



Canadian  
Intellectual Property  
Office

An Agency of  
Industry Canada

Office de la propriété  
intellectuelle  
du Canada

Un organisme  
d'Industrie Canada

ISSN-1712-4034

# The Patent

Office Record

# La Gazette

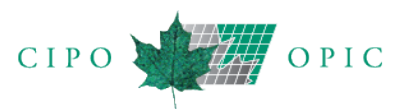
du Bureau des brevets



Vol. 151 No. 20 May 16, 2023

Vol. 151 No. 20 le 16 mai 2023

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.

# Table of Contents

## Table des matières

Notices	
Avis .....	1
Canadian Patents Issued	
Brevets canadiens délivrés .....	25
Canadian Applications Open to Public Inspection	
Demandes canadiennes mises à la disponibilité du public.....	75
PCT Applications Entering the National Phase	
Demandes PCT entrant en phase nationale .....	91
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 .....	186
Index of Canadian Patents Issued	
Index des brevets canadiens délivrés .....	192
Index of Canadian Applications Open to Public Inspection	
Index des demandes canadiennes mises à la disponibilité du public .....	201
Index of PCT Applications Entering the National Phase	
Index des demandes PCT entrant en phase nationale .....	204
Index of Canadian Divisional and Previously Unavailable Applications Open to Public Inspection	
Index des demandes canadiennes apparentées par division et demandes mises à la disponibilité du public non disponibles auparavant .....	221

## 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:

2,757,461

## 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 :

2,757,461

## 9. Applications Open to Public Inspection

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 However, an application shall not be open for public inspection if it is withdrawn within the time set out in Section 92 of the *Patent Rules*.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

## 10. Language of Published Documents

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

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

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

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

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

## 9. Demandes mises à la disponibilité du public

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

## 10. Langue du document publié

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

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

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

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

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

## Notices

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

### 4. Late payment fee

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

### Preliminary Examination

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

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

\* International fees will be reduced by:

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

## 12. PCT Notices

### Patent Cooperation Treaty (PCT)

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

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

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

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

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

### 4. Taxe pour paiement tardif

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

### Examen préliminaire

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

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

\* Les frais seront réduits de:

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

## 12. Avis PCT

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

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

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

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

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



### 13. Practice Notice

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

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

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

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

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

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

### 13. Énoncé de pratique

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

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

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

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

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

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

## Notices

Offices.

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

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

## 14. Correspondence Procedures

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

Web Link for MOPOP:

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

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

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

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

Publication date: May 10, 2017

Amendment date: June 17, 2019

### On this page:

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

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

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

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

## 14. Procédures de correspondance

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

Lien Web pour le RPBB :

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

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

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

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

Date de publication : 10 mai 2017

Date de modification : 17 juin 2019

### Sur cette page :

1. Remise physique de correspondance et communications écrites à l'OPIC.
2. Correspondance électronique
3. Précisions concernant les formats électroniques acceptés
4. Renseignements généraux
5. Prorogation des délais
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

## Avis

except statutory holiday

l'exception des jours fériés

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## 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,

## Avis

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.

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

TIFF Format:

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

PDF Format:

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

ASCII

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

## Trademarks

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

## Industrial Design

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

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

## Avis

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

Format TIFF

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

Format PDF

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

ASCII

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

## Marques de commerce

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

## Dessins industriels

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

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

## Notices

### 4. General Information

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

### 5. Time Period Extensions

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

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

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

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

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

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

### 4. Renseignements généraux

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

### 5. Prorogation des délais

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

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

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

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

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

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

## Avis

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## Notices

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

### Time period extensions under the Patent Cooperation Treaty

Rule 80.5 of the Regulations under the PCT provides:

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

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

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

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

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

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

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

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

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

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

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

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

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



## Avis

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## Notices

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

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

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

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

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

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

#### Trademarks

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

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

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

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

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

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

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

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

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

#### Marques de commerce

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

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

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

## Avis

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

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

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

The *Canadian Patent Office Record* of May 16, 2023 contains applications open to public inspection from April 30, 2023 to May 6, 2023.

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

La *Gazette du bureau des brevets* du 16 mai 2023 contient les demandes disponibles au public pour consultation pour la période du 30 avril 2023 au 6 mai 2023.

# Canadian Patents Issued

May 16, 2023

## Brevets canadiens délivrés

16 mai 2023

---

[11] \***2,757,461**  
[13] C  
[51] **Int.Cl. G06F 17/00 (2019.01) G06F 16/901 (2019.01)**  
[25] EN  
[54] **GRAPH SIMILARITY CALCULATION SYSTEM, METHOD AND PROGRAM**  
[54] **SYSTEME, METHODE ET PROGRAMME DE CALCUL DE SIMILARITE GRAPHIQUE**  
[72] HIDO, SHOHEI, JP  
[72] KASHIMA, HISASHI, JP  
[73] INTERNATIONAL BUSINESS MACHINES CORPORATION, US  
[85] 2011-09-30  
[86] 2010-06-09 (PCT/JP2010/059795)  
[87] (WO2011/001806)  
[30] JP (2009-155060) 2009-06-30

---

[11] **2,777,670**  
[13] C  
[51] **Int.Cl. A61K 39/145 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PRODUCING INFLUENZA VACCINE**  
[54] **PROCEDE DE PRODUCTION D'UN VACCIN ANTIGRIPPAL**  
[72] D'HONDT, ERIK JOZEF, BE  
[72] ENGELMANN, HANS BERND, DE  
[73] GLAXOSMITHKLINE BIOLOGICALS, NIEDERLASSUNG DER SMITHKLINE BEECHAM PHARMA GMBH & CO. KG, DE  
[73] GLAXOSMITHKLINE BIOLOGICALS S.A., BE  
[85] 2012-04-13  
[86] 2010-10-25 (PCT/EP2010/066083)  
[87] (WO2011/051235)  
[30] GB (0918830.1) 2009-10-27  
[30] US (61/329,230) 2010-04-29

---

[11] **2,787,655**  
[13] C  
[51] **Int.Cl. G16H 20/10 (2018.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR PHARMACY LOCATION**  
[54] **METHODES ET SYSTEMES DE REPERAGE DE PHARMACIES**  
[72] COHAN, KEVIN C., US  
[72] SHUTKO, ALAN T., US  
[72] WILCOX, GARY S., US  
[72] COLE, ELIZABETH T., US  
[73] EXPRESS SCRIPTS, INC., US  
[86] (2787655)  
[87] (2787655)  
[22] 2012-08-22  
[30] US (13/221,643) 2011-08-30

---

[11] **2,799,613**  
[13] C  
[51] **Int.Cl. G01N 3/00 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR TESTING LOAD-BEARING CAPACITY**  
[54] **PROCEDE ET APPAREIL PERMETTANT DE TESTER LA CAPACITE DE CHARGE**  
[72] HAYES, JOHN A., US  
[72] RYAN, WILLIAM G., US  
[72] YANKOPOLUS, NICHOLAS K., US  
[73] LOADTEST, INC., US  
[85] 2012-11-15  
[86] 2011-05-18 (PCT/US2011/037031)  
[87] (WO2011/146644)  
[30] US (61/345,793) 2010-05-18

---

[11] **2,821,681**  
[13] C  
[51] **Int.Cl. A61M 1/00 (2006.01)**  
[25] EN  
[54] **APPARATUSES AND METHODS FOR NEGATIVE PRESSURE WOUND THERAPY**  
[54] **APPAREILS ET PROCEDES POUR THERAPIE DE PLAIE A PRESSION NEGATIVE**  
[72] ARMSTRONG, ED, US  
[72] BLACKBURN, IAIN MICHAEL, GB  
[72] EMMERSON, ROBERT, GB  
[72] MOSHOLDER, MICHAEL B., US  
[73] SMITH & NEPHEW, INC., US  
[85] 2013-06-13  
[86] 2011-06-22 (PCT/US2011/041521)  
[87] (WO2012/087376)  
[30] US (61/426,432) 2010-12-22

---

[11] **2,821,883**  
[13] C  
[51] **Int.Cl. A63H 33/10 (2006.01)**  
[25] EN  
[54] **A TOY CONSTRUCTION SYSTEM**  
[54] **SYSTEME DE CONSTRUCTION LUDIQUE**  
[72] STOLTEN, MARK RANDALL, NZ  
[73] STOLTEN, MARK RANDALL, AS TRUSTEE OF AND TO THE ISAIAH 54 TRUST, NZ  
[73] STOLTEN, ELIZABETH MARY, AS TRUSTEE OF AND TO THE ISAIAH 54 TRUST, NZ  
[85] 2013-06-14  
[86] 2011-12-16 (PCT/NZ2011/000264)  
[87] (WO2012/082000)  
[30] NZ (590000) 2010-12-16

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **2,833,176**  
[13] C

[51] **Int.Cl. C07K 19/00 (2006.01) A61K 38/46 (2006.01) A61P 31/04 (2006.01) C07K 14/005 (2006.01) C07K 14/195 (2006.01) C07K 14/47 (2006.01) C12N 9/14 (2006.01)**

[25] EN

[54] **CHIMERIC ANTIBACTERIAL POLYPEPTIDES**

[54] **POLYPEPTIDES CHIMERES ANTIBACTERIENS**

[72] APPAIAH, C.B., IN

[72] PADMANABHAN, SRIRAM, IN

[72] SARAVANAN, R. SANJEEV, IN

[72] SRIRAM, BHARATHI, IN

[73] BACTOCLEAR HOLDINGS PTE. LTD., SG

[85] 2013-10-11

[86] 2012-04-12 (PCT/IN2012/000261)

[87] (WO2012/140676)

[30] IN (1277/CHE/2011) 2011-04-12

---

[11] **2,837,823**  
[13] C

[51] **Int.Cl. A61B 6/00 (2006.01) A61B 5/06 (2006.01)**

[25] EN

[54] **METHODS FOR PREVENTING AND TREATING MOTOR-RELATED NEUROLOGICAL CONDITIONS**

[54] **PROCEDES POUR PREVENIR ET TRAITER DES ETATS NEUROLOGIQUES LIES A LA FONCTION MOTRICE**

[72] WILLIS, GREGORY LYNN, AU

[73] CLARENCEW PTY. LTD, AU

[85] 2013-11-29

[86] 2012-05-31 (PCT/IB2012/001161)

[87] (WO2012/164393)

[30] US (61/491,860) 2011-05-31

---

[11] **2,854,044**  
[13] C

[51] **Int.Cl. A63B 47/00 (2006.01) A63B 57/20 (2015.01) A63B 47/04 (2006.01) A63B 57/00 (2015.01)**

[25] EN

[54] **GOLF BALL HOLDER AND METHOD THEREOF**

[54] **DISPOSITIF DE SUPPORT D'UNE BALLE DE GOLF ET METHODE ASSOCIEE**

[72] DARR, ADNAN, CA

[73] DARR, ADNAN, CA

[86] (2854044)

[87] (2854044)

[22] 2014-06-06

---

[11] **2,865,741**  
[13] C

[51] **Int.Cl. B22F 7/02 (2006.01) B23K 5/18 (2006.01)**

[25] EN

[54] **WEAR RESISTANT COATING**

[54] **REVETEMENT RESISTANT A L'USURE**

[72] BELL, ANDREW, GB

[73] OERLIKON METCO (US) INC., US

[86] (2865741)

[87] (2865741)

[22] 2014-09-29

[30] US (61/885,714) 2013-10-02

[30] US (61/987,541) 2014-05-02

---

[11] **2,870,419**  
[13] C

[51] **Int.Cl. G01J 3/02 (2006.01)**

[25] EN

[54] **DIVIDED-APERTURE INFRA-RED SPECTRAL IMAGING SYSTEM**

[54] **SYSTEME D'IMAGERIE SPECTRALE INFRAROUGE A OUVERTURE DIVISEE**

[72] KESTER, ROBERT TIMOTHY, US

[72] HAGEN, NATHAN ADRIAN, US

[73] REBELLION PHOTONICS, INC., US

[86] (2870419)

[87] (2870419)

[22] 2014-11-12

[30] US (61/903,075) 2013-11-12

---

[11] **2,874,728**  
[13] C

[51] **Int.Cl. G06Q 10/04 (2023.01) E21B 43/30 (2006.01) E21B 49/00 (2006.01) G06F 17/10 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR RESERVOIR SIMULATION OPTIMIZATION**

[54] **SYSTEME ET PROCEDE D'OPTIMISATION DE SIMULATION DE RESERVOIR**

[72] GORELL, SHELDON, US

[73] LANDMARK GRAPHICS CORPORATION, US

[85] 2014-11-25

[86] 2012-05-30 (PCT/US2012/039998)

[87] (WO2013/180705)

---

[11] **2,877,286**  
[13] C

[51] **Int.Cl. C12N 5/0783 (2010.01) A61K 35/17 (2015.01) A61P 37/02 (2006.01) A61P 37/06 (2006.01) G01N 1/34 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR DIMINISHING AN IMMUNE RESPONSE**

[54] **COMPOSITIONS ET PROCEDES POUR FAIRE DIMINUER UNE REPONSE IMMUNITAIRE**

[72] FLAVELL, RICHARD A., US

[72] GAGLIANI, NICOLA, US

[72] GREGORI, SILVIA, IT

[72] HUBER, SAMUEL, DE

[72] MAGNANI, CHIARA FRANCESCA, IT

[72] RONCAROLO, MARIA GRAZIA, IT

[73] YALE UNIVERSITY, US

[73] OSPEDALE SAN RAFFAELE SRL, IT

[73] FONDAZIONE TELETHON, IT

[85] 2014-12-18

[86] 2013-06-18 (PCT/US2013/046378)

[87] (WO2013/192215)

[30] US (61/661,172) 2012-06-18

[30] US (61/816,497) 2013-04-26

---

[11] **2,887,955**  
[13] C

[51] **Int.Cl. A61B 17/068 (2006.01) A61B 17/00 (2006.01) A61B 17/94 (2006.01)**

[25] EN

[54] **END-EFFECTOR FORCE MEASUREMENT DRIVE CIRCUIT**

[54] **CIRCUIT D'ENTRAINEMENT DE MESURE DE FORCE D'UN EFFECTEUR D'EXTREMITE**

[72] COLLINS, ETHAN, US

[72] HRYB, JOHN, US

[72] CALDERONI, ANTHONY, US

[72] PANTAZIS, JOHN, US

[73] COVIDIEN LP, US

[86] (2887955)

[87] (2887955)

[22] 2015-04-14

[30] US (61/988,342) 2014-05-05

[30] US (14/670,781) 2015-03-27

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,889,413**  
[13] C

[51] **Int.Cl. F02F 1/42 (2006.01)**  
[25] EN  
[54] **ENGINE CYLINDER HEAD  
INTAKE PORT CONFIGURATION**  
[54] **CONFIGURATION D'ORIFICE  
D'ENTREE DE TETE DE  
CYLINDRE DE MOTEUR**  
[72] DOPKE, RUSSELL J., US  
[72] DEHN, JAMES J., US  
[73] CHAMPION POWER EQUIPMENT,  
US  
[86] (2889413)  
[87] (2889413)  
[22] 2015-04-23  
[30] US (14/270,909) 2014-05-06

---

[11] **2,892,412**  
[13] C

[51] **Int.Cl. F16M 13/02 (2006.01) H02S  
10/40 (2014.01) E01F 9/00 (2016.01)  
F16M 11/00 (2006.01) F16M 13/00  
(2006.01) G08G 1/01 (2006.01) G09F  
7/18 (2006.01) G09F 9/00 (2006.01)  
H04B 7/24 (2006.01) H04N 7/18  
(2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR  
ATTACHING SIGNS TO  
FOUNDATION MEMBERS SUCH  
AS ROAD BARRIERS**  
[54] **APPAREIL ET METHODE DE  
FIXATION D’AFFICHES AUX  
ELEMENTS DE STRUCTURE  
COMME DES BARRIERES  
ROUTIERES**  
[72] POWELL, BEN, CA  
[72] DELAMERE, JAMES HAROLD, CA  
[72] PIERSON, JOHN DAVID, CA  
[72] VAKILI, MOHAMMAD BAGHER,  
CA  
[73] POWELL (RICHMOND HILL)  
CONTRACTING LIMITED, CA  
[73] AMG METALS INC., CA  
[73] DELAMERE/POWELL HOLDCO  
INC., CA  
[86] (2892412)  
[87] (2892412)  
[22] 2015-05-25

---

---

[11] **2,892,417**  
[13] C

[51] **Int.Cl. F16L 25/06 (2006.01) F16L  
19/02 (2006.01)**  
[25] EN  
[54] **MOVEMENT-CONSTRAINING  
ASSEMBLY FOR FLUID-  
CONVEYING SYSTEM**  
[54] **ENSEMBLE DE CONTRAINTE DE  
MOUVEMENT POUR SYSTEME  
D’ACHEMINEMENT D’UN  
FLUIDE**  
[72] LEFEBVRE, GUY, CA  
[72] PIETROBON, JOHN, CA  
[73] PRATT & WHITNEY CANADA  
CORP., CA  
[86] (2892417)  
[87] (2892417)  
[22] 2015-05-21  
[30] US (14/306,729) 2014-06-17

---

[11] **2,893,329**  
[13] C

[51] **Int.Cl. A47J 27/10 (2006.01) A47J  
27/62 (2006.01) A47J 36/00 (2006.01)  
A47J 43/00 (2006.01) F24H 1/06  
(2006.01) F24H 9/14 (2006.01)**  
[25] EN  
[54] **CODE TRANSLATION METHOD  
FOR PRECISION SOUS-VIDE  
COOKER DEVICE**  
[54] **PROCEDE DE TRADUCTION DE  
CODE POUR APPAREIL DE  
CUISSON DE PRECISION SOUS  
VIDE**  
[72] WU, JEFF, US  
[73] ANOVA APPLIED ELECTRONICS,  
INC., US  
[86] (2893329)  
[87] (2893329)  
[22] 2015-06-01  
[30] US (62/005/860) 2014-05-30  
[30] US (14/491,961) 2014-09-19

---

---

[11] **2,897,011**  
[13] C

[51] **Int.Cl. A61B 5/00 (2006.01) G16H  
50/20 (2018.01) G16H 15/00 (2018.01)  
G16H 40/67 (2018.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR  
PROCESSING AND DISPLAYING  
PATIENT  
ELECTROCARDIOGRAPH DATA**  
[54] **SYSTEMES ET PROCEDES POUR  
LE TRAITEMENT ET  
L’AFFICHAGE DE DONNEES  
ELECTROCARDIOGRAPHIQUES  
DE PATIENT**  
[72] KUPPURAJ, RAVI, US  
[72] GEORGESCU, SERBAN P., US  
[72] FAHEY, MICHAEL, US  
[72] SONIN, JUHAN, US  
[72] BENOIT, ERIC, US  
[73] INFOBIONIC, INC., US  
[85] 2015-06-30  
[86] 2013-12-24 (PCT/US2013/077664)  
[87] (WO2014/107385)  
[30] US (61/749,052) 2013-01-04

---

[11] **2,901,379**  
[13] C

[51] **Int.Cl. C07F 7/08 (2006.01) A61K  
47/10 (2017.01) C07K 7/00 (2006.01)  
C08L 71/02 (2006.01)**  
[25] EN  
[54] **SUBSTITUTED  
SILAXANTHENIUM RED TO  
NEAR-IRRED  
FLUOROCHROMES FOR IN  
VITRO AND IN VIVO IMAGING  
AND DETECTION**  
[54] **FLUOROCHROMES ROUGE A  
PROCHE-IRFRAROUGE A BASE  
D’UN SILAXANTHENIUM  
SUBSTITUE POUR L’IMAGERIE  
ET LA DETECTION IN VITRO ET  
IN VIVO**  
[72] GROVES, KEVIN, US  
[72] BUFF, RYAN, US  
[73] VISEN MEDICAL, INC., US  
[85] 2015-08-13  
[86] 2014-03-14 (PCT/US2014/029350)  
[87] (WO2014/144793)  
[30] US (61/794,188) 2013-03-15

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **2,905,797**  
[13] C

[51] **Int.Cl. G01C 11/00 (2006.01) G06F 21/60 (2013.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR PERFORMING SENSITIVE GEOSPATIAL PROCESSING IN NON-SENSITIVE OPERATOR ENVIRONMENTS**  
[54] **SYSTEME ET PROCEDE PERMETTANT DE METTRE EN OEUVRE UN TRAITEMENT GEOSPATIAL SENSITIF DANS DES ENVIRONNEMENTS D'OPERATEURS NON SENSITIFS**  
[72] SCHULTZ, STEPHEN L., US  
[72] GIUFFRIDA, FRANK, US  
[73] PICTOMETRY INTERNATIONAL CORP., US  
[85] 2015-09-11  
[86] 2014-03-12 (PCT/US2014/024774)  
[87] (WO2014/165204)  
[30] US (13/796,839) 2013-03-12

---

[11] **2,906,986**  
[13] C

[51] **Int.Cl. C08L 101/06 (2006.01) C08K 5/06 (2006.01) C08K 5/13 (2006.01) C08K 5/51 (2006.01) C08L 33/00 (2006.01) C08L 63/00 (2006.01) C08L 95/00 (2006.01) C09D 1/08 (2006.01) C09D 5/02 (2006.01) C09D 5/08 (2006.01) C09D 5/16 (2006.01) C09D 17/00 (2006.01)**  
[25] EN  
[54] **ADDITIVES TO RESIN COMPOSITIONS FOR IMPROVED IMPACT STRENGTH AND FLEXIBILITY**  
[54] **ADDITIFS A DES COMPOSITIONS A BASE DE RESINE POUR OBTENIR UNE RESISTANCE AUX IMPACTS ET UNE FLEXIBILITE AMELIOREES**  
[72] PALMER, CHARLES FRANCIS, JR., US  
[72] VANDEZANDE, GERALD, US  
[73] ETHOX CHEMICALS, LLC, US  
[85] 2015-09-14  
[86] 2014-04-22 (PCT/US2014/035057)  
[87] (WO2014/176294)  
[30] US (61/814,619) 2013-04-22  
[30] US (14/259,132) 2014-04-22

---

---

[11] **2,907,172**  
[13] C

[51] **Int.Cl. G06Q 10/083 (2023.01) G06Q 30/06 (2023.01)**  
[25] EN  
[54] **APPARATUS, ARTICLE OF MANUFACTURE AND METHODS FOR PURCHASING ARBITRAGE**  
[54] **APPAREIL, ARTICLE MANUFACTURE ET PROCEDES D'ARBITRAGE D'ACHATS**  
[72] LUTNICK, HOWARD W., US  
[72] SIMS, COLIN, US  
[72] FRIEDMAN, ARI, US  
[72] MILLER, MARK, US  
[73] CFFH, LLC, US  
[85] 2015-09-15  
[86] 2014-03-14 (PCT/US2014/027212)  
[87] (WO2014/143652)  
[30] US (13/839,236) 2013-03-15

---

[11] **2,909,122**  
[13] C

[51] **Int.Cl. G06K 19/077 (2006.01) B42D 15/02 (2006.01) B42D 25/485 (2014.01) G06K 7/10 (2006.01)**  
[25] EN  
[54] **IMPROVEMENTS RELATING TO BUSINESS CARDS**  
[54] **AMELIORATIONS ASSOCIEES A DES CARTES PROFESSIONNELLES**  
[72] THOROGOOD, PAUL, GB  
[73] MOO PRINT LIMITED, GB  
[85] 2015-10-08  
[86] 2014-04-10 (PCT/GB2014/051132)  
[87] (WO2014/167344)  
[30] GB (1306552.9) 2013-04-10

---

[11] **2,910,381**  
[13] C

[51] **Int.Cl. E04G 1/18 (2006.01) E04G 1/15 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR ASSEMBLY OF A SHORING TOWER**  
[54] **METHODE ET APPAREIL D'ASSEMBLAGE D'UNE TOUR D'ETAYAGE**  
[72] BECKER, MICHAEL, DE  
[73] HUNNEBECK GMBH, DE  
[86] (2910381)  
[87] (2910381)  
[22] 2015-10-28  
[30] DE (102014222249.4) 2014-10-31

---

---

[11] **2,916,802**  
[13] C

[51] **Int.Cl. E01H 1/08 (2006.01) E01H 1/04 (2006.01)**  
[25] EN  
[54] **VEHICLE ASSISTED WORKING DEVICE, CLEANING SYSTEM AND METHOD**  
[54] **DISPOSITIF FONCTIONNEL ASSISTE PAR VEHICULE, MECANISME DE NETTOYAGE ET METHODE**  
[72] HAPPONEN, JAAKKO, FI  
[72] HEIKKINEN, PETRI, FI  
[73] TROMBIA TECHNOLOGIES OY, FI  
[86] (2916802)  
[87] (2916802)  
[22] 2016-01-07  
[30] FI (20155008) 2015-01-08

---

[11] **2,917,603**  
[13] C

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 11/06 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **METHODS FOR INCREASING FORCED EXPIRATORY VOLUME IN ASTHMATICS USING BENRALIZUMAB**  
[54] **PROCEDE POUR AUGMENTER LE VOLUME D'EXPIRATION FORCEE CHEZ DES ASTHMATIQUES A L'AIDE DE BENRALIZUMAB**  
[72] WARD, CHRISTINE, US  
[72] ROSKOS, LORIN, US  
[72] WANG, BING, US  
[72] RAIBLE, DONALD G., US  
[73] ASTRAZENECA AB, SE  
[85] 2016-01-06  
[86] 2014-08-07 (PCT/US2014/050119)  
[87] (WO2015/023507)  
[30] US (61/864,948) 2013-08-12

---

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,918,522**  
[13] C

[51] **Int.Cl. F02C 7/266 (2006.01) H01T 13/16 (2006.01) H01T 13/44 (2006.01) H01T 13/50 (2006.01)**

