5/10 (2006.01) B65B 57/14 (2006.01) B65G 1/04 (2006.01) B65G 1/137 (2006.01) G07F 11/00 (2006.01)**  
[25] EN  
[54] **METHOD, COMPUTER PROGRAM PRODUCT AND DISPENSING DEVICE FOR DISPENSING DISCRETE MEDICAMENTS**  
[54] **PROCEDE, PRODUIT-PROGRAMME INFORMATIQUE ET DISPOSITIF DE DISTRIBUTION PERMETTANT DE DISTRIBUER DES MEDICAMENTS DISCRETS**  
[72] BRAKKEE, MARTINUS JOHANNES DONATUS, NL  
[72] VAN ROON, PETER, NL  
[72] VAN VOORN, PATRICK, NL  
[71] VMI HOLLAND B.V., NL  
[85] 2023-12-21  
[86] 2022-01-19 (PCT/NL2022/050022)  
[87] (WO2022/271009)  
[30] US (17/353,986) 2021-06-22

[21] **3,223,972**  
[13] A1

[51] **Int.Cl. G16B 30/00 (2019.01) G16B 40/10 (2019.01) G16B 40/20 (2019.01)**  
[25] EN  
[54] **EFFICIENT ARTIFICIAL INTELLIGENCE-BASED BASE CALLING OF INDEX SEQUENCES**  
[54] **APPEL DE BASE REPOSANT SUR L'INTELLIGENCE ARTIFICIELLE EFFICACE DE SEQUENCES D'INDEX**  
[72] DUTTA, ANINDITA, US  
[72] VESSERE, GERY, US  
[71] ILLUMINA, INC., US  
[85] 2023-12-21  
[86] 2022-06-30 (PCT/US2022/035847)  
[87] (WO2023/278788)  
[30] US (63/217,644) 2021-07-01  
[30] US (17/839,331) 2022-06-13



## Demandes PCT entrant en phase nationale

[21] **3,223,973**  
[13] A1

[51] **Int.Cl. G01D 5/20 (2006.01)**  
[25] EN  
[54] **SENSOR ARRANGEMENT IN A FOOD PROCESSING MACHINE**  
[54] **AGENCEMENT DE CAPTEUR DANS UNE MACHINE DE TRAITEMENT D'ALIMENTS**  
[72] JACKEL, ANDREAS, DE  
[72] SCHWEBEL, JORG, DE  
[71] GUNTHER MASCHINENBAU GMBH, DE  
[85] 2023-12-21  
[86] 2022-06-24 (PCT/EP2022/067416)  
[87] (WO2022/269070)  
[30] EP (21181691.3) 2021-06-25

[21] **3,223,974**  
[13] A1

[51] **Int.Cl. F25B 5/04 (2006.01) F25B 41/20 (2021.01) F25B 41/42 (2021.01) F16K 11/14 (2006.01)**  
[25] EN  
[54] **AIR-TO-WATER HEAT PUMP SYSTEM WITH DEFROSTING UNIT AND METHOD OF OPTIMIZING THE OPERATION OF THE AIR-TO-WATER HEAT PUMP**  
[54] **SYSTEME DE POMPE A CHALEUR AIR-EAU AVEC UNITE DE DEGIVRAGE ET PROCEDE D'OPTIMISATION DU FONCTIONNEMENT DE LA POMPE A CHALEUR AIR-EAU**  
[72] JEDRZEJCZAK, MAREK, PL  
[71] JEDRZEJCZAK, MAREK, PL  
[85] 2023-12-21  
[86] 2022-06-22 (PCT/PL2022/050040)  
[87] (WO2022/271045)  
[30] PL (P.438230) 2021-06-22  
[30] PL (P.441486) 2022-06-14

[21] **3,223,975**  
[13] A1

[51] **Int.Cl. G06Q 30/02 (2023.01)**  
[25] EN  
[54] **IMAGE ANALYSIS SYSTEM**  
[54] **SYSTEME D'ANALYSE D'IMAGE**  
[72] GARDNER, RICHARD, US  
[71] Q FACTOR HOLDINGS LLC, US  
[85] 2023-12-21  
[86] 2022-06-17 (PCT/US2022/073038)  
[87] (WO2022/272236)  
[30] US (17/304,524) 2021-06-22

[21] **3,223,976**  
[13] A1

[51] **Int.Cl. A23K 50/10 (2016.01) A23K 20/105 (2016.01) A23K 20/20 (2016.01)**  
[25] EN  
[54] **FEED ADDITIVE COMPRISING IODOFORM FOR USE IN A METHOD OF REDUCING METHANE PRODUCTION IN AND/OR FOR IMPROVING PERFORMANCE OF A RUMINANT**  
[54] **ADDITIF POUR L'ALIMENTATION ANIMALE CONTENANT DE L'IODOFORME DESTINE A ETRE UTILISE DANS UN PROCEDE DE REDUCTION DE LA PRODUCTION DE METHANE DANS ET/POUR L'AMELIORATION DES PERFORMANCES D'UN RUMINANT**  
[72] NIELSEN, METTE OLAF, DK  
[72] HANSEN, HANNE HELENE, DK  
[71] DANSK LANDBRUGS GROVVARESELSKAB A.M.B.A., DK  
[85] 2023-12-21  
[86] 2022-06-29 (PCT/EP2022/067913)  
[87] (WO2023/275152)  
[30] EP (21182396.8) 2021-06-29

[21] **3,223,977**  
[13] A1

[51] **Int.Cl. A47K 13/24 (2006.01) E03D 9/00 (2006.01) E03D 9/02 (2006.01) E03D 13/00 (2006.01)**  
[25] EN  
[54] **URINE CONTAINMENT AND DEODORIZING DEVICE**  
[54] **DISPOSITIF DE CONFINEMENT ET DE DESODORISATION D'URINE**  
[72] DALTON, SCOTT, US  
[71] DALTON, SCOTT, US  
[85] 2023-12-21  
[86] 2022-06-10 (PCT/US2022/032992)  
[87] (WO2022/271461)  
[30] US (63/215,066) 2021-06-25  
[30] US (63/219,943) 2021-07-09  
[30] US (17/828,791) 2022-05-31

[21] **3,223,978**  
[13] A1

[51] **Int.Cl. C12Q 1/6825 (2018.01) C12Q 1/6827 (2018.01) C12Q 1/6834 (2018.01) H01L 21/62 (2006.01)**  
[25] EN  
[54] **CONDUCTOMETRIC SENSOR FOR DETECTING A NUCLEIC ACID AND A METHOD FOR THE DETECTION THEREOF**  
[54] **CAPTEUR CONDUCTOMETRIQUE POUR LA DETECTION D'UN ACIDE NUCLEIQUE ET SON PROCEDE DE DETECTION**  
[72] AHMED, TAIMUR, AU  
[72] PERERA, GANGANATH, AU  
[72] WALIA, SUMEET, AU  
[72] BHASKARAN, MADHU, AU  
[72] SRIRAM, SHARATH, AU  
[72] FOX, STEPHEN, AU  
[72] FELLOWES, ANDREW, AU  
[71] ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY, AU  
[71] PETER MACCALLUM CANCER INSTITUTE, AU  
[85] 2023-12-21  
[86] 2022-06-23 (PCT/AU2022/050637)  
[87] (WO2022/266714)  
[30] AU (2021901896) 2021-06-23

[21] **3,223,979**  
[13] A1

[51] **Int.Cl. G01J 1/44 (2006.01) B82Y 15/00 (2011.01) G01J 1/02 (2006.01)**  
[25] EN  
[54] **SUPERCONDUCTING SINGLE PHOTON DETECTOR WITH PHOTON NUMBER RESOLUTION**  
[54] **DETECTEUR DE PHOTON UNIQUE SUPRACONDUCTEUR A RESOLUTION DU NOMBRE DE PHOTONS**  
[72] KESHAVARZ AKHLAGHI, MOHSEN, CA  
[71] PHOTONIC INC., CA  
[85] 2023-12-21  
[86] 2022-07-22 (PCT/CA2022/051136)  
[87] (WO2023/000106)  
[30] US (63/203,478) 2021-07-23

## PCT Applications Entering the National Phase

[21] **3,223,980**  
[13] A1

[25] EN  
[54] **EDGE COATING OF SUBSTRATES, ESPECIALLY PLATE-SHAPED SUBSTRATES**  
[54] **REVETEMENT DE BORDS DE SUBSTRATS, EN PARTICULIER DE SUBSTRATS EN FORME DE PLAQUE**  
[72] BENZ, INA, DE  
[72] GORDER, TIM, DE  
[72] TERFLOTH, CHRISTIAN, DE  
[71] JOWAT SE, DE  
[85] 2023-12-21  
[86] 2022-05-12 (PCT/EP2022/062926)  
[87] (WO2023/274613)  
[30] DE (10 2021 117 136.9) 2021-07-02  
[30] DE (10 2021 120 894.7) 2021-08-11  
[30] DE (10 2021 122 622.8) 2021-09-01

[21] **3,223,981**  
[13] A1

[51] **Int.Cl. C08G 63/08 (2006.01) C09J 167/04 (2006.01)**  
[25] EN  
[54] **POLY (3-HYDROXYACID) POLYMERS FROM LONG-CHAIN EPOXIDES AND THEIR USES RELATED TO HOT MELT ADHESIVES**  
[54] **POLYMERES DE POLY(3-HYDROXYACIDE) A PARTIR D'EPOXYDES A CHAINE LONGUE ET LEURS UTILISATIONS ASSOCIEES A DES ADHESIFS THERMOFUSIBLES**  
[72] GRAY, STEVEN, US  
[72] DEAK, DARIUS, US  
[71] BOSTIK SA, FR  
[85] 2023-12-21  
[86] 2022-06-28 (PCT/IB2022/000381)  
[87] (WO2023/275619)  
[30] US (63/216,031) 2021-06-29

[21] **3,223,989**  
[13] A1

[51] **Int.Cl. H04L 9/30 (2006.01)**  
[25] EN  
[54] **DEVICES, SYSTEMS, SOFTWARE, AND METHODS FOR EFFICIENT DATA PROCESSING FOR FULLY HOMOMORPHIC ENCRYPTION**  
[54] **DISPOSITIFS, SYSTEMES, LOGICIEL ET PROCEDES DE TRAITEMENT EFFICACE DE DONNEES POUR LE CHIFFREMENT ENTIEREMENT HOMOMORPHIQUE**  
[72] PROTHERO, JERROLD, US  
[71] ASTRAPI CORPORATION, US  
[85] 2023-12-22  
[86] 2022-06-28 (PCT/US2022/035242)  
[87] (WO2023/278393)  
[30] US (63/215,800) 2021-06-28

[21] **3,223,994**  
[13] A1

[51] **Int.Cl. G06N 10/60 (2022.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR SOLVING AN INTEGER PROGRAMMING PROBLEM OR A MIXED-INTEGERS PROGRAMMING PROBLEM USING A CIRCUIT-BASED CONTINUOUS-VARIABLE QUANTUM OPTICAL DEVICE**  
[54] **PROCEDES ET SYSTEMES DE RESOLUTION D'UN PROBLEME DE PROGRAMMATION EN NOMBRES ENTIERS OU D'UN PROBLEME DE PROGRAMMATION EN NOMBRES ENTIERS MIXTES A L'AIDE D'UN DISPOSITIF OPTIQUE QUANTIQUE A VARIATION CONTINUE A BASE DE CIRCUIT**  
[72] KHOSRAVI, FARHAD, CA  
[72] RONAGH, POOYA, CA  
[72] SCHERER, ARTUR, CA  
[71] IQB INFORMATION TECHNOLOGIES INC., CA  
[85] 2023-12-22  
[86] 2022-06-30 (PCT/IB2022/056124)  
[87] (WO2023/275825)  
[30] US (63/217,689) 2021-07-01  
[30] US (63/255,777) 2021-10-14

[21] **3,223,998**  
[13] A1

[51] **Int.Cl. A61G 1/02 (2006.01)**  
[25] EN  
[54] **PATIENT SUPPORT APPARATUS WITH MULTIPLE DRIVING MODES**  
[54] **APPAREIL SUPPORT DE PATIENT AYANT DE MULTIPLES MODES D'ENTRAINEMENT**  
[72] PAUL, ANISH, US  
[71] STRYKER CORPORATION, US  
[85] 2023-12-22  
[86] 2022-06-27 (PCT/US2022/035048)  
[87] (WO2023/043517)  
[30] US (63/244,884) 2021-09-16

[21] **3,224,003**  
[13] A1

[51] **Int.Cl. A61G 7/018 (2006.01) A61G 7/16 (2006.01)**  
[25] EN  
[54] **LOAD CELL ASSEMBLY FOR A PATIENT SUPPORT APPARATUS**  
[54] **ENSEMBLE DE CELLULES DE CHARGE POUR UN APPAREIL DE SUPPORT DE PATIENT**  
[72] GUNCAN, BERKAY, TR  
[72] KOC, MEHMET ILKER, TR  
[72] SUKUMARAN, SUJAY, US  
[72] OLSON, MICHAEL JOHN, US  
[71] STRYKER CORPORATION, US  
[85] 2023-12-22  
[86] 2022-10-13 (PCT/US2022/046506)  
[87] (WO2023/064430)  
[30] US (63/255,127) 2021-10-13

[21] **3,224,009**  
[13] A1

[51] **Int.Cl. H01R 13/527 (2006.01) H02S 40/36 (2014.01) H02G 15/10 (2006.01)**  
[25] EN  
[54] **FIRE ENCLOSURE**  
[54] **ENCEINTE ANTI-INCENDIE**  
[72] ELMES, STUART, GB  
[72] TAN, KOK THONG, GB  
[72] ADAMS, THOMAS, GB  
[71] VIRIDIAN SOLAR LIMITED, GB  
[85] 2023-12-22  
[86] 2022-07-08 (PCT/EP2022/069095)  
[87] (WO2023/281066)  
[30] GB (2109882.7) 2021-07-08

## Demandes PCT entrant en phase nationale

[21] **3,224,014**  
[13] A1

[51] **Int.Cl. E04B 1/21 (2006.01) E04B 1/26 (2006.01) E04B 1/41 (2006.01) E04B 1/48 (2006.01) E04B 1/94 (2006.01) E04B 2/56 (2006.01) E04C 3/30 (2006.01) E04G 21/12 (2006.01) E04H 9/02 (2006.01) F16B 2/14 (2006.01) F16B 7/04 (2006.01) F16G 11/04 (2006.01)**

[25] EN

[54] **A COUPLING SYSTEM, COUPLER TOOLS AND METHODS OF USE THEREOF**

[54] **SYSTEME D'ACCOUPLLEMENT, OUTILS D'ACCOUPLLEMENT ET PROCEDES D'UTILISATION CORRESPONDANTS**

[72] SCOTT, BENJAMIN THOMAS, NZ  
[72] ROEBUCK, JONATHAN KEITH, NZ  
[72] WALTERS, JEREMY NEIL, NZ  
[72] BOTMAN, KEVIN PAUL, NZ  
[72] VAN DEUN, BYRON RONALD, NZ  
[71] HOLMES SOLUTIONS LIMITED PARTNERSHIP, NZ

[85] 2023-12-22  
[86] 2022-06-28 (PCT/NZ2022/050083)  
[87] (WO2023/277706)  
[30] AU (2021901949) 2021-06-28  
[30] AU (2021903998) 2021-12-10

[21] **3,224,019**  
[13] A1

[51] **Int.Cl. F04B 9/04 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR CONTROLLING FLUID VOLUMES TO ACHIEVE SEPARATION AND PCR AMPLIFICATION**

[54] **PROCEDE ET APPAREIL DE COMMANDE DE VOLUMES DE FLUIDE POUR OBTENIR UNE SEPARATION ET UNE AMPLIFICATION PCR**

[72] YAMANA, KABIR, US  
[72] HERRERA, JACK, US  
[72] LINDBLOM, RASMUS, US  
[71] FORMULATRIX, INC., US

[85] 2023-12-22  
[86] 2021-10-19 (PCT/US2021/055638)  
[87] (WO2022/086981)  
[30] US (63/093,640) 2020-10-19

[21] **3,224,020**  
[13] A1

[51] **Int.Cl. B01L 3/00 (2006.01) C12Q 1/686 (2018.01)**

[25] EN

[54] **FLUIDIC DETECTION AND CONTROL ALGORITHM FOR PCR ANALYSIS**

[54] **ALGORITHME DE DETECTION ET DE CONTROLE DE FLUIDE POUR ANALYSE PCR**

[72] LINDBLOM, RASMUS, US  
[72] NILSSON, MICHAEL, US  
[71] FORMULATRIX, INC., US

[85] 2023-12-22  
[86] 2021-10-19 (PCT/US2021/055645)  
[87] (WO2022/086987)  
[30] US (63/093,640) 2020-10-19

[21] **3,224,022**  
[13] A1

[51] **Int.Cl. B01J 19/00 (2006.01) B01L 3/00 (2006.01) C12Q 1/00 (2006.01) G01N 33/50 (2006.01) G01N 33/53 (2006.01) G01N 35/00 (2006.01)**

[25] EN

[54] **DISPOSABLE CARTRIDGE FOR REAGENT STORAGE SYSTEMS AND METHODS USING THE SAME**

[54] **CARTOUCHE JETABLE POUR SYSTEMES DE STOCKAGE DE REACTIF ET PROCEDES L'UTILISANT**

[72] YAMANA, KABIR, US  
[72] NILSSON, MICHAEL, US  
[71] FORMULATRIX, INC., US

[85] 2023-12-22  
[86] 2021-10-19 (PCT/US2021/055647)  
[87] (WO2022/086989)  
[30] US (63/093,640) 2020-10-19

[21] **3,224,024**  
[13] A1

[51] **Int.Cl. B01L 3/00 (2006.01) C12Q 1/6806 (2018.01) C12Q 1/6834 (2018.01) C12Q 1/686 (2018.01) C12Q 1/6874 (2018.01) C12N 15/10 (2006.01)**

[25] EN

[54] **APPARATUSES WITH FLUIDIC CHANNEL GEOMETRIES FOR SAMPLE TO ANSWER PCR ANALYSIS AND METHODS OF USING SAME**

[54] **APPAREILS A GEOMETRIES DE CANAUX FLUIDIQUES POUR PERMETTRE L'ANALYSE PAR PCR DE L'ECHANTILLON ET PROCEDES D'UTILISATION ASSOCIES**

[72] YAMANA, KABIR, US  
[72] NILSSON, MICHAEL, US  
[71] FORMULATRIX, INC., US

[85] 2023-12-22  
[86] 2021-10-19 (PCT/US2021/055649)  
[87] (WO2022/086991)  
[30] US (63/093,640) 2020-10-19

[21] **3,224,029**  
[13] A1

[51] **Int.Cl. G01J 5/05 (2022.01) G01J 5/061 (2022.01)**

[25] EN

[54] **PROBE HOUSING AND PROBE DEVICE HAVING A SENSOR AND A PROBE HOUSING**

[54] **BOITIER DE SONDE ET DISPOSITIF DE SONDE COMPORTANT UN CAPTEUR ET UN BOITIER DE SONDE**

[72] MULLER, MARTIN, DE  
[72] BEVERSDORFF, MANFRED, DE  
[72] STOCKHAUSEN, GUIDO, DE  
[71] DEUTSCHES ZENTRUM FUR LUFT-UND RAUMFAHRT E.V., DE

[85] 2023-12-22  
[86] 2022-07-08 (PCT/EP2022/069143)  
[87] (WO2023/285315)  
[30] DE (10 2021 118 359.6) 2021-07-15

## PCT Applications Entering the National Phase

[21] **3,224,031**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2023.01) G06Q 10/10 (2023.01) G16Y 20/40 (2020.01) G16Y 40/20 (2020.01) H04M 3/56 (2006.01) H04M 11/00 (2006.01)**

[25] EN

[54] **COMPUTER SYSTEM, METHOD, AND PROGRAM FOR IMPROVING RELATIONS WITH INDIVIDUAL PARTIES IN TWO-PARTY COMMUNICATION**

[54] **SYSTEME INFORMATIQUE, PROCEDE ET PROGRAMME POUR AMELIORER LES RELATIONS AVEC DES PARTIES INDIVIDUELLES DANS UNE COMMUNICATION A DEUX ABONNES**

[72] HONDA, HIDETAKA, JP  
[71] KAKEAI, INC., JP  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/JP2022/025378)  
[87] (WO2022/270632)  
[30] JP (2021-105704) 2021-06-25

[21] **3,224,033**  
[13] A1

[51] **Int.Cl. C07D 213/42 (2006.01) A61P 25/20 (2006.01) C07D 231/12 (2006.01) C07D 239/26 (2006.01) C07D 307/94 (2006.01) C07D 401/04 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **SULFONAMIDE OREXIN RECEPTOR AGONISTS AND USES THEREOF**

[54] **AGONISTES DU RECEPTEUR DE L'OREXINE A BASE DE SULFONAMIDE ET LEURS UTILISATIONS**

[72] MARINELLI, DAVIDE, IE  
[72] CHOVIATIA, PRAFULKUMAR, GB  
[72] BEATO, CLAUDIA, IT  
[72] OUVRY, GILLES, GB  
[71] JAZZ PHARMACEUTICALS IRELAND LIMITED, IE  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/EP2022/067376)  
[87] (WO2022/269049)  
[30] US (63/215,054) 2021-06-25

[21] **3,224,034**  
[13] A1

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

[25] EN

[54] **LINEAR FOURIER FIDUCIAL**

[54] **REPERE DE FOURIER LINEAIRE**

[72] NAREID, HELGE, GB  
[71] ILLUMINA, INC., US  
[85] 2023-12-22  
[86] 2022-06-24 (PCT/EP2022/067335)  
[87] (WO2022/269033)  
[30] US (63/215,152) 2021-06-25  
[30] US (63/216,898) 2021-06-30  
[30] US (17/592,895) 2022-02-04

[21] **3,224,036**  
[13] A1

[51] **Int.Cl. C12P 13/04 (2006.01)**

[25] EN

[54] **ENZYMATIC METHOD FOR THE PRODUCTION OF L-GLUFOSINATE P-ALKYL ESTERS**

[54] **PROCEDE ENZYMATIQUE POUR LA PRODUCTION D'ESTERS P-ALKYLIQUES DE L-GLUFOSINATE**

[72] LAUTENSCHUTZ, LUDGER, DE  
[72] OSSWALD, STEFFEN, DE  
[72] POTTER, MARKUS, DE  
[72] MULLER, JAKOB, DE  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2023-12-14  
[86] 2022-05-31 (PCT/EP2022/064682)  
[87] (WO2022/248739)  
[30] EP (21179773.3) 2021-06-16

[21] **3,224,040**  
[13] A1

[51] **Int.Cl. A61K 47/42 (2017.01) A61P 25/28 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR PERMEABILIZING THE BLOOD BRAIN BARRIER**

[54] **COMPOSITIONS ET METHODES DE PERMEABILISATION DE LA BARRIERE HEMATOENCEPHALIQUE**

[72] EICHMANN, ANNE, US  
[72] BOYE, KEVIN, US  
[72] GERALDO, LUIZ, FR  
[71] YALE UNIVERSITY, US  
[71] INSERM (INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE), FR  
[85] 2023-12-22  
[86] 2022-06-27 (PCT/US2022/035114)  
[87] (WO2023/278321)  
[30] US (63/215,499) 2021-06-27

[21] **3,224,041**  
[13] A1

[25] EN

[54] **THERAPEUTIC PATCH AND USES THEREOF**

[54] **TIMBRE THERAPEUTIQUE ET SES UTILISATIONS**

[72] SKUTHE, EVA CATHRINE AARDAL, NO  
[72] SKUTHE, JOSTEIN, NO  
[72] HENRIKSEN, KJETIL, NO  
[71] ORIPATCH AS, NO  
[85] 2023-12-22  
[86] 2022-07-08 (PCT/EP2022/069101)  
[87] (WO2023/281069)  
[30] GB (2109849.6) 2021-07-08

[21] **3,224,043**  
[13] A1

[51] **Int.Cl. A61P 19/06 (2006.01)**

[25] EN

[54] **USE OF MAZDUTIDE**

[54] **UTILISATION DE MAZDUTIDE**

[72] AN, PEI, CN  
[72] DENG, HUAN, CN  
[71] INNOVENT BIOLOGICS (SUZHOU) CO., LTD., CN  
[85] 2023-12-22  
[86] 2022-06-23 (PCT/CN2022/100878)  
[87] (WO2022/268174)  
[30] CN (202110711050.0) 2021-06-25

[21] **3,224,053**  
[13] A1

[51] **Int.Cl. F41A 21/30 (2006.01) F41A 21/36 (2006.01)**

[25] EN

[54] **SUPPRESSOR**

[54] **SILENCIEUX**

[72] GIDIKOV, TRIFON GANCHEV, BG  
[71] BAMEKS - 98 AD, BG  
[85] 2023-12-22  
[86] 2021-09-13 (PCT/BG2021/000023)  
[87] (WO2022/266726)  
[30] BG (5330) 2021-06-25

## Demandes PCT entrant en phase nationale

[21] <b>3,224,055</b> [13] A1	[21] <b>3,224,058</b> [13] A1	[21] <b>3,224,062</b> [13] A1
[51] <b>Int.Cl. C08B 1/00 (2006.01) C08L 1/02 (2006.01) C09D 101/02 (2006.01) C09J 101/02 (2006.01)</b> [25] EN [54] <b>METHODS FOR PREPARING TUNICATE DERIVED NANOCRYSTALLINE CELLULOSE, AND USES THEREOF</b> [54] <b>PROCEDES DE PREPARATION DE CELLULOSE NANOCRYSTALLINE DERIVEE DE TUNICIERS, ET SES UTILISATIONS</b> [72] ACHARYA, BISHNU, CA [72] DUNLOP, MATTHEW J., CA [71] UNIVERSITY OF PRINCE EDWARD ISLAND, CA [85] 2023-12-22 [86] 2021-11-05 (PCT/CA2021/051583) [87] (WO2023/015371) [30] US (63/231,548) 2021-08-10	[51] <b>Int.Cl. E02D 13/10 (2006.01)</b> [25] EN [54] <b>A PILE DRIVING DEVICE AND A FOLLOWER</b> [54] <b>DISPOSITIF D'ENFONCEMENT DE PIEU ET SUIVEUR</b> [72] OVERKAMP, PATRICK INGMAR, NL [71] IQIP HOLDING B.V., NL [85] 2023-12-22 [86] 2022-08-10 (PCT/NL2022/050464) [87] (WO2023/018329) [30] NL (2028956) 2021-08-11	[51] <b>Int.Cl. C07F 9/6558 (2006.01) A61K 31/438 (2006.01) A61K 31/454 (2006.01) A61K 31/4725 (2006.01) A61K 31/496 (2006.01) A61K 31/506 (2006.01) A61K 31/55 (2006.01) A61K 31/675 (2006.01) A61P 35/02 (2006.01) C07D 401/04 (2006.01) C07D 401/14 (2006.01) C07D 403/04 (2006.01) C07D 471/10 (2006.01) C07F 9/6561 (2006.01)</b> [25] EN [54] <b>PROTEIN INHIBITOR OR DEGRADING AGENT, PHARMACEUTICAL COMPOSITION CONTAINING SAME AND PHARMACEUTICAL USE</b> [54] <b>INHIBITEUR DE PROTEINE OU AGENT DE DEGRADATION, COMPOSITION PHARMACEUTIQUE LE CONTENANT ET UTILISATION PHARMACEUTIQUE</b> [72] YE, GUOZHONG, CN [72] DU, YONG, CN [72] ZHANG, YUHUA GEORGE, CN [72] CHEN, JINJU, CN [72] CHEN, SHAOJUN, CN [72] LIU, ZHI, CN [72] CHEN, YONGFENG, CN [72] ZHAO, CUNLIANG, CN [72] LIU, YAO, CN [72] FANG, TAO, CN [72] YU, MIAO, CN [72] LU, XIAORONG, CN [72] WANG, YUXIA, CN [72] WANG, ZHAOFU, CN [72] WU, QIANG, CN [72] KONG, DESHENG, CN [72] ZHANG, LI, CN [71] JING MEDICINE TECHNOLOGY (SHANGHAI) LTD., CN [85] 2023-12-22 [86] 2022-06-27 (PCT/CN2022/101684) [87] (WO2022/268229) [30] CN (202110716210.0) 2021-06-25 [30] CN (202110979581.8) 2021-08-24 [30] CN (202210234529.4) 2022-03-10 [30] CN (202210556400.5) 2022-05-20
[21] <b>3,224,056</b> [13] A1		
[51] <b>Int.Cl. C07C 219/06 (2006.01) C07C 51/60 (2006.01) C07C 55/36 (2006.01) C07C 67/14 (2006.01) C07C 67/313 (2006.01) C07C 69/28 (2006.01)</b> [25] EN [54] <b>CONTINUOUS FLOW PROCESS FOR PRODUCTION OF CATIONIC LIPIDS</b> [54] <b>PROCEDE CONTINU DE PRODUCTION DE LIPIDES CATIONIQUES</b> [72] SEEBERGER, PETER, DE [72] PLUTSCHACK, MATTHEW, DE [72] CAMBIE, DARIO, DE [72] WOLF, JAKOB, DE [71] MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN E.V., DE [85] 2023-12-22 [86] 2022-06-24 (PCT/EP2022/067361) [87] (WO2022/269041) [30] EP (21181410.8) 2021-06-24 [30] EP (21209660.6) 2021-11-22		

## PCT Applications Entering the National Phase

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[21] **3,224,063**  
[13] A1

[51] **Int.Cl. B60L 53/14 (2019.01) B60L 53/16 (2019.01) B60L 53/31 (2019.01) B60L 53/35 (2019.01)**

[25] EN

[54] **ELECTRIC VEHICLE CHARGING STATION AND INTERFACE DEVICE THEREFOR**

[54] **STATION DE CHARGE DE VEHICULE ELECTRIQUE ET DISPOSITIF D'INTERFACE ASSOCIE**

[72] FREELING-WILKINSON, OLIVIER, GB

[71] URBAN ELECTRIC NETWORKS LTD, GB

[85] 2023-12-22

[86] 2022-07-28 (PCT/GB2022/051988)

[87] (WO2023/007169)

[30] GB (2110854.3) 2021-07-28

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[21] **3,224,067**  
[13] A1

[25] FR

[54] **OPTOELECTRONIC COMPONENT THAT IS INSENSITIVE TO DISLOCATIONS**

[54] **COMPOSANT OPTOELECTRONIQUE INSENSIBLES AUX DISLOCATIONS**

[72] RODRIGUEZ, JEAN BAPTISTE, FR

[72] BARANOV, ALEXEI, FR

[72] CERUTTI, LAURENT, FR

[72] TOURNIE, ERIC, FR

[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR

[71] UNIVERSITE DE MONTPELLIER, FR

[85] 2023-12-22

[86] 2022-06-30 (PCT/EP2022/068188)

[87] (WO2023/275320)

[30] FR (FR2107138) 2021-07-01

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[21] **3,224,068**  
[13] A1

[51] **Int.Cl. A61K 31/519 (2006.01) A61P 17/00 (2006.01)**

[25] EN

[54] **TREATMENT OF HAND ECZEMA WITH BARICITINIB**

[54] **TRAITEMENT DE L'ECZEMA DES MAINS A L'AIDE DE BARICITINIB**

[72] GROND, SUSANNE, US

[72] RIEDL, ELISABETH, US

[71] ELI LILLY AND COMPANY, US

[85] 2023-12-22

[86] 2022-07-29 (PCT/US2022/038744)

[87] (WO2023/009767)

[30] US (63/203,757) 2021-07-30

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[21] **3,224,069**  
[13] A1

[51] **Int.Cl. A23L 29/269 (2016.01) A23L 29/281 (2016.01) A23P 10/30 (2016.01) A61K 9/00 (2006.01) A61K 9/48 (2006.01)**

[25] EN

[54] **SOFTGEL CAPSULE**

[54] **CAPSULE MOLLE**

[72] SUKURU, KARUNAKAR, US

[72] FANG, QI, US

[72] LI, HAITAO, US

[72] GENNADIOS, ARIS, US

[71] R.P. SCHERER TECHNOLOGIES, LLC, US

[85] 2023-12-22

[86] 2022-07-06 (PCT/US2022/036190)

[87] (WO2023/283226)

[30] US (63/218,579) 2021-07-06

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[21] **3,224,070**  
[13] A1

[51] **Int.Cl. C07F 15/02 (2006.01) B01J 31/28 (2006.01) C07F 7/04 (2006.01)**

[25] EN

[54] **IRON-BASED COMPLEXES FOR USE IN THE CATALYSIS OF HYDROSILYLATION REACTIONS**

[54] **COMPLEXES A BASE DE FER DESTINES A ETRE UTILISES DANS LA CATALYSE DE REACTIONS D'HYDROSILYLATION**

[72] SONG, DATONG, CA

[72] LIANG, QIUMING, CA

[72] JIMENEZ SANTIAGO, JOSE LUIS, CA

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

[85] 2023-12-22

[86] 2022-06-23 (PCT/CA2022/051014)

[87] (WO2022/266768)

[30] US (63/202,810) 2021-06-25

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[21] **3,224,071**  
[13] A1

[51] **Int.Cl. C03C 13/06 (2006.01) C03C 25/25 (2018.01) B32B 5/24 (2006.01) C03B 37/06 (2006.01) C03C 3/091 (2006.01) C03C 25/14 (2018.01) C03C 25/40 (2006.01)**

[25] FR

[54] **PRODUCT COMPRISING A MINERAL WOOL TO BE BLOWN**

[54] **PRODUIT COMPRENANT UNE LAINE MINERALE A SOUFFLER**

[72] RONY, AMAURY, FR

[72] MICHEL, ALEXIA, FR

[72] PERROS, ELODIE, FR

[72] TOULEMON, DELPHINE, FR

[71] SAINT-GOBAIN ISOVER, FR

[85] 2023-12-22

[86] 2022-07-21 (PCT/FR2022/051460)

[87] (WO2023/002136)

[30] FR (FR2107879) 2021-07-21

[30] FR (FR2201006) 2022-02-04

[30] FR (FR2201008) 2022-02-04

## Demandes PCT entrant en phase nationale

[21] **3,224,072**  
[13] A1

[51] **Int.Cl. H01R 24/54 (2011.01) H01R 24/40 (2011.01)**  
[25] EN  
[54] **ELECTRICAL CABLE CONNECTOR**  
[54] **CONNECTEUR DE CABLE ELECTRIQUE**  
[72] LOZHKO, ANDRIY, US  
[71] PPC BROADBAND, INC., US  
[85] 2023-12-22  
[86] 2022-06-16 (PCT/US2022/033783)  
[87] (WO2023/278166)  
[30] US (63/216,156) 2021-06-29

[21] **3,224,073**  
[13] A1

[51] **Int.Cl. C03C 13/06 (2006.01) C03C 25/255 (2018.01) B32B 5/24 (2006.01) C03B 37/06 (2006.01) C03C 3/091 (2006.01) C03C 25/14 (2018.01) C03C 25/40 (2006.01)**  
[25] FR  
[54] **PRODUCT COMPRISING A MINERAL WOOL TO BE BLOWN**  
[54] **PRODUIT COMPRENANT UNE LAINE MINERALE A SOUFFLER**  
[72] RONY, AMAURY, FR  
[72] MICHEL, ALEXIA, FR  
[72] PERROS, ELODIE, FR  
[72] TOULEMON, DELPHINE, FR  
[71] SAINT-GOBAIN ISOVER, FR  
[85] 2023-12-22  
[86] 2022-07-21 (PCT/FR2022/051461)  
[87] (WO2023/002137)  
[30] FR (FR2107879) 2021-07-21  
[30] FR (FR2201006) 2022-02-04  
[30] FR (FR2201008) 2022-02-04

[21] **3,224,076**  
[13] A1

[51] **Int.Cl. A61K 31/519 (2006.01) A61K 31/44 (2006.01) A61P 25/00 (2006.01) C07D 213/16 (2006.01) C07D 487/04 (2006.01) G01N 33/50 (2006.01)**  
[25] EN  
[54] **PHOSPHODIESTERASE INHIBITORS FOR THE MITIGATION OF FRAGILE X SYNDROME SYMPTOMS**  
[54] **INHIBITEURS DE PHOSPHODIESTERASE POUR L'ATTENUATION DES SYMPTOMES DU SYNDROME DE L'X FRAGILE**  
[72] BOWIE, DEREK, CA  
[71] THE ROYAL INSTITUTION FOR THE ADVANCEMENT OF LEARNING/MCGILL UNIVERSITY, CA  
[85] 2023-12-22  
[86] 2022-07-08 (PCT/CA2022/000034)  
[87] (WO2023/279193)  
[30] US (63/219,524) 2021-07-08

[21] **3,224,077**  
[13] A1

[51] **Int.Cl. C03C 13/06 (2006.01) C03C 25/255 (2018.01) B32B 5/24 (2006.01) C03B 37/06 (2006.01) C03C 3/091 (2006.01) C03C 25/14 (2018.01) C03C 25/40 (2006.01)**  
[25] FR  
[54] **PRODUCT COMPRISING A MINERAL WOOL TO BE BLOWN**  
[54] **PRODUIT COMPRENANT UNE LAINE MINERALE A SOUFFLER**  
[72] RONY, AMAURY, FR  
[72] MICHEL, ALEXIA, FR  
[72] PERROS, ELODIE, FR  
[72] TOULEMON, DELPHINE, FR  
[71] SAINT-GOBAIN ISOVER, FR  
[85] 2023-12-22  
[86] 2022-07-21 (PCT/FR2022/051462)  
[87] (WO2023/002138)  
[30] FR (FR2107879) 2021-07-21  
[30] FR (FR2201006) 2022-02-04  
[30] FR (FR2201008) 2022-02-04

[21] **3,224,078**  
[13] A1

[51] **Int.Cl. E04B 9/20 (2006.01) E04B 9/36 (2006.01)**  
[25] EN  
[54] **ABSORBER TILE ELEMENT AND TILE SYSTEM**  
[54] **ELEMENT DE TUILE ABSORBEUR ET SYSTEME DE TUILE**  
[72] NILSSON, THOMAS, SE  
[71] SAINT-GOBAIN ECOPHON AB, SE  
[85] 2023-12-22  
[86] 2022-06-15 (PCT/EP2022/066400)  
[87] (WO2023/274735)  
[30] EP (21183117.7) 2021-07-01

[21] **3,224,079**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/48 (2006.01) A61K 31/05 (2006.01) A61K 31/4706 (2006.01) A61K 36/185 (2006.01) A61K 47/10 (2017.01) A61K 47/44 (2017.01) A61P 29/00 (2006.01)**  
[25] EN  
[54] **COMPOSITION COMPRISING CANNABIDIOL AND HYDROXYCHLOROQUINE IN A FIXED DOSE COMBINATION CAPSULE**  
[54] **COMPOSITION COMPRENANT DU CANNABIDIOL ET DE L'HYDROXYCHLOROQUINE DANS UNE CAPSULE COMBINEE A DOSE FIXE**  
[72] BLEACKLEY, MARK ROBERT, AU  
[72] LATHAM, JOEL BRADLEY, AU  
[71] INCANNEX HEALTHCARE LIMITED, AU  
[85] 2023-12-22  
[86] 2022-07-13 (PCT/AU2022/050731)  
[87] (WO2023/283684)  
[30] AU (2021902170) 2021-07-15

[21] **3,224,081**  
[13] A1

[25] EN  
[54] **SPOOL ENCLOSURE FOR A TERMINAL**  
[54] **ENCEINTE DE BOBINE POUR UN TERMINAL**  
[72] LEESON, KIM, GB  
[72] TREZISE, SHAUN, GB  
[72] ETHERIDGE, HARVEY, GB  
[71] PPC BROADBAND FIBER LTD., GB  
[85] 2023-12-22  
[86] 2022-07-04 (PCT/US2022/036061)  
[87] (WO2023/278884)  
[30] US (63/217,925) 2021-07-02

## PCT Applications Entering the National Phase

[21] <b>3,224,082</b> [13] A1	[21] <b>3,224,141</b> [13] A1	[21] <b>3,224,162</b> [13] A1
[51] <b>Int.Cl. G01N 33/50 (2006.01) G01N 33/483 (2006.01) G01N 33/574 (2006.01)</b>	[51] <b>Int.Cl. F41G 3/02 (2006.01) F41G 3/04 (2006.01) F41G 3/06 (2006.01) F41G 3/16 (2006.01) F41G 3/22 (2006.01) F41G 5/24 (2006.01) G01S 17/89 (2020.01)</b>	[51] <b>Int.Cl. G06T 7/10 (2017.01) G06T 7/00 (2017.01)</b>
[25] EN	[25] FR	[25] FR
[54] <b>METHODS FOR PREDICTING MULTI-ORGAN METASTATIC DISEASE IN SUBJECTS HAVING HYPER-ENGORGED CANCER ASSOCIATED MACROPHAGE-LIKE CELLS (CAMLS)</b>	[54] <b>OBSERVING DEVICE COMPRISING INDEPENDENT OPTICAL AND OPTRONIC CHANNELS AND VEHICLE EQUIPPED WITH SUCH A DEVICE</b>	[54] <b>AUTOMATIC METHOD FOR SEGMENTATION OF A THROMBUS AND A LESION IN A THREE-DIMENSIONAL BRAIN IMAGE</b>
[54] <b>METHODES POUR PREDIRE UNE MALADIE METASTASIQUE MULTI-ORGANE ET UNE SURVIE GLOBALE ET SANS PROGRESSION CHEZ DES SUJETS AYANT DES CELLULES DE TYPE MACROPHAGES GEANTS CIRCULANTS ASSOCIEES AU CANCER (CAML)</b>	[54] <b>DISPOSITIF D' OBSERVATION A VOIES OPTRONIQUE ET OPTIQUE INDEPENDANTES ET VEHICULE EQUIPE D'UN TEL DISPOSITIF</b>	[54] <b>PROCEDE AUTOMATIQUE DE SEGMENTATION D'UN THROMBUS ET D'UNE LESION DANS UNE IMAGE TRIDIMENSIONNELLE CEREBRALE</b>
[72] ADAMS, DANIEL L., US	[72] MORAILLON, ARNAUD, FR	[72] KOBOLD, JONATHAN, DE
[72] TANG, CHA-MEI, US	[72] ARAGONES, JULIEN, FR	[72] VIGNERON, VINCENT, FR
[71] CREATV MICROTECH INC., US	[72] TAFANELLI, CLAIRE, FR	[72] MAAREF, HICHEM, FR
[85] 2023-12-22	[72] GUETTIER, CHRISTOPHE, FR	[72] ALECU, COSMIN, FR
[86] 2022-07-06 (PCT/US2022/036253)	[72] BORRIELLO, MARIE-AXELLE, FR	[72] SMADJA, DIDIER, FR
[87] (WO2023/283264)	[72] LARRIBE, FABRICE, FR	[72] CHAUSSON, NICOLA, FR
[30] US (63/218,628) 2021-07-06	[72] BERTELLI, FLORIAN, FR	[72] LHERMITTE, YANN, FR
	[71] SAFRAN ELECTRONICS & DEFENSE, FR	[71] UNIVERSITE D'EVRY VAL D'ESSONNE, FR
	[85] 2023-12-22	[71] CENTRE HOSPITALIER SUD FRANCILIEN, FR
	[86] 2022-06-23 (PCT/EP2022/067200)	[85] 2023-12-22
	[87] (WO2023/274842)	[86] 2022-07-01 (PCT/EP2022/068270)
	[30] FR (FR2106898) 2021-06-28	[87] (WO2023/280708)
		[30] FR (FR2107286) 2021-07-06
		[21] <b>3,224,180</b> [13] A1
		[51] <b>Int.Cl. C07K 16/28 (2006.01) A61K 35/00 (2006.01) A61K 39/00 (2006.01) A61P 35/00 (2006.01) C07K 16/18 (2006.01)</b>
		[25] EN
		[54] <b>METHODS AND COMPOSITIONS FOR TREATING CANCER</b>
		[54] <b>METHODES ET COMPOSITIONS POUR LE TRAITEMENT DU CANCER</b>
		[72] KAO, HENRY, CH
		[72] MARKERT, CHRISTOPH, DE
		[72] MCINTYRE, CHRISTINE, GB
		[72] MENG, RAYMOND, D., US
		[72] MUECKE, MERLIND, CH
		[72] TEICHGRAEBER, VOLKER, CH
		[72] CODARRI DEAK, LAURA, CH
		[71] F. HOFFMANN-LA ROCHE AG, CH
		[85] 2023-12-14
		[86] 2022-07-28 (PCT/US2022/074279)
		[87] (WO2023/010095)



## Demandes PCT entrant en phase nationale

[21] **3,224,420**  
[13] A1

[51] **Int.Cl. H01M 4/13 (2010.01) H01M 10/052 (2010.01)**  
[25] EN  
[54] **SLURRY COMPOSITION FOR SECONDARY BATTERY ELECTRODE, AND SECONDARY BATTERY ELECTRODE USING SAME**  
[54] **COMPOSITION DE PATE POUR ELECTRODE DE BATTERIE SECONDAIRE, ET ELECTRODE DE BATTERIE SECONDAIRE L'UTILISANT**  
[72] KIM, SEONG DO, KR  
[72] KIM, DONG HO, KR  
[72] KIM, TAE YOON, KR  
[72] YANG, HWI CHAN, KR  
[72] LEE, JOO CHUL, KR  
[72] LIM, HYUNG WOO, KR  
[71] DONGJIN SEMICHEM CO., LTD., KR  
[85] 2023-12-28  
[86] 2021-07-02 (PCT/KR2021/008406)  
[87] (WO2022/005242)  
[30] KR (10-2020-0081708) 2020-07-02  
[30] KR (10-2020-0081709) 2020-07-02

[21] **3,224,508**  
[13] A1

[51] **Int.Cl. H04W 12/06 (2021.01)**  
[25] EN  
[54] **METHOD, APPARATUS AND SYSTEM FOR NETWORK CONNECTION, AND SERVER AND MEDIUM**  
[54] **PROCEDE, APPAREIL ET SYSTEME DE CONNEXION RESEAU, SERVEUR ET SUPPORT**  
[72] ZHANG, LEI, CN  
[71] BEIJING JINGDONG QIANSHI TECHNOLOGY CO., LTD., CN  
[85] 2023-12-15  
[86] 2022-05-24 (PCT/CN2022/094670)  
[87] (WO2023/284417)  
[30] CN (202110802229.7) 2021-07-15

[21] **3,224,510**  
[13] A1

[51] **Int.Cl. B65D 71/44 (2006.01) B65D 71/70 (2006.01)**  
[25] EN  
[54] **CARRIER FOR CONTAINERS**  
[54] **DISPOSITIF DE TRANSPORT POUR CONTENEURS**  
[72] THOMPSON, JON, GB  
[71] GRAPHIC PACKAGING INTERNATIONAL, LLC, US  
[85] 2023-12-15  
[86] 2022-07-14 (PCT/US2022/037069)  
[87] (WO2023/287949)  
[30] US (63/222,225) 2021-07-15  
[30] US (63/260,881) 2021-09-03

[21] **3,224,511**  
[13] A1

[51] **Int.Cl. G06N 3/04 (2023.01) G06N 3/08 (2023.01)**  
[25] EN  
[54] **CHANNEL ACCESS METHOD AND RELATED APPARATUS**  
[54] **PROCEDE D'ACCES A UN CANAL ET APPAREIL ASSOCIE**  
[72] GUO, ZIYANG, CN  
[72] LIU, PENG, CN  
[72] LUO, JIAJUN, CN  
[72] YANG, XUN, CN  
[72] LI, YUNBO, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2023-12-15  
[86] 2022-06-14 (PCT/CN2022/098741)  
[87] (WO2022/262734)  
[30] CN (202110673131.6) 2021-06-17

[21] **3,224,512**  
[13] A1

[51] **Int.Cl. B01F 23/50 (2022.01) B01F 25/21 (2022.01) B01F 25/50 (2022.01) B01F 35/53 (2022.01)**  
[25] EN  
[54] **MIXING TANK ARRANGEMENT AND METHOD FOR MIXING**  
[54] **AGENCEMENT DE RESERVOIR DE MELANGE ET PROCEDE DE MELANGE**  
[72] HILTUNEN, PEKKA, FI  
[71] KLEENER POWER SOLUTIONS OY, FI  
[85] 2023-12-15  
[86] 2022-06-16 (PCT/EP2022/066442)  
[87] (WO2022/263583)  
[30] EP (21180342.4) 2021-06-18

[21] **3,224,513**  
[13] A1

[51] **Int.Cl. C07D 237/34 (2006.01) C07D 471/04 (2006.01)**  
[25] EN  
[54] **NLRP3 INFLAMMASOME INHIBITORS**  
[54] **INHIBITEURS DE L'INFLAMMASOME NLRP3**  
[72] JOHANSSON, LARS ANDERS MIKAEL, SE  
[72] GRADEN, HENRIK, SE  
[72] BERGONZINI, GIULIA, SE  
[72] SUGAMA, HIROSHI, JP  
[72] MATSUMURA, TAKEHIKO, JP  
[71] ASTRAZENECA AB, SE  
[71] MITSUBISHI TANABE PHARMA CORPORATION, JP  
[85] 2023-12-15  
[86] 2022-07-01 (PCT/EP2022/068292)  
[87] (WO2023/275366)  
[30] US (63/217,970) 2021-07-02

[21] **3,224,514**  
[13] A1

[51] **Int.Cl. A61K 51/04 (2006.01)**  
[25] EN  
[54] **FIBROBLAST ACTIVATION PROTEIN INHIBITORS AND USE THEREOF**  
[54] **INHIBITEURS DE PROTEINE D'ACTIVATION DES FIBROBLASTES ET LEUR UTILISATION**  
[72] OSTERKAMP, FRANK, DE  
[72] GIBSON, CHRISTOPH, DE  
[72] SAUPE, JORN, DE  
[72] SMERLING, CHRISTIANE, DE  
[72] WAHSNER-TESCHNER, JESSICA, DE  
[72] HOHNE, AILEEN, DE  
[72] ZBORALSKI, DIRK, DE  
[72] REINEKE, ULRICH, DE  
[72] PASCHKE, MATTHIAS, DE  
[72] BREDENBECK, ANNE, DE  
[72] HAASE, CHRISTIAN, DE  
[72] UNGEWIB, JAN, DE  
[71] 3B PHARMACEUTICALS GMBH, DE  
[85] 2023-12-15  
[86] 2022-07-22 (PCT/EP2022/070693)  
[87] (WO2023/002045)  
[30] EP (21187424.3) 2021-07-23