[25] EN

[54] **HIGH ENERGY IGNITION GENERATOR NOTABLY FOR A GAS TURBINE**

[54] **GENERATEUR D'ALLUMAGE HAUTE ENERGIE NOTAMMENT DESTINE A UNE TURBINE A GAZ**

[72] GIRARD, MICKAEL, FR

[72] GABOREL, GAEL, FR

[73] AEVA, FR

[86] (2918522)

[87] (2918522)

[22] 2016-01-20

[30] FR (15 50736) 2015-01-30

---

[11] **2,918,870**  
[13] C

[51] **Int.Cl. F16L 19/065 (2006.01) F16L 19/06 (2006.01) F16L 19/08 (2006.01)**

[25] EN

[54] **GRIP ELEMENTS FOR GRIP RING ELEMENTS PREHENSEURS POUR ANNEAU DE PREHENSION**

[72] CHIPROOT, AVI, IL

[73] KRAUSZ INDUSTRIES LTD., IL

[86] (2918870)

[87] (2918870)

[22] 2016-01-20

[30] US (14/606,170) 2015-01-27

---

[11] **2,919,104**  
[13] C

[51] **Int.Cl. A62B 17/00 (2006.01) A41D 31/08 (2019.01) A41D 1/00 (2018.01) A41D 13/00 (2006.01)**

[25] EN

[54] **INSULATING GARMENT FOR FIREFIGHTER BUNKER GEAR**

[54] **VETEMENT ISOLANT POUR TENUE DE FEU DE POMPIER**

[72] BIBEAU, LOUIS, CA

[73] LOGISTIK UNICORP INC., CA

[86] (2919104)

[87] (2919104)

[22] 2016-01-26

[30] US (62/107,773) 2015-01-26

---

[11] **2,919,894**  
[13] C

[51] **Int.Cl. E02D 17/20 (2006.01) E02B 3/12 (2006.01) E02B 3/14 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR STABILIZING SLOPES AND EMBANKMENTS WITH SOIL LOAD TRANSFER PLATES**

[54] **PROCEDE ET APPAREIL POUR STABILISER DES PENTES ET DES TALUS AVEC DES PLAQUES DE TRANSFERT DE CHARGE DE SOL**

[72] PRASHAR, YOGESH, US

[72] SHORT, RICHARD, US

[72] SMITH, MIRIAM, US

[73] GEOPIER FOUNDATION COMPANY, INC., US

[85] 2016-01-28

[86] 2014-08-14 (PCT/US2014/050999)

[87] (WO2015/023812)

[30] US (61/865,758) 2013-08-14

---

[11] **2,921,285**  
[13] C

[51] **Int.Cl. G06F 16/38 (2019.01) G06F 16/23 (2019.01) H04L 12/16 (2006.01)**

[25] EN

[54] **INCREMENTAL SEARCHING IN ECOMMERCE**

[54] **RECHERCHE INCREMENTIELLE EN COMMERCE ELECTRONIQUE**

[72] WARREN, WILL, CA

[72] GOSSAGE, ROLAND, CA

[73] GROUPBY INC., CA

[86] (2921285)

[87] (2921285)

[22] 2016-02-19

[30] US (14/639,439) 2015-03-05

---

[11] **2,921,294**  
[13] C

[51] **Int.Cl. C07D 207/267 (2006.01) A61K 31/14 (2006.01) A61K 31/33 (2006.01) C07D 213/40 (2006.01) C07D 233/58 (2006.01) C07D 239/34 (2006.01) C07D 277/28 (2006.01) C07D 401/04 (2006.01) C07D 401/06 (2006.01) C07D 401/12 (2006.01) C07D 405/12 (2006.01) C07D 409/04 (2006.01) C07D 409/14 (2006.01) C07D 413/04 (2006.01) C07D 413/12 (2006.01) C07D 417/04 (2006.01) C07D 417/06 (2006.01) C07D 417/12 (2006.01) C07D 471/04 (2006.01) C07D 487/04 (2006.01) C07D 491/048 (2006.01) C07D 491/052 (2006.01) C07D 491/20 (2006.01) C07D 495/14 (2006.01)**

[25] EN

[54] **ANTIVIRAL COMPOUNDS**

[54] **COMPOSES ANTIVIRAUX**

[72] WANG, GUANGYI, US

[72] BEIGELMAN, LEONID, US

[72] TRUONG, ANH, US

[72] NAPOLITANO, CARMELA, IT

[72] ANDREOTTI, DANIELE, IT

[72] HE, HAIYING, CN

[72] STEIN, KARIN ANN, US

[73] JANSSEN BIOPHARMA, INC., US

[85] 2016-02-11

[86] 2014-08-19 (PCT/US2014/051642)

[87] (WO2015/026792)

[30] US (61/868,519) 2013-08-21

[30] US (61/945,048) 2014-02-26

---

[11] **2,922,285**  
[13] C

[51] **Int.Cl. E21B 17/03 (2006.01) E21B 17/042 (2006.01)**

[25] EN

[54] **DUAL COILED TUBING HEAD**

[54] **TETE DE TUBE ENROULE DOUBLE**

[72] SPENCE, DEAN, CA

[72] MCDIARMID, LEIGH, CA

[73] SPENCE, DEAN, CA

[73] MCDIARMID, LEIGH, CA

[86] (2922285)

[87] (2922285)

[22] 2016-03-02



**Brevets canadiens délivrés  
16 mai 2023**

[11] **2,922,425**

[13] C

[51] **Int.Cl. G16H 20/17 (2018.01) G16H 40/63 (2018.01) G16H 40/67 (2018.01) A61M 5/142 (2006.01) A61M 5/178 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD OF MONITORING AND MANAGING A REMOTE INFUSION REGIMEN**  
[54] **SYSTEME ET PROCEDE DE SURVEILLANCE ET DE GESTION D'UN REGIME DE PERFUSION A DISTANCE**

[72] JACOBSON, JAMES D., US

[72] FOLKES, SHAWN M., US

[72] BELKIN, ANATOLY S., US

[73] ICU MEDICAL, INC., US

[85] 2016-02-24

[86] 2014-08-29 (PCT/US2014/053440)

[87] (WO2015/031774)

[30] US (61/872,333) 2013-08-30

[30] US (14/472,549) 2014-08-29

[11] **2,924,227**

[13] C

[51] **Int.Cl. G06Q 40/04 (2012.01)**

[25] EN

[54] **COMPUTERIZED ORDER MATCHING WITH FEES SELECTABLE BY PARTICIPANTS**  
[54] **APPARIEMENT D'ORDRES INFORMATISE AVEC DROITS SELECTIONNABLES PAR LES PARTICIPANTS**

[72] DJURDJEVIC, DEANA, CA

[72] SAMPSON, KEVIN, CA

[73] TSX INC., CA

[85] 2016-03-14

[86] 2014-06-03 (PCT/CA2014/000477)

[87] (WO2015/074134)

[30] US (61/907,637) 2013-11-22

[11] **2,924,536**

[13] C

[51] **Int.Cl. H04L 5/00 (2006.01)**

[25] EN

[54] **DOWNLINK CONTROL FORMAT INDICATOR**

[54] **INDICATEUR DE FORMAT DE COMMANDE DE LIAISON DESCENDANTE**

[72] CHEN, WANSI, US

[72] XU, HAO, US

[72] GAAL, PETER, US

[72] LUO, TAO, US

[72] YERRAMALLI, SRINIVAS, US

[72] JI, TINGFANG, US

[72] DAMNJANOVIC, ALEKSANDAR, US

[72] WEI, YONGBIN, US

[72] BHUSHAN, NAGA, US

[72] MALLADI, DURGA PRASAD, US

[72] SUKHAVASI, RAVI TEJA, US

[73] QUALCOMM INCORPORATED, US

[85] 2016-03-15

[86] 2014-09-25 (PCT/US2014/057519)

[87] (WO2015/057368)

[30] US (61/890,554) 2013-10-14

[30] US (14/494,956) 2014-09-24

[11] **2,925,293**

[13] C

[51] **Int.Cl. C07C 203/04 (2006.01) A61K 31/621 (2006.01) A61K 31/695 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) C07C 69/76 (2006.01) C07C 247/10 (2006.01) C07C 309/76 (2006.01) C07F 7/08 (2006.01)**

[25] EN

[54] **COMPOUNDS USEFUL IN THE TREATMENT OF NEOPLASTIC DISEASES**

[54] **COMPOSES UTILES DANS LE TRAITEMENT DE MALADIES NEOPLASIQUES**

[72] BERKESSEL, ALBRECHT, DE

[72] KRUGER, MARK, DE

[72] KREUZER, KARL-ANTON, DE

[72] POLL-WOLBECK, SIMON, DE

[73] UNIVERSITAT ZU KOLN, DE

[85] 2016-03-23

[86] 2014-09-24 (PCT/EP2014/070328)

[87] (WO2015/044177)

[30] EP (13185801.1) 2013-09-24

[11] **2,926,132**

[13] C

[51] **Int.Cl. B64G 1/42 (2006.01) B64G 1/40 (2006.01) H02J 4/00 (2006.01) H02J 9/00 (2006.01)**

[25] EN

[54] **SATELLITE ELECTRIC PROPULSION POWER SUPPLY UNIT AND SYSTEM FOR MANAGING THE ELECTRIC PROPULSION OF A SATELLITE**  
[54] **MODULE D'ALIMENTATION DE PROPULSION ELECTRIQUE D'UN SATELLITE ET SYSTEME DE GESTION DE LA PROPULSION ELECTRIQUE D'UN SATELLITE**

[72] GRUWE, ALAIN, BE

[72] LEDENT, PHILIPPE, BE

[73] THALES, FR

[86] (2926132)

[87] (2926132)

[22] 2016-04-05

[30] EP (15305515.7) 2015-04-08

[11] **2,928,012**

[13] C

[51] **Int.Cl. C12Q 1/6809 (2018.01) C12Q 1/6813 (2018.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **METHOD FOR ANALYSING THE INTERACTION OF NUCLEOTIDE SEQUENCES IN A THREE-DIMENSIONAL DNA STRUCTURE**  
[54] **PROCEDE POUR ANALYSER L'INTERACTION DE SEQUENCES DE NUCLEOTIDES DANS UNE STRUCTURE TRIDIMENSIONNELLE D'ADN**

[72] GROSVELD, FRANK, NL

[72] KNOCH, TOBIAS, NL

[73] ERASMUS UNIVERSITEIT

MEDISCH CENTRUM

ROTTERDAM, NL

[85] 2016-04-19

[86] 2014-11-18 (PCT/IB2014/002485)

[87] (WO2015/071748)

[30] GB (1320351.8) 2013-11-18

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,930,944**  
[13] C

[51] **Int.Cl. E04F 15/18 (2006.01) B62D 25/20 (2006.01) B62D 63/08 (2006.01) E04F 15/00 (2006.01) E04F 15/04 (2006.01)**

[25] EN

[54] **WOOD FLOORING WITH REINFORCED THERMOPLASTIC UNDERLAYER**

[54] **REVETEMENT DE PLANCHER EN BOIS COMPORTANT UNE SOUS-COUCHE THERMOPLASTIQUE RENFORCEE**

[72] LU, ZIQIANG, US

[72] CHORNEY, MARC, US

[73] ROCKLAND FLOORING LLC, US

[86] (2930944)

[87] (2930944)

[22] 2016-05-25

[30] US (14/728,483) 2015-06-02

---

[11] **2,934,001**  
[13] C

[51] **Int.Cl. H02B 1/26 (2006.01)**

[25] EN

[54] **FUSE ARC GAS BAFFLE WITH ARC RESISTANT FUSE ASSEMBLY**

[54] **DEFLECTEUR DE GAZ D'ARC DE SOUDAGE DOTE D'UN MECANISME DE SOUDAGE RESISTANT A L'ARC**

[72] RANDALL, ALFRED LEE, US

[72] FARR, THOMAS ARTHUR, US

[72] COCHRAN, JOHN AUSTIN, US

[72] GIBBS, IRVING ALBERT, US

[73] EATON INTELLIGENT POWER LIMITED, IE

[86] (2934001)

[87] (2934001)

[22] 2016-06-23

[30] US (62/199,347) 2015-07-31

[30] US (15/181,763) 2016-06-14

---

[11] **2,934,580**  
[13] C

[51] **Int.Cl. C08L 23/22 (2006.01) C08J 3/03 (2006.01) C08J 3/20 (2006.01) C08K 5/098 (2006.01)**

[25] EN

[54] **ANTI-AGGLOMERANTS FOR POLYISOBUTYLENE PRODUCTION**

[54] **ANTIMOTTANTS POUR LA PRODUCTION DE POLYISOBUTYLENE**

[72] THOMPSON, DAVID, CA

[72] LUND, CLINTON, CA

[73] BASF SOUTH EAST ASIA PTE. LTD., SG

[85] 2016-06-20

[86] 2014-12-22 (PCT/CA2014/051249)

[87] (WO2015/095960)

[30] EP (13199466.7) 2013-12-23

[30] EP (14160738.2) 2014-03-19

[30] EP (14175025.7) 2014-06-30

[30] EP (14175977.9) 2014-07-07

---

[11] **2,935,344**  
[13] C

[51] **Int.Cl. B60K 31/00 (2006.01)**

[25] EN

[54] **VEHICLE CONTROL SYSTEM**

[54] **SYSTEME DE COMMANDE DU VEHICULE**

[72] GODLEY, MATTHEW HOWARD, US

[73] GODLEY, MATTHEW HOWARD, US

[85] 2016-06-28

[86] 2014-12-22 (PCT/US2014/071869)

[87] (WO2015/108676)

[30] US (61/927,692) 2014-01-15

[30] US (14/455,232) 2014-08-08

---

[11] **2,935,415**  
[13] C

[51] **Int.Cl. C07C 323/60 (2006.01) A61K 31/22 (2006.01) A61K 31/27 (2006.01) A61K 31/4196 (2006.01) A61K 31/4402 (2006.01) A61K 31/4409 (2006.01) A61K 31/445 (2006.01) A61K 31/4465 (2006.01) A61K 31/52 (2006.01) A61K 31/55 (2006.01) A61K 31/695 (2006.01) A61P 31/04 (2006.01) C07D 211/20 (2006.01) C07D 213/38 (2006.01) C07D 223/04 (2006.01) C07D 249/14 (2006.01) C07D 473/00 (2006.01) C07F 7/18 (2006.01)**

[25] EN

[54] **12-EPI-PLEUROMUTILINS**

[54] **12-EPI-PLEUROMUTILINES**

[72] THIRRING, KLAUS, AT

[72] HEILMAYER, WERNER, AT

[72] RIEDL, ROSEMARIE, AT

[72] KOLLMANN, HERMANN, AT

[72] IVEZIC-SCHOENFELD, ZRINKA, AT

[72] WICHA, WOLFGANG, AT

[72] PAUKNER, SUSANNE, AT

[72] STRICKMANN, DIRK, AT

[73] NABRIVA THERAPEUTICS AG, AT

[85] 2016-06-29

[86] 2015-01-21 (PCT/EP2015/051159)

[87] (WO2015/110481)

[30] EP (14152107.0) 2014-01-22

---

[11] **2,935,775**  
[13] C

[51] **Int.Cl. G05B 19/042 (2006.01) H05B 47/19 (2020.01)**

[25] EN

[54] **ELECTRICAL DEVICE WITH ASSOCIATED SETTINGS AND SYSTEM INCLUDING THE SAME**

[54] **DISPOSITIF ELECTRIQUE ET PARAMETRES ASSOCIES, ET SYSTEME RENFERMANT LEDIT DISPOSITIF**

[72] EL-GAYYAR, AHMED, US

[73] EATON INTELLIGENT POWER LIMITED, IE

[86] (2935775)

[87] (2935775)

[22] 2016-07-11

[30] US (14/845,498) 2015-09-04

**Brevets canadiens délivrés  
16 mai 2023**

[11] **2,935,776**  
[13] C

- [51] **Int.Cl. G05B 19/042 (2006.01) H04W 84/18 (2009.01) H05B 39/04 (2006.01) H05B 41/36 (2006.01)**  
[25] EN  
[54] **ELECTRICAL DEVICE, NETWORK AND METHOD OF CONTROLLING THE SAME**  
[54] **DISPOSITIF ELECTRIQUE, RESEAU ET METHODE DE CONTROLE ASSOCIEE**  
[72] EL-GAYYAR, AHMED, US  
[73] EATON INTELLIGENT POWER LIMITED, IE  
[86] (2935776)  
[87] (2935776)  
[22] 2016-07-11  
[30] US (14/845,441) 2015-09-04

[11] **2,936,121**  
[13] C

- [51] **Int.Cl. G06Q 30/0241 (2023.01) A63F 13/80 (2014.01) G06Q 30/0242 (2023.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR ON-LINE GAME BASED ON CONSUMER WISH LIST**  
[54] **SYSTEME ET METHODE DE JEU EN LIGNE FONDES SUR LA LISTE DE SOUHAITS DU CONSOMMATEUR**  
[72] SKOLER, FREDERICK W., US  
[73] TRANSFORM SR BRANDS, LLC, US  
[86] (2936121)  
[87] (2936121)  
[22] 2016-07-14  
[30] US (14/800,111) 2015-07-15

[11] **2,936,130**  
[13] C

- [51] **Int.Cl. F21V 8/00 (2006.01) F21S 4/22 (2016.01) F21V 9/00 (2018.01) F21V 13/08 (2006.01) F21V 33/00 (2006.01)**  
[25] EN  
[54] **LIGHTING SYSTEM**  
[54] **DISPOSITIF D'ECLAIRAGE**  
[72] GAWEL, MAREK, AT  
[73] NOVOMATIC AG, AT  
[85] 2016-07-07  
[86] 2015-01-08 (PCT/EP2015/050252)  
[87] (WO2015/104331)  
[30] DE (20 2014 000 196.0) 2014-01-10  
[30] DE (20 2014 000 264.9) 2014-01-13

[11] **2,937,580**  
[13] C

- [51] **Int.Cl. A61K 36/04 (2006.01) A61P 1/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR REDUCING TOTAL GAS PRODUCTION AND/OR METHANE PRODUCTION IN A RUMINANT ANIMAL**  
[54] **PROCEDE DE REDUCTION DE PRODUCTION DE GAZ ET/OU DE PRODUCTION DE METHANE TOTALE(S) CHEZ UN ANIMAL RUMINANT**  
[72] MACHADO, LORENNA, BR  
[72] MAGNUSSON, MARIE ELISABETH, AU  
[72] TOMKINS, NIGEL WILLIAM, AU  
[72] KINLEY, ROBERT DOUGLAS, AU  
[72] DE NYS, PETER CANISIUS, AU  
[72] PAUL, NICHOLAS ANDREW, AU  
[73] COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, AU  
[73] MEAT & LIVESTOCK AUSTRALIA LIMITED, AU  
[73] JAMES COOK UNIVERSITY, AU  
[85] 2016-07-21  
[86] 2015-01-21 (PCT/AU2015/000030)  
[87] (WO2015/109362)  
[30] AU (2014900182) 2014-01-21

[11] **2,937,822**  
[13] C

- [51] **Int.Cl. C04B 40/02 (2006.01) B28C 5/00 (2006.01) B28C 5/46 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR CURING CO2 COMPOSITE MATERIAL OBJECTS AT NEAR AMBIENT TEMPERATURE AND PRESSURE**  
[54] **PROCEDE ET APPAREIL POUR DURCIR DES OBJETS A BASE D'UN MATERIAU COMPOSITE REAGISSANT AU CO2 A UNE TEMPERATURE ET A UNE PRESSION PROCHES DES VALEURS AMBIANTES**  
[72] MCCANDLISH, LARRY E., US  
[72] NARINE, ORLANDO, US  
[72] CASTORO, DANIEL, US  
[73] SOLIDIA TECHNOLOGIES, INC., US  
[85] 2016-07-22  
[86] 2015-01-22 (PCT/US2015/012333)  
[87] (WO2015/112655)  
[30] US (61/930,404) 2014-01-22  
[30] US (62/033,366) 2014-08-05

[11] **2,940,561**  
[13] C

- [51] **Int.Cl. C02F 1/10 (2006.01) C02F 1/04 (2006.01) E21B 43/24 (2006.01)**  
[25] EN  
[54] **SEMI-CONTINUOUS TREATMENT OF PRODUCED WATER WITH BOILER FLUE GAS**  
[54] **TRAITEMENT SEMI-CONTINUU D'EAU PRODUITE AU MOYEN DE GAZ D'ECHAPPEMENT D'UNE CHAUDIERE**  
[72] RAJAGOPALAN, SURIYANARAYANAN, US  
[72] EMBRY, DALE, US  
[72] LATIMER, EDWARD, US  
[73] CONOCOPHILLIPS COMPANY, US  
[86] (2940561)  
[87] (2940561)  
[22] 2016-08-26  
[30] US (62/210180) 2015-08-26

[11] **2,942,445**  
[13] C

- [51] **Int.Cl. B65G 1/04 (2006.01) B25J 5/02 (2006.01) E04H 6/18 (2006.01) B65G 1/06 (2006.01)**  
[25] EN  
[54] **ROBOTIC SERVICE DEVICE**  
[54] **DISPOSITIF D'ENTRETIEN ROBOTIQUE**  
[72] FRYER, MARK, GB  
[72] INGRAM-TEDD, ANDY, GB  
[72] SHAIKH, SIDDIQUE, GB  
[72] LINDBO, SVERKER, GB  
[73] OCADO INNOVATION LIMITED, GB  
[85] 2016-09-12  
[86] 2015-03-18 (PCT/EP2015/055695)  
[87] (WO2015/140216)  
[30] GB (1404870.6) 2014-03-18

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,943,044**  
[13] C

[51] **Int.Cl. G06F 17/10 (2006.01)**  
[25] EN  
[54] **SOLVING NP-COMPLETE PROBLEMS WITHOUT HYPER-POLYNOMIAL COST**  
[54] **RESOLUTION DE PROBLEMES NON DETERMINISTES POLYNOMIAUX COMPLETS SANS COUT HYPER POLYNOMIAL**  
[72] GILLESPIE, CLAYTON, US  
[73] GILLESPIE, CLAYTON, US  
[85] 2016-09-15  
[86] 2015-03-25 (PCT/US2015/022377)  
[87] (WO2015/148599)  
[30] US (61/970,291) 2014-03-25

---

[11] **2,943,191**  
[13] C

[51] **Int.Cl. A61F 5/56 (2006.01) A61C 7/08 (2006.01)**  
[25] EN  
[54] **CUSPID AND FIRST BI-CUSPID BITE RETAINER FOR SLEEP APNEA**  
[54] **APPAREIL EMPECHANT LA FERMETURE DES CANINES ET DES PREMOLAIRES DESTINE A EVITER L'APNEE DU SOMMEIL**  
[72] LUCO, KENNETH, CA  
[73] LUCO, KENNETH, CA  
[86] (2943191)  
[87] (2943191)  
[22] 2016-09-27  
[30] US (14866964) 2015-09-27

---

[11] **2,944,525**  
[13] C

[51] **Int.Cl. A61F 5/56 (2006.01)**  
[25] EN  
[54] **BREATHING ASSIST DEVICE**  
[54] **DISPOSITIF D'ASSISTANCE RESPIRATOIRE**  
[72] HART, CHRISTOPHER PATRICK, AU  
[72] NGUYEN, VU THUA, AU  
[72] ANDERSON, NEIL, AU  
[72] FRASER, DARREN, AU  
[72] SLATER, MICHAEL LEIGH, AU  
[72] GULIZIA, STEFAN, AU  
[73] OPEN AIRWAY DENTAL SOLUTIONS LTD., CA  
[85] 2016-09-30  
[86] 2015-03-31 (PCT/AU2015/050144)  
[87] (WO2015/149127)  
[30] AU (2014901181) 2014-04-01  
[30] AU (2014901655) 2014-05-06  
[30] AU (2014903083) 2014-08-08

---

[11] **2,944,714**  
[13] C

[51] **Int.Cl. A61K 31/46 (2006.01) A61P 15/06 (2006.01)**  
[25] EN  
[54] **METHODS OF TREATING OR PREVENTING PRETERM LABOR**  
[54] **PROCEDES DE TRAITEMENT OU DE PREVENTION DU TRAVAIL PREMATURE**  
[72] VISCO, ANTHONY G., US  
[73] VISCO, ANTHONY G., US  
[85] 2016-09-30  
[86] 2015-05-06 (PCT/US2015/029455)  
[87] (WO2015/171753)  
[30] US (61/989,221) 2014-05-06

---

[11] **2,945,834**  
[13] C

[51] **Int.Cl. G01N 31/22 (2006.01)**  
[25] EN  
[54] **METHODS, COMPOSITIONS AND KITS FOR DETERMINING CLEANNESS OF A SURFACE**  
[54] **METHODES, COMPOSITIONS ET TROUSSES PERMETTANT DE DETERMINER LA PROPRETE D'UNE SURFACE**  
[72] DESROSIERS, DOMINIC, CA  
[72] MARCHAND, PATRICK, CA  
[73] SANI-MARC INC., CA  
[86] (2945834)  
[87] (2945834)  
[22] 2016-10-18  
[30] US (62/301,716) 2016-03-01

---

[11] **2,946,457**  
[13] C

[51] **Int.Cl. A61B 50/33 (2016.01) A61B 50/30 (2016.01) A61B 1/00 (2006.01) B65D 1/34 (2006.01) B65D 21/02 (2006.01) B65D 21/04 (2006.01) B65D 71/70 (2006.01) G02B 6/44 (2006.01)**  
[25] EN  
[54] **STORAGE KIT AND ASSEMBLY**  
[54] **KIT ET ENSEMBLE DE STOCKAGE**  
[72] RAMSEY, PETER, GB  
[73] MEDITECH ENDOSCOPY LTD, GB  
[85] 2016-10-20  
[86] 2015-04-29 (PCT/GB2015/051248)  
[87] (WO2015/166240)  
[30] GB (1407541.0) 2014-04-29  
[30] GB (1408726.6) 2014-05-16  
[30] GB (1413166.8) 2014-07-24  
[30] GB (1418282.8) 2014-10-15

---

[11] **2,946,753**  
[13] C

[51] **Int.Cl. E04B 9/18 (2006.01) E04B 9/00 (2006.01) F16L 3/26 (2006.01)**  
[25] EN  
[54] **HANGING LOAD SUPPORT**  
[54] **SUPPORT DE CHARGE SUSPENDUE**  
[72] SAREYKA, BRETT WAYNE, US  
[72] NEAL, JOSHUA LEE, US  
[73] WORTHINGTON ARMSTRONG VENTURE, US  
[85] 2016-10-21  
[86] 2015-04-24 (PCT/US2015/027485)  
[87] (WO2015/164718)  
[30] US (14/120,104) 2014-04-25

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **2,947,404**  
[13] C

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) G01N 33/574 (2006.01) C12P 21/08 (2006.01) C12Q 1/02 (2006.01)**

[25] EN

[54] **ANTI-MUC1 ANTIBODY OR ANTIGEN-BINDING FRAGMENT THEREOF AND USES THEREOF**

[54] **ANTICORPS ANTI-MUC1 OU FRAGMENT DE LIANT D'ANTIGENE DE CEUX-CI ET LEURS UTILISATIONS**

[72] NISHIMURA, SHINICHIRO, JP

[72] MIYOSHI, RISHO, JP

[72] NARUCHI, KENTARO, JP

[72] TANAKA, MASAKAZU, JP

[72] SATO, MASAHARU, JP

[73] MEDICINAL CHEMISTRY PHARMACEUTICALS, CO., LTD., JP

[85] 2016-10-28

[86] 2015-04-28 (PCT/JP2015/062761)

[87] (WO2015/166934)

[30] JP (2014-092299) 2014-04-28

---

[11] **2,947,818**  
[13] C

[51] **Int.Cl. B09C 1/08 (2006.01) B09C 1/02 (2006.01)**

[25] EN

[54] **REMEDIATION OF CONTAMINATED SOILS**

[54] **REMEDIATION DE SOLS CONTAMINES**

[72] STOIN, URI, IL

[72] SASSON, YOEL, IL

[73] YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREW UNIVERSITY OF JERUSALEM LTD., IL

[85] 2016-11-02

[86] 2015-05-03 (PCT/IL2015/050460)

[87] (WO2015/170317)

[30] US (61/988,223) 2014-05-04

---

[11] **2,948,862**  
[13] C

[51] **Int.Cl. G01V 1/38 (2006.01) G01V 1/28 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR CONDUCTING RECONNAISSANCE MARINE SEISMIC SURVEYS**

[54] **PROCEDES ET SYSTEMES DE REALISATION DE PROSPECTIONS SISMIQUES MARINES DE RECONNAISSANCE**

[72] BROOKES, DAVID, US

[72] BERNITSAS, NIKOLAOS, US

[72] FARMER, PAUL, US

[73] TGS-NOPEC GEOPHYSICAL COMPANY, US

[85] 2016-11-10

[86] 2015-05-14 (PCT/US2015/030750)

[87] (WO2015/175766)

[30] US (61/994,015) 2014-05-15

[30] US (14/711,154) 2015-05-13

---

[11] **2,949,562**  
[13] C

[51] **Int.Cl. H02K 41/02 (2006.01) B65G 43/00 (2006.01) B65G 54/02 (2006.01)**

[25] EN

[54] **LINEAR MOTOR SYSTEM WITH POWERED CURVILINEAR TRACK SECTIONS**

[54] **SYSTEME A MOTEUR LINEAIRE A SECTIONS RAILS CURVILIGNES MOTORISEES**

[72] KLEINIKKINK, ALBERT, CA

[72] DITNER, JOHN, CA

[72] MOWAT, DON, CA

[72] SCOTT, RYAN, CA

[72] KNAP, GRAHAM, CA

[72] CHUBB, RYAN, CA

[73] ATS AUTOMATION TOOLING SYSTEMS INC., CA

[85] 2016-11-18

[86] 2015-05-29 (PCT/CA2015/050492)

[87] (WO2015/184536)

[30] US (62/006,583) 2014-06-02

---

[11] **2,950,351**  
[13] C

[51] **Int.Cl. F16J 15/00 (2006.01) F16J 15/16 (2006.01) F16J 15/32 (2016.01)**

[25] EN

[54] **SEALING DEVICE AND METHOD FOR SEALING IN A FLUID MEDIUM**

[54] **DISPOSITIF DE SCELLEMENT ETANCHE ET PROCEDE POUR SCELLER DE MANIERE ETANCHE DANS UN MILIEU LIQUIDE**

[72] BAUMANN, MICHAEL, GB

[72] KOGLER, CHRISTIAN, AT

[72] SWETE, WOLFGANG, AT

[73] AKTIEBOLAGET SKF, SE

[85] 2016-11-25

[86] 2015-05-27 (PCT/EP2015/061646)

[87] (WO2015/181204)

[30] DE (10 2014 210 129.8) 2014-05-27

---

[11] **2,950,457**  
[13] C

[51] **Int.Cl. F16B 5/00 (2006.01) B29C 65/56 (2006.01) B29C 65/64 (2006.01)**

[25] EN

[54] **METHOD OF JOINING TWO OBJECTS**

[54] **PROCEDE D'ASSEMBLAGE DE DEUX OBJETS**

[72] MAYER, JORG, CH

[72] LEHMANN, MARIO, CH

[72] TORRIANI, LAURENT, CH

[73] INTER IKEA SYSTEMS B.V., NL

[73] WOODWELDING AG, CH

[85] 2016-11-28

[86] 2015-05-28 (PCT/EP2015/061853)

[87] (WO2015/181300)

[30] CH (00824/14) 2014-05-28

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,950,780**  
[13] C

[51] **Int.Cl. A61K 31/519 (2006.01) A61K 31/4535 (2006.01) A61K 31/4709 (2006.01) A61K 31/4965 (2006.01) A61K 31/497 (2006.01) A61K 31/5377 (2006.01) A61K 31/551 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **METHOD FOR TREATING CANCER USING A COMBINATION OF CHK1 AND ATR INHIBITORS**

[54] **METHODE DE TRAITEMENT ANTICANCEREUX UTILISANT UNE ASSOCIATION D'INHIBITEURS DE CHK1 ET D'ATR**

[72] HELLEDAY, THOMAS, SE

[72] SANJIV, KUMAR, SE

[73] VERTEX PHARMACEUTICALS INCORPORATED, US

[85] 2016-11-29

[86] 2015-06-17 (PCT/US2015/036137)

[87] (WO2015/195740)

[30] US (62/013,136) 2014-06-17

[30] US (62/043,530) 2014-08-29

[30] US (62/073,082) 2014-10-31

[30] US (62/161,438) 2015-05-14

---

[11] **2,950,887**  
[13] C

[51] **Int.Cl. F24C 15/20 (2006.01) F24F 11/30 (2018.01) G08B 19/00 (2006.01)**

[25] EN

[54] **SENSOR-ENABLED RANGE HOOD SYSTEM AND METHOD**

[54] **SYSTEME DE HOTTE ASPIRANTE A CAPTEURS ET PROCEDE**

[72] SINUR, RICHARD R., US

[72] WELLNITZ, BRIAN R., US

[72] PALMERSHEIM, RICHARD J., US

[73] BROAN-NUTONE LLC, US

[85] 2016-11-30

[86] 2015-04-29 (PCT/US2015/028219)

[87] (WO2015/168243)

[30] US (14/267,618) 2014-05-01

---

[11] **2,950,981**  
[13] C

[51] **Int.Cl. C11D 17/08 (2006.01) C11D 3/50 (2006.01) C11D 7/00 (2006.01)**

[25] EN

[54] **DISHWASHER DETERGENT FRAGRANCE COMPOSITION**

[54] **COMPOSITION DE PARFUM DE DETERGENT POUR LAVE-VAISSELLE**

[72] BLONDEAU, PHILIPPE, FR

[72] BRESSON BOIL, ALICE, FR

[72] MOUTTE, MAXENCE, FR

[72] QUELLET, CHRISTIAN, CH

[73] GIVAUDAN SA, CH

[85] 2016-12-01

[86] 2015-06-10 (PCT/EP2015/062983)

[87] (WO2015/189296)

[30] EP (14290167.7) 2014-06-10

---

[11] **2,951,352**  
[13] C

[51] **Int.Cl. B32B 3/16 (2006.01) B32B 37/00 (2006.01) B65D 71/00 (2006.01) B65D 75/00 (2006.01)**

[25] EN

[54] **REINFORCED FILM FOR UNITIZATION OF GOODS**

[54] **FILM RENFORCE POUR UNITARISATION DE MARCHANDISES**

[72] GATOS, KONSTANTINOS G., GR

[72] KARANDINOS, ANTHONY G., GR

[73] MEGA PLAST INDUSTRIAL-EXPORTING S.A., GR

[85] 2016-12-06

[86] 2015-06-26 (PCT/EP2015/064611)

[87] (WO2016/001107)

[30] GB (1411574.5) 2014-06-30

---

[11] **2,951,500**  
[13] C

[51] **Int.Cl. C12Q 1/68 (2018.01) C12Q 1/6876 (2018.01) G16B 20/20 (2019.01) A01K 67/02 (2006.01) C12N 15/00 (2006.01)**

[25] EN

[54] **PREDICTING THE ABILITY OF ATLANTIC SALMON TO UTILISE DIETARY PIGMENT BASED ON THE DETERMINATION OF POLYMORPHISMS**

[54] **PREDICTION DE LA CAPACITE DU SAUMON DE L'ATLANTIQUE EN VUE D'UTILISER UN PIGMENT ALIMENTAIRE SUR LA BASE DE LA DETERMINATION DE POLYMORPHISMES**

[72] LIEN, SIGBJORN, NO

[72] SODELAND, MARTE, NO

[72] MOEN, THOMAS, NO

[73] AQUAGEN AS, NO

[85] 2016-12-07

[86] 2015-06-10 (PCT/GB2015/051713)

[87] (WO2015/189617)

[30] GB (1410328.7) 2014-06-10

---

[11] **2,952,287**  
[13] C

[51] **Int.Cl. C07D 519/00 (2006.01) A61K 31/506 (2006.01) A61K 31/519 (2006.01) A61K 31/52 (2006.01) C07D 471/04 (2006.01) C07D 473/34 (2006.01)**

[25] EN

[54] **INDOLIZINE DERIVATIVES AS PHOSPHOINOSITIDE 3-KINASES INHIBITORS**

[54] **DERIVES D'INDOLIZINE UTILES EN TANT QU'INHIBITEURS DE PHOSPHOINOSITIDE 3-KINASES**

[72] BIAGETTI, MATTEO, IT

[72] ACCETTA, ALESSANDRO, IT

[72] CAPELLI, ANNA MARIA, IT

[72] GUALA, MATILDE, IT

[72] RETINI, MICHELE, IT

[73] CHIESI FARMACEUTICI S.P.A., IT

[85] 2016-12-14

[86] 2015-06-16 (PCT/EP2015/063390)

[87] (WO2015/193263)

[30] EP (14172764.4) 2014-06-17

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **2,952,620**  
[13] C

[51] **Int.Cl. G16B 20/40 (2019.01) G16B 20/00 (2019.01) G16B 30/00 (2019.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **METHOD FOR DETERMINING RELATEDNESS OF GENOMIC SAMPLES USING PARTIAL SEQUENCE INFORMATION**

[54] **PROCEDE POUR DETERMINER LE RAPPROCHEMENT D'ECHANTILLONS GENOMIQUES A L'AIDE D'INFORMATIONS DE SEQUENCE PARTIELLE**

[72] GREEN, RICHARD, US

[72] VOHR, SAMUEL, US

[73] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US

[85] 2016-12-15

[86] 2015-06-17 (PCT/US2015/036250)

[87] (WO2015/195816)

[30] US (62/013,734) 2014-06-18

---

[11] **2,952,828**  
[13] C

[51] **Int.Cl. F25B 41/00 (2021.01) F25B 33/00 (2006.01) F25B 43/00 (2006.01)**

[25] EN

[54] **EVAPORATOR LIQUID PREHEATER FOR REDUCING REFRIGERANT CHARGE**

[54] **PRECHAUFFEUR DE LIQUIDE D'EVAPORATEUR POUR REDUIRE LA CHARGE DE FLUIDE FRIGORIGENE**

[72] DEROSIER, GREG, US

[73] EVAPCO, INC., US

[85] 2016-12-16

[86] 2015-07-01 (PCT/US2015/038911)

[87] (WO2016/004257)

[30] US (62/019,877) 2014-07-01

[30] US (14/789,910) 2015-07-01

---

[11] **2,953,403**  
[13] C

[51] **Int.Cl. A01K 1/015 (2006.01) B01J 20/02 (2006.01) B01J 29/04 (2006.01)**

[25] EN

[54] **LOW DENSITY COMPOSITIONS WITH SYNERGISTIC ABSORBANCE PROPERTIES**

[54] **COMPOSITIONS DE FAIBLE DENSITE PRESENTANT DES PROPRIETES D'ABSORPTION SYNERGIQUES**

[72] JIANG, CHONGJUN, US

[72] GALHOTRA, PRAGATI, CA

[72] PALM, SCOTT KEVIN, US

[72] WANENE, WILSON KAMAU, US

[72] CROW, SEAN SPENCER, US

[72] GUPTA, VISHAL, US

[72] EVANOFF, KARA LINN, US

[73] EP MINERALS LLC., US

[85] 2016-12-21

[86] 2015-08-19 (PCT/US2015/045891)

[87] (WO2016/032821)

[30] US (62/041,946) 2014-08-26

---

[11] **2,954,313**  
[13] C

[51] **Int.Cl. B65H 51/14 (2006.01) B63B 21/04 (2006.01) B63B 21/66 (2006.01) B63B 27/00 (2006.01) B63G 8/39 (2006.01) B65H 51/02 (2006.01) H02G 1/10 (2006.01)**

[25] EN

[54] **DEVICE FOR TOWING A VERY LONG TUBULAR OBJECT**

[54] **DISPOSITIF DE HALAGE D'UN OBJET DE FORME TUBULAIRE DE GRANDE LONGUEUR**

[72] LONGUET, JEAN-PHILIPPE, FR

[72] LE GRAS, HERVE, FR

[72] COSSON, OLIVIER, FR

[72] PEDEN, BENOIT, FR

[72] LAGADEC, JEAN, FR

[73] THALES, FR

[85] 2017-01-04

[86] 2015-07-06 (PCT/EP2015/065325)

[87] (WO2016/001443)

[30] FR (1401505) 2014-07-04

---

[11] **2,954,389**  
[13] C

[51] **Int.Cl. H01M 6/32 (2006.01) H01M 50/489 (2021.01) H01M 50/636 (2021.01)**

[25] EN

[54] **A LIQUID-ACTIVATABLE BATTERY**

[54] **BATTERIE ACTIVABLE PAR LIQUIDE**

[72] BAKKER, NIELS, CN

[73] PHENOLOGY AG, CH

[85] 2017-01-05

[86] 2015-07-06 (PCT/CN2015/083405)

[87] (WO2016/004843)

[30] HK (14106838.7) 2014-07-07

---

[11] **2,954,475**  
[13] C

[51] **Int.Cl. C07K 14/47 (2006.01) A61K 38/00 (2006.01) C07K 14/00 (2006.01)**

[25] EN

[54] **APOE MIMETIC PEPTIDES AND HIGHER POTENCY TO CLEAR PLASMA CHOLESTEROL**

[54] **PEPTIDES E-MIMETIQUES D'APO AYANT UNE PUISSANCE SUPERIEURE AFIN DE DEGAGER LE TAUX DE CHOLESTEROL PLASMATIQUE**

[72] ANANTHARAMAIAH, GATTADAHALLI M., US

[72] GOLDBERG, DENNIS, US

[73] UAB RESEARCH FOUNDATION, US

[73] ANJI PHARMACEUTICALS INC., US

[85] 2017-01-06

[86] 2015-07-20 (PCT/US2015/041162)

[87] (WO2016/018665)

[30] US (62/031,585) 2014-07-31

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,954,776**  
[13] C

[51] **Int.Cl. G02B 6/46 (2006.01)**  
[25] EN  
[54] **OPTICAL FIBER DISTRIBUTION HUB WITH FIBER ROUTING STRUCTURES**  
[54] **CONCENTRATEUR DE DISTRIBUTION DE FIBRES OPTIQUES AYANT DES STRUCTURES DE ROUTAGE DE FIBRES**  
[72] MONTALVO URBANO, ADRIANA, MX  
[72] SANCHEZ GARCIA, SERGIO, MX  
[73] CORNING OPTICAL COMMUNICATIONS LLC, US  
[85] 2017-01-10  
[86] 2015-07-07 (PCT/US2015/039346)  
[87] (WO2016/007488)  
[30] US (62/022,875) 2014-07-10

---

[11] **2,955,079**  
[13] C

[51] **Int.Cl. B65G 47/52 (2006.01) B65G 15/00 (2006.01) B65G 47/46 (2006.01)**  
[25] EN  
[54] **CLEANABLE DIVERTER**  
[54] **DISPOSITIF DE DEVIATION POUVANT ETRE NETTOYE**  
[72] GUERNSEY, KEVIN W., US  
[72] BISHOP, JONATHAN J., US  
[72] DEROCHE, TIMOTHY J., US  
[72] GREMILLION, KEVIN L., US  
[72] VULPETTI, MATTHEW, US  
[72] LEE, BRIAN R., US  
[73] LAITRAM, L.L.C., US  
[85] 2017-01-12  
[86] 2015-06-23 (PCT/US2015/037171)  
[87] (WO2016/014196)  
[30] US (14/338,907) 2014-07-23

---

---

[11] **2,955,454**  
[13] C

[51] **Int.Cl. G06Q 20/20 (2012.01) G06Q 20/40 (2012.01) G06F 3/041 (2006.01)**  
[25] EN  
[54] **POINT OF SALE SYSTEM WITH SECURE AND UNSECURE MODES**  
[54] **SYSTEME DE POINT DE VENTE AYANT DES MODES SECURISE ET NON SECURISE**  
[72] REZAYEE, AFSHIN, US  
[72] SMITH, MALCOLM R., US  
[72] VADERA, KSHITIZ, US  
[72] WAI NG, KEVIN KA, US  
[72] YAN, HAIPENG, US  
[73] BLOCK, INC., US  
[85] 2017-01-17  
[86] 2015-07-16 (PCT/US2015/040819)  
[87] (WO2016/014346)  
[30] US (62/027,855) 2014-07-23  
[30] US (14/752,698) 2015-06-26

---

[11] **2,956,367**  
[13] C

[51] **Int.Cl. C08F 4/655 (2006.01) C08F 10/02 (2006.01)**  
[25] EN  
[54] **SOLID CATALYST FOR THE (CO)POLYMERISATION OF .ALPHA.-OLEFINS AND PROCESS FOR THE PREPARATION THEREOF.**  
[54] **CATALYSEUR SOLIDE POUR LA POLYMERISATION OU LA COPOLYMERISATION D'.ALPHA.-OLEFINES ET SON PROCEDE DE PREPARATION.**  
[72] MASI, FRANCESCO, IT  
[72] SOMMAZZI, ANNA, IT  
[72] POLESELLO, MARIO, IT  
[73] VERSALIS S.P.A., IT  
[85] 2017-01-24  
[86] 2015-07-30 (PCT/EP2015/067465)  
[87] (WO2016/016355)  
[30] IT (MI2014A001392) 2014-07-31

---

---

[11] **2,956,657**  
[13] C

[51] **Int.Cl. B32B 7/12 (2006.01) B32B 5/18 (2006.01) B32B 23/02 (2006.01) B32B 23/08 (2006.01)**  
[25] EN  
[54] **STRUCTURAL INSULATED SHEATHING**  
[54] **PROTECTION ISOLEE STRUCTURELLE**  
[72] BUDINSCAK, JOHN FRANK, JR., US  
[72] GAWRYLA, MATTHEW DANIEL, US  
[73] OWENS CORNING INTELLECTUAL CAPITAL, LLC, US  
[86] (2956657)  
[87] (2956657)  
[22] 2017-01-30  
[30] US (62/288,758) 2016-01-29

---

[11] **2,957,042**  
[13] C

[51] **Int.Cl. B32B 7/022 (2019.01) A47B 96/18 (2006.01) A47B 96/20 (2006.01) B32B 3/08 (2006.01) B32B 9/00 (2006.01) E04C 2/26 (2006.01) E04F 13/077 (2006.01)**  
[25] EN  
[54] **A KIT FOR FORMING A PANEL AND A METHOD OF FORMING A PANEL**  
[54] **KIT DE FORMATION DE PANNEAU ET PROCEDE DE FORMATION DE PANNEAU**  
[72] KYRIAKOULEAS, KYRI, AU  
[73] LITESTONE HOLDINGS PTY LIMITED, AU  
[85] 2017-02-02  
[86] 2015-08-04 (PCT/AU2015/050436)  
[87] (WO2016/019432)  
[30] AU (2014903007) 2014-08-04  
[30] AU (2014903647) 2014-09-12

---



**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **2,957,159**  
[13] C

[51] **Int.Cl. B01D 63/06 (2006.01) B01D 46/24 (2006.01) B01D 65/08 (2006.01) B01J 35/04 (2006.01) C04B 38/00 (2006.01)**

[25] FR

[54] **ELEMENT INTENDED FOR SEPARATION VIA TANGENTIAL FLOW AND HAVING BUILT-IN FLOW OBSTACLES, AND MANUFACTURE METHOD**

[54] **ELEMENT DE SEPARATION PAR FLUX TANGENTIEL INTEGRANT DES OBSTACLES A LA CIRCULATION ET PROCEDE DE FABRICATION**

[72] ANQUETIL, JEROME, FR

[73] TECHNOLOGIES AVANCEES ET MEMBRANES INDUSTRIELLES, FR

[85] 2017-02-02

[86] 2015-07-21 (PCT/FR2015/052000)

[87] (WO2016/024058)

[30] FR (1457745) 2014-08-11

---

[11] **2,957,677**  
[13] C

[51] **Int.Cl. G01F 23/292 (2006.01) G01N 21/55 (2014.01) G01S 17/36 (2006.01)**

[25] EN

[54] **INTERFEROMETRIC MEASUREMENT OF LIQUID VOLUMES**

[54] **MESURE INTERFEROMETRIQUE DE VOLUMES DE LIQUIDES**

[72] LUEDEMANN, HANS-CHRISTIAN, US

[73] LUEDEMANN, HANS-CHRISTIAN, US

[85] 2017-02-08

[86] 2015-08-06 (PCT/US2015/043910)

[87] (WO2016/025278)

[30] US (62/036,142) 2014-08-12

---

[11] **2,957,935**  
[13] C

[51] **Int.Cl. B22D 41/00 (2006.01) B22D 11/103 (2006.01)**

[25] EN

[54] **IMPACT PAD, TUNDISH AND APPARATUS INCLUDING THE IMPACT PAD, AND METHOD OF USING SAME**

[54] **SUPPORT D'IMPACT, PANIER DE COULEE ET APPAREIL INCLUANT LEDIT SUPPORT D'IMPACT, ET PROCEDE D'UTILISATION ASSOCIE**

[72] BHATTACHARYA, TATHAGATA, US

[73] ARCELORMITTAL INVESTIGACION Y DESARROLLO, S.L., ES

[85] 2017-02-10

[86] 2015-08-17 (PCT/US2015/045513)

[87] (WO2016/025948)

[30] US (62/037,949) 2014-08-15

---

[11] **2,958,025**  
[13] C

[51] **Int.Cl. F23R 3/28 (2006.01) B64D 37/00 (2006.01) F02C 7/22 (2006.01) F16L 9/19 (2006.01) F16L 37/56 (2006.01) F16L 39/00 (2006.01)**

[25] FR

[54] **CONNECTION DEVICE COMPRISING SEVERAL CURVED CONCENTRIC TUBES**

[54] **DISPOSITIF DE RACCORDEMENT COMPORTANT PLUSIEURS TUBES CONCENTRIQUES CINTRES**

[72] CHABAILLE, CHRISTOPHE, FR

[72] LOVAL, SEBASTIEN, FR

[72] LELEU, BENEDICTE, FR

[73] SAFRAN AIRCRAFT ENGINES, FR

[85] 2017-02-13

[86] 2015-08-19 (PCT/FR2015/052224)

[87] (WO2016/027034)

[30] FR (14 57895) 2014-08-20

---

[11] **2,958,132**  
[13] C

[51] **Int.Cl. C22C 21/06 (2006.01) B22D 11/00 (2006.01) C22F 1/047 (2006.01)**

[25] EN

[54] **SUPERPLASTIC-FORMING ALUMINUM ALLOY PLATE AND PRODUCTION METHOD THEREFOR**

[54] **PLAQUE D'ALLIAGE D'ALUMINIUM A FORMAGE SUPERPLASTIQUE ET SON PROCEDE DE PRODUCTION**

[72] KUDO, TOMOYUKI, JP

[72] SHINZATO, YOSHIFUMI, JP

[72] KURAMOTO, RYO, JP

[73] UACJ CORPORATION, JP

[85] 2017-02-14

[86] 2015-10-08 (PCT/JP2015/005121)

[87] (WO2016/056240)

[30] JP (2014-208188) 2014-10-09

---

[11] **2,958,619**  
[13] C

[51] **Int.Cl. G07C 5/08 (2006.01) A01G 23/00 (2006.01) G07C 5/12 (2006.01)**

[25] EN

[54] **METHOD, ARRANGEMENT AND USER INTERFACE FOR PRESENTING DATA DESCRIBING FOREST WORK UNIT OPERATION**

[54] **PROCEDE, CONFIGURATION ET INTERFACE D'UTILISATEUR POUR PRESENTER DES DONNEES DECRIVANT UNE OPERATION D'UNITE DE TRAVAUX FORESTIERS**