## PCT Applications Entering the National Phase

[21] **3,224,517**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/00 (2006.01)**  
[25] EN  
[54] **ANTI CANINE CD20 ANTIBODIES**  
[54] **ANTICORPS ANTI-CD20 CANIN**  
[72] BRADLEY, ALLAN, GB  
[72] BOLLAND, DANIEL, GB  
[72] WANG, JUEXUAN, GB  
[72] SUTAVANI, RUHCHA VIJAY, GB  
[71] PETMEDIX LTD, GB  
[85] 2023-12-15  
[86] 2022-06-17 (PCT/GB2022/051559)  
[87] (WO2022/263864)  
[30] GB (2108677.2) 2021-06-17  
[30] GB (2202635.5) 2022-02-25

[21] **3,224,520**  
[13] A1

[51] **Int.Cl. A61F 2/14 (2006.01)**  
[25] EN  
[54] **ENDOTHELIAL OCULAR IMPLANT**  
[54] **IMPLANT OCULAIRE ENDOTHELIAL**  
[72] DAPHNA, OFER, IL  
[72] DUBSON, DMITRY, IL  
[72] FERERA, NAHUM, IL  
[71] EYAYON MEDICAL LTD., IL  
[85] 2023-12-15  
[86] 2022-06-13 (PCT/IB2022/055461)  
[87] (WO2022/264005)  
[30] US (17/349,946) 2021-06-17

[21] **3,224,521**  
[13] A1

[51] **Int.Cl. A01N 25/04 (2006.01) A01N 25/30 (2006.01) A01N 47/34 (2006.01) A01N 55/02 (2006.01) A01P 7/04 (2006.01)**  
[25] EN  
[54] **NOVALURON WATER DISPERSIBLE SOLID COMPOSITION**  
[54] **COMPOSITION SOLIDE HYDRODISPERSABLE DE NOVALURON**  
[72] KOREN, LITAL, IL  
[72] DAYAGI, YOHAI, IL  
[72] MINES, YAAKOV, IL  
[71] ADAMA MAKHTESHIM LTD., IL  
[85] 2023-12-15  
[86] 2022-06-15 (PCT/IB2022/055552)  
[87] (WO2022/264064)  
[30] US (63/211,391) 2021-06-16

[21] **3,224,522**  
[13] A1

[51] **Int.Cl. A01K 75/02 (2006.01)**  
[25] EN  
[54] **LIGHT HERDING SYSTEM FOR TRAWLS**  
[54] **SYSTEME LEGER DE RASSEMBLAGE POUR CHALUTS**  
[72] ERLENDSSON, HJORTUR, IS  
[72] DAVIDSSON, JON ODDUR, IS  
[72] SKULASON, ARNI, IS  
[72] SKAFTASON, EINAR, IS  
[72] SAFWAT, SHERIF, US  
[71] HAMPIDJAN HF., IS  
[85] 2023-12-16  
[86] 2022-06-20 (PCT/IS2022/050003)  
[87] (WO2022/269645)  
[30] US (63/212,707) 2021-06-20  
[30] IS (IS 9151) 2021-07-16  
[30] US (63/223,060) 2021-07-18

[21] **3,224,524**  
[13] A1

[51] **Int.Cl. B23K 11/11 (2006.01) B23K 11/00 (2006.01) B23K 11/16 (2006.01) B23K 11/20 (2006.01) B23K 11/24 (2006.01)**  
[25] EN  
[54] **A WELDING METHOD**  
[54] **PROCEDE DE SOUDAGE**  
[72] WANG, ZHIFEN, US  
[72] CHIOCCA, ALEXIS, FR  
[71] ARCELORMITTAL, LU  
[85] 2023-12-17  
[86] 2022-06-21 (PCT/IB2022/055737)  
[87] (WO2023/002269)  
[30] IB (PCT/IB2021/056661) 2021-07-23

[21] **3,224,528**  
[13] A1

[51] **Int.Cl. A61J 3/00 (2006.01) B65B 43/42 (2006.01) A61J 3/07 (2006.01) A61J 7/00 (2006.01)**  
[25] EN  
[54] **FORMULATIONS OF ACTIVE PHARMACEUTICAL INGREDIENTS (APIS) FOR LOCAL DELIVERY VIA ACTIVE MICROBOT**  
[54] **FORMULATIONS D'INGREDIENTS PHARMACEUTIQUES ACTIFS (API) POUR UNE ADMINISTRATION LOCALE PAR L'INTERMEDIAIRE D'UN MICROROBOT ACTIF**  
[72] KISELYOV, ALEX, US  
[71] BIONAUT LABS LTD., IL  
[85] 2023-12-18  
[86] 2022-06-13 (PCT/US2022/033256)  
[87] (WO2022/271476)  
[30] US (63/213,945) 2021-06-23

[21] **3,224,539**  
[13] A1

[51] **Int.Cl. H01F 27/28 (2006.01) H01F 17/04 (2006.01) H01F 41/04 (2006.01)**  
[25] EN  
[54] **ELECTRO-MAGNETIC DEVICES HAVING MULTI-THICKNESS ELEMENTS, AND METHODS OF MANUFACTURING ELECTRO-MAGNETIC DEVICES HAVING MULTI-THICKNESS ELEMENTS**  
[54] **DISPOSITIFS ELECTRO-MAGNETIQUES AYANT DES ELEMENTS A EPAISSEURS MULTIPLES, ET PROCEDES DE FABRICATION DE DISPOSITIFS ELECTRO-MAGNETIQUES AYANT DES ELEMENTS A EPAISSEURS MULTIPLES**  
[72] HANSON, BENJAMIN, US  
[72] BRUNE, RODNEY, US  
[72] HUBER, MATT, US  
[71] VISHAY DALE ELECTRONICS, LLC, US  
[85] 2023-12-18  
[86] 2022-06-15 (PCT/US2022/033579)  
[87] (WO2022/266191)  
[30] US (17/351,782) 2021-06-18

## Demandes PCT entrant en phase nationale

[21] **3,224,541**  
[13] A1

[51] **Int.Cl. A23L 33/13 (2016.01) A23P 10/30 (2016.01) A61K 9/50 (2006.01) A61K 31/7084 (2006.01) A61K 47/10 (2017.01) A61P 25/20 (2006.01) A61P 37/04 (2006.01) A61P 39/06 (2006.01)**

[25] EN

[54] **MICROCAPSULE POWDER STABLE IN GASTRIC ACID, METHOD FOR PREPARING SAME, AND USE THEREOF**

[54] **POUDRE DE MICROCAPSULE STABLE DANS L'ACIDE GASTRIQUE, SON PROCEDE DE PREPARATION ET SON APPLICATION**

[72] CHEN, JIANSHEG, CN  
[72] ZHANG, BO, CN  
[72] ZHANG, TONG, CN  
[72] HOU, YAYING, CN  
[72] LV, JING, CN  
[71] HOBOOMLIFE BIO-TECHNOLOGY (SHENZHEN) CO., LTD., CN  
[85] 2023-12-29  
[86] 2022-04-22 (PCT/CN2022/088327)  
[87] (WO2023/000736)  
[30] CN (202110819545.5) 2021-07-20

[21] **3,224,542**  
[13] A1

[51] **Int.Cl. E21B 47/06 (2012.01) E21B 47/13 (2012.01) E21B 47/18 (2012.01)**

[25] EN

[54] **ALONG STRING MEASUREMENT TOOL WITH PRESSURE SENSOR ARRAY**

[54] **OUTIL DE MESURE LE LONG D'UNE RAME AVEC RESEAU DE CAPTEURS DE PRESSION**

[72] GOSWAMI, JAIDEVA C., US  
[72] HEWLETT, RICHARD, US  
[72] PINK, ANTHONY, US  
[72] PINK, STEPHEN, GB  
[71] NATIONAL OILWELL VARCO, L.P., US  
[85] 2023-12-18  
[86] 2022-06-15 (PCT/US2022/033622)  
[87] (WO2022/271507)  
[30] US (63/202,805) 2021-06-25  
[30] US (63/202,825) 2021-06-25

[21] **3,224,544**  
[13] A1

[51] **Int.Cl. A61K 31/706 (2006.01) A61P 3/00 (2006.01) C07D 213/127 (2006.01) C07H 19/048 (2006.01)**

[25] EN

[54] **TREATMENT OF IMMUNE-RELATED DISORDERS, KIDNEY DISORDERS, LIVER DISORDERS, HEMOLYTIC DISORDERS, AND OXIDATIVE STRESS-ASSOCIATED DISORDERS USING NRH, NARH AND REDUCED DERIVATIVES THEREOF**

[54] **TRAITEMENT DE TROUBLES LIES A L'IMMUNITE, DE TROUBLES RENAUX, DE TROUBLES HEPATIQUES, DE TROUBLES HEMOLYTIQUES ET DE TROUBLES LIES AU STRESS OXYDATIF A L'AIDE DE NRH, NARH ET DE LEURS DERIVES REDUITS**

[72] SUBRAMANIAN, G. MANI, US  
[72] PRANESH, GAUTHAM TUMKUR, IN  
[72] GANAPATI, GANGADHARA, US  
[72] ZACHARIAH, NIKHIL SAJI, IN  
[72] KUMAR, K. S. AJAY, IN  
[71] MITOPOWER LLC, US  
[85] 2023-12-18  
[86] 2022-06-16 (PCT/US2022/033794)  
[87] (WO2022/266322)  
[30] IN (202141027391) 2021-06-18  
[30] US (63/236,974) 2021-08-25

[21] **3,224,548**  
[13] A1

[51] **Int.Cl. G16B 20/20 (2019.01) G06N 20/00 (2019.01) G06N 20/20 (2019.01) G16B 40/20 (2019.01)**

[25] EN

[54] **METHODS FOR IDENTIFYING MUTATIONS USING MACHINE LEARNING**

[54] **PROCEDES D'IDENTIFICATION DE MUTATIONS A L'AIDE D'UN APPRENTISSAGE AUTOMATIQUE**

[72] TOMLINS, SCOTT ARTHUR, US  
[72] RHODES, DANIEL REED, US  
[72] JOHNSON, DAVID BRYAN, US  
[71] STRATA ONCOLOGY, INC., US  
[85] 2023-12-18  
[86] 2022-06-17 (PCT/US2022/034115)  
[87] (WO2022/266518)  
[30] US (63/211,891) 2021-06-17

[21] **3,224,552**  
[13] A1

[51] **Int.Cl. C25D 3/12 (2006.01) C25D 3/56 (2006.01)**

[25] EN

[54] **COATED SURFACES, COATINGS AND ARTICLES USING THEM**

[54] **SURFACES REVETUES, REVETEMENTS ET ARTICLES LES UTILISANT**

[72] HAGHDOOST, ATIEH, US  
[72] KARGAR, MEHDI, US  
[72] ILGAR, ERSAN, US  
[72] CHURCH, DANIEL, US  
[71] MAXTERIAL, INC., US  
[85] 2023-12-18  
[86] 2022-06-20 (PCT/US2022/034155)  
[87] (WO2022/266528)  
[30] US (63/212,515) 2021-06-18  
[30] US (63/223,497) 2021-07-19  
[30] US (63/226,649) 2021-07-28

[21] **3,224,554**  
[13] A1

[51] **Int.Cl. C25D 3/12 (2006.01) C25D 5/10 (2006.01)**

[25] EN

[54] **PROCESSES FOR PRODUCING COATED SURFACES, COATINGS AND ARTICLES USING THEM**

[54] **PROCESSUS DE PRODUCTION DE SURFACES REVETUES, REVETEMENTS ET ARTICLES LES UTILISANT**

[72] HAGHDOOST, ATIEH, US  
[72] KARGAR, MEHDI, US  
[72] ILGAR, ERSAN, US  
[72] CHURCH, DANIEL, US  
[71] MAXTERIAL, INC., US  
[85] 2023-12-18  
[86] 2022-06-20 (PCT/US2022/034157)  
[87] (WO2022/266529)  
[30] US (63/212,515) 2021-06-18  
[30] US (63/223,497) 2021-07-19  
[30] US (63/226,649) 2021-07-28

## PCT Applications Entering the National Phase

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[21] **3,224,559**  
[13] A1

[51] **Int.Cl. C22C 27/04 (2006.01) C23C 4/06 (2016.01)**  
[25] EN  
[54] **MOVEABLE COMPONENTS WITH SURFACE COATINGS**  
[54] **COMPOSANTS MOBILES DOTES DE REVETEMENTS DE SURFACE**  
[72] HAGHDOOST, ATIEH, US  
[72] KARGAR, MEHDI, US  
[72] ILGAR, ERSAN, US  
[72] CHURCH, DANIEL, US  
[71] MAXTERIAL, INC., US  
[85] 2023-12-18  
[86] 2022-06-20 (PCT/US2022/034164)  
[87] (WO2022/266532)  
[30] US (63/212,515) 2021-06-18  
[30] US (63/223,497) 2021-07-19  
[30] US (63/226,649) 2021-07-28

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[21] **3,224,563**  
[13] A1

[51] **Int.Cl. C25D 3/12 (2006.01) C25D 3/56 (2006.01)**  
[25] EN  
[54] **ARTICLES INCLUDING SURFACE COATINGS ON EXTERNAL SURFACES, INTERNAL SURFACES OR BOTH**  
[54] **ARTICLES COMPRENANT DES REVETEMENTS DE SURFACE SUR DES SURFACES EXTERNES, DES SURFACES INTERNES OU LES DEUX**  
[72] HAGHDOOST, ATIEH, US  
[72] KARGAR, MEHDI, US  
[72] ILGAR, ERSAN, US  
[72] CHURCH, DANIEL, US  
[71] MAXTERIAL, INC., US  
[85] 2023-12-18  
[86] 2022-06-20 (PCT/US2022/034165)  
[87] (WO2022/266533)  
[30] US (63/212,515) 2021-06-18  
[30] US (63/223,497) 2021-07-19  
[30] US (63/226,649) 2021-07-28

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[21] **3,224,589**  
[13] A1

[51] **Int.Cl. A62C 2/06 (2006.01)**  
[25] EN  
[54] **EMBER BLOCKING VENT SCREEN AND METHOD OF INSTALLATION**  
[54] **ECRAN D'AERATION DE BLOCAGE DE BRAISES ET PROCEDE D'INSTALLATION**  
[72] ROSA, STEPHEN, US  
[71] ROSA, STEPHEN, US  
[85] 2023-12-29  
[86] 2022-06-07 (PCT/US2022/032458)  
[87] (WO2022/261063)  
[30] US (63/209,679) 2021-06-11

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[21] **3,224,602**  
[13] A1

[25] EN  
[54] **SYSTEM FOR PRESENTING ROBOTIC DATA FLOWS FOR APPLICATION DEVELOPMENT**  
[54] **SYSTEME DE PRESENTATION DE FLUX DE DONNEES ROBOTIQUES POUR DEVELOPPEMENT D'APPLICATIONS**  
[72] WALES, CAROLYN, US  
[72] CIANCI, CHRIS, US  
[72] KAEHLER, ADRIAN, US  
[72] KRANSKI, JEFF, US  
[71] SANCTUARY COGNITIVE SYSTEMS CORPORATION, CA  
[85] 2023-12-29  
[86] 2022-04-01 (PCT/US2022/023167)  
[87] (WO2022/212919)  
[30] US (63/169,721) 2021-04-01

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[21] **3,224,654**  
[13] A1

[51] **Int.Cl. F24S 23/70 (2018.01) F24S 20/61 (2018.01) F24S 30/425 (2018.01) F24S 50/80 (2018.01)**  
[25] EN  
[54] **SYSTEM FOR MODERATING ENERGY ABSORPTION AT THE EARTH'S SURFACE WITH A PROGRAMMABLE FORCING NETWORK OF CLIMATE CONTROL PANELS**  
[54] **SYSTEME POUR LA MODERATION DE L'ABSORPTION D'ENERGIE A LA SURFACE DE LA TERRE AVEC UN RESEAU DE FORCAGE PROGRAMMABLE DE PANNEAUX DE REGULATION CLIMATIQUE**  
[72] LAWRENCE, DOUGLAS, US  
[71] LAWRENCE, DOUGLAS, US  
[85] 2023-12-22  
[86] 2022-08-25 (PCT/US2022/075433)  
[87] (WO2023/034712)  
[30] US (63/238,373) 2021-08-30

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[21] **3,224,655**  
[13] A1

[51] **Int.Cl. B01J 27/18 (2006.01)**  
[25] EN  
[54] **TRI-FUNCTIONAL HETEROGENEOUS PHOTOCATALYST**  
[54] **PHOTOCATALYSEUR HETEROGENE TRI-FONCTIONNEL**  
[72] TAVASOLI, ALEXANDRA VICTORIA, CA  
[72] OZIN, GEOFFREY ALAN, CA  
[71] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA  
[85] 2023-12-11  
[86] 2022-06-29 (PCT/CA2022/051039)  
[87] (WO2023/272389)  
[30] US (63/216,668) 2021-06-30

## Demandes PCT entrant en phase nationale

[21] **3,224,657**  
[13] A1

[51] **Int.Cl. A42B 3/32 (2006.01) A42B 3/06 (2006.01) A42B 3/10 (2006.01)**  
[25] EN  
[54] **IMPACT PROTECTION SYSTEM**  
[54] **SYSTEME DE PROTECTION CONTRE LES CHOCS**  
[72] JOSEPH, ROBERT, AU  
[72] ROBINSON, BRODIE, AU  
[71] ANTI ORDINARY PTY LTD, AU  
[85] 2023-12-18  
[86] 2021-06-23 (PCT/AU2021/050653)  
[87] (WO2021/258141)

[21] **3,224,659**  
[13] A1

[51] **Int.Cl. E04F 13/08 (2006.01)**  
[25] EN  
[54] **PREFABRICATED BUILDING PANELS AND METHODS FOR CONSTRUCTING BUILDINGS**  
[54] **PANNEAUX DE CONSTRUCTION PREFABRIQUES ET PROCEDES DE CONSTRUCTION DE BATIMENTS**  
[72] DOMBOWSKY, MICHAEL ANTHONY, CA  
[72] DOMBOWSKY, BRADEN LOUIS, CA  
[71] NEXII BUILDING SOLUTIONS INC., CA  
[85] 2023-12-18  
[86] 2022-06-17 (PCT/CA2022/050984)  
[87] (WO2022/261787)  
[30] US (63/212,604) 2021-06-18

[21] **3,224,661**  
[13] A1

[51] **Int.Cl. C08G 18/40 (2006.01) A61K 9/00 (2006.01) A61K 9/48 (2006.01) A61K 47/18 (2017.01)**  
[25] EN  
[54] **AMPHIPHILIC OLIGOMERS AND SELF-ASSEMBLING HYDROGELS FORMED THEREFROM**  
[54] **OLIGOMERES AMPHIPHILES ET HYDROGELS A AUTOASSEMBLAGE FORMES A PARTIR DE CEUX-CI**  
[72] SANTERRE, PAUL, CA  
[72] SONE, ELI, CA  
[72] LAM, ANGUS WEN-TSUNG, CA  
[71] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA  
[85] 2023-12-18  
[86] 2022-06-20 (PCT/CA2022/050992)  
[87] (WO2022/261791)  
[30] US (63/212,459) 2021-06-18

[21] **3,224,662**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 37/06 (2006.01) C07K 16/28 (2006.01) C12N 15/13 (2006.01)**  
[25] EN  
[54] **VISTA AGONISTS AND RELATED COMPOSITIONS AND METHODS**  
[54] **AGONISTES VISTA ET COMPOSITIONS ET METHODES ASSOCIEES**  
[72] GARIPEY, JEAN, CA  
[72] MA, VIVIAN, CA  
[72] SPARKES, AMANDA, CA  
[72] MATUS, ESTHER, CA  
[71] SUNNYBROOK RESEARCH INSTITUTE, CA  
[85] 2023-12-18  
[86] 2022-06-24 (PCT/CA2022/051018)  
[87] (WO2022/266772)  
[30] US (63/215,076) 2021-06-25

[21] **3,224,663**  
[13] A1

[51] **Int.Cl. A61N 1/36 (2006.01) G16H 20/30 (2018.01) G16H 40/67 (2018.01) A61N 1/04 (2006.01) G06F 1/16 (2006.01)**  
[25] EN  
[54] **SMART GARMENT FOR REMOTE DELIVERY OF THERAPY**  
[54] **VETEMENT INTELLIGENT POUR L'ADMINISTRATION A DISTANCE D'UNE THERAPIE**  
[72] MOINEAU, BASTIEN, CA  
[72] ALIZADEH-MEGHRAZI, MILAD, CA  
[72] MAHNAM, AMIN, CA  
[71] MYANT INC., CA  
[85] 2023-12-18  
[86] 2022-06-24 (PCT/CA2022/051021)  
[87] (WO2022/266775)  
[30] US (63/214,583) 2021-06-24

[21] **3,224,664**  
[13] A1

[51] **Int.Cl. B01J 13/00 (2006.01)**  
[25] EN  
[54] **AEROGELS, METHODS FOR THEIR PREPARATION AND USES THEREOF**  
[54] **AEROGELS, LEURS PROCEDES DE PREPARATION ET LEURS UTILISATIONS**  
[72] JIANG, FENG, CA  
[72] QIN, HENGFEI, CA  
[72] ZHANG, IVAN, CA  
[71] THE UNIVERSITY OF BRITISH COLUMBIA, CA  
[85] 2023-12-18  
[86] 2022-08-04 (PCT/CA2022/051190)  
[87] (WO2023/010218)  
[30] US (63/230,312) 2021-08-06

[21] **3,224,665**  
[13] A1

[51] **Int.Cl. C07D 265/36 (2006.01) A61K 31/4709 (2006.01) A61K 31/498 (2006.01) A61K 31/538 (2006.01) A61K 31/5383 (2006.01) A61P 35/00 (2006.01) C07D 401/14 (2006.01) C07D 403/14 (2006.01) C07D 413/14 (2006.01) C07D 419/14 (2006.01) C07D 498/04 (2006.01)**  
[25] EN  
[54] **HETEROCYCLIC COMPOUNDS AS IMMUNOMODULATORS OF PD-L1 INTERACTIONS**  
[54] **COMPOSES HETEROCYCLIQUES UTILES COMME IMMUNOMODULATEURS D'INTERACTIONS DE PD-L1**  
[72] YANG, BAILING, CN  
[72] CHEN, JINHUA, CN  
[72] LAI, YANG, CN  
[72] SUN, WEI, CN  
[72] LIANG, BIN, CN  
[72] DONG, LIUYU, CN  
[72] YE, JIUYONG, CN  
[72] KRISTJAN, GUDMUNDSSON, CN  
[72] WU, JINZI JASON, CN  
[71] ASCLETIS BIOSCIENCE CO., LTD, CN  
[85] 2023-12-18  
[86] 2021-07-02 (PCT/CN2021/104258)  
[87] (WO2023/272720)

## PCT Applications Entering the National Phase

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[21] **3,224,667**  
[13] A1

[51] **Int.Cl. A23L 27/60 (2016.01) A23L 23/00 (2016.01) A23L 29/10 (2016.01) A23L 29/212 (2016.01) A23L 35/00 (2016.01)**

[25] EN

[54] **OIL IN WATER EMULSIFIED FOOD COMPOSITION COMPRISING AQUAFABA AND PROCESS FOR MANUFACTURING THE SAME**

[54] **COMPOSITION ALIMENTAIRE EMULSIFIEE D'HUILE DANS L'EAU COMPRENANT DE L'AQUAFABA ET SON PROCEDE DE FABRICATION**

[72] CLIFFORD, RYAN MICHAEL, NL  
[72] KIM, HYUNJUNG, NL  
[72] SMEEMAN, EMMA MARIA, NL  
[71] UNILEVER IP HOLDINGS B.V., NL  
[85] 2023-12-18  
[86] 2022-05-12 (PCT/EP2022/062992)  
[87] (WO2022/263074)  
[30] EP (21180430.7) 2021-06-18

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[21] **3,224,668**  
[13] A1

[51] **Int.Cl. H04R 1/10 (2006.01) H04R 5/033 (2006.01)**

[25] EN

[54] **HEADPHONES**

[54] **ECOUTEURS**

[72] GROSSLER, STEFAN, DE  
[72] HANNEMANN, AJAN, DE  
[72] BINGS, PASCAL, DE  
[71] BURMESTER AUDIOSYSTEME GMBH, DE  
[85] 2023-12-18  
[86] 2022-06-14 (PCT/EP2022/066129)  
[87] (WO2022/263423)  
[30] EP (21180298.8) 2021-06-18

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[21] **3,224,673**  
[13] A1

[51] **Int.Cl. A61K 31/351 (2006.01) A61K 31/382 (2006.01) A61K 31/403 (2006.01) A61K 31/4184 (2006.01) A61K 31/4422 (2006.01) A61K 31/554 (2006.01) A61K 31/70 (2006.01) A61K 31/7034 (2006.01) A61K 31/7042 (2006.01) A61K 31/7048 (2006.01) A61K 31/7056 (2006.01) A61K 31/722 (2006.01) A61P 13/12 (2006.01)**