[72] SAVUOJA, JANI, FI

[72] RANTA, NIKO, FI

[72] HILJANEN, JARMO, FI

[73] PONSSE OYJ, FI

[85] 2017-02-17

[86] 2015-08-26 (PCT/FI2015/050548)

[87] (WO2016/030576)

[30] FI (20145742) 2014-08-27

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,961,203**  
[13] C

[51] **Int.Cl. G06N 20/00 (2019.01)**  
[25] EN  
[54] **METHOD FOR DEVELOPING MACHINE OPERATION CLASSIFIER USING MACHINE LEARNING**

[54] **PROCEDE DE DEVELOPPEMENT DE CLASSIFICATEUR DE FONCTIONNEMENT DE MACHINE AU MOYEN D'UN APPRENTISSAGE AUTOMATIQUE**

[72] HODEL, BENJAMIN, US  
[72] KIM, SANGKYUM, US  
[72] LEE, PAUL, US  
[73] CATERPILLAR INC., US  
[85] 2017-03-13  
[86] 2015-09-15 (PCT/US2015/050168)  
[87] (WO2016/044263)  
[30] US (14/489,191) 2014-09-17

---

[11] **2,961,371**  
[13] C

[51] **Int.Cl. A61B 5/11 (2006.01) A61B 5/00 (2006.01) G08B 21/02 (2006.01)**  
[25] EN  
[54] **IMPAIRMENT DETECTION WITH BIOLOGICAL CONSIDERATIONS**

[54] **DETECTION DE DEFICIENCE A L'AIDE DE CONSIDERATIONS BIOLOGIQUES**

[72] SCHUMACHER, JENNIFER F., US  
[72] HOWARD, JAMES W., US  
[72] LOBNER, ERIC C., US  
[73] ATTENTI ELECTRONIC MONITORING LTD, US  
[85] 2017-03-14  
[86] 2015-09-15 (PCT/US2015/050073)  
[87] (WO2016/044199)  
[30] US (62/050,373) 2014-09-15

---

[11] **2,961,974**  
[13] C

[51] **Int.Cl. F21K 9/27 (2016.01) F21V 29/70 (2015.01) F21K 9/272 (2016.01) F21K 9/278 (2016.01) F21V 3/10 (2018.01)**  
[25] EN  
[54] **LED TUBE LAMP**

[54] **LAMPE TUBE A DEL**

[72] JIANG, TAO, CN  
[73] JIAXING SUPER LIGHTING ELECTRIC APPLIANCE CO., LTD, CN  
[85] 2017-03-21  
[86] 2015-09-26 (PCT/CN2015/090859)  
[87] (WO2016/045633)  
[30] CN (201410507660.9) 2014-09-28  
[30] CN (201410508899.8) 2014-09-28  
[30] CN (201410623355.6) 2014-11-06  
[30] CN (201410734425.5) 2014-12-05  
[30] CN (201510075925.7) 2015-02-12  
[30] CN (201510136796.8) 2015-03-27  
[30] CN (201510259151.3) 2015-05-19  
[30] CN (201510338027.6) 2015-06-17  
[30] CN (201510372375.5) 2015-06-26  
[30] CN (201510373492.3) 2015-06-26  
[30] CN (201510482944.1) 2015-08-07  
[30] CN (201510483475.5) 2015-08-08  
[30] CN (201510555543.4) 2015-09-02

---

[11] **2,962,778**  
[13] C

[51] **Int.Cl. C12N 5/071 (2010.01) C12Q 1/02 (2006.01) G01N 33/15 (2006.01) G01N 33/48 (2006.01)**  
[25] EN  
[54] **ENGINEERED RENAL TISSUES, ARRAYS THEREOF, AND METHODS OF MAKING THE SAME**

[54] **TISSUS RENAUX PRODUITS PAR GENIE GENETIQUE, RESEAUX CORRESPONDANTS, ET PROCEDES DE PRODUCTION**

[72] NGUYEN, DEBORAH LYNN GREENE, US  
[72] KING, SHELBY MARIE, US  
[72] PRESNELL, SHARON C., US  
[73] ORGANOVO, INC., US  
[85] 2017-03-27  
[86] 2015-10-06 (PCT/US2015/054315)  
[87] (WO2016/057571)  
[30] US (62/060,416) 2014-10-06  
[30] US (62/140,285) 2015-03-30

---

[11] **2,963,165**  
[13] C

[51] **Int.Cl. C08J 3/16 (2006.01) B33Y 70/00 (2020.01) C09J 11/00 (2006.01) C08F 6/22 (2006.01)**  
[25] EN  
[54] **AQUEOUS COAGULATABLE POLYMER DISPERSION AND USE THEREOF AS AN ADHESIVE**

[54] **DISPERSION AQUEUSE DE POLYMERES COAGULABLES ET SON UTILISATION EN TANT QUE COLLE**

[72] SCHMIDT, CHRISTIAN, DE  
[72] TERFLOTH, CHRISTIAN, DE  
[73] JOWAT SE, DE  
[85] 2017-03-30  
[86] 2015-09-30 (PCT/EP2015/072546)  
[87] (WO2016/050838)  
[30] EP (14187381.0) 2014-10-01

---

[11] **2,964,295**  
[13] C

[51] **Int.Cl. H01R 13/516 (2006.01) H01R 13/506 (2006.01) H01R 27/02 (2006.01)**  
[25] EN  
[54] **DEVICE FOR SECURING ELECTRICAL CHARGING CABLES TOGETHER**

[54] **DISPOSITIF DE SOLIDARISATION DE CABLES DE RECHARGEMENT ELECTRIQUE**

[72] FROMENT, MARION, FR  
[72] BLANC, OLIVIER, FR  
[72] SOUBIRANE, ALAIN, FR  
[73] BANKS AND ACQUIRERS INTERNATIONAL HOLDING, FR  
[85] 2017-04-11  
[86] 2015-10-16 (PCT/EP2015/074059)  
[87] (WO2016/059233)  
[30] FR (1459999) 2014-10-17

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **2,964,447**  
[13] C

[51] **Int.Cl. F25D 23/06 (2006.01) F16L 59/065 (2006.01) F16L 59/12 (2006.01) F25D 23/00 (2006.01)**

[25] EN

[54] **REFRIGERATOR AND VACUUM INSULATION PANEL THEREOF**

[54] **REFRIGERATEUR ET SON PANNEAU ISOLANT SOUS VIDE**

[72] JEONG, HYUN KU, KR  
[72] KIM, DAE HWAN, KR  
[72] KUK, KEON, KR  
[72] KIM, JUN O, KR  
[72] JANG, CHOONG HYO, KR  
[72] KIM, MIN SOO, KR  
[73] SAMSUNG ELECTRONICS CO., LTD., KR  
[85] 2017-04-12  
[86] 2015-09-30 (PCT/KR2015/010294)  
[87] (WO2016/060389)  
[30] KR (10-2014-0139822) 2014-10-16

---

[11] **2,964,501**  
[13] C

[51] **Int.Cl. A61L 27/26 (2006.01) A61L 27/56 (2006.01)**

[25] EN

[54] **A BIOMATERIAL SCAFFOLD FOR REGENERATING THE ORAL MUCOSA**

[54] **ECHAFAUDAGE EN BIOMATERIAU POUR REGENERATION DE LA MUQUEUSE ORALE**

[72] CASTRO FEO, BEGONA, ES  
[72] BAIGET ORTS, AMPARO, ES  
[73] HISTOCELL, S.L., ES  
[85] 2017-04-13  
[86] 2015-10-23 (PCT/EP2015/074610)  
[87] (WO2016/062862)  
[30] EP (14382417.5) 2014-10-24

---

---

[11] **2,965,431**  
[13] C

[51] **Int.Cl. G16H 50/30 (2018.01) G06T 7/12 (2017.01) G06V 20/69 (2022.01)**

[25] EN

[54] **COMPUTATIONAL PATHOLOGY SYSTEMS AND METHODS FOR EARLY-STAGE CANCER PROGNOSIS**

[54] **SYSTEMES ET METHODES DE PRONOSTIC DE CANCER A UN STADE PRECOCE**

[72] BARNES, MICHAEL, US  
[72] CHUKKA, SRINIVAS, US  
[72] LAFLEUR, BONNIE, US  
[72] XU, CHANG, US  
[73] VENTANA MEDICAL SYSTEMS, INC., US  
[85] 2017-04-21  
[86] 2015-12-03 (PCT/EP2015/078541)  
[87] (WO2016/087592)  
[30] US (62/087,229) 2014-12-03

---

[11] **2,965,513**  
[13] C

[51] **Int.Cl. H04W 24/00 (2009.01) H04W 12/122 (2021.01)**

[25] EN

[54] **TUNNELED MONITORING SERVICE AND METHODS**

[54] **SERVICE DE SURVEILLANCE EN TUNNEL ET PROCEDES**

[72] KING, JASON, US  
[72] WOFFORD, JEFF, US  
[72] SMITH, PATRICK, US  
[72] HAMMERSLEY, SCOTT, US  
[72] DEHAAS, RONALD, US  
[73] COVENANT EYES, INC., US  
[85] 2017-04-21  
[86] 2015-10-22 (PCT/US2015/056921)  
[87] (WO2016/065150)  
[30] US (62/067,816) 2014-10-23

---

---

[11] **2,966,970**  
[13] C

[51] **Int.Cl. H04W 48/16 (2009.01) H04W 16/14 (2009.01) H04W 56/00 (2009.01)**

[25] EN

[54] **RADIO TERMINAL, RADIO STATION, AND METHOD THEREOF**

[54] **TERMINAL SANS FIL, STATION SANS FIL ET PROCEDES ASSOCIES**

[72] FUTAKI, HISASHI, JP  
[73] NEC CORPORATION, JP  
[85] 2017-05-05  
[86] 2015-10-09 (PCT/JP2015/005137)  
[87] (WO2016/072047)  
[30] JP (2014-226392) 2014-11-06

---

[11] **2,967,112**  
[13] C

[51] **Int.Cl. A61K 31/4704 (2006.01) A61P 35/02 (2006.01)**

[25] EN

[54] **QUINOLINE CARBOXAMIDES FOR USE IN THE TREATMENT OF LEUKEMIA**

[54] **QUINOLEINES CARBOXAMIDES A UTILISER DANS LE TRAITEMENT DE LA LEUCEMIE**

[72] ERIKSSON, HELENA, SE  
[72] SVENSSON, LEIF, SE  
[72] TORNGREN, MARIE, SE  
[73] ACTIVE BIOTECH AB, SE  
[85] 2017-05-10  
[86] 2015-11-05 (PCT/EP2015/075769)  
[87] (WO2016/078921)  
[30] EP (14193776.3) 2014-11-19

---

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,967,367**  
[13] C

[51] **Int.Cl. C12N 15/864 (2006.01) C12N 15/113 (2010.01) C12N 7/01 (2006.01) C12N 15/53 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS OF TREATING AMYOTROPHIC LATERAL SCLEROSIS (ALS)**

[54] **COMPOSITIONS ET METHODES DE TRAITEMENT DE LA SCLEROSE LATERALE AMYOTROPHIQUE (SLA)**

[72] SAH, DINAH WEN-YEE, US

[72] HOU, JINZHAO, US

[72] NONNENMACHER, MATHIEU E., US

[72] ZHOU, PENGCHENG, US

[72] HOSSBACH, MARKUS, DE

[72] DECKERT, JOCHEN, DE

[73] VOYAGER THERAPEUTICS, INC., US

[85] 2017-05-10

[86] 2015-11-13 (PCT/US2015/060562)

[87] (WO2016/077687)

[30] US (62/079,588) 2014-11-14

[30] US (62/211,992) 2015-08-31

[30] US (62/234,466) 2015-09-29

---

[11] **2,967,385**  
[13] C

[51] **Int.Cl. C07C 231/02 (2006.01) C07C 59/72 (2006.01)**

[25] EN

[54] **METHODS OF MANUFACTURING TREPROSTINIL AND TREPROSTINIL DERIVATIVE PRODRUGS**

[54] **PROCEDES DE FABRICATION DE TREPROSTINIL ET PROMEDICAMENTS DERIVES DE TREPROSTINIL**

[72] MALININ, VLADIMIR, US

[72] PERKINS, WALTER, US

[72] LEIFER, FRANZISKA, US

[72] KONICEK, DONNA M., US

[72] LI, ZHILI, US

[72] PLAUNT, ADAM, US

[73] INSMED INCORPORATED, US

[85] 2017-05-10

[86] 2015-11-18 (PCT/US2015/061427)

[87] (WO2016/081658)

[30] US (62/081,515) 2014-11-18

---

[11] **2,967,564**  
[13] C

[51] **Int.Cl. G21C 15/247 (2006.01) F04D 7/06 (2006.01) F04D 29/046 (2006.01) F16C 17/03 (2006.01)**

[25] EN

[54] **MOLTEN METAL TRANSFER PUMP**

[54] **POMPE DE TRANSFERT DE METAL EN FUSION**

[72] SCHUTSKY, SERGEY YURIEVICH, RU

[72] AGRINSKIY, ANDREI NIKOLAEVICH, RU

[72] PAVLOV, NIKOLAI NIKOLAEVICH, RU

[72] BYKOV, ALEXANDER NIKOLAEVICH, RU

[72] ORLOV, BORIS VALENTINOVICH, RU

[72] SIMONOV, NIKITA IGOREVICH, RU

[73] JOINT STOCK COMPANY "AKME-ENGINEERING", RU

[85] 2017-05-11

[86] 2015-11-16 (PCT/RU2015/000790)

[87] (WO2016/080866)

[30] RU (2014146270) 2014-11-19

---

[11] **2,967,879**  
[13] C

[51] **Int.Cl. C01B 3/26 (2006.01) C01B 3/00 (2006.01) C01B 3/38 (2006.01) C01B 3/48 (2006.01)**

[25] EN

[54] **PROCESS AND PLANT FOR PRODUCING AND STORING HYDROGEN**

[54] **PROCEDE ET INSTALLATION DE PRODUCTION ET STOCKAGE D'HYDROGENE**

[72] WASSERSCHIED, PETER, DE

[72] ARLT, WOLFGANG, DE

[72] TEICHMANN, DANIEL, DE

[73] HYDROGENIOUS TECHNOLOGIES GMBH, DE

[85] 2017-05-15

[86] 2015-11-09 (PCT/EP2015/076030)

[87] (WO2016/078948)

[30] DE (10 2014 223 427.1) 2014-11-17

---

[11] **2,968,301**  
[13] C

[51] **Int.Cl. C07J 9/00 (2006.01) C07J 75/00 (2006.01)**

[25] EN

[54] **5.BETA.-6-ALKYL-7-HYDROXY-3-ONE STEROIDS AS INTERMEDIATES FOR THE PRODUCTION OF STEROIDAL FXR MODULATORS**

[54] **STEROIDES 5.BETA.-6-ALKYL-7-HYDROXY-3-ONE UTILISES EN TANT QU'INTERMEDIAIRES POUR LA PRODUCTION DE MODULATEURS DE FXR STEROIDIENS**

[72] WEYMOUTH-WILSON, ALEXANDER, GB

[72] KOMSTA, ZOFIA, GB

[72] BOYDELL, JAMES, GB

[72] WALLIS, LAURA, GB

[72] BARTLETT, NATHAN, GB

[72] SHELBOURNE, MONTERRAT, GB

[73] NZP UK LIMITED, GB

[85] 2017-05-18

[86] 2015-11-19 (PCT/GB2015/053517)

[87] (WO2016/079518)

[30] GB (1420593.4) 2014-11-19

[30] GB (1420594.2) 2014-11-19

[30] GB (1505674.0) 2015-04-01

---

[11] **2,968,360**  
[13] C

[51] **Int.Cl. F16K 15/02 (2006.01) E21B 43/12 (2006.01)**

[25] EN

[54] **EROSION RESISTANT GAS LIFT VALVE ASSEMBLIES WITH FLUID FLOW BARRIERS AND METHODS OF ASSEMBLING SAME**

[54] **ENSEMBLES SOUPAPE D'EXTRACTION AU GAZ AYANT UNE BARRIERE D'ECOULEMENT DE FLUIDE ET LEURS PROCEDES D'ASSEMBLAGE**

[72] OTTA, SHOURYA PRAKASH, US

[72] TURNQUIST, NORMAN ARNOLD, US

[72] LUSTED, RODERICK MARK, US

[72] QI, XUELE, US

[73] BAKER HUGHES OILFIELD OPERATIONS LLC, US

[85] 2017-05-18

[86] 2015-11-20 (PCT/US2015/061737)

[87] (WO2016/085786)

[30] US (14/555,260) 2014-11-26

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **2,968,717**  
[13] C

[51] **Int.Cl. H05K 1/02 (2006.01) H05K 7/14 (2006.01)**  
[25] EN  
[54] **ELECTRICAL DEVICE, SERIES OF ELECTRICAL DEVICES AND METHOD FOR PRODUCING SAME**  
[54] **APPAREIL ELECTRIQUE, SERIE D'APPAREILS ELECTRIQUES ET PROCEDE DE FABRICATION**  
[72] KOLBERT, ALEXANDER, DE  
[72] MOMANN, DIRK, DE  
[73] SEW-EURODRIVE GMBH & CO. KG, DE  
[85] 2017-05-24  
[86] 2015-12-18 (PCT/EP2015/002560)  
[87] (WO2016/119808)  
[30] DE (10 2015 000 939.7) 2015-01-28

---

[11] **2,969,033**  
[13] C

[51] **Int.Cl. E04H 12/16 (2006.01) E04H 12/18 (2006.01) E04H 12/34 (2006.01)**  
[25] EN  
[54] **PRESTRESSED SECTION OF CONCRETE FOR A WINDMILL MAST**  
[54] **SECTION PRECONTRAINTE DE BETON POUR UN MAT D'EOLIENNE**  
[72] DOBRUSKY, SVATOPLUK, FR  
[72] CHANVILLARD, GILLES, FR  
[73] HOLCIM TECHNOLOGY LTD, CH  
[85] 2017-05-26  
[86] 2015-11-30 (PCT/EP2015/078016)  
[87] (WO2016/087345)  
[30] FR (1461713) 2014-12-01

---

[11] **2,969,071**  
[13] C

[51] **Int.Cl. B29C 33/10 (2006.01) B29C 70/48 (2006.01)**  
[25] FR  
[54] **MOULDING DEVICE FOR THE MANUFACTURE OF COMPOSITE COMPONENTS USING LIQUID POLYMER RESIN**  
[54] **DISPOSITIF DE MOULAGE POUR LA FABRICATION DE PIECES EN MATERIAU COMPOSITE A PARTIR DE RESINE POLYMERE LIQUIDE**  
[72] CAUCHOIS, JEAN-PIERRE, FR  
[72] GERARD, PIERRE, FR  
[72] FRANCOIS, GILLES, FR  
[72] TAILLEMITE, SEBASTIEN, FR  
[72] PERRIN, HENRI, FR  
[73] ARKEMA FRANCE, FR  
[73] INSTITUT DE SOUDURE, FR  
[85] 2017-05-26  
[86] 2015-12-03 (PCT/FR2015/053309)  
[87] (WO2016/087788)  
[30] FR (1461865) 2014-12-03

---

[11] **2,969,247**  
[13] C

[51] **Int.Cl. H02G 1/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR THE SEVERANCE OF AN ELECTRICAL POWER CABLE, OR OF A STRAND SECTION, DEVICE THEREFOR, AS WELL AS CUTTING DEVICE**  
[54] **PROCEDE DE SECTIONNEMENT D'UN CABLE D'ALIMENTATION ELECTRIQUE, OU D'UNE SECTION DE BRIN, DISPOSITIF CORRESPONDANT, ET DISPOSITIF DE COUPE**  
[72] FRENKEN, EGBERT, DE  
[72] MCNULTY, WILLIAM JOHN, US  
[72] DARKOW, TORSTEN, DE  
[72] LEHR, ANDREAS, DE  
[73] GUSTAV KLAUKE GMBH, DE  
[73] GREENLEE TEXTRON INC., US  
[85] 2017-05-29  
[86] 2016-01-07 (PCT/US2016/012417)  
[87] (WO2016/112153)  
[30] US (62/100,639) 2015-01-07

---

[11] **2,969,372**  
[13] C

[51] **Int.Cl. C07H 19/20 (2006.01) A61K 31/7064 (2006.01) A61K 31/7068 (2006.01) A61K 31/7072 (2006.01) A61P 31/12 (2006.01) A61P 31/20 (2006.01) C07H 19/06 (2006.01)**  
[25] EN  
[54] **PHOSPHORAMIDATES FOR THE TREATMENT OF HEPATITIS B VIRUS**  
[54] **PHOSPHORAMIDATES POUR LE TRAITEMENT DU VIRUS DE L'HEPATITE B**  
[72] DE LA ROSA, ABEL, US  
[72] PAINTER, GEORGE, US  
[72] BLUEMLING, GREGORY R., US  
[73] EMORY UNIVERSITY, US  
[85] 2017-05-30  
[86] 2015-12-07 (PCT/US2015/064338)  
[87] (WO2016/099982)  
[30] US (62/091,686) 2014-12-15  
[30] US (62/094,117) 2014-12-19  
[30] US (62/201,974) 2015-08-06

---

[11] **2,969,376**  
[13] C

[51] **Int.Cl. B66B 5/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR OPERATING AN ELECTRONIC SAFETY SYSTEM WITH TEMPORARY SUBSCRIBERS**  
[54] **PROCEDE POUR FAIRE FONCTIONNER UN SYSTEME DE SECURITE ELECTRONIQUE COMPRENANT DES ABONNES TEMPORAIRES**  
[72] SONNENMOSER, ASTRID, CH  
[72] LUSTENBERGER, IVO, CH  
[72] HESS, MARTIN, CH  
[73] INVENTIO AG, CH  
[85] 2017-05-31  
[86] 2015-12-15 (PCT/EP2015/079748)  
[87] (WO2016/096826)  
[30] EP (14199056.4) 2014-12-18

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,969,520**  
[13] C

- [51] **Int.Cl. E02F 9/28 (2006.01) E21C 35/18 (2006.01)**  
[25] EN  
[54] **REPLACEABLE SHROUD FOR WORK IMPLEMENT**  
[54] **CARENAGE REMPLACABLE POUR OUTIL DE TRAVAIL**  
[72] SERRURIER, DOUGLAS C., US  
[72] MAGULURU, MADHUKAR, US  
[73] CATERPILLAR INC., US  
[85] 2017-06-01  
[86] 2015-11-16 (PCT/US2015/060849)  
[87] (WO2016/089581)  
[30] US (62/088,171) 2014-12-05  
[30] US (14/879,292) 2015-10-09

---

[11] **2,970,241**  
[13] C

- [51] **Int.Cl. F16H 55/18 (2006.01) F16H 57/12 (2006.01)**  
[25] EN  
[54] **SCISSOR GEAR ASSEMBLY WITH INTEGRAL ISOLATION MECHANISM**  
[54] **ENSEMBLE ENGRENAGE EN CISEAUX DOTE D'UN MECANISME D'ISOLATION INTEGRE**  
[72] SEFCIK, MICHAEL C., US  
[72] BIGA, MICHAEL, US  
[73] LINAMAR CORPORATION, CA  
[85] 2017-06-08  
[86] 2015-12-11 (PCT/IB2015/002458)  
[87] (WO2016/092370)  
[30] US (62/090,641) 2014-12-11

---

[11] **2,970,426**  
[13] C

- [51] **Int.Cl. B02C 18/36 (2006.01) B02C 18/10 (2006.01) B02C 19/20 (2006.01)**  
[25] EN  
[54] **DISGREGATING DEVICE OF BIOLOGICAL MATERIAL AND CORRESPONDING MANUFACTURING METHOD AND METHOD FOR THE PREPARATION OF CELL SUSPENSIONS AND TISSUE MICROGRAFTS**  
[54] **DISPOSITIF DE DESAGREGATION D'UN MATRIEU BIOLOGIQUE ET PROCEDE DE FABRICATION CORRESPONDANT, ET PROCEDE POUR LA PREPARATION DE SUSPENSIONS CELLULAIRES ET DE MICROGREFFES TISSULAIRES**  
[72] GRAZIANO, ANTONIO, IT  
[72] D'AQUINO, RICCARDO, IT  
[73] HUMAN BRAIN WAVE S.R.L., IT  
[85] 2017-06-09  
[86] 2015-12-14 (PCT/IB2015/059571)  
[87] (WO2016/097960)  
[30] IT (MI2014A002143) 2014-12-15

---

[11] **2,970,732**  
[13] C

- [51] **Int.Cl. B01D 15/32 (2006.01) C07K 1/20 (2006.01)**  
[25] EN  
[54] **TARGET MOLECULE CAPTURE FROM CRUDE SOLUTIONS**  
[54] **CAPTURE DE MOLECULES CIBLES PAR DES SOLUTIONS BRUTES**  
[72] SKUDAS, ROMAS, DE  
[72] ADRIAN, KLAUS, DE  
[72] EDELMANN, BIANCA, DE  
[72] JOEHNCK, MATTHIAS, DE  
[73] MERCK PATENT GMBH, DE  
[85] 2017-06-13  
[86] 2015-11-18 (PCT/EP2015/002306)  
[87] (WO2016/096071)  
[30] EP (14004224.3) 2014-12-15

---

[11] **2,971,110**  
[13] C

- [51] **Int.Cl. C07D 403/06 (2006.01) A61K 31/496 (2006.01) A61P 19/02 (2006.01) A61P 19/04 (2006.01)**  
[25] EN  
[54] **5-[(PIPERAZIN-1-YL)-3-OXO-PROPYL]-IMIDAZOLIDINE-2,4-DIONE DERIVATIVES AS ADAMTS INHIBITORS FOR THE TREATMENT OF OSTEOARTHRITIS**  
[54] **DERIVES 5-[(PIPERAZINE-1-YL)-3-OXO-PROPYL]-IMIDAZOLIDINE-2,4-DIONE COMME INHIBITEURS D'ADAMTS POUR LE TRAITEMENT DE L'ARTHROSE**  
[72] BREBION, FRANCK LAURENT, FR  
[72] ALVEY, LUKE JONATHAN, FR  
[72] AMANTINI, DAVID, FR  
[72] DEPREZ, PIERRE MARC MARIE JOSEPH, FR  
[72] GOSMINI, ROMAIN LUC MARIE, FR  
[72] JARY, HELENE MARIE, FR  
[72] PEIXOTO, CHRISTOPHE, FR  
[72] VARIN, MARIE LAURENCE CLAIRE, FR  
[72] DE CEUNINCK, FREDERIC ANDRE, FR  
[72] POP-BOTEZ, IULIANA ECATERINA, FR  
[73] GALAPAGOS NV, BE  
[85] 2017-06-15  
[86] 2015-12-18 (PCT/EP2015/080430)  
[87] (WO2016/102347)  
[30] EP (EP14307129.8) 2014-12-22

---

[11] **2,971,354**  
[13] C

- [51] **Int.Cl. E01F 13/04 (2006.01) E04H 17/14 (2006.01)**  
[25] EN  
[54] **EXTENSIBLE/RETRACTABLE MOVABLE FENCE**  
[54] **CLOTURE MOBILE DEPLOYABLE/RETRACTABLE**  
[72] ZHOU, YANYAN, CN  
[72] LEI, XINSHENG, CN  
[73] SICHUAN BOWA ENGINEERING MATERIAL CO., LTD., CN  
[86] (2971354)  
[87] (2971354)  
[22] 2017-06-19

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **2,971,550**  
[13] C

[51] **Int.Cl. C08F 20/02 (2006.01) C08J 5/24 (2006.01) D06M 13/203 (2006.01) D06M 15/263 (2006.01)**

[25] EN

[54] **LIQUID (METH)ACRYLIC SYRUP, METHOD FOR IMPREGNATING A FIBROUS SUBSTRATE WITH SAID SYRUP, AND COMPOSITE MATERIAL PRODUCED AFTER POLYMERISATION OF SAID IMPREGNATION SYRUP**

[54] **SIROP (METH)ACRYLIQUE LIQUIDE, PROCEDE D'IMPREGNATION D'UN SUBSTRAT FIBREUX PAR LEDIT SIROP, ET MATERIAU COMPOSITE OBTENU APRES POLYMERISATION DUDIT SIROP D'IMPREGNATION**

[72] GERARD, PIERRE, FR

[72] TAILLEMITE, SEBASTIEN, FR

[72] CALIN, DANIEL, FR

[73] ARKEMA FRANCE, FR

[85] 2017-06-19

[86] 2015-12-22 (PCT/FR2015/053736)

[87] (WO2016/102899)

[30] FR (14 63054) 2014-12-22

---

[11] **2,971,740**  
[13] C

[51] **Int.Cl. G06Q 10/063 (2023.01) G06F 16/29 (2019.01) G06Q 10/1053 (2023.01)**

[25] EN

[54] **LABOR MARKETPLACE EXCHANGE COMPUTING SYSTEMS AND METHODS**

[54] **PROCEDES ET SYSTEMES INFORMATIQUES D'ECHANGE SUR UNE PLACE DE MARCHE DE MAIN-D'OEUVRE**

[72] CATINO, THEODORE A., US

[72] CATINO, BEVERLY A., US

[72] CATINO, MITCHELL A., US

[73] GIGSMART, INC., US

[85] 2017-06-20

[86] 2015-12-30 (PCT/US2015/068094)

[87] (WO2016/111898)

[30] US (62/100,211) 2015-01-06

---

[11] **2,971,796**  
[13] C

[51] **Int.Cl. A61F 13/00 (2006.01) A61F 13/02 (2006.01) A61M 1/00 (2006.01) B29C 65/00 (2006.01) B29C 65/16 (2006.01) F04B 43/04 (2006.01) F04B 45/047 (2006.01) F04B 49/06 (2006.01) G09F 13/08 (2006.01)**

[25] EN

[54] **NEGATIVE PRESSURE WOUND THERAPY APPARATUS AND METHODS**

[54] **APPAREIL ET PROCEDES DE TRAITEMENT DES PLAIES PAR PRESSION NEGATIVE**

[72] ASKEM, BEN ALAN, GB

[72] FERRARI, IACOPO CLAUDIO, MU

[72] FOINI, MATTEO, MU

[72] FORZANI, PAOLO, MU

[72] FRYER, CHRISTOPHER JOHN, GB

[72] HUNT, ALLAN KENNETH FRAZER GRUGEON, GB

[72] RIVA, CHRISTIAN, MU

[73] SMITH & NEPHEW PLC, GB

[85] 2017-06-21

[86] 2015-12-21 (PCT/IB2015/002536)

[87] (WO2016/103033)

[30] US (62/095,721) 2014-12-22

---

[11] **2,971,898**  
[13] C

[51] **Int.Cl. E21D 9/00 (2006.01) E21D 9/14 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR FORMING TUNNELS FOR TRANSPORT ROUTES.**

[54] **PROCEDE ET APPAREIL POUR FORMER DES TUNNELS POUR DES VOIES DE TRANSPORT.**

[72] THOMSON, JAMES CRAWFORD, FR

[73] THOMSON, JAMES CRAWFORD, FR

[85] 2017-06-15

[86] 2015-12-22 (PCT/GB2015/054108)

[87] (WO2016/102946)

[30] GB (1422937.1) 2014-12-22

---

[11] **2,972,038**  
[13] C

[51] **Int.Cl. C12N 15/55 (2006.01) A61K 38/46 (2006.01) A61K 48/00 (2006.01) A61P 3/00 (2006.01) A61P 3/08 (2006.01) C12N 7/01 (2006.01) C12N 9/16 (2006.01) C12N 15/864 (2006.01)**

[25] EN

[54] **ADENO-ASSOCIATED VIRUS VECTORS ENCODING MODIFIED G6PC AND USES THEREOF**

[54] **VECTEURS A BASE DE VIRUS ADENO-ASSOCIE CODANT POUR UNE G6PC MODIFIEE, ET UTILISATIONS DE CES DERNIERS**

[72] CHOU, JANICE J., US

[73] THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES, US

[85] 2017-06-22

[86] 2015-12-22 (PCT/US2015/067338)

[87] (WO2016/106303)

[30] US (62/096,400) 2014-12-23

---

[11] **2,972,487**  
[13] C

[51] **Int.Cl. E05B 65/06 (2006.01) E05B 65/00 (2006.01) E05B 65/44 (2006.01) E05G 1/00 (2006.01) E05G 1/04 (2006.01)**

[25] EN

[54] **SECURITY DEVICE FOR INTEGRATION INTO A SECURITY SYSTEM**

[54] **DISPOSITIF DE SECURITE CONCU POUR UNE INTEGRATION DANS UN SYSTEME DE SECURITE**

[72] LEE, JONATHAN, US

[73] LEE, JONATHAN, US

[85] 2017-06-27

[86] 2016-01-11 (PCT/US2016/012800)

[87] (WO2016/115010)

[30] US (14/594,553) 2015-01-12

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,973,168**  
[13] C

[51] **Int.Cl. E06B 9/56 (2006.01) E06B 9/58 (2006.01)**  
[25] EN  
[54] **UPRIGHT FOR A SHADING SYSTEM, REMOVABLE FLANGE OF THE UPRIGHT AND CORRESPONDING COUPLING MEANS**  
[54] **MONTANT DESTINE A UN SYSTEME D'OMBRAGE, BRIDE AMOVIBLE DU MONTANT, ET MOYENS DE COUPLAGE CORRESPONDANTS**  
[72] LOMBARDINI, MARCO, CH  
[73] PLASTEX SA, CH  
[85] 2017-07-06  
[86] 2016-05-25 (PCT/EP2016/061836)  
[87] (WO2016/193103)  
[30] EP (15169794.3) 2015-05-29

---

[11] **2,973,624**  
[13] C

[51] **Int.Cl. B65D 77/06 (2006.01) B65D 75/58 (2006.01) B65D 83/00 (2006.01)**  
[25] EN  
[54] **CLEANING LIQUID DISPENSING SYSTEM**  
[54] **SYSTEME DE DISTRIBUTION DE LIQUIDE DE LAVAGE**  
[72] GATELY, JOHN DECLAN, GB  
[72] PRYOR, JAMES GARFIELD, GB  
[72] SMITH, ELIZABETH JANE, GB  
[73] UNILEVER GLOBAL IP LIMITED, GB  
[85] 2017-07-12  
[86] 2016-01-13 (PCT/EP2016/050583)  
[87] (WO2016/113317)  
[30] EP (15151533.5) 2015-01-16

---

---

[11] **2,974,167**  
[13] C

[51] **Int.Cl. A61K 9/00 (2006.01) B29C 67/00 (2017.01)**  
[25] EN  
[54] **DRUG DELIVERY SYSTEM COMPRISING A NON-STEROIDAL ANTI-INFLAMMATORY (NSAID) AND A PROGESTOGENIC COMPOUND AND METHODS FOR MANUFACTURING**  
[54] **SYSTEME D'ADMINISTRATION DE MEDICAMENT COMPRENANT UN ANTI-INFLAMMATOIRE NON STEROIDIEN (AINS) ET UN COMPOSE PROGESTATIF, ET PROCEDES DE FABRICATION**  
[72] JUKARAINEN, HARRI, FI  
[72] PIHLAJA, JYRKI, FI  
[72] HOLMBERG, SVANTE, FI  
[72] VALO, TUULA, FI  
[72] HONKA, ANU-LIISA, FI  
[72] HOLLAENDER, JENNY, FI  
[73] BAYER OY, FI  
[85] 2017-07-18  
[86] 2016-01-20 (PCT/EP2016/051135)  
[87] (WO2016/116502)  
[30] US (62/106,073) 2015-01-21

---

[11] **2,974,220**  
[13] C

[51] **Int.Cl. A61K 31/7052 (2006.01) A61K 9/08 (2006.01) A61K 47/22 (2006.01) A61P 31/00 (2006.01) A61P 31/04 (2006.01)**  
[25] EN  
[54] **AQUEOUS SOLUTION FORMULATIONS OF VANCOMYCIN**  
[54] **FORMULATIONS DE SOLUTIONS AQUEUSES DE VANCOMYCINE**  
[72] CHEN, ANDREW XIAN, US  
[73] LATITUDE PHARMACEUTICALS, INC., US  
[85] 2017-07-18  
[86] 2016-02-05 (PCT/US2016/016829)  
[87] (WO2016/127087)  
[30] US (62/113,322) 2015-02-06

---

---

[11] **2,974,591**  
[13] C

[51] **Int.Cl. E05F 1/10 (2006.01) E05F 1/08 (2006.01)**  
[25] EN  
[54] **PIVOTING FITTING**  
[54] **FERRURE PIVOTANTE**  
[72] KAISER, ANDRE, DE  
[72] MONTECCHIO, ANDREAS, DE  
[73] HETTICH HOLDING GMBH & CO. OHG, DE  
[85] 2017-07-21  
[86] 2016-02-15 (PCT/EP2016/053179)  
[87] (WO2016/131780)  
[30] DE (10 2015 102 393.8) 2015-02-19

---

[11] **2,974,844**  
[13] C

[51] **Int.Cl. F16D 29/00 (2006.01) F16D 37/02 (2006.01)**  
[25] EN  
[54] **CABLE-DRIVEN SYSTEM WITH MAGNETORHEOLOGICAL FLUID CLUTCH APPARATUSES**  
[54] **SYSTEME ENTRAINE PAR CABLE COMPRENANT DES APPAREILS D'EMBRAYAGE HYDRAULIQUE MAGNETORHEOLOGIQUE**  
[72] PLANTE, JEAN-SEBASTIEN, CA  
[72] DENNINGER, MARC, CA  
[72] CHOUINARD, PATRICK, CA  
[72] JULIO, GUIFRE, CA  
[72] VIAU, JOEL, CA  
[72] LAROSE, PASCAL, CA  
[73] SOCIETE DE COMMERCIALISATION DES PRODUITS DE LA RECHERCHE APPLIQUEE SOCPRA SCIENCES ET GENIE S.E.C., CA  
[85] 2017-07-25  
[86] 2016-02-25 (PCT/CA2016/050191)  
[87] (WO2016/134472)  
[30] US (62/120,556) 2015-02-25

---



**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **2,974,850**  
[13] C

[51] **Int.Cl. A61B 34/00 (2016.01) A61B 34/20 (2016.01) A61B 5/107 (2006.01) A61B 17/74 (2006.01) A61F 2/32 (2006.01) A61F 2/46 (2006.01)**

[25] EN

[54] **LEG LENGTH CALCULATION IN COMPUTER-ASSISTED SURGERY**

[54] **CALCUL DE LONGUEUR DE JAMBE EN CHIRURGIE ASSISTEE PAR ORDINATEUR**

[72] DUVAL, KARINE, CA

[72] LI, DI, CA

[72] MOREAU-BELANGER, LAURENCE, CA

[72] PELLETIER, BENOIT, CA

[72] LEONE, YVAN, CA

[72] VALIN, MYRIAM, CA

[72] PARADIS, FRANCOIS, CA

[73] ORTHOSOFT ULC, CA

[85] 2017-07-25

[86] 2016-02-02 (PCT/CA2016/050090)

[87] (WO2016/123704)

[30] US (62/110,861) 2015-02-02

---

[11] **2,975,543**  
[13] C

[51] **Int.Cl. E04H 9/02 (2006.01) G21D 1/00 (2006.01)**

[25] EN

[54] **REACTOR MODULE SUPPORT STRUCTURE**

[54] **STRUCTURE DE SUPPORT DE MODULE DE REACTEUR**

[72] LISZKAI, TAMAS, US

[72] XU, HEQIN, US

[72] SNYDER, MATTHEW, US

[72] KOSKI, WILLIAM, US

[73] NUSCALE POWER, LLC, US

[85] 2017-07-31

[86] 2016-03-01 (PCT/US2016/018526)

[87] (WO2016/148832)

[30] US (14/662,059) 2015-03-18

---

[11] **2,976,608**  
[13] C

[51] **Int.Cl. C08L 33/02 (2006.01) C08F 2/22 (2006.01) C08J 3/03 (2006.01) C08J 3/24 (2006.01) C08L 101/00 (2006.01) C09D 133/02 (2006.01)**

[25] EN

[54] **AQUEOUS DISPERSIONS**

[54] **DISPERSIONS AQUEUSES**

[72] STEINER, ANDREAS, AT

[72] LUNZER, FLORIAN, AT

[72] ZIRNGAST, MICHAELA, AT

[72] PIETSCH, CLAUDIA, AT

[72] BILLIANI, JOHANN, AT

[72] GOBEC, MICHAEL, AT

[72] HYDEN, WOLFGANG, AT

[73] ALLNEX AUSTRIA GMBH, AT

[85] 2017-08-14

[86] 2016-04-07 (PCT/EP2016/057644)

[87] (WO2016/173821)

[30] EP (15165241.9) 2015-04-27

---

[11] **2,976,866**  
[13] C

[51] **Int.Cl. C12N 1/20 (2006.01) A01P 21/00 (2006.01) B09C 1/10 (2006.01) C05F 1/00 (2006.01) C05F 11/08 (2006.01) C12N 1/14 (2006.01) C12P 1/04 (2006.01)**

[25] EN

[54] **MICROBIAL CONSORTIA AND AGRICULTURAL AND BIODEGRADATION APPLICATIONS THEREOF**

[54] **CONSORTIUMS MICROBIENS**

[72] YOON, SUNG-YONG H., US

[72] SWORDS, KATHLEEN, US

[72] WAGNER, D. RY, US

[72] RAJAGOPAL, SELVASUNDARAM, IN

[73] AMVAC CHEMICAL CORPORATION, US

[85] 2017-08-16

[86] 2016-02-26 (PCT/IB2016/051084)

[87] (WO2016/135699)

[30] US (62/126,337) 2015-02-27

---

[11] **2,977,191**  
[13] C

[51] **Int.Cl. C12N 1/20 (2006.01) B09C 1/10 (2006.01) C05F 1/00 (2006.01) C05F 11/08 (2006.01) C12N 1/14 (2006.01)**

[25] EN

[54] **MICROBIAL CONSORTIA AND AGRICULTURAL AND BIODEGRADATION APPLICATIONS THEREOF**

[54] **COMMUNAUTES BACTERIENNES ET APPLICATIONS DANS LES DOMAINES DE L'AGRICULTURE ET DE LA BIODEGRADATION**

[72] YOON, SUNG-YONG H., US

[72] SWORDS, KATHLEEN, US

[72] WAGNER, D. RY, US

[72] JOHNSON, BRENT, US

[72] THORPE, DARRELL T., US

[72] RAJAGOPAL, SELVASUNDARAM, IN

[73] AMVAC CHEMICAL CORPORATION, US

[85] 2017-08-18

[86] 2016-02-26 (PCT/IB2016/051085)

[87] (WO2016/135700)

[30] US (62/126,343) 2015-02-27

---

[11] **2,977,493**  
[13] C

[51] **Int.Cl. A61K 47/42 (2017.01) A61K 47/69 (2017.01) A61K 9/14 (2006.01) A61K 35/74 (2015.01) A61K 39/385 (2006.01) A61K 47/30 (2006.01)**

[25] EN

[54] **DISPLAY PLATFORM FROM BACTERIAL SPORE COAT PROTEINS**

[54] **PLATEFORME D'AFFICHAGE PROVENANT DE PROTEINES D'ENVELOPPE DE SPORES BACTERIENNES**

[72] RAMAMURTHI, KUMARAN S., US

[72] WU, I-LIN, US

[73] THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES, US

[85] 2017-08-22

[86] 2015-08-07 (PCT/US2015/044316)

[87] (WO2016/140702)

[30] US (62/127,738) 2015-03-03

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,978,380**  
[13] C

[51] **Int.Cl. G06F 21/36 (2013.01) G06F 21/60 (2013.01) H04L 9/14 (2006.01) H04L 9/30 (2006.01) H04L 9/32 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR ENCRYPTION**

[54] **PROCEDE ET SYSTEME DE CHIFFREMENT**

[72] LANDROCK, PETER, GB

[72] FORGET, GUILLAUME, DE

[72] PEDERSEN, TORBEN PRYDS, DK

[73] CRYPTOMATHIC LTD, GB

[85] 2017-08-31

[86] 2016-03-01 (PCT/GB2016/050536)

[87] (WO2016/139462)

[30] GB (1503611.4) 2015-03-03

---

[11] **2,978,659**  
[13] C

[51] **Int.Cl. C12N 15/09 (2006.01) C12N 15/85 (2006.01)**

[25] EN

[54] **EUKARYOTIC EXPRESSION VECTORS COMPRISING REGULATORY ELEMENTS OF THE GLOBIN GENE CLUSTERS**

[54] **VECTEURS D'EXPRESSION EUCARYOTE COMPRENANT DES ELEMENTS REGULATEURS DES GROUPES DE GENES DE GLOBINES**

[72] GOLETZ, STEFFEN, DE

[72] JAHN, DOREEN, DE

[72] DANIELCZYK, ANTJE, DE

[73] GLYCOTOPE GMBH, DE

[85] 2017-09-05

[86] 2016-03-30 (PCT/EP2016/056926)

[87] (WO2016/156404)

[30] LU (92686) 2015-03-31

[30] EP (15161922.8) 2015-03-31

---

[11] **2,978,956**  
[13] C

[51] **Int.Cl. G10K 11/172 (2006.01)**

[25] EN

[54] **ACOUSTIC STRUCTURES WITH MULTIPLE DEGREES OF FREEDOM**

[54] **STRUCTURES ACOUSTIQUES AVEC PLUSIEURS DEGRES DE LIBERTE**

[72] ICHIHASHI, FUMITAKA, US

[73] HEXCEL CORPORATION, US

[85] 2017-09-06

[86] 2016-04-18 (PCT/US2016/028029)

[87] (WO2016/182693)

[30] US (14/708,382) 2015-05-11

---

[11] **2,979,026**  
[13] C

[51] **Int.Cl. F41A 33/04 (2006.01) A01M 29/16 (2011.01) A63H 5/04 (2006.01) G10K 15/04 (2006.01)**

[25] EN

[54] **NOISE GENERATION DEVICE**

[54] **DISPOSITIF DE PRODUCTION DE BRUIT**

[72] HUGILL, MARK DANIEL, NZ

[72] HUGILL, SHANE ROSS, NZ

[73] RDX TECHNOLOGIES LIMITED, NZ

[85] 2017-09-07

[86] 2016-03-18 (PCT/NZ2016/050042)

[87] (WO2016/148586)

[30] NZ (705968) 2015-03-18

---

[11] **2,979,326**  
[13] C

[51] **Int.Cl. C07D 401/06 (2006.01) A61K 31/4178 (2006.01) A61K 31/454 (2006.01) A61P 25/04 (2006.01) A61P 29/02 (2006.01) C07D 403/06 (2006.01)**

[25] EN

[54] **SUBSTITUTED IMIDAZOL DERIVATIVE AND PHARMACEUTICAL COMPOSITIONS THEREOF USEFUL AS ANALGESIC**

[54] **DERIVE D'IMIDAZOLE SUBSTITUE ET COMPOSITIONS PHARMACEUTIQUES CONNEXES UTILES COMME ANALGESIQUES**

[72] OSADA, YUJI, JP

[72] IZUMIMOTO, NAOKI, JP

[72] MORITA, YASUHIRO, JP

[72] UDAGAWA, SHUJI, JP

[72] ISEKI, KATSUHIKO, JP

[72] MIYOSHI, TOMOYA, JP

[72] IWANO, SHUNSUKE, JP

[73] TORAY INDUSTRIES, INC., JP

[85] 2017-09-11

[86] 2016-03-24 (PCT/JP2016/059293)

[87] (WO2016/152952)

[30] JP (2015-061249) 2015-03-24

---

[11] **2,979,557**  
[13] C

[51] **Int.Cl. H04L 12/66 (2006.01) H04L 9/14 (2006.01) H04L 9/18 (2006.01) H04L 67/1097 (2022.01)**

[25] EN

[54] **SECURE AND CONTROL DATA MIGRATING BETWEEN ENTERPRISE AND CLOUD SERVICES**

[54] **MIGRATION DE DONNEES SECURISEE ET DE COMMANDE ENTRE UNE ENTREPRISE ET DES SERVICES EN NUAGE**

[72] COIMBATORE, SARAVANAN, US

[73] THALES DIS CPL USA, INC., US

[85] 2017-09-12

[86] 2016-03-03 (PCT/US2016/020681)

[87] (WO2016/144694)

[30] US (14/656,518) 2015-03-12

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **2,979,796**  
[13] C

[51] **Int.Cl. B65D 75/20 (2006.01) B65B 11/54 (2006.01) B65B 61/18 (2006.01) B65D 75/58 (2006.01) B65D 75/66 (2006.01) B65D 85/60 (2006.01)**

[25] EN

[54] **WRAPPER FOR CONFECTIONARY PRODUCTS**

[54] **EMBALLAGE POUR PRODUITS DE CONFISERIE**

[72] TERRASI, GIUSEPPE, IT

[73] SOREMARTEC S.A., LU

[85] 2017-09-14

[86] 2016-04-22 (PCT/IB2016/052304)

[87] (WO2016/174557)

[30] IT (102015000013414) 2015-04-28

---

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

[51] **Int.Cl. B65G 15/38 (2006.01) B41J 11/00 (2006.01)**

[25] EN

[54] **CONVEYOR BELT HAVING MAGNETIC LINEAR ENCODER READABLE MARKERS**

[54] **BANDE TRANSPORTEUSE COMPRENANT DES MARQUEURS LISIBLES PAR CODEUR LINEAIRES MAGNETIQUES**

[72] LEHMANN, ANDREAS, CH

[72] MARCON, GIANFRANCO, IT

[72] BASSI, GIUSEPPE, IT

[72] BERTACCHI, SERGIO, IT

[72] MAPELLI, MATTEO, IT

[73] HABASIT AG, CH

[85] 2017-09-15

[86] 2016-03-10 (PCT/EP2016/055083)

[87] (WO2016/146463)

[30] EP (15159566.7) 2015-03-18

---

[11] **2,980,461**  
[13] C

[51] **Int.Cl. H01M 4/86 (2006.01) H01M 4/88 (2006.01) H01M 4/96 (2006.01) H01M 8/10 (2016.01)**

[25] EN

[54] **GAS-DIFFUSION ELECTRODE SUBSTRATE COMPRISING AN ELECTRODE SUBSTRATE AND A MICROPOROUS LAYER DISPOSED THEREON AND METHOD FOR MANUFACTURING SAME**

[54] **SUBSTRAT D'ELECTRODE A DIFFUSION DE GAZ COMPRENANT UN SUBSTRAT D'ELECTRODE ET UNE COUCHE MICROPOREUSE DEPOSEE SUR CELUI-CI, ET METHODE DE FABRICATION CONNEXE**

[72] HASHIMOTO, MASARU, JP

[72] WAKATABE, MICHIO, JP

[72] KATO, SHO, JP

[73] TORAY INDUSTRIES, INC., JP

[85] 2017-09-20

[86] 2016-04-15 (PCT/JP2016/062149)

[87] (WO2016/171082)

[30] JP (2015-089039) 2015-04-24

---

[11] **2,980,728**  
[13] C

[51] **Int.Cl. C08L 91/00 (2006.01) C08L 23/02 (2006.01) G02B 6/44 (2006.01)**

[25] EN

[54] **FLOODING COMPOUNDS FOR TELECOMMUNICATION CABLES**

[54] **COMPOSES DE REMPLISSAGE POUR CABLES DE TELECOMMUNICATION**

[72] ZHANG, YICHI, US

[72] ESSEGHIR, MOHAMED, US

[72] KMIEC, CHESTER J., US

[72] JIN, YI, US

[72] YALVAC, SELIM, US

[73] DOW GLOBAL TECHNOLOGIES LLC, US

[85] 2017-09-22

[86] 2016-03-14 (PCT/US2016/022254)