[25] EN

[54] **USE OF SGLT-2 INHIBITORS FOR THE PREVENTION AND/OR TREATMENT OF RENAL DISEASES IN NON-HUMAN MAMMALS**

[54] **UTILISATION D'INHIBITEURS DE SGLT-2 POUR LA PREVENTION ET/OU LE TRAITEMENT DE MALADIES RENALES CHEZ DES MAMMIFERES NON HUMAINS**

[72] KROH, CARLA, DE  
[72] LANG, INGO ULRICH, DE  
[72] MATALLO, JOSE, DE  
[71] BOEHRINGER INGELHEIM VETMEDICA GMBH, DE  
[85] 2023-12-18  
[86] 2022-07-26 (PCT/EP2022/070943)  
[87] (WO2023/006747)  
[30] EP (21188321.0) 2021-07-28

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[21] **3,224,676**  
[13] A1

[51] **Int.Cl. C12N 9/16 (2006.01) A23K 10/16 (2016.01) A23K 20/189 (2016.01) A23K 50/10 (2016.01) A23K 50/30 (2016.01) A23K 50/75 (2016.01) A23K 50/80 (2016.01)**

[25] EN

[54] **PHYTASE VARIANTS**

[54] **VARIANTS DE PHYTASE**

[72] JUNTUNEN, KARI, FI  
[72] AHOLA, PIHLA, FI  
[72] BENSON, SVEN, DE  
[72] LORENZ, LENZ, DE  
[72] METZGER, TARA, DE  
[72] KUHN, IMKE, DE  
[72] PURANEN, TERHI, FI  
[72] PALOHEIMO, MARJA, FI  
[71] AB ENZYMES OY, FI  
[85] 2023-12-18  
[86] 2022-06-23 (PCT/FI2022/050463)  
[87] (WO2023/285735)  
[30] EP (21186223.0) 2021-07-16  
[30] EP (21186231.3) 2021-07-16

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[21] **3,224,677**  
[13] A1

[51] **Int.Cl. C12M 1/26 (2006.01) C12M 1/12 (2006.01)**

[25] EN

[54] **ASEPTIC CONNECTOR**

[54] **CONNECTEUR ASEPTIQUE**

[72] VERAITCH, FARLAN, GB  
[72] RAIMES, WILLIAM, GB  
[72] LITTEN, NEIL, GB  
[72] SMITH, RICHARD, GB  
[72] AMINI, ARMAN, GB  
[72] SHAPKA, STEPHEN, GB  
[71] ORIBIOTECH LTD, GB  
[85] 2023-12-18  
[86] 2022-06-08 (PCT/GB2022/051429)  
[87] (WO2022/269231)  
[30] GB (2109127.7) 2021-06-24

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[21] **3,224,678**  
[13] A1

[51] **Int.Cl. H04Q 1/12 (2006.01) H01Q 1/12 (2006.01)**

[25] EN

[54] **A MOUNTING SYSTEM**

[54] **SYSTEME DE MONTAGE**

[72] HANSEN, PETER, GB  
[72] TURNER, MATTHEW, GB  
[72] SHAHIDI, EBBY, GB  
[72] HOLMES, SIMON, GB  
[71] EVOLUTIONARY RAIL LIMITED, GB  
[85] 2023-12-18  
[86] 2022-06-17 (PCT/GB2022/051538)  
[87] (WO2022/263843)  
[30] GB (2108815.8) 2021-06-18

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[21] **3,224,679**  
[13] A1

[51] **Int.Cl. G01K 13/20 (2021.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR MEASURING TEMPERATURES OF INDIVIDUALS**

[54] **SYSTEMES ET PROCEDES DE MESURE DE TEMPERATURES D'INDIVIDUS**

[72] MOLLOY, ROISIN, GB  
[72] CAIRNS, GERRY, GB  
[71] TRIMEDIKA LIMITED, GB  
[85] 2023-12-18  
[86] 2022-06-16 (PCT/IB2022/055588)  
[87] (WO2022/264081)  
[30] US (63/212,551) 2021-06-18

## Demandes PCT entrant en phase nationale

[21] **3,224,680**  
[13] A1

[51] **Int.Cl. B02C 2/04 (2006.01) B02C 4/32 (2006.01) G01N 3/56 (2006.01)**  
[25] EN  
[54] **METHOD OF AND SYSTEM FOR OPERATING A VERTICAL GRINDING MILL**  
[54] **PROCEDE ET SYSTEME POUR FAIRE FONCTIONNER UN BROYEUR VERTICAL**  
[72] MENEZES, KELLSON TAKENAKA, BR  
[72] ARRUDA, MARIO CESAR CASTRO, BR  
[72] LINO, MARLON FABIO MARQUES, BR  
[72] ROSSI, MAURO ALBERTO CASTHELOGE, BR  
[72] COUTINHO, RICARDO OLIVEIRA, BR  
[71] ANGLO AMERICAN MINERIO DE FERRO BRASIL S/A, BR  
[85] 2023-12-18  
[86] 2022-06-21 (PCT/IB2022/055743)  
[87] (WO2022/269485)  
[30] GB (2109006.3) 2021-06-23

[21] **3,224,684**  
[13] A1

[51] **Int.Cl. A01D 34/66 (2006.01) A01B 39/08 (2006.01) A01B 39/16 (2006.01) A01D 34/84 (2006.01) A01G 3/04 (2006.01)**  
[25] EN  
[54] **AGRICULTURAL MACHINE COMPRISING A SUCKER-REMOVING DEVICE ADAPTED TO REMOVE SUCKERS FROM A VEGETABLE PLANT**  
[54] **MACHINE AGRICOLE COMPRENANT UN DISPOSITIF DE RETRAIT DE GOURMANDS CONCU POUR RETIRER LES GOURMANDS D'UNE PLANTE POTAGERE**  
[72] BONGIOVANNI, LIVIO, IT  
[71] SPOLGREEN SRL, IT  
[85] 2023-12-18  
[86] 2022-06-22 (PCT/IB2022/055773)  
[87] (WO2022/269500)  
[30] IT (102021000016487) 2021-06-26

[21] **3,224,687**  
[13] A1

[51] **Int.Cl. G01N 33/569 (2006.01)**  
[25] EN  
[54] **USE OF SINGLE CELL ELISA STARTING FROM DEPARAFFINIZED CELLS FOR THE DETECTION OF MOLECULES OF INTEREST**  
[54] **UTILISATION D'ELISA UNICELLULAIRE A PARTIR DE CELLULES DEPARAFFINEES POUR LA DETECTION DE MOLECULES D'INTERET**  
[72] CARREIRA, VINICIUS, US  
[72] MARELLA, MATHIEU, US  
[71] JANSSEN BIOTECH, INC., US  
[85] 2023-12-18  
[86] 2022-06-23 (PCT/IB2022/055835)  
[87] (WO2022/269534)  
[30] US (63/214,177) 2021-06-23

[21] **3,224,688**  
[13] A1

[51] **Int.Cl. A01K 1/01 (2006.01) A01K 5/02 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR CARRYING OUT AN ANIMAL-RELATED OPERATION, AND IN COMBINATION, A BARN FOR KEEPING ANIMALS AND A SYSTEM OF THIS KIND**  
[54] **SYSTEME ET PROCEDE POUR METTRE EN ŒUVRE UNE OPERATION ASSOCIEE A UN ANIMAL, ET EN COMBINAISON, UNE GRANGE POUR GARDER DES ANIMAUX ET UN SYSTEME DE CE TYPE**  
[72] JORNA, HARM, NL  
[71] LELY PATENT N.V., NL  
[85] 2023-12-18  
[86] 2022-07-07 (PCT/IB2022/056284)  
[87] (WO2023/285928)  
[30] NL (2028701) 2021-07-12

[21] **3,224,689**  
[13] A1

[51] **Int.Cl. C10G 1/00 (2006.01) C10G 1/10 (2006.01) C10G 3/00 (2006.01) C10G 11/18 (2006.01) C10L 1/04 (2006.01)**  
[25] EN  
[54] **CO-PROCESSING OF WASTE PLASTIC PYROLYSIS OILS AND BIORENEWABLE FEEDSTOCKS**  
[54] **CO-TRAITEMENT D'HUILES DE PYROLYSE DE DECHETS PLASTIQUES ET DE CHARGES BIO-RENOUVELABLES**  
[72] LIU, TENGFEI, US  
[72] SCHMIDT, JOEL EDWARD, US  
[72] GROVE, RICHARD, US  
[72] TIMKEN, HYE-KYUNG CHO, US  
[71] CHEVRON U.S.A. INC., US  
[85] 2023-12-18  
[86] 2022-07-20 (PCT/IB2022/056693)  
[87] (WO2023/026111)  
[30] US (63/236,758) 2021-08-25

[21] **3,224,711**  
[13] A1

[51] **Int.Cl. A46B 13/02 (2006.01)**  
[25] EN  
[54] **DUSTING DEVICE**  
[54] **DISPOSITIF DE DEPOUSSIERAGE**  
[72] RAMSEY, MARK C., US  
[71] RAMSEY, MARK C., US  
[85] 2024-01-02  
[86] 2021-07-29 (PCT/US2021/043645)  
[87] (WO2023/009121)

[21] **3,224,714**  
[13] A1

[51] **Int.Cl. C12Q 1/6886 (2018.01) C07K 14/82 (2006.01) C12N 9/12 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **METHODS OF DETECTING NTRK FUSION PROTEINS**  
[54] **METHODES DE DETECTION DE PROTEINES DE FUSION NTRK**  
[72] RHODES, DANIEL REED, US  
[72] TOMLINS, SCOTT ARTHUR, US  
[72] JOHNSON, DAVID BRYAN, US  
[71] STRATA ONCOLOGY, INC., US  
[85] 2023-12-18  
[86] 2022-06-21 (PCT/US2022/034417)  
[87] (WO2022/266551)

## PCT Applications Entering the National Phase

[21] **3,224,715**  
[13] A1

[51] **Int.Cl. A01F 15/18 (2006.01) A01D 41/127 (2006.01) A01D 43/00 (2006.01) A01D 61/02 (2006.01) C11B 1/04 (2006.01) A01H 5/10 (2018.01)**

[25] EN

[54] **SYSTEMS FOR GROWING AND PROCESSING PLANTS AND PLANT MATERIALS**

[54] **SYSTEMES DE CULTURE ET DE TRAITEMENT DE PLANTES ET DE MATIERES VEGETALES**

[72] NEAL, ANDREW T., US

[72] HEWITT, NICHOLAS, US

[71] EHEMPHOUSE CORP., US

[85] 2023-12-12

[86] 2022-06-22 (PCT/US2022/034468)

[87] (WO2022/271790)

[30] US (63/213,475) 2021-06-22

[21] **3,224,716**  
[13] A1

[51] **Int.Cl. G16H 20/17 (2018.01) G16H 50/50 (2018.01)**

[25] EN

[54] **PREDICTION FUNNEL FOR GENERATION OF HYPO- AND HYPER GLYCEMIC ALERTS BASED ON CONTINUOUS GLUCOSE MONITORING DATA**

[54] **ENTONNOIR DE PREDICTION POUR LA GENERATION D'ALERTE HYPOGLYCEMIQUE ET HYPERGLYCEMIQUE SUR LA BASE DE DONNEES DE SURVEILLANCE CONTINUE DU GLUCOSE**

[72] FACCIOLI, SIMONE, US

[72] FACCHINETTI, ANDREA, US

[72] DEL FAVERO, SIMONE, US

[72] PRENDIN, FRANCISCO, US

[72] SPARACINO, GIOVANNI, US

[71] DEXCOM, INC., US

[85] 2023-12-18

[86] 2022-11-01 (PCT/US2022/079085)

[87] (WO2023/081659)

[30] US (63/263,433) 2021-11-02

[21] **3,224,718**  
[13] A1

[51] **Int.Cl. A61L 29/04 (2006.01) A61L 29/16 (2006.01) A61L 31/04 (2006.01) A61L 31/16 (2006.01)**

[25] EN

[54] **COMPOSITIONS, METHODS, AND DEVICES FOR SUSTAINED RELEASE OF AN AGENT**

[54] **COMPOSITIONS, PROCEDES ET DISPOSITIFS POUR LA LIBERATION PROLONGEE D'UN AGENT**

[72] DUGAS, TAMMY R., US

[72] SABLIOV, CRISTINA, US

[72] ASTETE, CARLOS, US

[71] BOARD OF SUPERVISORS OF LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COLLEGE, US

[85] 2023-12-18

[86] 2022-06-21 (PCT/US2022/073054)

[87] (WO2022/272243)

[30] US (63/202,673) 2021-06-21

[21] **3,224,719**  
[13] A1

[51] **Int.Cl. A61B 5/145 (2006.01) G06F 9/451 (2018.01) G16H 20/10 (2018.01) G16H 40/63 (2018.01)**

[25] EN

[54] **GLUCOSE MONITORING OVER PHASES AND CORRESPONDING PHASED INFORMATION DISPLAY**

[54] **SURVEILLANCE DE GLUCOSE AU COURS DE PHASES ET DISPOSITIF D'AFFICHAGE D'INFORMATIONS DELIVREES PAR PHASE CORRESPONDANT**

[72] DIENER, ALEXANDER MICHAEL, US

[72] FISCHER, STACEY LYNNE, US

[72] STROTHERS, HARRY SHAW, US

[72] PATTERSON, CHAD M., US

[72] YUEN, JUSTIN, US

[72] KAMATH, APURV U., US

[72] TERRY, ANDREW MERRILL, US

[72] CRAWFORD, MARGARET A., US

[72] DERDZINSKI, MARK, US

[72] PICKUS, SARAH KATE, US

[72] JEPSON, LAUREN H., US

[72] NOAR, ADAM G., US

[72] KANTER, DOUGLAS S., US

[72] SOKOLASH, SONYA, US

[71] DEXCOM, INC., US

[85] 2023-12-18

[86] 2022-08-31 (PCT/US2022/042191)

[87] (WO2023/075924)

[30] US (63/263,186) 2021-10-28

[21] **3,224,720**  
[13] A1

[51] **Int.Cl. A61B 5/0215 (2006.01) A61B 5/00 (2006.01) A61F 2/24 (2006.01)**

[25] EN

[54] **SENSING HEART VALVE REPAIR DEVICES**

[54] **DISPOSITIFS DE DETECTION DE REPARATION DE VALVE CARDIAQUE**

[72] OLIVER, DANIEL JAMES, US

[72] CHU, WAINA MICHELLE, US

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2023-12-18

[86] 2022-07-14 (PCT/US2022/037176)

[87] (WO2023/003755)

[30] US (63/223,904) 2021-07-20

[30] US (63/245,731) 2021-09-17

[21] **3,224,722**  
[13] A1

[51] **Int.Cl. G16B 30/00 (2019.01)**

[25] EN

[54] **A METHOD FOR IDENTIFYING VARIANTS IN GENE PRODUCTS FROM GENE CONSTRUCTS USED IN CELL THERAPY APPLICATIONS**

[54] **PROCEDE D'IDENTIFICATION DE VARIANTS DE PRODUITS GENIQUES A PARTIR DE CONSTRUCTIONS GENIQUES UTILISEES DANS DES APPLICATIONS DE THERAPIE CELLULAIRE**

[72] ANDRADE, JORGE, US

[72] BOLOTIN, EUGENE, US

[72] FALK, ALEXANDER S., US

[72] LIAO, EDWARD H., US

[71] KITE PHARMA, INC., US

[85] 2023-12-18

[86] 2022-06-29 (PCT/US2022/035585)

[87] (WO2023/278619)

[30] US (63/217,933) 2021-07-02



## Demandes PCT entrant en phase nationale

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[21] **3,224,723**  
[13] A1

[51] **Int.Cl. A61K 31/137 (2006.01) A61K 47/50 (2017.01) A61P 25/04 (2006.01)**

[25] EN

[54] **MODIFIED RELEASE FORMULATIONS OF METHADONE AND ITS ISOMERS, ESMETHADONE AND LEVOMETHADONE AND DERIVATIVES**

[54] **FORMULATIONS A LIBERATION MODIFIEE DE METHADONE ET SES ISOMERES, D'ESMETHADONE ET DE LEVOMETHADONE ET DERIVES**

[72] MANFREDI, PAOLO L., US  
[72] DE MARTIN, SARA, IT  
[72] MATTAREI, ANDREA, IT  
[72] PASUT, GIANFRANCO, IT  
[72] INTURRISI, CHARLES E., US  
[71] MANFREDI, PAOLO L., US  
[71] INTURRISI, CHARLES E., US  
[85] 2023-12-18  
[86] 2022-06-28 (PCT/US2022/035255)  
[87] (WO2023/278400)  
[30] US (63/216,647) 2021-06-30

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[21] **3,224,725**  
[13] A1

[51] **Int.Cl. A47G 9/10 (2006.01) A47C 27/045 (2006.01) A47C 27/06 (2006.01)**

[25] EN

[54] **HYBRID PILLOW**

[54] **OREILLER HYBRIDE**

[72] MANUSZAK, BRIAN M., US  
[72] HANSON, ROBBIE, US  
[72] BEAMON, JAMES A., US  
[72] PLATEK, ALLEN M., US  
[71] SEALY TECHNOLOGY, LLC, US  
[85] 2023-12-18  
[86] 2022-06-24 (PCT/US2022/034928)  
[87] (WO2022/272079)  
[30] US (63/214,505) 2021-06-24

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[21] **3,224,726**  
[13] A1

[51] **Int.Cl. A47C 27/20 (2006.01) A47C 27/045 (2006.01) A47C 27/05 (2006.01) A47G 9/10 (2006.01)**

[25] EN

[54] **MOLDED HYBRID PILLOW**

[54] **OREILLER HYBRIDE MOULE**

[72] MANUSZAK, BRIAN M., US  
[72] HANSON, ROBBIE, US  
[72] BEAMON, JAMES A., US  
[72] PLATEK, ALLEN M., US  
[71] SEALY TECHNOLOGY, LLC, US  
[85] 2023-12-18  
[86] 2022-06-24 (PCT/US2022/034916)  
[87] (WO2022/272072)  
[30] US (63/214,503) 2021-06-24

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[21] **3,224,727**  
[13] A1

[51] **Int.Cl. A47C 27/06 (2006.01) A47C 27/05 (2006.01)**

[25] EN

[54] **TWO-SIDED HYBRID MATTRESS TOPPER**

[54] **SURMATELAS HYBRIDE A DEUX COTES**

[72] TAR, KEVIN, US  
[72] BEAMON, JAMES A., US  
[72] MANUSZAK, BRIAN M., US  
[72] PLATEK, ALLEN M., US  
[72] TAR, ALANDA, US  
[72] LEWIS, JESSICA LEE, US  
[72] MANUSZAK, DIANE, US  
[71] SEALY TECHNOLOGY, LLC, US  
[85] 2023-12-18  
[86] 2022-06-24 (PCT/US2022/034910)  
[87] (WO2022/272066)  
[30] US (63/214,502) 2021-06-24

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[21] **3,224,728**  
[13] A1

[51] **Int.Cl. C09C 1/50 (2006.01) F27D 17/00 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR RECOVERY AND REUSE OF TAIL GAS AND FLUE GAS COMPONENTS**

[54] **PROCEDE ET APPAREIL DE RECUPERATION ET DE REUTILISATION DE GAZ DE QUEUE ET DE COMPOSANTS DE GAZ DE FUMEE**

[72] WANG, DAXIANG, US  
[72] CHI, WEI-MING, US  
[72] CROCKER, DAVID S., US  
[72] GREEN, MARTIN C., US  
[72] MATHEU, DAVID M., US  
[72] DAVIES, ROB, US  
[71] CABOT CORPORATION, US  
[85] 2023-12-18  
[86] 2022-06-23 (PCT/US2022/034713)  
[87] (WO2022/271943)  
[30] US (63/214,497) 2021-06-24  
[30] US (63/240,062) 2021-09-02

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[21] **3,224,730**  
[13] A1

[51] **Int.Cl. C12N 9/22 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **MODIFICATION OF HECT E3 UBIQUITIN LIGASE GENES TO IMPROVE YIELD TRAITS**

[54] **MODIFICATION DES GENES DE L'UBIQUITINE LIGASE E3 HECT POUR AMELIORER LES CARACTERISTIQUES LIEES AU RENDEMENT**

[72] MARRI, PRADEEP REDDY, US  
[72] MATHEW, LOLITA GEORGE, US  
[72] KIM, HAEJIN, US  
[71] PAIRWISE PLANTS SERVICES, INC., US  
[85] 2023-12-18  
[86] 2022-06-23 (PCT/US2022/034625)  
[87] (WO2022/271892)  
[30] US (63/214,498) 2021-06-24

## PCT Applications Entering the National Phase

[21] **3,224,731**  
[13] A1

[51] **Int.Cl. A61N 1/36 (2006.01) A61N 1/04 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR IMPROVING ELECTRIC FIELD THERAPY TO REDUCE SOLID TUMORS**  
[54] **APPAREIL ET PROCEDURE POUR AMELIORER UNE THERAPIE PAR CHAMP ELECTRIQUE VISANT A REDUIRE DES TUMEURS SOLIDES**  
[72] ROTONDO, RICHARD, US  
[72] TRAVERS, PETER F., US  
[72] KRYWICK, SCOTT, US  
[72] TRAVERS, NATHANIEL R., US  
[72] WATKINS, KEN, US  
[71] LIFEBRIDGE INNOVATIONS, PBC, US  
[85] 2023-12-18  
[86] 2022-06-22 (PCT/US2022/034439)  
[87] (WO2022/271769)  
[30] US (63/213,550) 2021-06-22

[21] **3,224,737**  
[13] A1

[51] **Int.Cl. B60K 1/04 (2019.01) H01M 50/204 (2021.01) H01M 50/24 (2021.01) H01M 50/258 (2021.01) H01M 50/267 (2021.01) H01M 50/298 (2021.01)**  
[25] EN  
[54] **ELECTRIC VEHICLE BATTERY MODULE**  
[54] **MODULE DE BATTERIE DE VEHICULE ELECTRIQUE**  
[72] MAZAIKA, DAVID MICHAEL, US  
[71] COULOMB SOLUTIONS, INC., US  
[71] MAZAIKA, DAVID MICHAEL, US  
[85] 2023-10-30  
[86] 2022-03-22 (PCT/US2022/021405)  
[87] (WO2023/182979)

[21] **3,224,739**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/403 (2006.01) A61K 31/437 (2006.01) A61K 31/4965 (2006.01) A61K 31/506 (2006.01) A61K 31/675 (2006.01) A61P 35/00 (2006.01) C07D 471/00 (2006.01) C07D 487/04 (2006.01)**  
[25] EN  
[54] **(R)-GLUTARIMIDE CRBN LIGANDS AND METHODS OF USE**  
[54] **LIGANDS DE (R)-GLUTARIMIDE CRBN ET PROCEDES D'UTILISATION**  
[72] LEI, BAILIN, CN  
[72] LIU, HUAQING, CN  
[72] HAN, SONGZHE, CN  
[72] HUO, CHANGXIN, CN  
[72] WANG, ZHIWEI, CN  
[71] BEIGENE SWITZERLAND GMBH, CH  
[85] 2023-12-19  
[86] 2022-06-21 (PCT/CN2022/100017)  
[87] (WO2022/268052)  
[30] CN (PCT/CN2021/101281) 2021-06-21  
[30] CN (PCT/CN2021/142802) 2021-12-30

[21] **3,224,741**  
[13] A1

[51] **Int.Cl. A61K 47/54 (2017.01) A61K 47/64 (2017.01) A61K 47/65 (2017.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **LIGAND-DRUG CONJUGATE AND USE THEREOF**  
[54] **CONJUGUE LIGAND-MEDICAMENT ET UTILISATION DE CELUI-CI**  
[72] HUANG, BAOHUA ROBERT, CN  
[72] TAN, WEI, CN  
[72] WANG, GUITAO, CN  
[72] SHAO, JUN, CN  
[72] MAO, SHENGFEI, CN  
[72] WANG, ZHONGBO, CN  
[72] GU, LONGJUN, CN  
[72] QIAN, GANG, CN  
[72] BU, TINGTING, CN  
[71] COHERENT BIOPHARMA (SUZHOU), LIMITED, CN  
[85] 2023-12-19  
[86] 2022-06-24 (PCT/CN2022/101108)  
[87] (WO2022/268202)  
[30] CN (PCT/CN2021/102377) 2021-06-25

[21] **3,224,742**  
[13] A1

[51] **Int.Cl. B01J 23/745 (2006.01) A62D 3/34 (2007.01) B01J 41/04 (2017.01) B09C 1/00 (2006.01)**  
[25] EN  
[54] **PFAS DESTRUCTION IN AN ALKALINE, HYDROTHERMAL ENVIRONMENT, AND RELATED METHODS AND SYSTEMS**  
[54] **DESTRUCTION DE PFAS DANS UN ENVIRONNEMENT HYDROTHERMAL ALCALIN, ET PROCEDES ET SYSTEMES ASSOCIES**  
[72] PINKARD, BRIAN, US  
[72] CZERSKI, MIKE, US  
[72] DE MARNE, ALEX, US  
[72] MACEACHERN, JOSHUA, US  
[71] AQUAGGA, INC., US  
[85] 2023-12-18  
[86] 2022-06-29 (PCT/US2022/073254)  
[87] (WO2023/279021)  
[30] US (63/217,602) 2021-07-01  
[30] US (63/252,874) 2021-10-06