[87] (WO2016/160316)

[30] US (62/140,677) 2015-03-31

---

[11] **2,981,226**  
[13] C

[51] **Int.Cl. B01D 53/02 (2006.01) B01D 53/14 (2006.01) B01D 53/26 (2006.01) F24F 3/14 (2006.01) F25B 39/00 (2006.01) F25B 39/02 (2006.01)**

[25] EN

[54] **DEVICE FOR THE EXTRACTION OF WATER FROM THE ENVIRONMENT**

[54] **DISPOSITIF DESTINE A EXTRAIRE DE L'EAU DE L'ENVIRONNEMENT**

[72] VELASCO VALCKE, FRANCISCO JAVIER, CO

[73] PANACEA QUANTUM LEAP TECHNOLOGY LLC, US

[85] 2017-09-28

[86] 2016-03-30 (PCT/CO2016/000002)

[87] (WO2016/155678)

[30] CO (15-072388) 2015-03-30

---

[11] **2,981,936**  
[13] C

[51] **Int.Cl. B65D 50/06 (2006.01) B65D 51/24 (2006.01)**

[25] FR

[54] **STOPPER FOR A CONTAINER NECK**

[54] **BOUCHON POUR UN COL DE RECIPIENT**

[72] LUZZATO, MICHEL, FR

[73] NOVEMBAL USA INC., US

[85] 2017-10-05

[86] 2016-04-27 (PCT/EP2016/059406)

[87] (WO2016/174089)

[30] FR (1553816) 2015-04-28

---

[11] **2,982,156**  
[13] C

[51] **Int.Cl. E05F 5/00 (2017.01) E05F 5/02 (2006.01)**

[25] EN

[54] **FURNITURE HINGE COMPRISING A DAMPER**

[54] **CHARNIERE DE MEUBLE DOTEE D'UN AMORTISSEUR**

[72] UMIT, KIRENCI, TR

[72] ERTAC, CAPUR, TR

[73] SAMET KALIP VE MADEN ESYA SAN. VE TIC A.S., TR

[85] 2017-10-06

[86] 2016-04-18 (PCT/EP2016/058514)

[87] (WO2016/177559)

[30] DE (10 2015 106 919.9) 2015-05-04

**Canadian Patents Issued  
May 16, 2023**

---

[11] **2,983,037**  
[13] C

[51] **Int.Cl. F16D 37/02 (2006.01) B64C 27/59 (2006.01) F16D 29/00 (2006.01)**

[25] EN

[54] **MAGNETORHEOLOGICAL FLUID CLUTCH APPARATUS WITH CYLINDRICAL FLUID GAP**

[54] **APPAREIL D'EMBRAYAGE A FLUIDE MAGNETORHEOLOGIQUE AVEC ENTREFER A FLUIDE CYLINDRIQUE**

[72] PLANTE, JEAN-SEBASTIEN, CA  
[72] DENNINGER, MARC, CA  
[72] JULIO, GUIFRE, CA  
[72] CHOUINARD, PATRICK, CA  
[72] LAROSE, PASCAL, CA  
[73] EXONETIK INC., CA  
[85] 2017-10-17  
[86] 2016-04-21 (PCT/CA2016/050464)  
[87] (WO2016/168934)  
[30] US (62/150,611) 2015-04-21  
[30] US (62/173,606) 2015-06-10

---

[11] **2,983,348**  
[13] C

[51] **Int.Cl. C08G 18/83 (2006.01) C08J 7/12 (2006.01) C08J 9/224 (2006.01) C08J 9/28 (2006.01)**

[25] EN

[54] **FUNCTIONALIZED ISOCYANATE BASED POROUS MATERIALS**

[54] **MATERIAUX POREUX A BASE D'ISOCYANATE FONCTIONNALISE**

[72] JONCHERAY, THOMAS JULIEN, BE  
[72] VANDENBROECK, JAN, BE  
[72] GEUMEZ, GILLES JEAN, BE  
[73] HUNTSMAN INTERNATIONAL LLC, US  
[85] 2017-10-19  
[86] 2016-04-20 (PCT/EP2016/058759)  
[87] (WO2016/173903)  
[30] EP (15165161.9) 2015-04-27

---

---

[11] **2,983,581**  
[13] C

[51] **Int.Cl. B65H 3/08 (2006.01) B65G 59/10 (2006.01) B65H 5/14 (2006.01)**

[25] EN

[54] **APPARATUS FOR UNSTACKING PACKAGING UNITS**

[54] **APPAREIL POUR DESEMPILER DES UNITES D'EMBALLAGE**

[72] KNOOK, ARIE JAN THEODORUS, NL  
[73] MOBA GROUP B.V., NL  
[85] 2017-10-20  
[86] 2016-04-25 (PCT/NL2016/050289)  
[87] (WO2016/171561)  
[30] EP (15001229.2) 2015-04-24

---

[11] **2,984,070**  
[13] C

[51] **Int.Cl. F26B 9/02 (2006.01) B09B 3/40 (2022.01) B09B 1/00 (2006.01) B65F 5/00 (2006.01) C05F 9/00 (2006.01) C05F 17/00 (2020.01) E04D 12/00 (2006.01) E04H 5/00 (2006.01) F26B 3/32 (2006.01) F26B 25/10 (2006.01)**

[25] EN

[54] **METHOD FOR TREATING WASTE**

[54] **PROCEDE DE TRAITEMENT DE DECHETS**

[72] MAIER, BEAT RENE, CH  
[73] HOLCIM TECHNOLOGY LTD, CH  
[85] 2017-10-26  
[86] 2016-04-08 (PCT/IB2016/000450)  
[87] (WO2016/174513)  
[30] AT (A 264/2015) 2015-04-30

---

[11] **2,984,489**  
[13] C

[51] **Int.Cl. F16K 17/168 (2006.01) F16K 15/18 (2006.01) F16K 17/04 (2006.01) F16K 27/06 (2006.01) F16K 5/06 (2006.01)**

[25] EN

[54] **BALL VALVE WITH PRESSURE RELIEF FEATURE**

[54] **ROBINET A BILLE AVEC ELEMENT LIMITEUR DE PRESSION**

[72] OBERMARK, CRAIG, US  
[73] PARKER-HANNIFIN CORPORATION, US  
[85] 2017-10-31  
[86] 2015-12-15 (PCT/US2015/065748)  
[87] (WO2016/182599)  
[30] US (62/160,633) 2015-05-13

---

---

[11] **2,984,871**  
[13] C

[51] **Int.Cl. H02G 3/22 (2006.01) F16L 5/02 (2006.01)**

[25] EN

[54] **INDICATION MEANS OF A WEDGE OF A LEAD-THROUGH SYSTEM**

[54] **MOYENS D'INDICATION D'UN COIN D'UN SYSTEME DE TRAVERSEE**

[72] MILTON, STEFAN, SE  
[72] BERGLUND, PIERRE, SE  
[73] ROXTEC AB, SE  
[85] 2017-11-02  
[86] 2016-05-03 (PCT/SE2016/050396)  
[87] (WO2016/178621)  
[30] SE (1550562-1) 2015-05-04

---

[11] **2,986,923**  
[13] C

[51] **Int.Cl. C09K 5/04 (2006.01)**

[25] EN

[54] **HEAT TRANSFER FLUIDS, SYSTEMS, EFFICIENCIES, AND METHODS**

[54] **FLUIDES, SYSTEMES, RENDEMENTS, ET PROCEDES DE TRANSFERT DE CHALEUR**

[72] CAPUCIATI, PETER, US  
[72] CHAMPIE, MAX, US  
[73] BLUON, INC., US  
[85] 2017-11-22  
[86] 2016-05-20 (PCT/US2016/033631)  
[87] (WO2016/191308)  
[30] US (62/165,711) 2015-05-22

---

**Brevets canadiens délivrés**  
**16 mai 2023**

---

[11] **2,987,214**  
[13] C

[51] **Int.Cl. A61M 5/24 (2006.01) A61M 5/28 (2006.01)**  
[25] FR  
[54] **BOX FOR MOUNTING A CONTAINER ON AN INJECTOR PEN, TOGETHER FORMING AN INJECTABLE PRODUCT RESERVOIR FOR AN INJECTOR PEN EQUIPPED WITH SUCH ASSEMBLY**  
[54] **BOITIER DE MONTAGE D'UN RECIPIENT SUR UN STYLO INJECTEUR, ENSEMBLE FORMANT RESERVOIR DE PRODUIT INJECTABLE POUR UN STYLO INJECTEUR EQUIPE D'UN TEL ENSEMBLE**  
[72] ANEAS, ANTOINE, FR  
[73] BIOCORP PRODUCTION, FR  
[85] 2017-11-24  
[86] 2016-06-01 (PCT/EP2016/062395)  
[87] (WO2016/193314)  
[30] FR (1554993) 2015-06-02

---

[11] **2,988,492**  
[13] C

[51] **Int.Cl. C11D 17/08 (2006.01) C11D 1/02 (2006.01) C11D 1/66 (2006.01) C11D 1/83 (2006.01) C11D 3/00 (2006.01)**  
[25] EN  
[54] **PROCESSES FOR MAKING LIQUID DETERGENT COMPOSITIONS COMPRISING A LIQUID CRYSTALLINE PHASE**  
[54] **PROCEDES DE PREPARATION DE COMPOSITIONS DE DETERGENT LIQUIDE COMPRENANT UNE PHASE CRISTALLINE LIQUIDE**  
[72] THOOFT, SERGE OMER ALFONS JEAN, BE  
[72] UYTTERSROT, JAN-SEBASTIAAN, BE  
[73] THE PROCTER & GAMBLE COMPANY, US  
[85] 2017-12-04  
[86] 2016-06-21 (PCT/US2016/038450)  
[87] (WO2016/209783)  
[30] EP (15173053.8) 2015-06-22  
[30] EP (16163137.9) 2016-03-31

---

[11] **2,988,701**  
[13] C

[51] **Int.Cl. B25H 3/02 (2006.01)**  
[25] EN  
[54] **STORAGE CONTAINER**  
[54] **CONTENANT DE RANGEMENT**  
[72] WOLLE, LUTZ, DE  
[72] BARABEISCH, MARKUS, DE  
[73] TTS TOOLTECHNIC SYSTEMS AG & CO. KG, DE  
[85] 2017-12-07  
[86] 2015-07-24 (PCT/EP2015/066975)  
[87] (WO2017/016572)

---

[11] **2,989,619**  
[13] C

[51] **Int.Cl. G01V 1/28 (2006.01) G01V 1/30 (2006.01) G01V 1/36 (2006.01)**  
[25] EN  
[54] **SEISMIC AZIMUTHAL GRADIENT ESTIMATION**  
[54] **ESTIMATION DE GRADIENT D'AZIMUT SISMIQUE**  
[72] SWAN, HERBERT, US  
[72] HOWELL, JACK, US  
[72] MIRONOVA, ANASTASIA, US  
[73] CONOCOPHILLIPS COMPANY, US  
[85] 2017-12-14  
[86] 2016-06-17 (PCT/US2016/038025)  
[87] (WO2016/205608)  
[30] US (62/181,009) 2015-06-17  
[30] US (15/185,320) 2016-06-17

---

[11] **2,991,105**  
[13] C

[51] **Int.Cl. B01J 2/16 (2006.01) B01J 2/00 (2006.01) B04C 5/00 (2006.01) B07B 4/02 (2006.01)**  
[25] EN  
[54] **CONTINUOUS PARTICLE MANUFACTURING DEVICE**  
[54] **DISPOSITIF DE FABRICATION CONTINUE DE PARTICULES**  
[72] HISAZUMI, KOJI, JP  
[72] HASEGAWA, KOJI, JP  
[72] NAGATO, TAKUYA, JP  
[72] KOBAYASHI, MAKOTO, JP  
[73] KABUSHIKI KAISHA POWREX, JP  
[85] 2017-12-29  
[86] 2016-06-23 (PCT/JP2016/068607)  
[87] (WO2017/002694)  
[30] JP (2015-131036) 2015-06-30

---

[11] **2,991,329**  
[13] C

[51] **Int.Cl. H04L 45/02 (2022.01) B60R 16/023 (2006.01) B60W 50/00 (2006.01) B66F 9/24 (2006.01) G05B 19/04 (2006.01) G06F 9/30 (2018.01)**  
[25] EN  
[54] **VEHICLE CONTROL MODULE WITH SIGNAL SWITCHBOARD AND OUTPUT TABLES**  
[54] **MODULE DE COMMANDE DE VEHICULE AVEC TABLEAU DE DISTRIBUTION DE SIGNAUX ET TABLES DE SORTIE**  
[72] ADDISON, MARK E., US  
[72] CONLEY, WALTER, III, US  
[72] DAMMEYER, KARL L., US  
[72] HAMMER, JOE K., US  
[72] MANGETTE, STEPHEN T., US  
[73] CROWN EQUIPMENT CORPORATION, US  
[85] 2018-01-03  
[86] 2016-07-26 (PCT/US2016/043981)  
[87] (WO2017/019658)  
[30] US (62/197,857) 2015-07-28  
[30] US (62/197,836) 2015-07-28

---

[11] **2,991,772**  
[13] C

[51] **Int.Cl. A61K 8/9783 (2017.01) A61K 8/31 (2006.01) A61K 36/575 (2006.01) A61P 1/02 (2006.01) A61Q 11/00 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS COMPRISING MAGNOLIA BARK EXTRACT AND A HYDROCARBON FOR REMOVAL OF GRAM NEGATIVE BACTERIA FROM THE ORAL CAVITY AND FRESHENING BREATH**  
[54] **COMPOSITIONS RENFERMANT UN EXTRAIT D'ECORCE DE MAGNOLIA ET UN HYDROCARBURE POUR L'ELIMINATION DE BACTERIES A GRAM NEGATIF DE LA CAVITEORALE ET LE RAFRAICHISSEMENT DE L'HALEINE**  
[72] BUSSCHER, HENK J., US  
[72] DODDS, MICHAEL W., US  
[72] MAITRA, AMARNATH, US  
[72] WESSEL, STEFAN, US  
[72] VAN DER MEI, HENNY C., US  
[73] WM. WRIGLEY JR. COMPANY, US  
[85] 2018-01-08  
[86] 2016-07-14 (PCT/US2016/042296)  
[87] (WO2017/011665)  
[30] US (62/192,282) 2015-07-14

**Canadian Patents Issued  
May 16, 2023**

[11] **2,991,997**  
[13] C

[51] **Int.Cl. B64G 1/24 (2006.01) B64G 1/10 (2006.01) B64G 1/28 (2006.01)**  
[25] EN  
[54] **METHODS AND APPARATUS TO MINIMIZE COMMAND DYNAMICS OF A SATELLITE**  
[54] **METHODES ET APPAREIL SERVANT A MINIMISER LA DYNAMIQUE DE COMMANDE D'UN SATELLITE**  
[72] LUI, TIMOTHY S., US  
[72] LEMKE, GARY, US  
[73] THE BOEING COMPANY, US  
[86] (2991997)  
[87] (2991997)  
[22] 2018-01-12  
[30] US (15/466228) 2017-03-22

[11] **2,992,626**  
[13] C

[51] **Int.Cl. C01B 3/38 (2006.01) C01B 3/48 (2006.01) C01B 3/50 (2006.01)**  
[25] EN  
[54] **PROCESS AND PLANT FOR COOLING SYNTHESIS GAS**  
[54] **PROCEDE ET INSTALLATION POUR LE REFROIDISSEMENT D'UN GAZ DE SYNTHESE**  
[72] TADIELLO, JEAN-PHILIPPE, FR  
[72] CHEN, YUE, DE  
[73] L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, FR  
[85] 2018-01-04  
[86] 2016-07-04 (PCT/EP2016/025070)  
[87] (WO2017/008915)  
[30] EP (15400030.1) 2015-07-10

[11] **2,993,259**  
[13] C

[51] **Int.Cl. G06Q 20/00 (2012.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR SETTING CERTIFICATE RECEIPT TIME LIMITATION FOR ELECTRONIC CERTIFICATE**  
[54] **PROCEDE ET SYSTEME DE DEFINITION D'UNE LIMITATION DE TEMPS DE RECEPTION DE CERTIFICAT POUR UN CERTIFICAT ELECTRONIQUE**  
[72] ZHANG, YI, CN  
[73] 10353744 CANADA LTD., CA  
[85] 2018-01-22  
[86] 2015-07-21 (PCT/CN2015/084594)  
[87] (WO2017/012025)

[11] **2,993,472**  
[13] C

[51] **Int.Cl. A23L 33/105 (2016.01) A61J 3/07 (2006.01) A61K 9/48 (2006.01) A61K 38/47 (2006.01)**  
[25] EN  
[54] **FORMULATION OF GLUCOSINOLATES AND MYROSINASE**  
[54] **FORMULATION DE GLUCOSINOLATES ET DE MYROSINASE**  
[72] SAENZ GOMEZ, JESSICA, ES  
[72] OLIVER GARCIA, LAURA, ES  
[72] VILLARAN VELASCO, MARIA, CARMEN, ES  
[73] FUNDACION TECNALIA RESEARCH & INNOVATION, ES  
[85] 2018-01-24  
[86] 2016-07-15 (PCT/EP2016/066962)  
[87] (WO2017/016906)  
[30] EP (15382389.3) 2015-07-28

[11] **2,993,587**  
[13] C

[51] **Int.Cl. E01B 35/12 (2006.01) E01B 35/00 (2006.01)**  
[25] EN  
[54] **TRACK LOADING TOOL**  
[54] **OUTIL DE CHARGEMENT DE PISTE**  
[72] FRITSCH, MATT, US  
[72] OGORZALEK, JEREMY, US  
[72] WATERWORTH, TOM, US  
[72] SCHWERT, ERIC, US  
[72] DECKER, ARNOLD, US  
[72] JOHNSON, TYLER JEFFREY, US  
[73] ENERPAC TOOL GROUP CORP., US  
[86] (2993587)  
[87] (2993587)  
[22] 2018-01-31  
[30] US (62/558,828) 2017-09-14

[11] **2,994,031**  
[13] C

[51] **Int.Cl. C08G 18/76 (2006.01) C08G 18/79 (2006.01) C08J 9/28 (2006.01)**  
[25] EN  
[54] **ISOCYANATE BASED ORGANIC XEROGELS WITH REDUCED DENSITY**  
[54] **XEROGELS ORGANIQUES A BASE D'ISOCYANATE PRESENTANT UNE DENSITE REDUITE**  
[72] JONCHERAY, THOMAS JULIEN, BE  
[72] VANDENBROECK, JAN, BE  
[72] GEUMENZ, GILLES JEAN, BE  
[73] HUNTSMAN INTERNATIONAL LLC, US  
[85] 2018-01-29  
[86] 2016-06-16 (PCT/EP2016/063869)  
[87] (WO2017/021047)  
[30] EP (EP15179990.5) 2015-08-06

[11] **2,994,320**  
[13] C

[51] **Int.Cl. C12N 15/56 (2006.01) C12N 1/15 (2006.01) C12N 1/21 (2006.01) C12N 9/24 (2006.01) C12N 9/42 (2006.01) C12P 19/14 (2006.01)**  
[25] EN  
[54] **TREATMENT OF CELLULOSIC MATERIAL AND ENZYMES USEFUL THEREIN**  
[54] **TRAITEMENT DE MATERIEL CELLULOSIQUE ET ENZYMES POUVANT ETRE EMPLOYEES DANS CE TRAITEMENT**  
[72] KALLIO, JARNO, FI  
[72] VOUTILAINEN, SANNI, FI  
[72] VIKARI, LIISA, FI  
[72] HOOMAN, SATU, FI  
[72] HALONEN, TEEMU, FI  
[72] SIKA-AHO, MATTI, FI  
[72] VEHEMAANPERA, JARI, FI  
[72] ALAPURANEN, MARIKA, FI  
[72] PURANEN, TERHI, FI  
[73] ROAL OY, FI  
[86] (2994320)  
[87] (2994320)  
[22] 2006-12-15  
[62] 2,833,029  
[30] US (60/753,258) 2005-12-22  
[30] FI (20151318) 2005-12-22

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **2,996,680**  
[13] C

[51] **Int.Cl. A01N 43/84 (2006.01) A01N 25/00 (2006.01) A01N 25/10 (2006.01) A01N 25/12 (2006.01) A01N 43/56 (2006.01) A01N 43/78 (2006.01) A01P 3/00 (2006.01) A01P 13/00 (2006.01)**

[25] EN

[54] **COMPOSITION, METHOD FOR PRODUCING COMPOSITION, AND PESTICIDE COMPOSITION**

[54] **COMPOSITION, PROCEDE DE PRODUCTION D'UNE COMPOSITION, ET COMPOSITION PESTICIDE**

[72] RUSU, AI, JP

[72] WATANABE, ATSUSHI, JP

[73] SUMITOMO CHEMICAL COMPANY, LIMITED, JP

[85] 2018-02-26

[86] 2016-09-01 (PCT/JP2016/075703)

[87] (WO2017/038946)

[30] JP (2015-174433) 2015-09-04

---

[11] **2,997,169**  
[13] C

[51] **Int.Cl. B01D 61/00 (2006.01) B01D 67/00 (2006.01) B01D 71/02 (2006.01) F03G 7/00 (2006.01) H01M 8/22 (2006.01)**

[25] FR

[54] **DISPOSITIF DE PRODUCTION D'ENERGIE PAR GRADIENT DE SALINITE A TRAVERS DES MEMBRANES NANO-FLUIDIQUES A BASE D'OXYDE DE TITANE**

[54] **DEVICE FOR PRODUCING ENERGY BY SALINITY GRADIENT THROUGH TITANIUM OXIDE NANOFUID MEMBRANES**

[72] MOTTET, BRUNO, FR

[72] BOCQUET, LYDERIC, FR

[72] SIRIA, ALESSANDRO, FR

[72] BECHELANY, MIKHAEL, FR

[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS), FR

[73] SWEETCH ENERGY, FR

[85] 2018-02-28

[86] 2016-09-02 (PCT/EP2016/070683)

[87] (WO2017/037213)

[30] EP (15306346.6) 2015-09-02

---

[11] **2,997,719**  
[13] C

[51] **Int.Cl. G01R 31/52 (2020.01) B64F 5/60 (2017.01) G01R 31/58 (2020.01) B64D 37/32 (2006.01) B64D 45/00 (2006.01) G01R 19/165 (2006.01)**

[25] EN

[54] **DETECTION SYSTEM FOR ABRADED WIRES IN FUEL TANKS**

[54] **SYSTEME DE DETECTION DE FILS ABRASES DANS LES RESERVOIRS DE CARBURANT**

[72] TILLOTSON, BRIAN J., US

[73] THE BOEING COMPANY, US

[86] (2997719)

[87] (2997719)

[22] 2018-03-07

[30] US (15/612,491) 2017-06-02

---

[11] **2,997,770**  
[13] C

[51] **Int.Cl. B25J 9/10 (2006.01) F16H 57/01 (2012.01) F16H 25/20 (2006.01)**

[25] EN

[54] **ACTUATOR DIAGNOSTICS AND PROGNOSTICS**

[54] **DIAGNOSTIC ET PRONOSTIC D'ACTIONNEUR**

[72] BESSER, STEVEN, US

[72] ROSENGREN, GARY W., US

[72] HOBART, PATRICK, US

[72] SHULZ, ROBERT, US

[72] DI MARCO, STEVEN, US

[72] DIETRICH, AARON, US

[73] TOLOMATIC, INC., US

[85] 2018-03-06

[86] 2016-09-14 (PCT/US2016/051647)

[87] (WO2017/048788)

[30] US (62/218,222) 2015-09-14

---

[11] **2,998,886**  
[13] C

[51] **Int.Cl. C12Q 1/6876 (2018.01) C12Q 1/6806 (2018.01) C12Q 1/6813 (2018.01) C12Q 1/6869 (2018.01) C07H 21/00 (2006.01) C12N 15/10 (2006.01) C12Q 1/68 (2018.01)**

[25] EN

[54] **METHODS AND COMPOSITIONS FOR GENOMIC TARGET ENRICHMENT AND SELECTIVE DNA SEQUENCING**

[54] **PROCEDES ET COMPOSITIONS POUR L'ENRICHISSEMENT D'UNE CIBLE GENOMIQUE ET LE SEQUENCAGE SELECTIF D'ADN**

[72] LIZARDI, PAUL M., US

[72] FERGUSON, BRENT W., US

[73] PETAOMICS, INC., US

[85] 2018-03-15

[86] 2016-09-16 (PCT/US2016/052317)

[87] (WO2017/049213)

[30] US (62/219,332) 2015-09-16

---

[11] **2,999,309**  
[13] C

[51] **Int.Cl. F16L 5/00 (2006.01) B64C 1/00 (2006.01) F16L 3/10 (2006.01) F16L 3/123 (2006.01) F16L 5/08 (2006.01) H05K 9/00 (2006.01)**

[25] EN

[54] **TRANSPORT ELEMENT SUPPORT ASSEMBLY**

[54] **ASSEMBLAGE DE SUPPORT D'ELEMENT DE TRANSPORT**

[72] CHEATHAM, BENJAMIN CURTIS, US

[72] GILBERTSON, MICHAEL LESLIE, US

[73] THE BOEING COMPANY, US

[86] (2999309)

[87] (2999309)

[22] 2018-03-23

[30] US (15/628,018) 2017-06-20

---

[11] **2,999,832**  
[13] C

[51] **Int.Cl. A61F 13/00 (2006.01) A61F 13/02 (2006.01)**

[25] EN

[54] **DEVICES FOR WOUND CLOSURE**

[54] **DISPOSITIFS DE FERMETURE DE PLAIES**

[72] QUINTERO, JULIAN A., US

[73] ETHICON, LLC, US

[85] 2018-03-23

[86] 2015-09-24 (PCT/US2015/051919)

[87] (WO2017/052549)

**Canadian Patents Issued  
May 16, 2023**

---

[11] **3,001,090**  
[13] C

[51] **Int.Cl. D01F 9/17 (2006.01) C08L 97/00 (2006.01) D01D 5/06 (2006.01) D06M 13/00 (2006.01)**

[25] EN

[54] **A PROCESS FOR THE MANUFACTURE OF A SHAPED BODY**

[54] **PROCESSUS POUR LA FABRICATION D'UN CORPS FACONNE**

[72] GAROFF, NIKLAS, SE

[72] PROTZ, ROBERT, DE

[72] ERDMANN, JENS, DE

[72] GANSTER, JOHANNES, DE

[72] LEHMANN, ANDRE, DE

[73] STORA ENSO OYJ, FI

[85] 2018-04-05

[86] 2016-10-06 (PCT/IB2016/055988)

[87] (WO2017/060847)

[30] SE (1551298-1) 2015-10-08

---

[11] **3,003,707**  
[13] C

[51] **Int.Cl. B01F 31/30 (2022.01) B01F 35/42 (2022.01)**

[25] EN

[54] **POWDER HOPPER FOR DIFFICULT-TO-FLOW POWDERS FOR USE IN THERMAL SPRAYING AND METHOD MAKING AND USING THE SAME**

[54] **TREMIE A POUDRE POUR POUDRES A ECOULEMENT DIFFICILE DESTINEE A ETRE UTILISEE DANS UNE PULVERISATION THERMIQUE ET PROCEDES DE FABRICATION ET D'UTILISATION ASSOCIES**

[72] COTLER, ELLIOT M., US

[72] SAVILL, ROBERT F., JR., US

[72] MOLZ, RONALD J., US

[72] ARJONA, DANIEL R., US

[73] OERLIKON METCO (US) INC., US

[85] 2018-04-30

[86] 2015-12-09 (PCT/US2015/064767)

[87] (WO2017/099761)

---

[11] **3,004,505**  
[13] C

[51] **Int.Cl. A23D 7/00 (2006.01) A23D 7/01 (2006.01) A23D 7/015 (2006.01) A23D 7/02 (2006.01)**

[25] EN

[54] **PROCESS FOR PREPARING A FAT SLURRY COMPRISING OLIVE OIL AND FOR PREPARING A SPREAD WITH SAID SLURRY.**

[54] **PROCEDE DE PREPARATION D'UNE BOUILLIE DE MATIERE GRASSE CONTENANT DE L'HUILE D'OLIVE ET DE PREPARATION D'UN PRODUIT A TARTINER AVEC LADITE BOUILLIE.**

[72] GREBENKAMPER, KAI, NL

[72] LEENHOUTS, ABRAHAM, NL

[72] THE, ROGIER ANTOINE FLORIS, NL

[73] UPFIELD EUROPE B.V., NL

[85] 2018-05-07

[86] 2016-11-16 (PCT/EP2016/077801)

[87] (WO2017/108275)

[30] EP (15201653.1) 2015-12-21

---

[11] **3,004,616**  
[13] C

[51] **Int.Cl. C03C 1/00 (2006.01) B09B 3/00 (2022.01) C03B 37/01 (2006.01) C03C 13/06 (2006.01)**

[25] FR

[54] **METHOD FOR PRODUCING ROCK WOOL AND RECOVERABLE CAST IRON**

[54] **PROCEDE DE PRODUCTION DE LAINE DE ROCHE ET DE FONTE VALORISABLE**

[72] SOKOLOFF, BRUNO, FR

[72] PICARD, LYONEL, FR

[73] EURECAT S.A, FR

[73] ECO'RING, FR

[85] 2018-05-08

[86] 2016-11-04 (PCT/EP2016/076630)

[87] (WO2017/080913)

[30] FR (1560700) 2015-11-09

---

[11] **3,007,274**  
[13] C

[51] **Int.Cl. B05C 17/005 (2006.01) B05C 5/02 (2006.01) C08L 23/06 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR REDUCING AIR INGRESSION INTO SEALANT TUBES**

[54] **SYSTEME ET PROCEDE SERVANT A LA REDUCTION DE L'ENTREE D'AIR DANS DES TUBES DE PRODUIT D'ETANCHEITE**

[72] NELSON, W. ROBERT, US

[72] WILSON, JENNIFER LYN, US

[72] HOHLIOS, GUS A., US

[73] SPIRIT AEROSYSTEMS, INC., US

[85] 2018-06-01

[86] 2016-10-14 (PCT/US2016/056961)

[87] (WO2017/099884)

[30] US (62/264,123) 2015-12-07

[30] US (15/292,329) 2016-10-13

---

[11] **3,007,675**  
[13] C

[51] **Int.Cl. A61B 5/291 (2021.01) A61B 5/318 (2021.01) A61B 5/369 (2021.01) A61B 5/389 (2021.01) A61B 5/398 (2021.01)**

[25] EN

[54] **HEADSET FOR BIO-SIGNALS ACQUISITION**

[54] **CASQUE POUR ACQUISITION DE BIO-SIGNAUX**

[72] ATTAL, YOHAN, FR

[72] DUMAS, THIBAUD, FR

[73] MYBRAIN TECHNOLOGIES, FR

[85] 2018-06-07

[86] 2015-12-08 (PCT/EP2015/079034)

[87] (WO2016/091911)

[30] EP (14196835.4) 2014-12-08

[30] US (14/563,049) 2014-12-08



**Brevets canadiens délivrés  
16 mai 2023**

[11] **3,007,826**

[13] C

- [51] **Int.Cl. G01B 11/245 (2006.01)**  
[25] EN  
[54] **DEVICE FOR THE CONTACTLESS THREE-DIMENSIONAL INSPECTION OF BLADES FOR TURBOMACHINES, PARTICULARLY FOR AIRCRAFT TURBINES OR JET ENGINES**  
[54] **DISPOSITIF DE CONTROLE TRIDIMENSIONNEL SANS CONTACT DE PALE POUR TURBOMACHINE, EN PARTICULIER POUR REACTEUR OU TURBINE D'AERONEF**  
[72] LE NEEL, DIDIER, FR  
[73] DWFRITZ AUTOMATION, LLC, US  
[85] 2018-04-13  
[86] 2016-11-02 (PCT/EP2016/076336)  
[87] (WO2017/076853)  
[30] FR (1560486) 2015-11-02

[11] **3,007,925**

[13] C

- [51] **Int.Cl. B01J 10/00 (2006.01) B01J 4/00 (2006.01) B01J 19/24 (2006.01) B01J 19/30 (2006.01) C01B 17/16 (2006.01)**  
[25] EN  
[54] **HYDROGEN SULFIDE PRODUCTION PROCESS AND RELATED REACTOR VESSELS**  
[54] **PROCEDE DE PRODUCTION DE SULFURE D'HYDROGENE ET CUVES DE REACTION ASSOCIEES**  
[72] HASENBERG, DANIEL M., US  
[72] PAUWELS, ALEX, BE  
[72] MERTENS, IVES, BE  
[73] CHEVRON PHILLIPS CHEMICAL COMPANY LP, US  
[85] 2018-06-08  
[86] 2015-12-10 (PCT/US2015/065071)  
[87] (WO2017/099783)

[11] **3,012,355**

[13] C

- [51] **Int.Cl. A61B 5/145 (2006.01) A61B 5/1459 (2006.01) A61B 5/1473 (2006.01) A61B 5/1495 (2006.01)**  
[25] EN  
[54] **TISSUE-INTEGRATING SENSORS**  
[54] **CAPTEURS D'INTEGRATION DE TISSU**  
[72] WISNIEWSKI, NATALIE ANN, US  
[72] HELTON, KRISTEN, US  
[72] MCMILLAN, WILLIAM A., US  
[73] PROFUSA, INC., US  
[86] (3012355)  
[87] (3012355)  
[22] 2011-10-06  
[62] 2,813,041  
[30] US (61/390,252) 2010-10-06

[11] **3,013,184**

[13] C

- [51] **Int.Cl. A01N 25/30 (2006.01) A01N 35/02 (2006.01) A01P 1/00 (2006.01)**  
[25] EN  
[54] **MICROBICIDAL COMPOSITION**  
[54] **COMPOSITION MICROBICIDE**  
[72] YIN, BEI, US  
[73] MC (US) 3 LLC, US  
[85] 2018-07-30  
[86] 2016-02-24 (PCT/US2016/019269)  
[87] (WO2017/135975)  
[30] US (15/016,685) 2016-02-05

[11] **3,013,513**

[13] C

- [51] **Int.Cl. G01F 11/00 (2006.01) A61J 3/07 (2006.01) B65B 1/38 (2006.01) G01F 11/02 (2006.01) G01F 15/14 (2006.01)**  
[25] EN  
[54] **PIPETTE**  
[54] **PIPETTE**  
[72] PETERS, HEINRICH, DE  
[72] GAUS, PHILIPP, DE  
[72] HILD, MARCUS, DE  
[72] STURM, JULIA, DE  
[73] HARRO HOFLLIGER VERPACKUNGSMASCHINEN GMBH, DE  
[85] 2018-08-02  
[86] 2016-02-06 (PCT/EP2016/000205)  
[87] (WO2017/133749)

[11] **3,015,980**

[13] C

- [51] **Int.Cl. B32B 15/00 (2006.01) B32B 5/00 (2006.01)**  
[25] EN  
[54] **DAMAGE RESISTANT INDICATOR COATING**  
[54] **REVETEMENT INDICATEUR RESISTANT AUX DOMMAGES**  
[72] GLAESEMANN, WILLIAM E., US  
[72] GABRIEL, JOSEPH M., US  
[72] JOHNSON, DEREK ANTON, US  
[73] HEXAGON TECHNOLOGY AS, NO  
[85] 2018-08-27  
[86] 2017-03-31 (PCT/US2017/025494)  
[87] (WO2017/176590)  
[30] US (62/318,942) 2016-04-06

[11] **3,020,872**

[13] C

- [51] **Int.Cl. B25J 9/00 (2006.01) B25J 5/00 (2006.01) B25J 18/04 (2006.01) B25J 19/04 (2006.01)**  
[25] EN  
[54] **PORTABLE PROGRAMMABLE MACHINES, ROBOTIC END EFFECTORS, AND RELATED METHODS**  
[54] **MACHINES PROGRAMMABLES PORTATIVES, EFFECTEURS D'EXTREMITE ROBOTIQUES ET METHODES ASSOCIEES**  
[72] PRINGLE, JOHN WALTER, IV, US  
[72] ERICKSON, CHRIS J., US  
[73] THE BOEING COMPANY, US  
[86] (3020872)  
[87] (3020872)  
[22] 2018-10-12  
[30] US (15/832,543) 2017-12-05

**Canadian Patents Issued  
May 16, 2023**

---

[11] **3,021,306**  
[13] C

[51] **Int.Cl. C07D 471/04 (2006.01) A61K 31/437 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **BENZAMIDE MONOMESYLATE SALT FOR MEDICAL APPLICATIONS**  
[54] **SEL DE MONOMESYLATE DE BENZAMIDE POUR APPLICATIONS MEDICALES**  
[72] CHILOV, GERMES GRIGORIEVICH, RU  
[72] TITOV, ILYA YURIEVICH, RU  
[73] LIMITED LIABILITY COMPANY «FUSION PHARMA», RU  
[85] 2018-10-17  
[86] 2017-04-18 (PCT/RU2017/050025)  
[87] (WO2017/184032)  
[30] RU (2016114904) 2016-04-18

---

[11] **3,022,426**  
[13] C

[51] **Int.Cl. A61K 38/44 (2006.01) A61K 33/00 (2006.01) A61P 31/04 (2006.01)**  
[25] EN  
[54] **MYELOPEROXIDASE COMPOSITIONS AND METHODS FOR INHIBITION OF LIPOPOLYSACCHARIDES AND LIPID A**  
[54] **COMPOSITIONS DE MYELOPEROXYDASE ET METHODES D'INHIBITION DE LIPOPOLYSACCHARIDES ET DE LIPIDE A**  
[72] ALLEN, ROBERT C., US  
[73] EXOXEMIS, INC., US  
[85] 2018-10-26  
[86] 2017-04-13 (PCT/US2017/027458)  
[87] (WO2017/204918)  
[30] US (62/342,382) 2016-05-27

---

[11] **3,022,785**  
[13] C

[51] **Int.Cl. B65D 19/38 (2006.01) B65D 1/22 (2006.01) B65D 19/04 (2006.01) B65D 21/032 (2006.01) B65D 81/26 (2006.01)**  
[25] EN  
[54] **A SYSTEM OF OPEN-TOPPED CONTAINERS**  
[54] **SYSTEME DE RECIPIENTS A DESSUS OUVERT**  
[72] OSKARSSON, DAGUR, IS  
[73] SAEPLAST ICELAND EHF., IS  
[85] 2018-10-31  
[86] 2016-05-04 (PCT/IS2016/050008)  
[87] (WO2016/178253)  
[30] IS (050105) 2015-05-04  
[30] IS (050127) 2015-11-06

---

[11] **3,024,229**  
[13] C

[51] **Int.Cl. B60N 2/806 (2018.01) B60N 2/14 (2006.01) B60N 2/68 (2006.01)**  
[25] EN  
[54] **HEAD RESTRAINT MECHANISM FOR REVERSIBLE SEAT**  
[54] **MECANISME DE LIMITATION DE TETE DESTINE A UN SIEGE REVERSIBLE**  
[72] VETERE, LOUIS, II, US  
[73] MAGNA SEATING INC., CA  
[86] (3024229)  
[87] (3024229)  
[22] 2018-11-15  
[30] US (62/587,001) 2017-11-16

---

[11] **3,024,514**  
[13] C

[51] **Int.Cl. A61C 17/34 (2006.01) A46B 13/00 (2006.01) A46B 13/02 (2006.01) A47K 7/04 (2006.01) A61C 17/24 (2006.01) A61C 17/26 (2006.01)**  
[25] EN  
[54] **A DUAL MOTOR CLEANSING BRUSH**  
[54] **BROSSE DE NETTOYAGE A DEUX MOTEURS**  
[72] POWELL, STEVEN D., US  
[72] MAKAY, MICHAEL CHAD, US  
[73] CHIRP PRODUCTS LLC, US  
[85] 2018-11-15  
[86] 2017-06-19 (PCT/US2017/038197)  
[87] (WO2017/201549)  
[30] US (15/161,164) 2016-05-20

---

[11] **3,026,417**  
[13] C

[51] **Int.Cl. H04M 1/15 (2006.01) H02G 11/02 (2006.01)**  
[25] EN  
[54] **SMART CORD REEL SYSTEM**  
[54] **SYSTEME DE BOBINE DE CORDON INTELLIGENT**  
[72] ALFORD, JOHN, US  
[72] SCHWARTZ, MARK, US  
[72] HINOJOSA, CHRIS, US  
[73] KONNECTRONIX, INC., US  
[85] 2018-12-03  
[86] 2017-06-07 (PCT/US2017/036406)  
[87] (WO2017/214307)  
[30] US (62/346,904) 2016-06-07  
[30] US (15/175,822) 2016-06-07

---

[11] **3,027,642**  
[13] C

[51] **Int.Cl. H05B 3/20 (2006.01) F03D 80/40 (2016.01) B32B 7/025 (2019.01) B32B 3/08 (2006.01) B32B 15/08 (2006.01) B32B 38/10 (2006.01) B64C 3/26 (2006.01) B64C 11/20 (2006.01) B64D 15/12 (2006.01) B64D 45/02 (2006.01)**  
[25] EN  
[54] **INTEGRATED LIGHTNING PROTECTION AND ELECTRICAL DE-ICING FOR AERODYNAMIC STRUCTURES**  
[54] **PROTECTION CONTRE LA Foudre ET DEGIVRAGE ELECTRIQUE INTEGRES DESTINES A DES STRUCTURES AERODYNAMIQUES**  
[72] KINLEN, PATRICK JOHN, US  
[72] BRUTON, ERIC ALAN, US  
[72] BROUWERS, EDWARD, US  
[72] YOUNG, KENNETH, US  
[73] THE BOEING COMPANY, US  
[86] (3027642)  
[87] (3027642)  
[22] 2018-12-13  
[30] US (15/851,041) 2017-12-21

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **3,029,964**  
[13] C

[51] **Int.Cl. B63G 8/08 (2006.01) B63H 21/17 (2006.01) F03G 7/04 (2006.01) H02J 7/00 (2006.01) H02J 15/00 (2006.01) H02N 11/00 (2006.01)**

[25] EN

[54] **UNDERWATER ENERGY HARVESTING DRONE AND METHOD FOR OPERATION**

[54] **DRONE DE RECOLTE D'ENERGIE SOUS-MARINE ET METHODE D'EXPLOITATION**

[72] HILLER, NATHAN D., US

[73] THE BOEING COMPANY, US

[86] (3029964)

[87] (3029964)

[22] 2019-01-14

[30] US (15/894613) 2018-02-12

---

[11] **3,032,165**  
[13] C

[51] **Int.Cl. C12N 15/11 (2006.01) C12N 15/113 (2010.01) C12N 15/115 (2010.01) C12Q 1/6876 (2018.01) A61K 31/712 (2006.01) A61K 31/713 (2006.01) C07H 19/02 (2006.01) C07H 19/06 (2006.01) C07H 19/16 (2006.01) C07H 21/00 (2006.01)**

[25] EN

[54] **COMPOSITIONS COMPRISING REVERSIBLY MODIFIED OLIGONUCLEOTIDES AND USES THEREOF**

[54] **COMPOSITIONS COMPRENANT DES OLIGONUCLEOTIDES MODIFIES DE MANIERE REVERSIBLE ET LEURS UTILISATIONS**

[72] WANG, WEIMIN, US

[72] KRISHNAMURTHY, VENKATA, US

[73] DICERNA PHARMACEUTICALS, INC., US

[85] 2019-01-25

[86] 2017-08-23 (PCT/US2017/048239)

[87] (WO2018/039364)

[30] US (62/378,635) 2016-08-23

---

[11] **3,033,783**  
[13] C

[51] **Int.Cl. E02F 9/28 (2006.01)**

[25] EN

[54] **FIXING DEVICE FOR FIXING A WEAR OR PROTECTION ELEMENT ON A SHOVEL OF AN EARTH MOVING MACHINE AND THE CORRESPONDING FIXING SYSTEM AND METHOD**

[54] **DISPOSITIF DE FIXATION D'UN ELEMENT D'USURE OU DE PROTECTION SUR UNE PELLE D'UNE MACHINE DE TERRASSEMENT, ET SYSTEME ET PROCEDE DE FIXATION CORRESPONDANTS**

[72] MARTINEZ MANE, ANGEL, ES

[72] PEREZ SORIA, FRANCISCO, ES

[72] PICON MANJON, FRANCESC, ES

[72] TRIGINER BOIXEDA, JORGE, ES

[73] METALOGENIA RESEARCH & TECHNOLOGIES S.L., ES

[85] 2019-02-12

[86] 2016-08-18 (PCT/ES2016/070604)

[87] (WO2018/033651)

---

[11] **3,033,994**  
[13] C

[51] **Int.Cl. A44C 7/00 (2006.01) A61B 17/34 (2006.01)**

[25] EN

[54] **DISPOSABLE HAND OPERATED CARTRIDGE BODY PIERCING INSTRUMENT**

[54] **INSTRUMENT JETABLE DE PERCAGE DE CORPS A CARTOUCHE ACTIONNE A LA MAIN**

[72] REIL, GORAN, US

[72] REIL, VLADIMIR, US

[73] REIL, GORAN, US

[85] 2019-02-14

[86] 2017-08-22 (PCT/US2017/047942)

[87] (WO2018/039189)

[30] US (62/378,638) 2016-08-23

[30] US (15/276,609) 2016-09-26

---

[11] **3,035,614**  
[13] C

[51] **Int.Cl. D21C 11/00 (2006.01) D21C 11/04 (2006.01) D21C 11/10 (2006.01)**

[25] EN

[54] **PROCESS FOR ISOLATION OF HEMICELLOSES FROM BIOMASS PULPING PROCESS WATERS OR SPENT LIQUORS**

[54] **PROCEDE D'ISOLATION D'HEMICELLOSES A PARTIR D'EAUX DE PROCEDE DE REDUCTION EN PATE DE BIOMASSE OU DE LIQUEURS RESIDUAIRES**

[72] SHAGAEV, OLEG, AT

[72] WIESEGGER, LUKAS, AT

[73] ANDRITZ AG, AT

[85] 2019-03-01

[86] 2017-07-27 (PCT/EP2017/069032)

[87] (WO2018/041488)

[30] AT (A50780/2016) 2016-09-02

---

[11] **3,035,900**  
[13] C

[51] **Int.Cl. H01M 4/134 (2010.01) H01M 4/133 (2010.01) H01M 10/0525 (2010.01)**

[25] EN

[54] **MICRO-CAPSULE TYPE SILICON-CARBON COMPOSITE NEGATIVE ELECTRODE MATERIAL AND PREPARING METHOD AND USE THEREOF**

[54] **MATERIAU D'ELECTRODE NEGATIVE COMPOSITE SILICIUM-CARBONE DE TYPE MICROCAPSULE ET METHODE DE PREPARATION ET UTILISATION ASSOCIEES**

[72] ZHENG, HONGHE, CN

[72] YANG, SIMING, CN

[72] ZHENG, XUEYING, CN

[72] ZHANG, XIAOHUI, CN

[73] JIANGSU DAOYING TECHNOLOGY CO., LTD., CN

[85] 2019-03-26

[86] 2018-09-18 (PCT/CN2018/106160)

[87] (WO2019/052572)

[30] CN (2017108391717) 2017-09-18

**Canadian Patents Issued  
May 16, 2023**

---

[11] **3,036,473**  
[13] C

[51] **Int.Cl. B32B 3/28 (2006.01) B32B 1/02 (2006.01) B32B 5/18 (2006.01) B60K 15/03 (2006.01) B60K 15/073 (2006.01) B64C 1/12 (2006.01) B64D 7/00 (2006.01) B64D 37/06 (2006.01)**

[25] EN

[54] **ENERGY ABSORBING COMPOSITE PANELS**

[54] **PANNEAUX MIXTES ABSORBANT L'ENERGIE**

[72] BOLUKBASI, AKIF O., US  
[72] GLEASON, TIMOTHY R., US  
[72] HOLEMANS, PETER, US  
[73] THE BOEING COMPANY, US  
[86] (3036473)  
[87] (3036473)  
[22] 2019-03-12  
[30] US (15/937414) 2018-03-27

---

[11] **3,036,913**  
[13] C

[51] **Int.Cl. C07K 16/24 (2006.01) A61K 47/68 (2017.01) A61K 39/395 (2006.01) A61P 19/02 (2006.01) A61P 37/02 (2006.01)**

[25] EN

[54] **ANTIBODY SPECIFICALLY BINDING TO IL-17A AND FUNCTIONAL FRAGMENT THEREOF**

[54] **ANTICORPS SE LIANT SPECIFIQUEMENT A IL -17 A ET FRAGMENT FONCTIONNEL DE CELUI-CI**

[72] SONG, NANMENG, CN  
[72] LIU, JIAWANG, CN  
[72] YANG, YAPING, CN  
[72] YANG, YANG, CN  
[72] YANG, DONGGE, CN  
[72] ZHANG, HONGJUAN, CN  
[72] JIN, MENGXIE, CN  
[73] BEIJING HANMI PHARM. CO., LTD., CN  
[85] 2019-03-14  
[86] 2017-09-08 (PCT/CN2017/101083)  
[87] (WO2018/050028)  
[30] CN (201610827097.2) 2016-09-14

---

[11] **3,039,786**  
[13] C

[51] **Int.Cl. G01K 1/024 (2021.01) G01K 1/14 (2021.01) G01K 3/00 (2006.01) G01K 7/16 (2006.01) H01C 7/10 (2006.01) H01C 7/12 (2006.01) H02J 11/00 (2006.01) H02J 13/00 (2006.01)**

[25] EN

[54] **ARRESTER TEMPERATURE MONITOR**

[54] **DISPOSITIF DE SURVEILLANCE DE TEMPERATURE DE DISPOSITIF D'ARRET**

[72] ROSTRON, JOSEPH R., US  
[72] KEISTER, JOSH, US  
[72] ANAND, RAJ, US  
[73] SOUTHERN STATES LLC, US  
[85] 2019-04-08  
[86] 2017-10-19 (PCT/US2017/057422)  
[87] (WO2018/075789)  
[30] US (62/410,262) 2016-10-19

---

[11] **3,041,380**  
[13] C

[51] **Int.Cl. H04N 21/466 (2011.01) H04N 21/258 (2011.01) H04N 21/84 (2011.01)**

[25] EN

[54] **RECOMMENDATION ENGINE APPARATUS AND METHODS**

[54] **APPAREIL ET PROCEDES DE MOTEUR DE RECOMMANDATION**

[72] KIMBLE, DAVID, US  
[72] CHIN, FEE LING, US  
[73] TIME WARNER CABLE ENTERPRISES LLC, US  
[86] (3041380)  
[87] (3041380)  
[22] 2010-03-30  
[62] 2,762,974  
[30] US (12/414,576) 2009-03-30

---

[11] **3,044,874**  
[13] C

[51] **Int.Cl. C25D 5/10 (2006.01) H01M 8/0208 (2016.01) H01M 8/0228 (2016.01) C23C 18/54 (2006.01) C25D 5/12 (2006.01)**

[25] EN

[54] **DEPOSITION OF A COATING ON AN INTERCONNECT FOR SOLID OXIDE CELL STACKS**

[54] **DEPOT D'UN REVETEMENT SUR UNE INTERCONNEXION POUR EMPILEMENTS DE PILES A OXYDE SOLIDE**

[72] NORBY, TOBIAS HOLT, DK  
[72] BLENNOW, BENGT PETER GUSTAV, SE  
[72] KUNGAS, RAINER, DK  
[72] RASS-HANSEN, JEPPE, DK  
[72] HEIREDAL-CLAUSEN, THOMAS, DK  
[73] TOPSOE A/S, DK  
[85] 2019-05-24  
[86] 2017-11-22 (PCT/EP2017/080068)  
[87] (WO2018/108471)  
[30] DK (PA 2016 00771) 2016-12-16