[21] **3,224,748**  
[13] A1

[51] **Int.Cl. C07D 239/48 (2006.01) A61K 31/505 (2006.01) A61K 31/506 (2006.01) A61P 35/02 (2006.01) A61P 37/02 (2006.01)**  
[25] EN  
[54] **NOVEL PHARMACEUTICAL SALTS AND POLYMORPHIC FORMS OF AN ERBB AND BTK INHIBITOR**  
[54] **NOUVEAUX SELS PHARMACEUTIQUES ET FORMES POLYMORPHES D'UN INHIBITEUR D'ERBB ET BTK**  
[72] ZHENG, JUN-CHENG, CN  
[72] JIANG, JIANAN, CN  
[72] GUO, QINGHAI, CN  
[72] CHANG, SHIH-YING, CN  
[72] ZENG, QINGBEI, CN  
[72] TSUI, HONCHUNG, CN  
[72] YANG, ZHENFAN, CN  
[72] ZHANG, XIAOLIN, CN  
[71] DIZAL (JIANGSU) PHARMACEUTICAL CO., LTD., CN  
[85] 2023-12-19  
[86] 2022-07-29 (PCT/CN2022/109065)  
[87] (WO2023/011358)  
[30] CN (PCT/CN2021/110048) 2021-08-02

## Demandes PCT entrant en phase nationale

[21] **3,224,750**  
[13] A1

[51] **Int.Cl. A61K 9/16 (2006.01) A61K 9/48 (2006.01) A61K 31/506 (2006.01)**

[25] EN

[54] **GRANULATE COMPOSITION COMPRISING NILOTINIB**

[54] **COMPOSITION DE GRANULES COMPRENANT DE LA NISINE**

[72] DREYER, KATJA, DE

[72] COSTA, GUSTAVO FRANCO, PT

[72] SILVA, GABRIEL LEITAO, PT

[71] HELM AG, DE

[85] 2023-12-19

[86] 2022-06-15 (PCT/EP2022/066305)

[87] (WO2022/263510)

[30] EP (21180485.1) 2021-06-19

[21] **3,224,751**  
[13] A1

[51] **Int.Cl. B01F 23/40 (2022.01) B01F 35/22 (2022.01) B01F 35/71 (2022.01) B01F 35/88 (2022.01)**

[25] EN

[54] **APPARATUS FOR PREPARING A LIQUID PREPARATION**

[54] **APPAREIL POUR PREPARER UNE PREPARATION LIQUIDE**

[72] TURNER, JEREMY, GB

[72] DIXON, ELANOR, GB

[72] MORSE, JAMES, GB

[72] BRAND, THOMAS, GB

[71] TRISTEL PLC, GB

[85] 2023-12-19

[86] 2022-06-23 (PCT/GB2022/051615)

[87] (WO2022/269273)

[30] GB (2108982.6) 2021-06-23

[21] **3,224,753**  
[13] A1

[51] **Int.Cl. C05G 5/30 (2020.01) C05G 5/12 (2020.01)**

[25] EN

[54] **INCORPORATION OF ALGINATE INTO FERTILIZER FOR QUALITY AND AGRONOMICAL BENEFITS**

[54] **INCORPORATION D'ALGINATE DANS UN ENGRAIS POUR DES BENEFICES DE QUALITE ET D'EFFICACITE AGRONOMIQUE**

[72] LIGHT, JERRI, US

[72] RICHARDS, ADDISON, US

[72] SHULTZ, MURRAY, US

[71] THE MOSAIC COMPANY, US

[85] 2023-12-19

[86] 2022-06-23 (PCT/IB2022/000808)

[87] (WO2023/105293)

[30] US (63/214,244) 2021-06-23

[21] **3,224,754**  
[13] A1

[51] **Int.Cl. C04B 40/02 (2006.01) B28B 11/24 (2006.01) C04B 28/04 (2006.01)**

[25] EN

[54] **METHOD OF PREPARATION OF A CONSTRUCTION ELEMENT BY CARBONATION OF CEMENT**

[54] **PROCEDE DE PREPARATION D'UN ELEMENT DE CONSTRUCTION PAR CARBONATATION DE CIMENT**

[72] HUET, BRUNO, CH

[72] BRIAUD, VINCENT, CH

[72] MEYER, VINCENT, CH

[72] LOUBET, GUILLAUME, CH

[72] LEVY, CHRISTOPHE, CH

[71] HOLCIM TECHNOLOGY LTD, CH

[85] 2023-12-19

[86] 2022-06-22 (PCT/EP2022/066982)

[87] (WO2022/268869)

[30] EP (21305864.7) 2021-06-23

[21] **3,224,755**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01)**

[25] EN

[54] **PRODUCTION OF ADENO-ASSOCIATED VIRUS VECTOR IN INSECT CELLS**

[54] **PRODUCTION DE VECTEUR DE VIRUS ADENO-ASSOCIE DANS DES CELLULES D'INSECTES**

[72] BARTON, ERIK SEAN, US

[72] DONG, GUOGANG, US

[72] THODAY, PAUL ALEXANDER, US

[71] PFIZER INC., US

[85] 2023-12-19

[86] 2022-06-20 (PCT/IB2022/055715)

[87] (WO2022/269466)

[30] US (63/213,346) 2021-06-22

[30] US (63/364,296) 2022-05-06

[21] **3,224,756**  
[13] A1

[51] **Int.Cl. B05D 7/00 (2006.01) H01M 50/276 (2021.01) H01M 50/278 (2021.01) H01M 50/282 (2021.01) B05D 1/28 (2006.01) B05D 3/02 (2006.01) B05D 7/14 (2006.01) B32B 27/00 (2006.01) C22C 38/06 (2006.01) C23C 2/06 (2006.01) C23C 28/00 (2006.01) C23C 28/02 (2006.01)**

[25] EN

[54] **STEEL SHEET FOR TOP COVER OF BATTERY PACK AND ITS MANUFACTURING METHOD**

[54] **COUVERCLE SUPERIEUR GI + OC**

[72] SANZEY, PASCALE, FR

[72] ALLELY, CHRISTIAN, FR

[72] KRIM, TAREK, FR

[72] DOSDAT, LAURENCE, FR

[72] BESSON, AURELIE, FR

[71] ARCELORMITTAL, LU

[85] 2023-12-19

[86] 2022-06-24 (PCT/IB2022/055861)

[87] (WO2023/012538)

[30] IB (PCT/IB2021/057038) 2021-08-02

[21] **3,224,757**  
[13] A1

[51] **Int.Cl. C07K 9/00 (2006.01) A61K 38/00 (2006.01) C07K 14/78 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **PEPTIDES FOR THE TREATMENT OF CHRONICALLY ACTIVE AUTOIMMUNE INFLAMMATION**

[54] **PEPTIDES POUR LE TRAITEMENT D'UNE INFLAMMATION AUTO-IMMUNE CHRONIQUEMENT ACTIVE**

[72] WENHART, CLARA, DE

[72] MUNCH, GOTZ, DE

[72] UNGERER, MARTIN, DE

[71] ADVANCECOR GMBH, DE

[85] 2023-12-19

[86] 2022-06-23 (PCT/EP2022/067134)

[87] (WO2022/268939)

[30] EP (21181867.9) 2021-06-25

## PCT Applications Entering the National Phase

[21] **3,224,759**  
[13] A1

[51] **Int.Cl. C08F 210/16 (2006.01) C08F 2/00 (2006.01) C08F 2/38 (2006.01) C08L 23/08 (2006.01)**

[25] EN

[54] **USE OF A SWELLING AGENT IN MULTI-STAGE POLYOLEFIN PRODUCTION**

[54] **UTILISATION D'UN AGENT GONFLANT DANS LA PRODUCTION DE POLYOLEFINES A PLUSIEURS ETAPES**

[72] HOFF, MATTHIAS, AT

[72] KETTNER, JOANA ELVIRA, AT

[72] KANELLOPOULOS, VASILEIOS, AT

[72] SUMERIN, VICTOR, FI

[72] AHO, JANI, FI

[72] KRALLIS, APOSTOLOS, FI

[72] KALLIO, KALLE, FI

[72] SAEED, IRFAN, FI

[72] ELOVAINIO, ERNO, FI

[71] BOREALIS AG, AT

[85] 2023-12-19

[86] 2022-06-23 (PCT/EP2022/067173)

[87] (WO2022/268951)

[30] EP (21181472.8) 2021-06-24

[21] **3,224,760**  
[13] A1

[51] **Int.Cl. C12N 15/76 (2006.01) C12P 21/00 (2006.01)**

[25] EN

[54] **NEW SYSTEMS FOR PRODUCING RECOMBINANT PROTEINS**

[54] **NOUVEAUX SYSTEMES DE PRODUCTION DE PROTEINES RECOMBINANTES**

[72] CAVALETTI, LINDA, IT

[72] CARENZI, GIACOMO ENRICO, IT

[72] KORMANEC, JAN, SK

[72] HOMEROVA, DAGMAR, SK

[71] NEMYSIS LIMITED, IE

[85] 2023-12-19

[86] 2022-06-28 (PCT/EP2022/067738)

[87] (WO2023/285135)

[30] IT (102021000018254) 2021-07-12

[21] **3,224,764**  
[13] A1

[51] **Int.Cl. H04N 1/405 (2006.01) H04N 1/407 (2006.01) H04N 1/60 (2006.01)**

[25] EN

[54] **METHOD FOR COLOR CORRECTING A DIGITAL PRINT**

[54] **PROCEDE DE CORRECTION DE COULEUR D'UNE IMPRESSION NUMERIQUE**

[72] KLEMM, MARKUS, DE

[72] LINNENBRUGGER, TIMO, DE

[72] HANNIG, HANS-JURGEN, DE

[71] AKZENTA PANELEE + PROFILE GMBH, DE

[85] 2023-12-19

[86] 2022-06-29 (PCT/EP2022/067920)

[87] (WO2023/275156)

[30] EP (21182815.7) 2021-06-30

[21] **3,224,770**  
[13] A1

[51] **Int.Cl. A61K 31/737 (2006.01) A61K 31/704 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **LOW-MOLECULAR-WEIGHT HE800 EXOPOLYSACCHARIDE DERIVATIVES WITH ANTI-CANCER PROPERTIES AND USES THEREOF**

[54] **DERIVES DE L'EXOPOLYSACCHARIDE HE800 DE FAIBLE POIDS MOLECULAIRE AYANT DES PROPRIETES ANTICANCEREUSES ET LEURS UTILISATIONS**

[72] COLLIEC-JOUAULT, SYLVIA, FR

[72] SINQUIN, CORINNE, FR

[72] MUNOZ GARCIA, JAVIER, FR

[72] HEYMANN, DOMINIQUE, FR

[72] ZYKWINSKA, AGATA, FR

[71] INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER (IFREMER), FR

[71] INSTITUT DE CANCEROLOGIE DE L'OUEST, FR

[71] UNIVERSITE DE NANTES, FR

[71] INSERM (INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE), FR

[85] 2023-12-19

[86] 2022-07-01 (PCT/EP2022/068227)

[87] (WO2023/275343)

[30] EP (21183145.8) 2021-07-01

[21] **3,224,772**  
[13] A1

[51] **Int.Cl. A01K 1/01 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR REMOVING MANURE FROM A FLOOR IN A BARN FOR ANIMALS, AND, IN COMBINATION, A BARN FOR KEEPING ANIMALS AND A SYSTEM OF THIS TYPE**

[54] **SYSTEME ET PROCEDE D'ELIMINATION DE FUMIER D'UN SOL DANS UNE ETABLE POUR ANIMAUX ET, EN ASSOCIATION, ETABLE DE GARDIENNAGE D'ANIMAUX ET SYSTEME DE CE TYPE**

[72] JORNA, HARM, NL

[72] VAN KESTER, ROBIN ANDREAS ALBERTUS, NL

[72] OZMEN, DOGAN, NL

[72] VAN DORP, MICHIEL ADRIAAN, NL

[71] LELY PATENT N.V., NL

[85] 2023-12-19

[86] 2022-07-07 (PCT/IB2022/056292)

[87] (WO2023/285931)

[30] NL (2028702) 2021-07-12

[21] **3,224,774**  
[13] A1

[51] **Int.Cl. A61K 31/426 (2006.01) A61P 19/02 (2006.01)**

[25] EN

[54] **DOSING REGIMEN FOR AN NLRP3 INHIBITOR IN THE TREATMENT OF OSTEOARTHRITIS**

[54] **SCHEMA POSOLOGIQUE POUR UN INHIBITEUR DE NLRP3 DANS LE TRAITEMENT DE L'ARTHROSE**

[72] COLEMAN, LAURA, US

[72] FARADY, CHRISTOPHER, CH

[72] GATLIK, EWA, CH

[72] SCHIEKER, MATTHIAS, CH

[71] NOVARTIS AG, CH

[85] 2023-12-19

[86] 2022-07-20 (PCT/IB2022/056695)

[87] (WO2023/002399)

[30] US (63/224,890) 2021-07-23

## Demandes PCT entrant en phase nationale

[21] **3,224,779**  
[13] A1

[51] **Int.Cl. B32B 5/02 (2006.01) D04H 1/413 (2012.01) D04H 1/4209 (2012.01) H01M 10/625 (2014.01) H01M 10/6555 (2014.01) H01M 10/658 (2014.01) H01M 50/204 (2021.01) H01M 50/249 (2021.01) H01M 50/293 (2021.01) B32B 5/18 (2006.01) B32B 5/26 (2006.01) B32B 5/28 (2006.01)**

[25] EN

[54] **FIRE SPREAD PREVENTION MATERIAL, METHOD FOR PRODUCING SAME, LAMINATE, ASSEMBLED BATTERY, AND AUTOMOBILE**

[54] **MATERIAU DE PREVENTION DE PROPAGATION DU FEU, SON PROCEDE DE PRODUCTION, STRATIFIE, BATTERIE ASSEMBLEE ET AUTOMOBILE**

[72] MIZUTA, KOHEI, JP  
[72] SATO, TAIGA, JP  
[72] TABARA, KAZUTO, JP  
[71] DENKA COMPANY LIMITED, JP  
[85] 2023-12-19  
[86] 2022-06-14 (PCT/JP2022/023819)  
[87] (WO2022/270360)  
[30] JP (2021-105144) 2021-06-24  
[30] JP (2021-192219) 2021-11-26

[21] **3,224,782**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 31/711 (2006.01) A61K 31/712 (2006.01) A61K 31/7125 (2006.01) A61K 48/00 (2006.01) A61P 21/04 (2006.01)**

[25] EN

[54] **COMBINATION OF ANTISENSE OLIGOMERS**

[54] **COMBINAISON D'OLIGOMERES ANTISENS**

[72] TONE, YUICHIRO, JP  
[72] AOKI, YOSHITSUGU, JP  
[72] MOTOHASHI, NORIO, JP  
[71] NIPPON SHINYAKU CO., LTD., JP  
[71] NATIONAL CENTER OF NEUROLOGY AND PSYCHIATRY, JP  
[85] 2023-12-19  
[86] 2022-06-23 (PCT/JP2022/025120)  
[87] (WO2022/270585)  
[30] JP (2021-104145) 2021-06-23

[21] **3,224,788**  
[13] A1

[51] **Int.Cl. C07G 1/00 (2011.01) D21C 11/02 (2006.01) G06F 1/00 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR PRODUCING LIGNIN**

[54] **PROCEDE ET SYSTEME DE PRODUCTION DE LIGNINE**

[72] WALLMO, HENRIK, SE  
[72] LITTORIN, ANDERS, SE  
[71] VALMET AB, SE  
[85] 2023-12-19  
[86] 2022-06-29 (PCT/SE2022/050650)  
[87] (WO2023/277774)  
[30] SE (2150839-5) 2021-06-30

[21] **3,224,789**  
[13] A1

[51] **Int.Cl. D21C 11/00 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR LIGNIN PRODUCTION**

[54] **PROCEDE ET SYSTEME DE PRODUCTION DE LIGNINE**

[72] WALLMO, HENRIK, SE  
[72] LITTORIN, ANDERS, SE  
[71] VALMET AB, SE  
[85] 2023-12-19  
[86] 2022-06-29 (PCT/SE2022/050652)  
[87] (WO2023/277776)  
[30] SE (2150840-3) 2021-06-30

[21] **3,224,790**  
[13] A1

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

[25] EN

[54] **SYSTEM AND METHOD FOR MONITORING A CONSCIOUSNESS-ALTERING THERAPEUTIC SESSION**

[54] **SYSTEME ET PROCEDE DE SURVEILLANCE D'UNE SESSION THERAPEUTIQUE ALTERANT LA CONSCIENCE**

[72] MAJERNIK, MARTIN, SK  
[72] KARLIN, DANIEL R., US  
[72] BARROW, ROBERT, US  
[72] DUBEC, PETER, SK  
[71] MIND MEDICINE, INC., US  
[85] 2023-12-19  
[86] 2022-06-13 (PCT/US2022/033308)  
[87] (WO2023/278131)  
[30] US (63/216,683) 2021-06-30

[21] **3,224,794**  
[13] A1

[51] **Int.Cl. B05B 7/24 (2006.01) B05B 11/00 (2023.01)**

[25] EN

[54] **AUTOMOTIVE SPRAY GUN BOTTLE AND ADAPTER**

[54] **FLACON DE PISTOLET DE PULVERISATION AUTOMOBILE ET ADAPTATEUR**

[72] PETKUS, MATTHEW MICHAEL, US  
[72] FARMER, RACHEL, US  
[72] SHIREMAN, DENNIS, US  
[71] W.M. BARR & COMPANY, INC., US  
[85] 2023-12-19  
[86] 2022-06-16 (PCT/US2022/033763)  
[87] (WO2022/271524)  
[30] US (17/359,020) 2021-06-25

[21] **3,224,797**  
[13] A1

[51] **Int.Cl. B05B 1/06 (2006.01) B05B 1/34 (2006.01) B05B 15/658 (2018.01) B05B 1/30 (2006.01)**

[25] EN

[54] **SPRAY WAND**

[54] **LANCE DE PULVERISATION**

[72] KAVCHOK, KEVIN ANDREW, US  
[72] PETKUS, MATTHEW MICHAEL, US  
[72] BYRD, ALANA, US  
[72] FARMER, RACHEL ANN, US  
[71] W.M. BARR & COMPANY, INC., US  
[85] 2023-12-19  
[86] 2022-06-16 (PCT/US2022/033808)  
[87] (WO2022/271527)  
[30] US (17/354,783) 2021-06-22

[21] **3,224,799**  
[13] A1

[51] **Int.Cl. G01N 33/569 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR DETECTING SARS-COV-2 ANALYTES IN DRIED SAMPLES**

[54] **METHODES ET SYSTEMES DE DETECTION D'ANALYTES DU SARS-COV-2 DANS DES ECHANTILLONS SECHES**

[72] COLLIER, BRADLEY B., US  
[72] GRANT, RUSSELL PHILLIP, US  
[71] LABORATORY CORPORATION OF AMERICA HOLDINGS, US  
[85] 2023-12-19  
[86] 2022-06-21 (PCT/US2022/034313)  
[87] (WO2022/271678)  
[30] US (63/212,862) 2021-06-21

## PCT Applications Entering the National Phase

[21] **3,224,802**  
[13] A1

[25] EN  
[54] **OPHTHALMIC FORMULATION AND METHODS OF USE**  
[54] **FORMULATION OPHTALMIQUE ET METHODES D'UTILISATION**  
[72] ALQALLAWI, ABDELHAMID MUHAMMAD, EG  
[72] ALQALLAWI, SHERIF ABDELHAMID, EG  
[71] ALQALLAWI, ABDELHAMID MUHAMMAD, EG  
[71] ALQALLAWI, SHERIF ABDELHAMID, EG  
[85] 2024-01-03  
[86] 2021-07-09 (PCT/IB2021/056171)  
[87] (WO2022/009161)  
[30] US (63/049,970) 2020-07-09

[21] **3,224,855**  
[13] A1

[51] **Int.Cl. E21B 33/129 (2006.01) E21B 23/01 (2006.01) E21B 23/06 (2006.01)**  
[25] EN  
[54] **SLIP RING EMPLOYING RADIALLY OFFSET SLOT**  
[54] **COLLECTEUR TOURNANT UTILISANT UNE FENTE A DECALAGE RADIAL**  
[72] MOORE, BRUCE ALAN, US  
[72] COTO, POMPILIO, US  
[71] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2023-12-19  
[86] 2021-08-03 (PCT/US2021/044287)  
[87] (WO2023/014349)  
[30] US (17/392,564) 2021-08-03

[21] **3,224,856**  
[13] A1

[51] **Int.Cl. C08B 37/16 (2006.01) A61K 31/724 (2006.01) A61P 23/00 (2006.01)**  
[25] EN  
[54] **NOVEL CRYSTALLINE FORMS OF SUGAMMADEX**  
[54] **NOUVELLES FORMES CRISTALLINES DE SUGAMMADEX**  
[72] LARPENT, PATRICK, CH  
[72] STUEBER, DIRK, US  
[72] VARSOLONA, RICHARD J., US  
[71] MERCK SHARP & DOHME LLC, US  
[71] WERTHENSTEIN BIOPHARMA GMBH, CH  
[85] 2023-12-19  
[86] 2021-09-08 (PCT/US2021/049352)  
[87] (WO2022/055918)  
[30] US (63/076,135) 2020-09-09

[21] **3,224,858**  
[13] A1

[51] **Int.Cl. A61L 9/22 (2006.01) B01D 53/34 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR NEGATIVE ION-BASED POLLUTION REDUCTION**  
[54] **PROCEDES ET SYSTEMES PERMETTANT DE REDUIRE LA POLLUTION PAR IONS NEGATIFS**  
[72] DICARLO, MARK, US  
[71] RAINIONS CORP., US  
[85] 2023-12-19  
[86] 2021-12-17 (PCT/US2021/072991)  
[87] (WO2022/133485)  
[30] US (17/127,273) 2020-12-18

[21] **3,224,859**  
[13] A1

[51] **Int.Cl. A61K 38/26 (2006.01) A61P 3/10 (2006.01)**  
[25] EN  
[54] **TREATMENT OF CONGENITAL HYPERINSULINISM WITH AVEXITIDE**  
[54] **TRAITEMENT DE L'HYPERINSULINISME CONGENITAL AVEC DE L'AVEXITIDE**  
[72] CRAIG, COLLEEN M., US  
[71] EIGER BIOPHARMACEUTICALS, INC., US  
[85] 2023-12-19  
[86] 2022-06-21 (PCT/US2022/034415)  
[87] (WO2022/271753)  
[30] US (63/213,051) 2021-06-21

[21] **3,224,861**  
[13] A1

[51] **Int.Cl. A61K 31/7076 (2006.01) A61P 25/00 (2006.01) A61P 25/28 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS CONTAINING ADENOSINE TRIPHOSPHATE (ATP) AND METHODS OF USE FOR COGNITIVE FUNCTION**  
[54] **COMPOSITIONS CONTENANT DE L'ADENOSINE TRIPHOSPHATE (ATP) ET PROCEDES D'UTILISATION POUR LA FONCTION COGNITIVE**  
[72] RATHMACHER, JOHN, US  
[72] KOLB, LARRY, US  
[72] BAIER, SHAWN, US  
[71] TSI USA, LLC, US  
[85] 2023-12-19  
[86] 2022-06-22 (PCT/US2022/034510)  
[87] (WO2022/271813)  
[30] US (63/213,378) 2021-06-22

[21] **3,224,863**  
[13] A1

[51] **Int.Cl. C07D 401/04 (2006.01) A01N 43/56 (2006.01) A01N 43/647 (2006.01) A01N 43/76 (2006.01) A01N 43/78 (2006.01) A01N 43/82 (2006.01) A61K 31/443 (2006.01) A61K 31/4436 (2006.01) A61K 31/4439 (2006.01) C07D 405/14 (2006.01) C07D 413/04 (2006.01) C07D 417/04 (2006.01)**  
[25] EN  
[54] **AZOLE COMPOUNDS FOR CONTROLLING INVERTEBRATE PESTS**  
[54] **COMPOSES AZOLE POUR LUTTER CONTRE DES INVERTEBRES NUISIBLES**  
[72] XU, MING, US  
[72] PAHUTSKI, JR., THOMAS FRANCIS, US  
[71] FMC CORPORATION, US  
[85] 2023-12-19  
[86] 2022-06-23 (PCT/US2022/034647)  
[87] (WO2022/271901)  
[30] US (63/214,420) 2021-06-24

## Demandes PCT entrant en phase nationale

[21] **3,224,865**  
[13] A1

[51] **Int.Cl. G06Q 20/12 (2012.01) G06Q 30/06 (2023.01) G06Q 50/06 (2012.01)**  
[25] EN  
[54] **BLOCKCHAIN-BASED PERMISSIONS LEDGER FOR METAVERSE IMPLEMENTATION**  
[54] **REGISTRE D'AUTORISATIONS BASE SUR UNE CHAINE DE BLOCS POUR MISE EN ŒUVRE DE METAVERS**  
[72] KERBER, WILLIAM XAVIER, US  
[71] HUMAN MODE, L.L.C., US  
[85] 2023-12-19  
[86] 2022-06-23 (PCT/US2022/034745)  
[87] (WO2022/271960)  
[30] US (63/214,240) 2021-06-23

[21] **3,224,866**  
[13] A1

[51] **Int.Cl. G06Q 20/20 (2012.01) G06Q 20/40 (2012.01) G06Q 20/38 (2012.01)**  
[25] EN  
[54] **AUTHORIZATION REQUEST AND MANAGEMENT**  
[54] **DEMANDE ET GESTION D'AUTORISATION**  
[72] SIMON, DANIEL, US  
[72] BROSGOL, PHILIPP, US  
[72] WEINBERG, JORDAN SCOTT, US  
[71] K-DIMENSIONAL HOLDINGS, INC., US  
[85] 2023-12-19  
[86] 2022-06-24 (PCT/US2022/034939)  
[87] (WO2022/272087)  
[30] US (63/215,112) 2021-06-25  
[30] US (63/335,741) 2022-04-28

[21] **3,224,868**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61K 31/713 (2006.01) A61P 27/02 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR SILENCING MYOC EXPRESSION**  
[54] **COMPOSITIONS ET PROCEDES DE SILENCAGE DE L'EXPRESSION DE MYOC**  
[72] CASTORENO, ADAM, US  
[72] PANDYA, BHAUMIK A., US  
[72] CASTELLANOS-RIZALDOS, ELENA, US  
[72] SCHLEGEL, MARK K., US  
[72] JADHAV, VASANT R., US  
[71] ALNYLAM PHARMACEUTICALS, INC., US  
[85] 2023-12-19  
[86] 2022-06-28 (PCT/US2022/035266)  
[87] (WO2023/278406)  
[30] US (63/215,804) 2021-06-28  
[30] US (63/287,404) 2021-12-08  
[30] US (63/351,033) 2022-06-10

[21] **3,224,871**  
[13] A1

[51] **Int.Cl. H04N 7/10 (2006.01) H04N 21/2668 (2011.01) H04N 21/472 (2011.01) G06Q 30/02 (2023.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR ALTERNATIVE ADVERTS**  
[54] **SYSTEMES ET PROCEDES POUR PUBLICITES ALTERNATIVES**  
[72] BRADLEY, WADE, US  
[72] PILLAI, SHRIKESH KARUNAKARAN, US  
[71] RIVIT TV, INC., US  
[85] 2023-12-14  
[86] 2022-06-16 (PCT/US2022/033826)  
[87] (WO2022/271529)  
[30] US (63/214,191) 2021-06-23  
[30] US (17/449,741) 2021-10-01  
[30] US (17/449,743) 2021-10-01  
[30] US (17/449,756) 2021-10-01

[21] **3,224,876**  
[13] A1

[51] **Int.Cl. H04W 12/80 (2021.01) H04W 12/03 (2021.01) H04W 12/72 (2021.01) H04W 12/75 (2021.01) H04L 9/40 (2022.01)**  
[25] EN  
[54] **5G N1/N2 INTERFACE MONITORING SYSTEM**  
[54] **SYSTEME DE SURVEILLANCE D'INTERFACE N1/N2 5G**  
[72] MUTHUCHAMY, SUBAPPRIYA, US  
[72] PRASAD, SANDEEP, US  
[72] LIUBINSKAS, TAURAS, US  
[72] SARASWATI, ABHISHEK, US  
[72] PINELLI, ALESSANDRO, US  
[72] AHERRAO, PRITISH VIJAY, US  
[72] DI RESTA, LORETO, US  
[72] BASS, BRANDON, US  
[71] NETSCOUT SYSTEMS, INC., US  
[85] 2023-12-19  
[86] 2022-06-28 (PCT/US2022/035301)  
[87] (WO2023/278433)  
[30] IN (202141029404) 2021-06-30  
[30] US (17/409,202) 2021-08-23

[21] **3,224,877**  
[13] A1

[51] **Int.Cl. E04H 15/00 (2006.01) E04G 21/26 (2006.01) E04G 21/30 (2006.01) E04G 25/04 (2006.01) E06B 3/80 (2006.01) F16M 11/08 (2006.01)**  
[25] EN  
[54] **SUPPORT SYSTEM**  
[54] **SYSTEME DE SUPPORT**  
[72] WHITTEMORE, JEFFREY P., US  
[71] ZIPWALL, LLC., US  
[85] 2023-12-19  
[86] 2022-06-30 (PCT/US2022/035702)  
[87] (WO2023/278685)  
[30] US (63/217,354) 2021-07-01

## PCT Applications Entering the National Phase

[21] **3,224,881**  
[13] A1

[51] **Int.Cl. C12N 9/22 (2006.01) C12N 15/113 (2010.01) C07K 14/315 (2006.01) C12N 15/10 (2006.01)**

[25] EN

[54] **NOVEL MUTATIONS IN STREPTOCOCCUS PYOGENES CAS9 DISCOVERED BY BROAD SCANNING MUTAGENESIS DEMONSTRATE ENHANCEMENT OF DNA CLEAVAGE ACTIVITY**

[54] **NOUVELLES MUTATIONS DANS STREPTOCOCCUS PYOGENES CAS9 DECOUVERTES PAR UNE MUTAGENESE A BALAYAGE ETENDU DEMONTRANT UNE AMELIORATION DE L'ACTIVITE DE CLIVAGE DE L'ADN**

[72] ROBERTS, NATHANIEL, US

[72] ZHANG, LIYANG, US

[72] VAKULSKAS, CHRISTOPHER, US

[71] INTEGRATED DNA TECHNOLOGIES, INC., US

[85] 2023-12-19

[86] 2022-07-05 (PCT/US2022/036079)

[87] (WO2023/278886)

[30] US (63/217,881) 2021-07-02

[21] **3,224,882**  
[13] A1

[51] **Int.Cl. B65D 71/42 (2006.01) B65D 71/70 (2006.01)**

[25] EN

[54] **CARRIER FOR CONTAINERS SUPPORT POUR RECIPIENTS**

[72] HICKS, DOUGLAS R., US

[72] MAY, KEVIN T., US

[72] SPIVEY, RAYMOND R., US

[71] GRAPHIC PACKAGING INTERNATIONAL, LLC, US

[85] 2023-12-19

[86] 2022-07-07 (PCT/US2022/036297)

[87] (WO2023/283293)

[30] US (63/219,648) 2021-07-08

[30] US (63/203,882) 2021-08-03

[21] **3,224,883**  
[13] A1

[51] **Int.Cl. F26B 9/06 (2006.01) G05B 13/04 (2006.01) G01N 33/00 (2006.01)**

[25] EN

[54] **AUTONOMOUS CROP DRYING, CONDITIONING AND STORAGE MANAGEMENT**

[54] **SYSTEME AUTONOME DE SECHAGE, DE CONDITIONNEMENT ET DE STOCKAGE DE CULTURES**

[72] HARWEGER, ERIC, US

[72] HURD, DILLON, US

[71] HABER TECHNOLOGIES, INC., US

[85] 2023-12-14

[86] 2022-06-14 (PCT/US2022/033499)

[87] (WO2022/266149)

[30] US (17/347,941) 2021-06-15

[30] US (17/728,889) 2022-04-25

[21] **3,224,885**  
[13] A1

[51] **Int.Cl. C07C 1/207 (2006.01) C07C 7/04 (2006.01) C07C 45/68 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM EMBODIMENTS FOR CONVERTING ETHANOL TO PARA-XYLENE AND ORTHO-XYLENE**

[54] **MODES DE REALISATION DE PROCEDE ET DE SYSTEME DE CONVERSION D'ETHANOL EN PARA-XYLENE ET EN ORTHO-XYLENE**

[72] RAMASAMY, KARTHIKEYAN K., US

[72] GUO, MOND, US

[72] ROSIN, RICHARD RUSSELL, US

[72] KOCAL, JOSEPH ANTHONY, US

[71] BATTELLE MEMORIAL INSTITUTE, US

[71] LANZATECH, INC., US

[85] 2023-12-19

[86] 2022-07-27 (PCT/US2022/038516)

[87] (WO2023/009619)

[30] US (17/387,725) 2021-07-28

[21] **3,224,886**  
[13] A1

[51] **Int.Cl. A61N 5/10 (2006.01) A61K 9/00 (2006.01) A61K 39/395 (2006.01) A61K 51/02 (2006.01) A61K 51/12 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **INTRATUMORAL ALPHA-EMITTER RADIATION IN COMBINATION WITH IMMUNE CHECKPOINT REGULATORS**

[54] **RAYONNEMENT ALPHA-EMETTEUR INTRATUMORAL EN COMBINAISON AVEC DES REGULATEURS DE POINTS DE CONTROLE IMMUNITAIRE**

[72] KEISARI, YONA, IL

[72] KELSON, ITZHAK, IL

[72] DOMANKEVICH, VERED, IL

[72] DEL MARE ROUMANI, SARA, IL

[72] DEN, ROBERT, US

[72] MANSOUR, FAIRUZ, IL

[72] SEGAL, RONEN, IL

[72] EFRATI, MARGALIT, IL

[72] SHAI, AMIT, IL

[72] NISHRI, YOSSI, IL

[71] ALPHA TAU MEDICAL LTD., IL

[85] 2023-12-14

[86] 2022-06-19 (PCT/IB2022/055680)

[87] (WO2022/269446)

[30] US (63/212,671) 2021-06-20



## Demandes PCT entrant en phase nationale

[21] **3,224,888**  
[13] A1

[51] **Int.Cl. A61N 5/10 (2006.01) A61K 9/00 (2006.01) A61K 39/395 (2006.01) A61K 51/02 (2006.01) A61K 51/12 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **INTRATUMORAL ALPHA-EMITTER RADIATION IN COMBINATION WITH VASCULATURE INHIBITORS**

[54] **RAYONNEMENT D'EMETTEUR ALPHA INTRATUMORAL EN COMBINAISON AVEC DES INHIBITEURS DU SYSTEME VASCULAIRE**

[72] KEISARI, YONA, IL  
[72] KELSON, ITZHAK, IL  
[72] DOMANKEVICH, VERED, IL  
[72] NISHRI, YOSSI, IL  
[72] COOKS, TOMER, IL  
[72] EFRATI, MARGALIT, IL  
[72] SEGAL, RONEN, IL  
[72] DEN, ROBERT, US  
[72] LUZ, ISHAI, IL  
[72] VATARESCU, MAAYAN HEDVA, IL  
[72] DEL MARE ROUMANI, SARA, IL  
[72] SHAI, AMIT, IL  
[71] ALPHA TAU MEDICAL LTD., IL  
[85] 2023-12-14  
[86] 2022-06-19 (PCT/IB2022/055679)  
[87] (WO2022/269445)  
[30] US (63/212,670) 2021-06-20

[21] **3,224,890**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01)**

[25] EN

[54] **LAG-3 ANTAGONIST THERAPY FOR HEMATOLOGICAL CANCER**

[54] **THERAPIE PAR ANTAGONISTE DE LAG-3 POUR CANCER HEMATOLOGIQUE**

[72] SRIVASTAVA, SHIVANI, US  
[72] AGRAWAL, SHRUTIDEVI KUNJBIHARILAL, US  
[72] GELB, ARNOLD BRUCE, US  
[72] CHEONG, ALICIA MUN YEN, GB  
[71] BRISTOL-MYERS SQUIBB COMPANY, US  
[85] 2023-12-19  
[86] 2022-10-28 (PCT/US2022/078912)  
[87] (WO2023/077090)  
[30] US (63/273,492) 2021-10-29

[21] **3,224,891**  
[13] A1

[51] **Int.Cl. G01N 29/265 (2006.01)**

[25] EN

[54] **PROBE POSITION ENCODING BY ULTRASOUND IMAGE CORRELATION**

[54] **CODAGE DE POSITION DE SONDÉ PAR CORRELATION D'IMAGES ULTRASONORES**

[72] LE DUFF, ALAIN, CA  
[71] EVIDENT CANADA, INC., CA  
[85] 2023-12-20  
[86] 2022-06-17 (PCT/CA2022/050979)  
[87] (WO2023/272378)  
[30] US (63/217,106) 2021-06-30

[21] **3,224,894**  
[13] A1

[51] **Int.Cl. C25B 1/04 (2021.01) C25B 9/19 (2021.01) C25B 9/60 (2021.01) C25B 9/70 (2021.01) C25B 15/021 (2021.01) C25B 15/023 (2021.01) C25B 15/027 (2021.01) C25B 15/02 (2021.01) C25B 15/08 (2006.01)**

[25] EN

[54] **SYSTEM FOR CARRYING OUT ELECTROLYSIS**

[54] **INSTALLATION POUR EFFECTUER UNE ELECTROLYSE**

[72] NEUBACHER, DIETMAR, AT  
[72] GOTTHARDT, SEBASTIAN, AT  
[71] H2I GREENHYDROGEN GMBH, AT  
[85] 2023-12-20  
[86] 2022-06-29 (PCT/AT2022/060229)  
[87] (WO2023/272326)  
[30] AT (A 50550/2021) 2021-07-01

[21] **3,224,896**  
[13] A1

[51] **Int.Cl. G01K 3/14 (2006.01) G01K 15/00 (2006.01) H01F 27/02 (2006.01) H05K 5/02 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR NON-INVASIVELY SENSING INTERNAL TEMPERATURE OF A FLUID CONTAINED IN A HOUSING**

[54] **APPAREIL ET PROCEDE DE DETECTION NON INVASIVE DE LA TEMPERATURE INTERNE D'UN FLUIDE CONTENU DANS UN BOITIER**

[72] CHISHOLM, JOHN PAUL, CA  
[72] LANDECKER, JAMES THOMAS ISAAC, CA  
[72] LIN, YEN-YOU, CA  
[72] PAULGAARD, MICHAEL STEPHEN, CA  
[72] SCHNEIDER, MATHIEU GARRET, CA  
[72] SIEBERT-TIMMER, AUDREY JOY CORRINE, CA  
[72] SILGARDO, ADRIAN BERNARD, CA  
[72] TUEY, AMANDA MAHN HAH, CA  
[72] TULINE, BENJAMIN DONALD CORMAC, CA  
[72] VAN HORN, JEREMY MICHAEL, CA  
[72] ZUIDERVEEN, THOMAS JACOB, CA  
[71] IFD TECHNOLOGIES INC., CA  
[85] 2023-12-20  
[86] 2022-06-17 (PCT/CA2022/050980)  
[87] (WO2022/266748)  
[30] US (63/214,695) 2021-06-24

## PCT Applications Entering the National Phase

[21] <b>3,224,897</b> [13] A1	[21] <b>3,224,898</b> [13] A1	[21] <b>3,224,904</b> [13] A1
[51] <b>Int.Cl. A61B 8/08 (2006.01) G16H 30/40 (2018.01) G06V 10/25 (2022.01) G06V 10/48 (2022.01) G06V 10/762 (2022.01) G06V 10/764 (2022.01)</b>	[51] <b>Int.Cl. C12N 5/0789 (2010.01) C12N 5/078 (2010.01) A61K 35/28 (2015.01)</b>	[51] <b>Int.Cl. C12N 15/11 (2006.01) C12N 15/113 (2010.01) A61K 31/713 (2006.01) A61P 3/06 (2006.01)</b>
[25] EN	[25] EN	[25] EN
[54] <b>SYSTEMS AND METHODS FOR CHARACTERIZING INTRA-TUMOR REGIONS ON QUANTITATIVE ULTRASOUND PARAMETRIC IMAGES TO PREDICT CANCER RESPONSE TO CHEMOTHERAPY AT PRE-TREATMENT</b>	[54] <b>ENHANCEMENT OF HEMATOPOIETIC STEM CELL AND HEMATOPOIETIC PROGENITOR CELL EXPANSION WITH AGENTS THAT ACTIVATE TAM RECEPTORS</b>	[54] <b>SIRNA INHIBITING ANGPTL3 GENE EXPRESSION AND USE THEREOF</b>
[54] <b>SYSTEMES ET PROCEDES POUR CHARACTERISER DES REGIONS INTRATUMORALES SUR DES IMAGES PARAMETRIQUES ULTRASONORES QUANTITATIVES POUR PREDIRE LA REPONSE D'UN CANCER A UNE CHIMIOETHERAPIE LORS D'UN PRETRAITEMENT</b>	[54] <b>AMELIORATION DE LA MULTIPLICATION DES CELLULES SOUCHES HEMATOPOIETIQUES ET DES CELLULES PROGENITRICES HEMATOPOIETIQUES AVEC DES AGENTS ACTIVANT LES RECEPTEURS TAM</b>	[54] <b>ARNSI INHIBANT L'EXPRESSION DU GENE ANGPTL3, ET SON UTILISATION</b>
[72] CZARNOTA, GREGORY J., CA	[72] PINEAULT, NICOLAS, CA	[72] PAN, JUN, CN
[72] SADEGHI-NAINI, ALI, CA	[72] MANESIA, JAVED, CA	[72] MA, XINXIN, CN
[72] TALEGHAMAR, HAMIDREZA, CA	[72] AUDET, JULIE, CA	[72] SONG, PEIMING, CN
[71] SUNNYBROOK RESEARCH INSTITUTE, CA	[71] CANADIAN BLOOD SERVICES, CA	[72] WU, CHUN, CN
[71] SADEGHI-NAINI, ALI, CA	[71] THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, CA	[72] FENG, HUI, CN
[71] TALEGHAMAR, HAMIDREZA, CA	[85] 2023-12-20	[72] YAO, SHENG, CN
[85] 2023-12-20	[86] 2022-07-22 (PCT/CA2022/051135)	[72] LV, JIASHENG, CN
[86] 2022-06-24 (PCT/CA2022/051020)	[87] (WO2023/000105)	[72] SIYANG, HAIXIAO, CN
[87] (WO2022/266774)	[30] US (63/224,941) 2021-07-23	[72] YIN, YIJIE, CN
[30] US (63/215,353) 2021-06-25		[72] GUO, WANTAO, CN
		[72] LI, HAIMING, CN
		[72] CHEN, DAWEI, CN
		[72] GU, JIAMIN, CN
		[72] KONG, XIANQI, CN
		[71] SHANGHAI JUNSHI BIOSCIENCES CO., LTD., CN
		[71] SUZHOU JUNMENG BIOSCIENCES CO., LTD., CN
		[85] 2023-12-20
		[86] 2022-06-21 (PCT/CN2022/100023)
		[87] (WO2022/268054)
		[30] CN (202110688187.9) 2021-06-21
	[21] <b>3,224,900</b> [13] A1	
	[51] <b>Int.Cl. H01M 50/30 (2021.01) H01M 50/358 (2021.01) H01M 50/367 (2021.01) H01M 10/52 (2006.01)</b>	
	[25] EN	
	[54] <b>BATTERY CELL, MANUFACTURING METHOD AND MANUFACTURING SYSTEM THEREFOR, BATTERY AND ELECTRIC DEVICE</b>	
	[54] <b>ELEMENT DE BATTERIE, ET PROCEDE DE FABRICATION ET SYSTEME ASSOCIE, BATTERIE ET DISPOSITIF ELECTRIQUE</b>	
	[72] PU, YUJIE, CN	
	[71] CONTEMPORARY AMPEREX TECHNOLOGY CO., LIMITED, CN	
	[85] 2023-12-20	
	[86] 2021-06-23 (PCT/CN2021/101918)	
	[87] (WO2022/266908)	

## Demandes PCT entrant en phase nationale

[21] **3,224,905**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61P 31/18 (2006.01) C12N 15/86 (2006.01)**

[25] EN

[54] **NOVEL SINGLE DOMAIN ANTIGEN BINDING MOLECULES AND THEIR USES**

[54] **NOUVELLES MOLECULES DE LIAISON A UN ANTIGENE A DOMAINE UNIQUE ET LEURS UTILISATIONS**

[72] KAISER, PHILIPP, DE

[72] TRAENKLE, BJOERN, DE

[72] ROTHBAUER, ULRICH, DE

[72] SONANINI, DOMINIK, DE

[72] KNEILLING, MANFRED, DE

[72] PICHLER, BERND, DE

[72] BESCHORNER, NIKLAS, DE

[72] HAMANN, MARTIN, DE

[72] HAUBER, JOACHIM, DE

[71] PROVIREX GENOME EDITING THERAPIES GMBH, DE

[85] 2023-12-20

[86] 2022-06-28 (PCT/EP2022/067773)

[87] (WO2023/275075)

[30] EP (21182579.9) 2021-06-29

[21] **3,224,906**  
[13] A1

[51] **Int.Cl. B64D 15/10 (2006.01) B64F 5/23 (2017.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR DISPENSING FLUID ONTO AN AIRPLANE SURFACE**

[54] **PROCEDE ET SYSTEME DE DISTRIBUTION DE FLUIDE SUR UNE SURFACE D'AVION**

[72] SVANEBJERG, ELO, DK

[71] VESTERGAARD COMPANY A/S, DK

[85] 2023-12-20

[86] 2022-07-08 (PCT/EP2022/069180)

[87] (WO2023/285324)

[30] EP (21185326.2) 2021-07-13

[21] **3,224,908**  
[13] A1

[51] **Int.Cl. H04W 72/04 (2023.01)**

[25] EN

[54] **COMMUNICATION METHOD AND DEVICE, STORAGE MEDIUM, AND PROGRAM PRODUCT**

[54] **PROCEDE DE COMMUNICATION, DISPOSITIF, SUPPORT DE STOCKAGE ET PRODUIT-PROGRAMME**

[72] LIU, CHENCHEN, CN

[72] GONG, BO, CN

[72] YU, JIAN, CN

[72] LU, YUXIN, CN

[72] GAN, MING, CN

[71] HUAWEI TECHNOLOGIES CO., LTD., CN

[85] 2023-12-20

[86] 2022-06-21 (PCT/CN2022/100205)

[87] (WO2022/268084)

[30] CN (202110698499.8) 2021-06-23

[21] **3,224,909**  
[13] A1

[51] **Int.Cl. C08G 63/199 (2006.01) C08G 18/42 (2006.01) C08G 63/672 (2006.01) C08G 63/87 (2006.01) C09J 175/06 (2006.01)**

[25] EN

[54] **POLYESTER POLYOL AND THE PREPARATION METHOD THEREOF**

[54] **POLYESTER POLYOL ET PROCEDE DE PREPARATION ASSOCIE**

[72] BRANDT, ADRIAN, DE

[72] KUX, ALEXANDER, DE

[72] BECK, HORST, DE

[72] BRENGER, ANDREAS, DE

[71] HENKEL AG & CO. KGAA, DE

[85] 2023-12-20

[86] 2022-05-31 (PCT/EP2022/064795)

[87] (WO2023/280478)

[30] EP (21184147.3) 2021-07-07

[21] **3,224,910**  
[13] A1

[51] **Int.Cl. C05G 5/30 (2020.01) C05C 1/00 (2006.01) C05C 9/00 (2006.01)**

[25] EN

[54] **PARTICLES COATED WITH A COMPOSITION COMPRISING CHOLINE CHLORIDE**

[54] **PARTICULES ENROBEES D'UNE COMPOSITION COMPRENANT DU CHLORURE DE CHOLINE**

[72] WARD, STUART, GB

[72] BROWN, JONATHAN, GB

[71] YARA UK LIMITED, GB

[85] 2023-12-20

[86] 2022-06-22 (PCT/GB2022/051583)

[87] (WO2022/269252)

[30] GB (2108968.5) 2021-06-22

[21] **3,224,912**  
[13] A1

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

[25] EN

[54] **VHH-BASED NKP30 BINDERS**

[54] **LIANTS NKP30 A BASE DE VHH**

[72] ZIELONKA, STEFAN, DE

[72] TOLEIKIS, LARS, DE

[72] KRAH, SIMON, DE

[72] PEKAR, LUKAS, DE

[72] EVERS, ANDREAS, DE

[71] MERCK PATENT GMBH, DE

[85] 2023-12-20

[86] 2022-06-22 (PCT/EP2022/066963)

[87] (WO2022/268857)

[30] EP (21180872.0) 2021-06-22

[21] **3,224,913**  
[13] A1

[51] **Int.Cl. B01F 23/45 (2022.01) B01F 23/40 (2022.01) B01F 33/501 (2022.01) B01F 35/71 (2022.01) B01F 35/88 (2022.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR PREPARING A LIQUID PREPARATION**

[54] **PROCEDE ET APPAREIL POUR PREPARER UNE PREPARATION LIQUIDE**

[72] TURNER, JEREMY, GB

[72] DIXON, ELANOR, GB

[72] MORSE, JAMES, GB

[72] BRAND, THOMAS, GB

[71] TRISTEL PLC, GB

[85] 2023-12-20

[86] 2022-06-23 (PCT/GB2022/051613)

[87] (WO2022/269271)

[30] GB (2108978.4) 2021-06-23

## PCT Applications Entering the National Phase

<p style="text-align: center;">[21] <b>3,224,914</b> [13] A1</p> <p>[51] <b>Int.Cl. C01G 53/00 (2006.01) H01M 4/525 (2010.01)</b></p> <p>[25] EN</p> <p>[54] <b>LITHIUM NICKEL-BASED COMPOSITE OXIDE AS A POSITIVE ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM-ION BATTERIES</b></p> <p>[54] <b>OXYDE COMPOSITE A BASE DE LITHIUM-NICKEL EN TANT QUE MATERIAU ACTIF D'ELECTRODE POSITIVE POUR BATTERIES AU LITHIUM-ION RECHARGEABLES</b></p> <p>[72] SONG, KYEONGSE, KR</p> <p>[72] KU, HEESUK, KR</p> <p>[72] KARAKULINA, OLESIA, KR</p> <p>[72] BLANGERO, MAXIME, KR</p> <p>[71] UMICORE, BE</p> <p>[85] 2023-12-20</p> <p>[86] 2022-06-24 (PCT/EP2022/067323)</p> <p>[87] (WO2023/274867)</p> <p>[30] EP (21182023.8) 2021-06-28</p>	<p style="text-align: center;">[21] <b>3,224,916</b> [13] A1</p> <p>[51] <b>Int.Cl. G16H 20/70 (2018.01) G16H 50/30 (2018.01) G06F 40/35 (2020.01) G06F 40/40 (2020.01)</b></p> <p>[25] EN</p> <p>[54] <b>PROVIDING CARE TO USERS WITH COMPLEX NEEDS</b></p> <p>[54] <b>FOURNITURE DE SOINS A DES UTILISATEURS PRESENTANT DES BESOINS COMPLEXES</b></p> <p>[72] BLACKWELL, ANDREW, GB</p> <p>[72] TANGEN, DANAH BARBARA, GB</p> <p>[72] EWBANK, MICHAEL, GB</p> <p>[72] CLELFORD, THOMAS FABIAN JAMES, GB</p> <p>[72] TABLAN, MIHAI VALENTIN, GB</p> <p>[72] GENTILE, JENNIFER, GB</p> <p>[72] BUCHHOLZ, SABINE NICOLE, GB</p> <p>[72] FREER, STEPHEN, GB</p> <p>[72] WINGFIELD, ANA MARIA FERREIRA PARADELA CATARINO, GB</p> <p>[72] CUMMINS, RONAN PATRICK, GB</p> <p>[72] MEHEW, SHAUN, GB</p> <p>[72] MARSHALL, EMILY, GB</p> <p>[71] IESO DIGITAL HEALTH LIMITED, GB</p> <p>[85] 2023-12-20</p> <p>[86] 2022-06-24 (PCT/GB2022/051630)</p> <p>[87] (WO2022/269287)</p> <p>[30] GB (2109185.5) 2021-06-25</p> <p>[30] GB (2204282.4) 2022-03-25</p>	<p style="text-align: center;">[21] <b>3,224,919</b> [13] A1</p> <p>[51] <b>Int.Cl. C07D 295/22 (2006.01) A61K 31/34 (2006.01) A61K 31/4035 (2006.01) A61K 31/4192 (2006.01) A61K 31/445 (2006.01) A61K 31/4453 (2006.01) A61K 31/5386 (2006.01) A61P 3/00 (2006.01) A61P 3/06 (2006.01) A61P 3/10 (2006.01) C07C 275/28 (2006.01) C07D 249/06 (2006.01) C07D 295/10 (2006.01) C07D 405/12 (2006.01) C07D 491/08 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>6-SUBSTITUTED NAPHTHALENE-1,3-DISULFONIC ACID DERIVATIVES AS MODULATORS OF THE EXTRACELLULAR NICOTINAMIDE PHOSPHORIBOSYL TRANSFERASE (ENAMPT) FOR THE TREATMENT OF E.G. DIABETES</b></p> <p>[54] <b>DERIVES D'ACIDE NAPHTALENE-1,3-DISULFONIQUE SUBSTITUES EN POSITION 6 SERVANT DE MODULATEURS DE LA NICOTINAMIDE PHOSPHORIBOSYL TRANSFERASE EXTRACELLULAIRE (ENAMPT) POUR LE TRAITEMENT PAR EXEMPLE DU DIABETE</b></p> <p>[72] BUTTERWORTH, SAMUEL, GB</p> <p>[72] GARZON SANZ, MIGUEL, ES</p> <p>[71] THE UNIVERSITY OF MANCHESTER, GB</p> <p>[85] 2023-12-20</p> <p>[86] 2022-07-26 (PCT/GB2022/051955)</p> <p>[87] (WO2023/007147)</p> <p>[30] GB (2110728.9) 2021-07-26</p>
<p style="text-align: center;">[21] <b>3,224,915</b> [13] A1</p> <p>[51] <b>Int.Cl. G16H 20/70 (2018.01) G16H 50/30 (2018.01) G06F 40/35 (2020.01) G06F 40/40 (2020.01)</b></p> <p>[25] EN</p> <p>[54] <b>A COMPUTER-IMPLEMENTED METHOD FOR PROVIDING CARE</b></p> <p>[54] <b>PROCEDE MIS EN OEUVRE PAR ORDINATEUR POUR FOURNIR DES SOINS</b></p> <p>[72] BLACKWELL, ANDREW, GB</p> <p>[72] TANGEN, DANAH BARBARA, GB</p> <p>[72] EWBANK, MICHAEL, GB</p> <p>[72] CLELFORD, THOMAS FABIAN JAMES, GB</p> <p>[72] TABLAN, MIHAI VALENTIN, GB</p> <p>[72] GENTILE, JENNIFER, GB</p> <p>[72] BUCHHOLZ, SABINE NICOLE, GB</p> <p>[72] FREER, STEPHEN, GB</p> <p>[72] WINGFIELD, ANA MARIA FERREIRA PARADELA CATARINO, GB</p> <p>[72] CUMMINS, RONAN PATRICK, GB</p> <p>[72] MEHEW, SHAUN, GB</p> <p>[72] MARSHALL, EMILY, GB</p> <p>[71] IESO DIGITAL HEALTH LIMITED, GB</p> <p>[85] 2023-12-20</p> <p>[86] 2022-06-24 (PCT/GB2022/051629)</p> <p>[87] (WO2022/269286)</p> <p>[30] GB (2109185.5) 2021-06-25</p> <p>[30] GB (2204282.4) 2022-03-25</p>	<p style="text-align: center;">[21] <b>3,224,917</b> [13] A1</p> <p>[51] <b>Int.Cl. F16D 69/00 (2006.01) F16D 65/04 (2006.01) F16D 65/092 (2006.01) F16D 69/04 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>BRAKE PAD UNIT AND A METHOD OF MANUFACTURE OF A BRAKE PAD UNIT</b></p> <p>[54] <b>UNITE DE PLAQUETTE DE FREIN ET PROCEDE DE FABRICATION D'UNE UNITE DE PLAQUETTE DE FREIN</b></p> <p>[72] SAVAGE, LUKE, GB</p> <p>[72] GOMBOS, ZOLTAN, GB</p> <p>[71] UNIVERSITY OF EXETER, GB</p> <p>[85] 2023-12-20</p> <p>[86] 2022-06-29 (PCT/GB2022/051677)</p> <p>[87] (WO2023/275550)</p> <p>[30] GB (2109621.9) 2021-07-02</p>	

## Demandes PCT entrant en phase nationale

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[21] **3,224,920**

[13] A1

[51] **Int.Cl. C01B 3/00 (2006.01) B01J 31/18 (2006.01) B01J 31/22 (2006.01) B01J 31/24 (2006.01) B01J 31/40 (2006.01) C07C 51/02 (2006.01) C07C 51/41 (2006.01)**

[25] EN

[54] **HYDROGEN STORAGE BASED ON AQUEOUS FORMATE-BICARBONATE (HYDROGEN CARBONATE) EQUILIBRIUM**

[54] **STOCKAGE D'HYDROGENE BASE SUR UN EQUILIBRE FORMIATE-BICARBONATE (CARBONATE D'HYDROGENE) AQUEUX**

[72] JOO, FERENC, HU

[72] PAPP, GABOR CSABA, HU

[72] ELEK, JANOS, HU

[72] HORVATH, HENRIETTA, HU

[71] GEOMAX PROJECT KFT., HU

[85] 2023-12-20

[86] 2022-07-01 (PCT/HU2022/050056)

[87] (WO2023/275578)

[30] HU (P2100254) 2021-07-02

[30] HU (P2200115) 2022-04-13

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[21] **3,224,921**

[13] A1

[51] **Int.Cl. A61K 38/06 (2006.01) A23C 9/152 (2006.01) A61K 9/19 (2006.01) A61K 9/50 (2006.01) A61K 38/12 (2006.01) C08H 1/00 (2006.01)**

[25] EN

[54] **MICROPARTICLE TISSUE SCAFFOLD COMPOSITIONS, APPARATUSES, METHODS OF PREPARATION, AND USES THEREOF**

[54] **COMPOSITIONS D'ECHAFAUDAGE TISSULAIRE A MICROPARTICULES, APPAREILS, METHODES DE PREPARATION ET UTILISATIONS DE CELLES-CI**

[72] ATTAR, ISHAY, IL

[72] KEREN, SINIK, IL

[72] COHEN, SHANI, IL

[71] BIO-CHANGE LTD., IL

[85] 2023-12-20

[86] 2022-06-21 (PCT/IB2022/000349)

[87] (WO2022/269351)

[30] US (63/212,993) 2021-06-21

# Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

## Demandes canadiennes apparentées par division et demandes mises à la disponibilité du public non disponibles auparavant

<p>[21] <b>3,223,799</b> [13] A1</p> <p>[25] EN [54] <b>HINGED CONNECTOR DOOR ASSEMBLY</b> [54] <b>ENSEMBLE DE PORTES DE CONNECTEUR ARTICULEES</b> [72] PLAMONDON, JEAN-SEBASTIEN, CA [72] PILON, VINCENT, CA [71] BELDEN CANADA ULC, CA [22] 2016-12-01 [41] 2017-06-08 [62] 3,006,885 [30] US (62/261,493) 2015-12-01</p>	<p>[21] <b>3,223,923</b> [13] A1</p> <p>[25] EN [54] <b>INTEGRATED VEHICLE COVER</b> [54] <b>BACHE DE VEHICULE INTEGRE</b> [72] KNEIFL, KELLY, US [72] GAARDER, ROBERT, US [72] FACCHINELLO, JEROME, US [72] DELANEY, DANIEL J., US [72] MOSINGO, ROBBIE, US [71] EXTANG CORPORATION, US [22] 2021-05-13 [41] 2021-11-14 [62] 3,118,257 [30] US (63/024,585) 2020-05-14</p>	<p>[21] <b>3,223,992</b> [13] A1</p> <p>[25] EN [54] <b>METHOD FOR DETERMINING HYDRAULIC FRACTURE ORIENTATION AND DIMENSION</b> [54] <b>PROCEDE POUR LA DETERMINATION D'ORIENTATION ET DE DIMENSION DE FRACTURE HYDRAULIQUE</b> [72] ROUSSEL, NICOLAS PATRICK, US [72] FLOREZ, HORACIO, US [72] RODRIGUEZ, ADOLFO ANTONIO, US [72] AGRAWAL, SAMARTH, US [71] CONOCOPHILLIPS COMPANY, US [22] 2014-12-18 [41] 2015-06-25 [62] 2,937,225 [30] US (61/917,659) 2013-12-18 [30] US (14/575,176) 2014-12-18</p>
<p>[21] <b>3,223,907</b> [13] A1</p> <p>[51] <b>Int.Cl. F02N 11/08 (2006.01) B08B 3/02 (2006.01) B08B 13/00 (2006.01) F02N 11/14 (2006.01) H02J 7/00 (2006.01) H02K 7/14 (2006.01)</b> [25] EN [54] <b>BATTERY COMMUNICATION SYSTEM</b> [54] <b>SYSTEME DE COMMUNICATION AVEC UNE PILE</b> [72] GILPATRICK, RICHARD J., US [72] ALEXANDER, CHRIS, US [71] FNA GROUP, INC., US [22] 2019-06-27 [41] 2019-12-29 [62] 3,048,097 [30] US (16/022,995) 2018-06-29</p>	<p>[21] <b>3,223,928</b> [13] A1</p> <p>[51] <b>Int.Cl. B01L 3/02 (2006.01)</b> [25] EN [54] <b>PIPETTE DISPENSER SYSTEM AND METHOD</b> [54] <b>SYSTEME ET PROCEDE DE DISTRIBUTEUR DE PIPETTES</b> [72] DENOMME, RYAN CAMERON, CA [72] IYER, KRISHNA, CA [72] STERLINA, PATRICK, US [72] HALL, GORDON H., CA [72] SUDARSAN, ARJUN, US [71] NICOYA LIFESCIENCES INC., CA [22] 2021-09-07 [41] 2022-03-17 [62] 3,191,995 [30] US (63/075,541) 2020-09-08 [30] US (63/139,173) 2021-01-19 [30] US (63/233,607) 2021-08-16</p>	<p>[21] <b>3,224,000</b> [13] A1</p> <p>[25] EN [54] <b>METHODS AND SYSTEMS FOR ALERTING USERS REGARDING MEDIA AVAILABILITY</b> [54] <b>PROCEDES ET SYSTEMES SERVANT A ALERTER DES UTILISATEURS QUANT A LA DISPONIBILITE DE CONTENU MULTIMEDIA</b> [72] TOMITA, KANAKO, JP [71] ROVI GUIDES, INC., US [22] 2015-05-29 [41] 2015-12-03 [62] 2,950,579 [30] US (14/291,233) 2014-05-30 [30] US (14/291,245) 2014-05-30</p>
<p>[21] <b>3,223,918</b> [13] A1</p> <p>[25] EN [54] <b>DETECTION OF PATHOLOGIES IN OCULAR IMAGES</b> [54] <b>DETECTION DE PATHOLOGIES DANS DES IMAGES OCULAIRES</b> [72] VAN HEMERT, JANO, GB [72] SWAN, DEREK ALISTAIR, GB [71] OPTOS PLC, GB [22] 2019-12-12 [41] 2020-06-20 [62] 3,064,885 [30] EP (18214689.4) 2018-12-20</p>		

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,224,007**  
[13] A1

[25] EN  
[54] **CONTROLLED REMOVAL OF IONS FROM AQUEOUS FLUID ELIMINATION CONTROLEE D'IONS A PARTIR D'UN FLUIDE AQUEUX**  
[72] NORMAN, PETER ROBERT, US  
[72] ELSON, BRIAN BRUCE, US  
[72] FALLBACH, MICHAEL JAMES, US  
[71] THE WATER COMPANY, LLC, US  
[22] 2019-06-12  
[41] 2019-12-19  
[62] 3,103,613  
[30] US (62/684,370) 2018-06-13  
[30] US (16/439,381) 2019-06-12

[21] **3,224,013**  
[13] A1

[25] EN  
[54] **COMBINATION THERAPY OF INHIBITORS OF C-C CHEMOKINE RECEPTOR TYPE 9 (CCR9) AND ANTI-ALPHA4BETA7 INTEGRIN BLOCKING ANTIBODIES**  
[54] **COMPOSITIONS ET METHODES POUR LE TRAITEMENT D'UNE MALADIE INFLAMMATOIRE DE L'INTESTIN A L'AIDE D'UNE POLYTHERAPIE A BASE D'INHIBITEURS A PETITES MOLECULES DE RECEPTEUR 9 DE CHIMIO KINE C-C (CCR9) ET D'ANTICORPS BLOQUANTS ANTI-INTEGRINE ALPHA4BETA7**  
[72] EBSWORTH, KAREN, US  
[72] WANG, YU, US  
[72] ZENG, YIBIN, US  
[72] ZHANG, PENGLIE, US  
[72] TAN, JOANNE, US  
[71] CHEMOCENTRYX, INC., US  
[22] 2015-10-05  
[41] 2016-04-14  
[62] 2,960,876  
[30] US (62/060,454) 2014-10-06

[21] **3,224,027**  
[13] A1

[51] **Int.Cl. A61K 31/7048 (2006.01) A61K 31/12 (2006.01) A61K 31/20 (2006.01) A61K 38/16 (2006.01) A61P 21/00 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS USING A POLYPHENOL FOR MUSCULOSKELETAL HEALTH**  
[54] **COMPOSITIONS ET PROCEDES EMPLOYANT UN POLYPHENOL POUR LA SANTE MUSCULOSQUELETTIQUE**  
[72] HORCAJADA, MARIE NOELLE, FR  
[72] MEMBREZ, FANNY, CH  
[72] BREUILLE, DENIS, CH  
[72] BOUTRY, CLAIRE, CH  
[71] SOCIETE DES PRODUITS NESTLE S.A., CH  
[22] 2016-11-17  
[41] 2017-05-26  
[62] 3,001,078  
[30] US (62/256,401) 2015-11-17

[21] **3,224,035**  
[13] A1

[25] EN  
[54] **AGRICULTURAL TILTING BEARING ASSEMBLY AND IMPROVED SUPPORT BRACKET FOR CONNECTING THE SAME TO AGRICULTURAL EQUIPMENT**  
[54] **ASSEMBLAGE DE SUPPORT D'INCLINAISON AGRICOLE ET MONTANT DE SUPPORT AMELIORE SERVANT A RELIER LEDIT ASSEMBLAGE A L'EQUIPEMENT AGRICOLE**  
[72] MARCHESAN, JOSE LUIZ ALBERTO, BR  
[71] MARCHESAN IMPLEMENTOS E MAQUINAS AGRICOLAS TATU S.A., BR  
[22] 2018-10-25  
[41] 2019-06-11  
[62] 3,022,257  
[30] US (15/837,593) 2017-12-11  
[30] US (15/944,477) 2018-04-03

[21] **3,224,039**  
[13] A1

[25] EN  
[54] **No Title Specified**  
[54]  
[72] ZHANG, YI, CN  
[71] 10353744 CANADA LTD., CA  
[22] 2015-07-21  
[41] 2017-01-26  
[62] 2,993,027

[21] **3,224,049**  
[13] A1

[25] EN  
[54] **DOWNHOLE TOOL FOR CONNECTING WITH A CONVEYANCE LINE**  
[54] **OUTIL DE FOND DE TROU DESTINE A ETRE RELIE A UNE LIGNE DE TRANSPORT**  
[72] MASSEY, JAMES PATRICK, US  
[72] MARTIN, BRANDON, US  
[71] IMPACT SELECTOR INTERNATIONAL, LLC, US  
[22] 2019-12-19  
[41] 2020-08-20  
[62] 3,124,204  
[30] US (62/783,045) 2018-12-20  
[30] US (62/870,028) 2019-07-02

[21] **3,224,051**  
[13] A1

[25] EN  
[54] **DEVICE AND SYSTEM FOR GENERATING ELECTRONIC CERTIFICATE**  
[54] **DISPOSITIF ET SYSTEME DE GENERATION DE CERTIFICAT ELECTRONIQUE**  
[72] ZHANG, YI, CN  
[71] 10353744 CANADA LTD., CA  
[22] 2014-09-12  
[41] 2016-03-17  
[62] 2,988,802

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

<p style="text-align: right;">[21] <b>3,224,059</b> [13] A1</p> <p>[25] EN [54] <b>METHOD, SYSTEM AND DEVICE FOR OPENING ELECTRONIC CERTIFICATE</b> [54] <b>PROCEDE, SYSTEME ET DISPOSITIF D'OUVERTURE DE CERTIFICAT ELECTRONIQUE</b> [72] ZHANG, YI, CN [71] 10353744 CANADA LTD., CA [22] 2015-07-21 [41] 2017-01-26 [62] 2,993,106</p>	<p style="text-align: right;">[21] <b>3,224,227</b> [13] A1</p> <p>[25] EN [54] <b>DRIED COMPOSITIONS CONTAINING FLAP ENDONUCLEASE</b> [54] <b>COMPOSITIONS SECHEES CONTENANT UNE ENDONUCLEASE FLAP</b> [72] PETERSON, PATRICK, US [72] LUU, TONY, US [72] JOST, MATTHIAS, US [71] GEN-PROBE INCORPORATED, US [22] 2018-05-18 [41] 2018-11-22 [62] 3,059,977 [30] US (62/508,975) 2017-05-19 [30] US (62/508,990) 2017-05-19 [30] US (62/540,478) 2017-08-02</p>	<p style="text-align: right;">[21] <b>3,224,385</b> [13] A1</p> <p>[25] EN [54] <b>CHIMERIC ANTIGEN RECEPTORS FOR TREATING MYELOID MALIGNANCIES</b> [54] <b>RECEPTEURS ANTIGENIQUES CHIMERIQUES POUR LE TRAITEMENT DE MALIGNITES MYELOIDES</b> [72] DAVILA, MARCO, US [72] BETTS, BRIAN, US [71] H. LEE MOFFITT CANCER CENTER AND RESEARCH INSTITUTE INC., US [71] REGENTS OF THE UNIVERSITY OF MINNESOTA, US [22] 2020-08-14 [41] 2021-02-25 [62] 3,147,835 [30] US (62/888,072) 2019-08-16</p>
<p style="text-align: right;">[21] <b>3,224,065</b> [13] A1</p> <p>[25] EN [54] <b>ARTICLES COMPRISING ADDITIVELY-MANUFACTURED COMPONENTS AND METHODS OF ADDITIVE MANUFACTURING</b> [54] <b>ARTICLES COMPRENANT DES COMPOSANTS FABRIQUES DE MANIERE ADDITIVE ET PROCEDES DE FABRICATION ADDITIVE</b> [72] LAPERRIERE, JEAN-FRANCOIS, CA [72] KRICK, THIERRY, CA [72] DUROCHER, JACQUES, CA [72] CORBEIL, JEAN-FRANCOIS, CA [72] SEGUIN, ALEXIS, CA [72] ROUZIER, EDOUARD, CA [72] BOISSONNEAULT, RAYMOND, CA [71] BAUER HOCKEY LTD., CA [22] 2020-05-21 [41] 2020-11-26 [62] 3,140,505 [30] US (62/850,831) 2019-05-21 [30] US (62/851,080) 2019-05-21 [30] US (62/881,687) 2019-08-01 [30] US (62/910,002) 2019-10-03 [30] US (62/969,307) 2020-02-03</p>	<p style="text-align: right;">[21] <b>3,224,360</b> [13] A1</p> <p>[25] EN [54] <b>LUMINAIRE HOUSING BOITIER DE LUMINAIRE</b> [72] DUCKWORTH, JASON E., US [72] ELMORE, MARK V., US [72] HODGES, DOUGLAS S., US [71] HUBBELL LIGHTING, INC., US [22] 2016-04-12 [41] 2016-10-20 [62] 2,982,750 [30] US (62/148,118) 2015-04-15 [30] US (14/984,827) 2015-12-30</p>	<p style="text-align: right;">[21] <b>3,224,392</b> [13] A1</p> <p>[25] EN [54] <b>MULTIPLEX DETECTION OF VULVOVAGINAL CANDIDIASIS, TRICHOMONIASIS AND BACTERIAL VAGINOSIS</b> [54] <b>DETECTION MULTIPLEX DE CANDIDOSE VULVO-VAGINALE, DE TRICHOMONASE ET DE VAGINOSE BACTERIENNE</b> [72] PAQUETTE, NANCY, CA [72] TREMBLAY, MARIE-HELENE, CA [72] TREMBLAY, SIMON, CA [72] THERRIEN, ROSELINE, CA [72] FORTIN, MARIE-CHRISTINE, CA [72] BELLEY-MONTFORT, LUCILE, CA [72] CANTIN, DANY, CA [72] ROGER-DALBERT, CELINE, CA [71] BECTON, DICKINSON AND COMPANY, US [22] 2016-04-20 [41] 2016-10-27 [62] 2,982,467 [30] US (62/152,754) 2015-04-24 [30] US (62/279,220) 2016-01-15</p>
<p style="text-align: right;">[21] <b>3,224,181</b> [13] A1</p> <p>[25] EN [54] <b>PLASMA-BASED FILMS AND METHODS FOR MAKING AND USING THE SAME</b> [54] <b>FILMS A BASE DE PLASMA ET PROCEDES POUR LES FABRIQUER ET LES UTILISER</b> [72] ERICSON, DANIEL GRANT, US [71] OCTAPHARMA AG, CH [22] 2017-05-31 [41] 2017-12-07 [62] 3,024,511 [30] US (62/343,840) 2016-05-31</p>	<p style="text-align: right;">[21] <b>3,224,365</b> [13] A1</p> <p>[25] EN [54] <b>BICYCLIC COMPOUNDS FOR DIAGNOSIS AND THERAPY OF ALPHA-SYNUCLEIN ASSOCIATED DISORDERS</b> [54] <b>COMPOSES BICYCLIQUES AUX FINS DE DIAGNOSTIC ET DE THERAPIE POUR LES TROUBLES ASSOCIES A L'ALPHA-SYNUCLEINE</b> [72] MOLETTE, JEROME, FR [72] GABELLIERI, EMANUELE, CH [72] DARMENCY, VINCENT, CH [71] AC IMMUNE SA, CH [22] 2017-03-10 [41] 2017-09-14 [62] 3,015,947 [30] EP (16159878.4) 2016-03-11 [30] EP (16199577.4) 2016-11-18</p>	



**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,224,423**  
[13] A1

[25] EN  
[54] **DUAL LUMEN SHEATH FOR ARTERIAL ACCESS**  
[54] **GAINE A DOUBLE LUMIERE POUR L'ACCES AUX ARTERES**  
[72] CORBETT, SCOTT, US  
[72] FANTUZZI, GLEN ROBERT, US  
[72] MURPHY, JOHN, US  
[72] KIRCHHOFF, FRANK, DE  
[72] BROSSAU, DAVID, US  
[72] SIESS, THORSTEN, US  
[71] ABIOMED, INC., US  
[22] 2016-08-17  
[41] 2017-02-23  
[62] 2,995,707  
[30] US (14/827,741) 2015-08-17

[21] **3,224,443**  
[13] A1

[25] EN  
[54] **HEAT TRANSFER SYSTEM AND ENVIRONMENTAL CONTROL SYSTEM WITH HEAT TRANSFER SYSTEM**  
[54] **SYSTEME DE TRANSFERT DE CHALEUR ET SYSTEME DE CONTROLE ENVIRONNEMENTAL AVEC SYSTEME DE TRANSFERT DE CHALEUR**  
[72] CONRAD, WAYNE ERNEST, CA  
[71] OMACHRON INTELLECTUAL PROPERTY INC., CA  
[22] 2018-08-01  
[41] 2020-02-01  
[62] 3,108,916

[21] **3,224,446**  
[13] A1

[25] EN  
[54] **SYSTEM AND METHOD FOR SYRINGE FLUID FILL VERIFICATION AND IMAGE RECOGNITION OF POWER INJECTOR SYSTEM FEATURES**  
[54] **SYSTEME ET PROCEDE POUR LA VERIFICATION DU REMPLISSAGE PAR UN FLUIDE D'UNE SERINGUE ET DE RECONNAISSANCE D'IMAGE DE CARACTERISTIQUES D'UN SYSTEME D'INJECTEUR DE PUISSANCE**  
[72] COWAN, KEVIN P., US  
[72] SPOHN, MICHAEL A., US  
[72] MCDERMOTT, MICHAEL, US  
[72] GRUBIC, HERBERT M., US  
[71] BAYER HEALTHCARE LLC, US  
[22] 2016-08-24  
[41] 2017-03-09  
[62] 3,207,632  
[30] US (62/211,462) 2015-08-28  
[30] US (62/259,824) 2015-11-25

[21] **3,224,457**  
[13] A1

[25] EN  
[54] **ESOPHAGEAL CANCER DETECTION KIT OR DEVICE, AND DETECTION METHOD**  
[54] **KIT OU DISPOSITIF DE DETECTION DU CANCER DE L'.SOPHAGE, ET METHODE DE DETECTION DE CELUI-CI**  
[72] SUDO, HIROKO, JP  
[72] NOBUMASA, HITOSHI, JP  
[72] KOZONO, SATOKO, JP  
[72] KONDOU, SATOSHI, JP  
[72] KAWAUCHI, JUNPEI, JP  
[72] OCHIAI, ATSUSHI, JP  
[72] KOJIMA, MOTOHIRO, JP  
[71] TORAY INDUSTRIES, INC., JP  
[71] NATIONAL CANCER CENTER, JP  
[22] 2015-06-18  
[41] 2015-12-23  
[62] 2,951,390  
[30] JP (2014-125036) 2014-06-18  
[30] JP (2015-070379) 2015-03-30

[21] **3,224,506**  
[13] A1

[25] EN  
[54] **LANTHANUM CARBONATE HYDROXIDE, LANTHANUM OXYCARBONATE AND METHODS OF THEIR MANUFACTURE AND USE**  
[54] **HYDROXYDE DE CARBONATE DE LANTHANE, OXYCARBONATE DE LANTHANE, ET PROCEDES POUR LEUR FABRICATION ET METHODES POUR LEUR UTILISATION**  
[72] DIXIT, MILIND, US  
[72] GORE, ASHOK YESHWANT, US  
[72] MAHALINGAM, RAVICHANDRAN, US  
[72] SCHAUER, EDWARD A., US  
[72] STEWART, MATTHEW, US  
[72] TANDALE, RAJENDRA, US  
[72] SINGH, RAMSHARAN, US  
[71] UNICYCIVE THERAPEUTICS, INC., US  
[22] 2011-05-12  
[41] 2011-11-17  
[62] 2,798,081  
[30] US (61/333,887) 2010-05-12

[21] **3,224,507**  
[13] A1

[25] EN  
[54] **CELL CO-EXPRESSING CHIMERIC ANTIGEN RECEPTORS BINDING CD19 AND CD22**  
[54] **CELLULE COEXPRIMANT DES RECEPTEURS D'ANTIGENE CHIMERIQUES LIANT CD19 ET CD22**  
[72] PULE, MARTIN, GB  
[72] CORDOBA, SHAUN, GB  
[72] ONUOHA, SHIMOB, GB  
[72] THOMAS, SIMON, GB  
[71] AUTOLUS LIMITED, GB  
[22] 2015-12-23  
[41] 2016-06-30  
[62] 2,970,440  
[30] GB (1423172.4) 2014-12-24

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

[21] **3,224,525**  
[13] A1

[25] EN  
[54] **SYSTEMS FOR TREATING AN AIRWAY USING AN ADAPTER DEVICE WITH TAPERED FITTINGS**  
[54] **SYSTEMES DE TRAITEMENT D'UNE VOIE RESPIRATOIRE AU MOYEN D'UN ADAPTEUR A RACCORDS CONIQUES**  
[72] NYE, HOYT, US  
[71] HOYT MEDICAL LLC, US  
[22] 2016-06-24  
[41] 2017-01-12  
[62] 2,991,746  
[30] US (14/795,531) 2015-07-09

[21] **3,224,532**  
[13] A1

[25] EN  
[54] **PROSTHETIC HEART VALVE AND DELIVERY APPARATUS**  
[54] **VALVULE CARDIAQUE PROTHETIQUE ET APPAREIL DE POSE**  
[72] HOANG, LIEN-HUONG T., US  
[72] SIEGEL, ALEXANDER J., US  
[72] BAKIS, GEORGE, US  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[22] 2014-12-05  
[41] 2015-06-11  
[62] 2,931,258  
[30] US (61/912,231) 2013-12-05  
[30] US (14/561,102) 2014-12-04

[21] **3,224,535**  
[13] A1

[51] **Int.Cl. A61K 31/20 (2006.01) A61K 31/047 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **USE OF LONG-TERM FASTING MIMICKING AS DIETARY TREATMENT FOR MULTIPLE MYELOMA AND OTHER CANCERS**  
[54] **UTILISATION D'UN JEUNE DE LONGUE DUREE IMITANT UN TRAITEMENT ALIMENTAIRE POUR LE MYELOME MULTIPLE ET AUTRES CANCERS**  
[72] LONGO, VALTER D., US  
[72] WRIGHT, WOODRING E., US  
[71] UNIVERSITY OF SOUTHERN CALIFORNIA, US  
[22] 2017-01-12  
[41] 2017-07-20  
[62] 3,009,664  
[30] US (62/277,649) 2016-01-12

[21] **3,224,543**  
[13] A1

[25] EN  
[54] **TOUCH-FREE FLOWABLE FOOD PRODUCT DISPENSER**  
[54] **DISTRIBUTEUR DE PRODUIT ALIMENTAIRE FLUIDE SANS CONTACT**  
[72] RUSCH, GERALD A., US  
[71] SERVER PRODUCTS, INC., US  
[22] 2021-03-31  
[41] 2022-01-27  
[62] 3,185,548  
[30] US (63/055,508) 2020-07-23  
[30] US (17/108,468) 2020-12-01

[21] **3,224,546**  
[13] A1

[25] EN  
[54] **METHODS OF TREATING FABRY PATIENTS HAVING RENAL IMPAIRMENT**  
[54] **METHODES DE TRAITEMENT DE PATIENTS ATTEINTS DE LA MALADIE DE FABRY SOUFFRANT D'UNE INSUFFISANCE RENALE**  
[72] CASTELLI, JEFF, US  
[71] AMICUS THERAPEUTICS, INC., US  
[22] 2018-05-30  
[41] 2018-12-06  
[62] 3,065,298  
[30] US (62/512,458) 2017-05-30  
[30] US (62/626,953) 2018-02-06  
[30] US (15/992,336) 2018-05-30

[21] **3,224,549**  
[13] A1

[51] **Int.Cl. G01N 33/52 (2006.01) G01N 1/28 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR ENHANCED DETECTION AND QUANTIFICATION OF ANALYTES**  
[54] **SYSTEMES ET PROCEDES POUR LA DETECTION AMELIOREE ET LA QUANTIFICATION DE SUBSTANCES A ANALYSER**  
[72] KHATTAK, AYUB, US  
[72] SEVER, CLINTON, US  
[72] NELSON, PAUL, US  
[72] COOPER, RYAN, US  
[72] CONGDON, THOMAS, US  
[72] DEMARTINO, JUSTIN, US  
[72] SHAPIRO, RAPHAEL, US  
[72] DUNCAN, MARK, US  
[71] CUE HEALTH INC., US  
[22] 2016-07-16  
[41] 2017-01-26  
[62] 3,159,274  
[30] US (62/194,101) 2015-07-17

[21] **3,224,571**  
[13] A1

[25] EN  
[54] **ELECTROLYTE BALANCING STRATEGIES FOR FLOW BATTERIES**  
[54] **STRATEGIES D'EQUILIBRAGE D'ELECTROLYTE POUR PILES A OXYDOREDUCTION**  
[72] REECE, STEVEN Y., US  
[72] BADRINARAYANAN, PARAVASTU, US  
[72] TYAGI, NITIN, US  
[72] GREJTAK, TIMOTHY B., US  
[71] LOCKHEED MARTIN ENERGY, LLC, US  
[22] 2014-09-24  
[41] 2015-04-02  
[62] 2,924,686  
[30] US (61/882,324) 2013-09-25

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demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,224,572**  
[13] A1

[25] EN  
[54] **LINKERS AND METHODS FOR OPTICAL DETECTION AND SEQUENCING**  
[54] **LIEURS ET PROCEDES DE DETECTION ET DE SEQUENCAGE OPTIQUES**  
[72] LEE, LINDA G., US  
[72] ALMOGY, GILAD, US  
[72] MENCHEN, STEVEN, US  
[71] ULTIMA GENOMICS, INC., US  
[22] 2020-02-18  
[41] 2020-08-27  
[62] 3,130,693  
[30] US (62/807,550) 2019-02-19

[21] **3,224,583**  
[13] A1

[25] EN  
[54] **COMPOSITIONS COMPRISING 2,3,3,3-TETRAFLUOROPROPENE, 1,1,2,3-TETRACHLOROPROPENE, 2-CHLORO-3,3,3-TRIFLUOROPROPENE, OR 2-CHLORO-1,1,1,2-TETRAFLUOROPROPANE**  
[54] **COMPOSITIONS COMPRENANT DU 2,3,3,3-TETRAFLUOROPROPENE, DU 1,1,2,3-TETRACHLOROPROPENE, DU 2-CHLORO-3,3,3-TRIFLUOROPROPENE, OU DU 2-CHLORO-1,1,1,2-TETRAFLUOROPROPANE**  
[72] NAPPA, MARIO JOSEPH, US  
[71] THE CHEMOURS COMPANY FC, LLC, US  
[22] 2010-12-22  
[41] 2011-07-21  
[62] 3,146,256  
[30] US (61/289,027) 2009-12-22

[21] **3,224,650**  
[13] A1

[25] EN  
[54] **PIT ASSEMBLY WITH REMOVABLE CARTRIDGE**  
[54] **ASSEMBLAGE DE TREMIE A CARTOUCHE AMOVIBLE**  
[72] MOSLEY, HAROLD THOMAS, US  
[72] MITCHELL, TIMOTHY J., US  
[71] MUELLER INTERNATIONAL, LLC, US  
[22] 2017-07-20  
[41] 2018-01-25  
[62] 2,973,988  
[30] US (15/218,767) 2016-07-25

[21] **3,224,651**  
[13] A1

[25] EN  
[54] **ELECTRONIC FURNITURE SYSTEMS WITH INTEGRATED INTERNAL SPEAKERS**  
[54] **SYSTEMES DE MEUBLES ELECTRONIQUES AVEC HAUT-PARLEURS INTERNES INTEGRES**  
[72] NELSON, SHAWN D., US  
[72] UNDERWOOD, DAVID M., US  
[72] KUCHLER, BRIAN, US  
[72] COWAN, DAVID M., US  
[72] GALLO, ANTHONY, US  
[71] THE LOVESAC COMPANY, US  
[22] 2016-11-11  
[41] 2017-05-26  
[62] 3,005,456  
[30] US (62/257,623) 2015-11-19  
[30] US (15/270,339) 2016-09-20  
[30] US (62/417,091) 2016-11-03  
[30] US (15/348,068) 2016-11-10

[21] **3,224,653**  
[13] A1

[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  
[22] 2020-06-05  
[41] 2021-01-14  
[62] 3,143,591  
[30] US (62/871,146) 2019-07-07  
[30] US (62/930,115) 2019-11-04

[21] **3,224,669**  
[13] A1

[25] EN  
[54] **COMPOUND ANGLE BEARING ASSEMBLY**  
[54] **ASSEMBLAGE PORTEUR ANGULAIRE COMPOSE**  
[72] RITCHIE, SHELDON, US  
[72] FEDDEMA, CHAD, US  
[71] TURBO DRILL INDUSTRIES, INC., US  
[22] 2017-10-21  
[41] 2018-04-21  
[62] 2,984,025  
[30] US (62/411,421) 2016-10-21

[21] **3,224,675**  
[13] A1

[51] **Int.Cl. A61M 1/14 (2006.01) A61B 5/145 (2006.01)**  
[25] EN  
[54] **CLOSED LOOP DIALYSIS TREATMENT USING ADAPTIVE ULTRAFILTRATION RATES**  
[54] **TRAITEMENT DE DIALYSE EN BOUCLE FERMEE UTILISANT DES DEBITS D'ULTRAFILTRATION ADAPTATIFS**  
[72] BARRETT, LOUIS LEEGRANDE, US  
[72] CHHI, KEN, US  
[72] YUDS, DAVID, US  
[72] MERICS, TOM, US  
[72] DOWD, JOAN, US  
[71] FRESENIUS MEDICAL CARE HOLDINGS, INC., US  
[22] 2018-12-21  
[41] 2019-07-04  
[62] 3,087,173  
[30] US (62/612,037) 2017-12-29  
[30] US (15/927,769) 2018-03-21

[21] **3,224,700**  
[13] A1

[51] **Int.Cl. H04N 19/61 (2014.01) H04N 19/12 (2014.01) H04N 19/159 (2014.01) H04N 19/176 (2014.01) H04N 1/41 (2006.01)**  
[25] EN  
[54] **VIDEO CODING METHOD ON BASIS OF SECONDARY TRANSFORM, AND DEVICE FOR SAME**  
[54] **PROCEDE DE CODAGE VIDEO SUR LA BASE D'UNE TRANSFORMEE SECONDAIRE ET DISPOSITIF ASSOCIE**  
[72] KOO, MOONMO, KR  
[72] KIM, SEUNGHWAN, KR  
[72] LIM, JAEHYUN, KR  
[71] LG ELECTRONICS INC., KR  
[22] 2019-12-19  
[41] 2020-06-25  
[62] 3,123,193  
[30] US (62/782,294) 2018-12-19

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[21] <b>3,224,707</b> [13] A1	[21] <b>3,224,733</b> [13] A1	[21] <b>3,224,765</b> [13] A1
<p>[25] EN</p> <p>[54] <b>MICROORGANISM WITH KNOCK-IN AT ACETOLACTATE DECARBOXYLASE GENE LOCUS</b></p> <p>[54] <b>MICRO-ORGANISME A INSERTION CIBLEE DE SEQUENCE AU NIVEAU DU LOCUS DU GENE DE L'ACETOLACTATE DECARBOXYLASE</b></p> <p>[72] LEANG, CHING, US</p> <p>[71] LANZATECH, INC., US</p> <p>[22] 2021-06-04</p> <p>[41] 2021-12-09</p> <p>[62] 3,180,978</p> <p>[30] US (63/035,739) 2020-06-06</p>	<p>[25] EN</p> <p>[54] <b>METHODS AND SYSTEMS FOR MANAGING SHIPMENT OF AN ITEM USING A WIRELESS NODE NETWORK</b></p> <p>[54] <b>PROCEDES ET SYSTEMES PERMETTANT DE GERER L'EXPEDITION D'UN ARTICLE A L'AIDE D'UN RESEAU DE NOEUDS SANS FIL</b></p> <p>[72] SKAAKSRUD, OLE-PETTER, US</p> <p>[72] HOLLAHAN, TERENCE, US</p> <p>[72] BENTON, STEVEN, US</p> <p>[71] FEDEX CORPORATE SERVICES, INC., US</p> <p>[22] 2014-11-07</p> <p>[41] 2015-07-02</p> <p>[62] 3,140,332</p> <p>[30] US (61/910,202) 2013-11-29</p> <p>[30] US (14/446,357) 2014-07-30</p>	<p>[25] EN</p> <p>[54] <b>LOW POWER DUAL-SENSITIVITY FG-MOSFET SENSOR FOR A WIRELESS RADIATION DOSIMETER</b></p> <p>[54] <b>CAPTEUR MOSFET A GRILLE FLOTTANTE, FAIBLE PUISSANCE ET A DOUBLE SENSIBILITE POUR UN DOSIMETRE SANS FIL</b></p> <p>[72] YADEGARI, BEHZAD, CA</p> <p>[72] MCGARRY, STEVEN, CA</p> <p>[72] ROY, LANGIS, CA</p> <p>[71] BEST THERATRONICS, LTD., CA</p> <p>[22] 2020-09-15</p> <p>[41] 2021-03-26</p> <p>[62] 3,093,726</p> <p>[30] US (62/906,526) 2019-09-26</p> <p>[30] US (17/008,143) 2020-08-31</p>
[21] <b>3,224,717</b> [13] A1	[21] <b>3,224,738</b> [13] A1	[21] <b>3,224,766</b> [13] A1
<p>[25] EN</p> <p>[54] <b>IMPROVED ANTI-SENESCENCE COMPOUNDS AND USES FOR THE TREATMENT OF CANCER</b></p> <p>[54] <b>COMPOSES ANTI-SENESCENCE AMELIORES ET LEURS UTILISATIONS</b></p> <p>[72] DE KEIZER, PETERUS LEONARDUS JOSEPHUS, NL</p> <p>[72] TEIFEL, MICHAEL, DE</p> <p>[72] MADL, TOBIAS, AT</p> <p>[72] BOURGEOIS, BENJAMIN MICHEL RENE, AT</p> <p>[72] SPREITZER, EMIL, AT</p> <p>[72] ANGELL, YVONNE MARIE, US</p> <p>[72] BAAR, MARJOLEIN PETRONELLA, NL</p> <p>[71] CLEARA BIOTECH B.V., NL</p> <p>[22] 2021-02-22</p> <p>[41] 2021-08-26</p> <p>[62] 3,168,560</p> <p>[30] US (62/979,819) 2020-02-21</p>	<p>[25] EN</p> <p>[54] <b>AEROSOL SOURCE FOR A VAPOUR PROVISION SYSTEM</b></p> <p>[54] <b>SOURCE D'AEROSOL POUR UN SYSTEME DE FOURNITURE DE VAPEUR</b></p> <p>[72] POTTER, MARK, GB</p> <p>[72] TIPTON, WADE, GB</p> <p>[72] HARRIS, WILLIAM, GB</p> <p>[72] ROWE, CHRISTOPHER, GB</p> <p>[72] DAVIES, JAMES, GB</p> <p>[72] BOONZAIR, JAMES, GB</p> <p>[72] DEVINE, CONOR, GB</p> <p>[71] NICOVENTURES TRADING LIMITED, GB</p> <p>[22] 2019-01-23</p> <p>[41] 2019-08-01</p> <p>[62] 3,089,292</p> <p>[30] GB (1801146.0) 2018-01-24</p>	<p>[25] EN</p> <p>[54] <b>P/S WAVE MEASUREMENT AND COMPENSATION</b></p> <p>[54] <b>MESURE D'ONDES P/S ET COMPENSATION</b></p> <p>[72] WESTERDAHL, HARALD, NO</p> <p>[72] THOMPSON, MARK, NO</p> <p>[72] AMUNDSEN, LASSE, NO</p> <p>[71] STATOIL PETROLEUM AS, NO</p> <p>[22] 2015-05-06</p> <p>[41] 2015-11-12</p> <p>[62] 2,947,966</p> <p>[30] GB (1408083.2) 2014-05-07</p>

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

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[21] **3,224,785**

[13] A1

[25] EN

[54] **PRODUCT USE AND BEHAVIOR  
MONITORING INSTRUMENT**

[54] **INSTRUMENT DE  
SURVEILLANCE D'UTILISATION  
ET DE COMPORTEMENT DE  
PRODUIT**

[72] SMITH, JEFFREY SEAN, US

[72] ALDERMAN, STEVEN L., US

[72] BRINKLEY, PAUL A., US

[72] BAXTER-WRIGHT, SARAH A., US

[72] HONG, KYUNG SOO (JASON), US

[72] NELSON, PAUL R., US

[72] SEARS, STEPHEN B., US

[72] SUR, RAJESH, US

[72] DARNELL, JOHN, US

[72] ROUND, ELAINE K., US

[71] RAI STRATEGIC HOLDINGS, INC.,  
US

[22] 2018-09-18

[41] 2019-03-28

[62] 3,076,121

[30] US (15/710,681) 2017-09-20

[30] US (15/892,151) 2018-02-08

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[21] **3,224,880**

[13] A1

[25] EN

[54] **HEAT DISSIPATION IN AN  
OPTICAL DEVICE**

[54] **DISSIPATION DE CHALEUR DANS  
UN DISPOSITIF OPTIQUE**

[72] FERRARA, JR., JAMES, US

[72] LIN, SEN, US

[71] AURORA OPERATIONS, INC., US

[22] 2021-12-07

[41] 2022-06-16

[62] 3,201,615

[30] US (63/122,146) 2020-12-07

[30] US (17/542,459) 2021-12-05

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[21] **3,224,926**

[13] A1

[25] EN

[54] **STEAM DIVERSION ASSEMBLY  
MECANISME DE DEVIATION DE  
VAPEUR**

[72] VAN PETEGEM, RONALD, US

[72] SKEATES, CRAIG, CA

[72] EMERSON, JOHN LEE, US

[72] DESRANLEAU, CHRIS, CA

[71] PACKERS PLUS ENERGY

SERVICES INC., CA

[22] 2017-03-02

[41] 2017-09-02

[62] 2,959,880

[30] US (62/302,552) 2016-03-02

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AFL TELECOMMUNICATIONS LLC	3,007,498	ANDERSON, TIMOTHY J.	3,179,241	AZHAR, MOHIUDEEN	3,108,777
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AIRD, KEVIN	3,107,004	APOLLOMICS INC.	2,955,788	BAEK, SEUNGWON	3,082,418
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ALLEY, NICHOLAS ROBERT	3,005,149	ARTUN, LARS	3,016,238	BALLARD, SPENCER	2,945,137
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BECTON, DICKINSON AND COMPANY	2,865,575	BLISS BIOPHARMACEUTICAL (HANGZHOU) CO., LTD.	3,093,327	BRIGGS, KYLE	2,976,313
BECTON, DICKINSON AND COMPANY	2,949,911	BLUE PENNY LLC	3,189,727	BRISTOL, INC., D/B/A REMOTE AUTOMATION SOLUTIONS	2,962,952
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PERI SE	3,092,897	QIU, JUNZHUAN	2,955,788	RICHARD, ANDREW	3,099,535
PERIYALWAR, SHALINI SURESH	2,849,763	QIU, XING	3,085,645	RICHARDSON, RIC B.	2,995,394
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JR.	3,099,535	GERDY	3,205,371	WANG, BO	3,157,822
TRUEX, BRYAN I.	3,058,524	VAN SCHALKWYK, ANDRE	3,111,729	WANG, GUANGMAO	3,125,365
TRUKHAN, NATALIA	3,026,817	VAN WYNSBERGHE, ERINN	3,001,071	WANG, GUOLIANG	3,057,179
TUCKER, CHRISTOPHER J.	2,997,751	VAN-DE-VELDE, PETER		WANG, JIANGFENG	3,092,885
TUOMINEN, JERE	3,068,573	FRANCIS	2,971,704	WANG, LETIAN	3,146,587
TURANO, MARC	3,214,670	VANDERAH, RICHARD J.	2,962,952	WANG, LI	3,125,365
TURNER, KELVIN	3,007,498	VANDERBILT UNIVERSITY	3,132,722	WANG, LI	3,131,035
TURNER, WILLIAM	2,998,741	VANLAER, ANTOINE	3,010,669	WANG, XIANG	3,125,365
TV-INSIGHT GMBH	3,066,318	VARGHESE, VIMAL	3,155,220	WANG, XIAOJUN	2,976,294
UBER TECHNOLOGIES INC.	3,040,081	VARIA, KUNAL ARVIND	3,155,220	WANG, XIAOTIAN	3,155,220
UBERMORGEN		VASKO, ROBERT	2,976,920	WANG, YONG	3,056,207
INNOVATIONS GMBH	3,015,042	VAUGHN, ERIC MARTIN	2,924,228	WANG, ZHAOYIN	3,090,485
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UK3M GREEN RODENTICIDE		VELEZ SALAS, PEDRO		WASAS, MARIAVICENTA	3,104,176
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		KATRIEN	2,968,151		

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SHRADER, NATHAN PATRICK	3,223,826	SRIRAM, SHARATH	3,223,880	TALLANO TECHNOLOGIES	3,223,703
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BELDEN CANADA ULC	3,223,799	FACCHINELLO, JEROME	3,223,923	LIN, SEN	3,224,880
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