---

[11] **3,046,653**  
[13] C

[51] **Int.Cl. B60K 13/02 (2006.01) F02M 35/024 (2006.01) F02M 35/04 (2006.01) F02M 35/10 (2006.01) F02M 35/16 (2006.01) F16H 57/04 (2010.01)**

[25] EN

[54] **AIR INTAKE ASSEMBLY FOR A UTILITY VEHICLE**

[54] **ENSEMBLE D'ADMISSION D'AIR POUR VEHICULE UTILITAIRE**

[72] SWAIN, PHILIP B., US  
[72] SCHLEIF, ANDREW C., US  
[72] LUTZ, DENNIS J., US  
[72] HICKE, DAVID J., US  
[72] BJERKETVEDT, ERIC D., US  
[72] DECKARD, AARON D., US  
[72] ROYTEK, CORRIE S., US  
[72] FREDRICKSON, DONOVAN L., US  
[72] DICKINSON, OWEN J., US  
[72] SHERRETT, JASON L., US  
[72] ENDRIZZI, JAMES J., US  
[73] POLARIS INDUSTRIES INC., US  
[85] 2019-06-10  
[86] 2017-12-12 (PCT/US2017/065724)  
[87] (WO2018/118508)  
[30] US (15/388,436) 2016-12-22

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **3,046,708**  
[13] C

[51] **Int.Cl. F16L 19/02 (2006.01)**  
[25] EN  
[54] **HIGH PRESSURE FLOWLINE UNION**  
[54] **RACCORD-UNION DE CONDUITE D'ÉCOULEMENT HAUTE-PRESSION**  
[72] NGUYEN, DUY D., US  
[73] CANTEX INTERNATIONAL, INC., US  
[85] 2019-06-10  
[86] 2017-12-08 (PCT/US2017/065452)  
[87] (WO2018/111729)  
[30] US (15/377,509) 2016-12-13

---

[11] **3,047,628**  
[13] C

[51] **Int.Cl. A61B 5/08 (2006.01) A61B 5/093 (2006.01) A61B 5/145 (2006.01) A61B 5/1455 (2006.01) A61B 5/097 (2006.01)**  
[25] EN  
[54] **DEVICE FOR DETERMINATION OF THE HEMOGLOBIN AMOUNT OF A PATIENT**  
[54] **DISPOSITIF SERVANT A DETERMINER LA QUANTITE D'HEMOGLOBINE DANS LE SANG D'UN PATIENT**  
[72] LUNDBY, CARSTEN, DK  
[73] OPCO MEDICAL APS, DK  
[85] 2019-06-19  
[86] 2017-01-30 (PCT/EP2017/051919)  
[87] (WO2018/137780)

---

[11] **3,048,265**  
[13] C

[51] **Int.Cl. C08J 11/08 (2006.01) C04B 26/26 (2006.01) C08L 95/00 (2006.01)**  
[25] EN  
[54] **NON-PETROLEUM BASED REJUVENATING AGENT**  
[54] **AGENT DE RESTAURATION A BASE DE PRODUITS NON PETROLIERS**  
[72] YI, WEIHONG, CA  
[72] LI, YI XIN, CA  
[73] YI, WEIHONG, CA  
[73] LI, YI XIN, CA  
[86] (3048265)  
[87] (3048265)  
[22] 2019-06-28

---

[11] **3,049,457**  
[13] C

[51] **Int.Cl. G16B 20/10 (2019.01) C12Q 1/6809 (2018.01) C12Q 1/6813 (2018.01) G16B 25/10 (2019.01) G16B 30/00 (2019.01)**  
[25] EN  
[54] **METHODS FOR NON-INVASIVE ASSESSMENT OF COPY NUMBER ALTERATIONS**  
[54] **PROCEDES D'EVALUATION NON INVASIVE DE VARIATIONS DU NOMBRE DE COPIES**  
[72] WU, YIJIN, US  
[72] MAZLOOM, AMIN, US  
[72] ZHONG, YANG, US  
[72] AZAB, MOSTAFA, US  
[73] SEQUENOM, INC., US  
[85] 2019-07-04  
[86] 2018-01-22 (PCT/US2018/014714)  
[87] (WO2018/136882)  
[30] US (62/448,594) 2017-01-20

---

[11] **3,052,659**  
[13] C

[51] **Int.Cl. F16B 12/22 (2006.01) A47B 47/00 (2006.01) A47B 96/00 (2006.01)**  
[25] EN  
[54] **FURNITURE ASSEMBLY**  
[54] **ASSEMBLAGE DE MEUBLES**  
[72] BASTIAN, GEOFFREY WILLIAM, US  
[72] PYLE, MICHAEL LEE, US  
[72] KRESSIN, MATTHEW SCOTT, US  
[72] COYLE, ROBERT TERRY, JR., US  
[73] MCS INDUSTRIES, INC., US  
[86] (3052659)  
[87] (3052659)  
[22] 2019-08-21  
[30] US (62/722,352) 2018-08-24

---

[11] **3,053,465**  
[13] C

[51] **Int.Cl. B32B 39/00 (2006.01) B32B 37/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR LAMINATING A COMPOSITE LAMINATE ALONG A CONTINUOUS LOOP LAMINATION PATH**  
[54] **SYSTEME ET PROCEDE POUR STRATIFIER UN STRATIFIE COMPOSITE LE LONG D'UN CHEMIN DE STRATIFICATION EN BOUCLE CONTINUE**  
[72] SHAW, PAUL D., US  
[72] KENDALL, JAMES R., US  
[72] SURIYAARACHCHI, RAVIENDRA S., US  
[73] THE BOEING COMPANY, US  
[86] (3053465)  
[87] (3053465)  
[22] 2019-08-29  
[30] US (16/190144) 2018-11-13

---

[11] **3,058,982**  
[13] C

[51] **Int.Cl. B26B 19/20 (2006.01) B26B 19/38 (2006.01)**  
[25] EN  
[54] **HAIR CUTTING MACHINE AND CUTTER HEAD FOR SUCH**  
[54] **MACHINE DE COUPE DE CHEVEUX ET TETE DE COUPEAU D'UNE TELLE MACHINE**  
[72] KRUSE, REINHARD, DE  
[72] ISAACS, ALFRED, DE  
[72] HUCK, KATHARINA, DE  
[72] SCHMITT, BERND, DE  
[73] EXONDA SALON TOOLS GMBH, DE  
[85] 2019-10-03  
[86] 2018-05-09 (PCT/EP2018/062083)  
[87] (WO2018/210670)  
[30] DE (10 2017 110 525.5) 2017-05-15

**Canadian Patents Issued  
May 16, 2023**

---

[11] **3,060,457**  
[13] C

[51] **Int.Cl. A24F 40/40 (2020.01) A24B 15/167 (2020.01) A24F 40/10 (2020.01) A24F 47/00 (2020.01) A61M 15/00 (2006.01) A61M 15/06 (2006.01) H02J 7/00 (2006.01) H02J 13/00 (2006.01)**

[25] EN

[54] **POWER SUPPLY UNIT FOR AEROSOL INHALER, AEROSOL INHALER, POWER SUPPLY CONTROL METHOD OF AEROSOL INHALER, AND POWER SUPPLY CONTROL PROGRAM OF AEROSOL INHALER**

[54] **BLOC D'ALIMENTATION POUR INHALATEUR D'AEROSOL, INHALATEUR D'AEROSOL, METHODE DE REGLAGE DE L'ALIMENTATION ELECTRIQUE D'UN INHALATEUR D'AEROSOL, ET PROGRAMME POUR LE DE REGLAGE DE L'ALIMENTATION ELECTRIQUE D'UN INHALATEUR D'AEROSOL**

[72] YAMADA, MANABU, JP  
[72] AKAO, TAKESHI, JP  
[73] JAPAN TOBACCO INC., JP  
[86] (3060457)  
[87] (3060457)  
[22] 2019-10-28

---

[11] **3,064,198**  
[13] C

[51] **Int.Cl. G01F 23/284 (2006.01)**

[25] EN

[54] **RADAR LEVEL GAUGE FOR MEASURING THE VOLUME OF BULK PRODUCTS IN TANKS**

[54] **DISPOSITIF DE MESURE DE NIVEAU DE TYPE RADAR POUR MESURER LE VOLUME DE PRODUITS EN VRAC DANS DES RESERVOIRS**

[72] LIBERMAN, ALEKSANDR VLADIMIROVICH, RU  
[72] TARNOVSKII, ANDREI VALERIEVICH, RU  
[72] LICHKOV, GENNADII GENNADIEVICH, RU  
[73] JOINT STOCK COMPANY "LIMACO", RU  
[85] 2019-11-19  
[86] 2018-05-24 (PCT/RU2018/050056)  
[87] (WO2018/226126)

---

[11] **3,066,206**  
[13] C

[51] **Int.Cl. G05B 15/00 (2006.01) F24F 11/00 (2018.01) G05B 15/02 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR HVAC INEFFICIENCY PREDICTION**

[54] **PROCEDES ET SYSTEMES DE PREDICTION D'INEFFICACITE DE CVCA**

[72] SAMUNI, ERAN, IL  
[72] COHEN, ERAN, IL  
[72] ZAK, ALEXANDER, IL  
[72] RIMINI, NOA, IL  
[73] GRID4C LTD., IL  
[85] 2019-12-04  
[86] 2018-06-05 (PCT/IL2018/050611)  
[87] (WO2018/225064)  
[30] US (62/515,116) 2017-06-05

---

[11] **3,067,199**  
[13] C

[51] **Int.Cl. G01F 1/05 (2006.01) G01F 1/84 (2006.01)**

[25] EN

[54] **A NOTCH FILTER IN A VIBRATORY FLOW METER**

[54] **FILTRE ELIMINATEUR DE BANDE DANS UN DEBITMETRE VIBRATOIRE**

[72] RENSING, MATTHEW JOSEPH, US  
[72] CUNNINGHAM, TIMOTHY J., US  
[73] MICRO MOTION, INC., US  
[85] 2019-12-12  
[86] 2017-06-14 (PCT/US2017/037518)  
[87] (WO2018/231227)

---

[11] **3,067,919**  
[13] C

[51] **Int.Cl. F04B 5/02 (2006.01) E21B 43/26 (2006.01) F04B 9/00 (2006.01) F04B 43/113 (2006.01) F04B 53/14 (2006.01)**

[25] EN

[54] **A DUAL-ACTING PRESSURE BOOSTING LIQUID PARTITION DEVICE, SYSTEM, FLEET AND USE**

[54] **DISPOSITIF DE SEPARATION DE LIQUIDE D'AMPLIFICATION DE PRESSION A DOUBLE ACTION, SYSTEME, FLOTTE ET UTILISATION**

[72] MOLLATT, TORBJORN, NO  
[73] RSM IMAGINEERING AS, NO  
[85] 2019-12-19  
[86] 2018-06-27 (PCT/EP2018/067230)  
[87] (WO2019/007774)  
[30] NO (20171100) 2017-07-04

---

[11] **3,068,009**  
[13] C

[51] **Int.Cl. A61B 17/88 (2006.01) A61B 17/04 (2006.01) A61B 17/56 (2006.01) A61B 17/58 (2006.01)**

[25] EN

[54] **WIRE PASSER SYSTEM AND METHOD**

[54] **PROCEDE ET SYSTEME DE PASSAGE DE FIL**

[72] SMITH, JUDD MICHAEL, US  
[72] SMITH, TADD NICHOLAS, US  
[72] SMITH, C. DANIEL, US  
[73] SMITH, JUDD MICHAEL, US  
[73] SMITH, TADD NICHOLAS, US  
[73] SMITH, C. DANIEL, US  
[85] 2019-12-19  
[86] 2018-06-20 (PCT/US2018/038572)  
[87] (WO2018/237055)  
[30] US (15/627,777) 2017-06-20  
[30] US (62/583,955) 2017-11-09  
[30] US (62/687,062) 2018-06-19

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **3,068,067**  
[13] C

[51] **Int.Cl. E21B 41/00 (2006.01) B62D 63/06 (2006.01) E21B 43/267 (2006.01) F04B 15/00 (2006.01) F04B 17/06 (2006.01) F04B 23/04 (2006.01) C09K 8/62 (2006.01)**

[25] EN

[54] **HYDRATION-BLENDER TRANSPORT FOR FRACTURING OPERATION**

[54] **ELEMENT DE TRANSPORT A HYDRATATION-MELANGEUR POUR OPERATION DE FRACTURATION**

[72] MORRIS, JEFFREY G., US

[72] BODISHBAUGH, ADRIAN, BENJAMIN, US

[72] BATEMAN, MICHAEL, US

[72] JENSEN, NEAL, US

[72] HOLTE, COREY, CA

[73] TYPHON TECHNOLOGY SOLUTIONS, LLC, US

[85] 2019-12-19

[86] 2018-06-28 (PCT/US2018/039976)

[87] (WO2019/006106)

[30] US (62/526,869) 2017-06-29

---

[11] **3,068,805**  
[13] C

[51] **Int.Cl. C07C 2/08 (2006.01) B01J 31/34 (2006.01) C07C 11/02 (2006.01) C07B 61/00 (2006.01)**

[25] EN

[54] **OLEFIN OLIGOMERIZATION CATALYST AND METHOD FOR PRODUCING OLEFIN OLIGOMER IN THE PRESENCE OF THE SAME CATALYST**

[54] **CATALYSEUR D'OLIGOMERISATION D'OLEFINE ET PROCEDE DE PRODUCTION D'OLIGOMERE D'OLEFINE EN PRESENCE DU MEME CATALYSEUR**

[72] ISHII, SEIICHI, JP

[72] ICHIKAWA, SHINICHIRO, JP

[72] FUJITA, TERUNORI, JP

[73] MITSUI CHEMICALS, INC., JP

[85] 2020-01-02

[86] 2018-07-06 (PCT/JP2018/025626)

[87] (WO2019/009390)

[30] JP (2017-132485) 2017-07-06

[30] JP (2017-132486) 2017-07-06

---

[11] **3,071,733**  
[13] C

[51] **Int.Cl. E21B 47/12 (2012.01) E21B 23/10 (2006.01) E21B 41/00 (2006.01)**

[25] EN

[54] **A DOWNHOLE CONNECTION CONNEXION DE FOND DE PUIT**

[72] ASH, SIMON CHRISTOPHER, GB

[72] GILHOOLEY, NEILL, GB

[73] REEVES WIRELINE TECHNOLOGIES LIMITED, GB

[86] (3071733)

[87] (3071733)

[22] 2020-02-06

[30] GB (1902141.9) 2019-02-15

---

[11] **3,072,186**  
[13] C

[51] **Int.Cl. F24H 1/28 (2006.01) F24H 15/335 (2022.01) F24H 15/36 (2022.01) F24H 1/43 (2006.01) F24H 1/44 (2022.01)**

[25] EN

[54] **WATER HEATER**

[54] **CHAUFFE-EAU**

[72] NIU, ZHONGSHENG, US

[72] SCHULTZ, MICHAEL WILLIAM, US

[72] YANG, MENG, CN

[73] A.O. SMITH CORPORATION, US

[85] 2020-02-04

[86] 2018-08-01 (PCT/US2018/044871)

[87] (WO2019/028176)

[30] US (15/669,383) 2017-08-04

---

[11] **3,072,753**  
[13] C

[51] **Int.Cl. H04N 19/85 (2014.01)**

[25] EN

[54] **TECHNIQUES FOR SYNTHESIZING FILM GRAIN**

[54] **TECHNIQUES DE SYNTHESE DE GRAIN DE FILM**

[72] NORKIN, ANDREY, US

[73] NETFLIX, INC., US

[85] 2020-02-11

[86] 2018-08-22 (PCT/US2018/047596)

[87] (WO2019/040663)

[30] US (62/548,885) 2017-08-22

[30] US (16/108,069) 2018-08-21

---

[11] **3,072,916**  
[13] C

[51] **Int.Cl. E05F 11/02 (2006.01)**

[25] EN

[54] **LOW PROFILE PANEL HANDLE ASSEMBLY AND METHODS FOR SAME**

[54] **ENSEMBLE DE POIGNEE AVEC PANNEAU BAS PROFIL ET SES PROCEDES**

[72] WOODWARD, BRADLEY D., US

[72] HOLLERMANN, ROSS MICHAEL, US

[73] MARVIN LUMBER AND CEDAR COMPANY, D/B/A MARVIN WINDOWS AND DOORS, US

[86] (3072916)

[87] (3072916)

[22] 2020-02-19

[30] US (62/807,413) 2019-02-19

---

[11] **3,076,232**  
[13] C

[51] **Int.Cl. A61K 31/14 (2006.01) A61K 31/16 (2006.01) A61K 31/196 (2006.01) A61K 31/198 (2006.01) A61K 31/215 (2006.01) A61K 31/277 (2006.01) A61K 31/5375 (2006.01) A61K 45/06 (2006.01) A61P 3/00 (2006.01) A61P 43/00 (2006.01)**

[25] EN

[54] **METHODS FOR INHIBITING CONVERSION OF CHOLINE TO TRIMETHYLAMINE (TMA)**

[54] **PROCEDES D'INHIBITION DE LA CONVERSION DE CHOLINE EN TRIMETHYLAMINE (TMA)**

[72] GARCIA-GARCIA, JOSE CARLOS, US

[72] GERBERICK, GEORGE FRANKLIN, US

[72] WOS, JOHN AUGUST, US

[72] HAZEN, STANLEY LEON, US

[72] GU, XIAODONG, US

[73] THE PROCTER & GAMBLE COMPANY, US

[73] THE CLEVELAND CLINIC FOUNDATION, US

[85] 2020-03-17

[86] 2018-10-02 (PCT/US2018/053926)

[87] (WO2019/070677)

[30] US (62/566,992) 2017-10-02

**Canadian Patents Issued  
May 16, 2023**

---

[11] **3,076,366**  
[13] C

[51] **Int.Cl. A61L 29/14 (2006.01) A61L 29/16 (2006.01) A61M 25/00 (2006.01)**

[25] EN

[54] **4% TRISODIUM CITRATE SOLUTION FOR USE AS A CATHETER LOCK SOLUTION**

[54] **SOLUTION DE CITRATE TRISODIQUE A 4 % POUR UTILISATION EN TANT QUE SOLUTION DE VERROUILLAGE DE CATHETER**

[72] MAHMOODIAN, ROZA, US

[72] FERRERI, SUZANNE, US

[73] BECTON, DICKINSON AND COMPANY, US

[85] 2020-03-18

[86] 2018-09-21 (PCT/US2018/052186)

[87] (WO2019/060697)

[30] US (62/561,859) 2017-09-22

---

[11] **3,076,488**  
[13] C

[51] **Int.Cl. H04W 4/021 (2018.01) H04N 21/254 (2011.01) H04W 4/35 (2018.01) G06Q 30/0279 (2023.01) G06F 3/04883 (2022.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR GEOGRAPHICALLY ASSOCIATED OR GEOGRAPHICALLY DISASSOCIATED ENTICING GIFT OR VIDEO DROP**

[54] **SYSTEME ET PROCEDE ASSOCIE OU NON ASSOCIE GEOGRAPHIQUEMENT FAVORISANT LA REMISE DE CADEAUX OU DE VIDEOS**

[72] HARDY, BRIAN, US

[72] HARDY, NORMAN, US

[73] GIFTDROP LLC, US

[85] 2020-03-19

[86] 2018-09-19 (PCT/US2018/051831)

[87] (WO2019/060470)

[30] US (62/560,801) 2017-09-20

[30] US (16/135,361) 2018-09-19

---

[11] **3,076,588**  
[13] C

[51] **Int.Cl. A45D 34/04 (2006.01) A45D 34/00 (2006.01) B65D 1/08 (2006.01) B65D 47/18 (2006.01)**

[25] EN

[54] **CAP AND VIAL APPLICATOR SYSTEM FOR APPLYING TWO COSMETIC PRODUCTS**

[54] **SYSTEME APPLICATEUR A CAPUCHON ET FLACON POUR L'APPLICATION DE DEUX PRODUITS COSMETIQUES**

[72] ROH, YEON JUNG, US

[73] ELC MANAGEMENT LLC, US

[85] 2020-03-20

[86] 2018-09-14 (PCT/US2018/051102)

[87] (WO2019/060222)

[30] US (15/710,044) 2017-09-20

---

[11] **3,077,009**  
[13] C

[51] **Int.Cl. C07K 16/30 (2006.01)**

[25] EN

[54] **ANTI-MSLN ANTIBODY AND PHARMACEUTICAL COMPOSITION FOR CANCER TREATMENT COMPRISING SAME**

[54] **ANTICORPS ANTI-MSLN ET COMPOSITION PHARMACEUTIQUE DESTINEE AU TRAITEMENT DU CANCER, CONTENANT LEDIT ANTICORPS**

[72] KIM, KI SU, KR

[72] JEONG, JUN HONG, KR

[72] KIM, DONG SIK, KR

[72] LIM, YANG MI, KR

[72] PARK, YONG YEA, KR

[72] LIM, HYUNG KWON, KR

[72] WON, JONG WHA, KR

[73] GREEN CROSS CORPORATION, KR

[73] MOGAM INSTITUTE FOR BIOMEDICAL RESEARCH, KR

[85] 2020-03-25

[86] 2018-10-22 (PCT/KR2018/012493)

[87] (WO2019/078698)

[30] KR (10-2017-0136565) 2017-10-20

---

[11] **3,077,591**  
[13] C

[51] **Int.Cl. A61M 25/06 (2006.01) A61J 1/06 (2006.01) A61J 1/10 (2006.01) A61J 1/14 (2006.01) A61M 25/00 (2006.01)**

[25] EN

[54] **FLUID STORAGE UNIT, SYSTEMS, AND METHODS FOR CATHETER PRIMING**

[54] **UNITE DE STOCKAGE DE FLUIDE, SYSTEMES ET METHODES PERMETTANT L'AMORCAGE D'UN CATHETER**

[72] NAIDU, JITHENDRA KUMAR SATHYANARAYANA, SG

[72] NG, MUM PEW, SG

[73] BECTON, DICKINSON AND COMPANY, US

[85] 2020-03-31

[86] 2018-10-04 (PCT/US2018/054420)

[87] (WO2019/074763)

[30] US (62/569,833) 2017-10-09

[30] US (16/150,902) 2018-10-03



**Brevets canadiens délivrés  
16 mai 2023**

[11] **3,078,218**  
[13] C

[51] **Int.Cl. C12N 15/06 (2006.01) A61K 47/68 (2017.01) A61K 31/5513 (2006.01) A61P 35/00 (2006.01) C07D 519/00 (2006.01) C07K 16/00 (2006.01) C07K 16/18 (2006.01) C07K 16/28 (2006.01) C07K 16/30 (2006.01) C12N 5/10 (2006.01) C12P 21/08 (2006.01)**

[25] EN

[54] **ANTIBODY-PYRROLOBENZODIAZEPINE DERIVATIVE CONJUGATE**

[54] **CONJUGUE ANTICORPS-DERIVE DE PYRROLOBENZODIAZEPINE**

[72] TODA, NARIHIRO, JP

[72] OTA, YUSUKE, JP

[72] DOI, FUMINAO, JP

[72] MEGURO, MASAKI, JP

[72] HAYAKAWA, ICHIRO, JP

[72] ASHIDA, SHINJI, JP

[72] MASUDA, TAKESHI, JP

[72] NAKADA, TAKASHI, JP

[72] IWAMOTO, MITSUHIRO, JP

[72] HARADA, NAOYA, JP

[72] TERAUCHI, TOMOKO, JP

[72] OKAJIMA, DAISUKE, JP

[72] NAKAMURA, KENSUKE, JP

[72] UCHIDA, HIROAKI, JP

[72] HAMADA, HIROFUMI, JP

[73] DAIICHI SANKYO COMPANY, LIMITED, JP

[85] 2020-03-27

[86] 2018-09-28 (PCT/JP2018/036252)

[87] (WO2019/065964)

[30] JP (2017-190713) 2017-09-29

[11] **3,078,474**  
[13] C

[51] **Int.Cl. B24D 11/00 (2006.01) B24D 99/00 (2010.01) B24D 18/00 (2006.01)**

[25] EN

[54] **ABRASIVE ARTICLE AND METHOD FOR FORMING SAME**

[54] **ARTICLE ABRASIF ET SON PROCEDE DE FORMATION**

[72] JAYARAM, ROBIN CHANDRAS, IN

[72] THANGAMANI, ARUNVEL, IN

[72] HARALUR, GURULINGAMURTHY M., IN

[73] SAINT-GOBAIN ABRASIVES, INC., US

[73] SAINT-GOBAIN ABRASIFS, FR

[85] 2020-04-03

[86] 2018-10-04 (PCT/US2018/054474)

[87] (WO2019/071053)

[30] IN (201741035158) 2017-10-04

[11] **3,079,243**  
[13] C

[51] **Int.Cl. G01N 21/64 (2006.01) G06T 3/40 (2006.01) G06T 11/00 (2006.01)**

[25] EN

[54] **IMAGE RECONSTRUCTION METHOD, DEVICE AND MICROSCOPIC IMAGING DEVICE**

[54] **PROCEDE ET DISPOSITIF DE RECONSTRUCTION D'IMAGE, ET DISPOSITIF D'IMAGERIE A MICROSCOPE**

[72] SHAO, JINHUA, CN

[72] SUN, JIN, CN

[72] DUAN, HOULI, CN

[72] WANG, QIANG, CN

[73] SUZHOU MICROVIEW MEDICAL TECHNOLOGIES CO., LTD., CN

[85] 2020-04-16

[86] 2018-09-29 (PCT/CN2018/108865)

[87] (WO2019/076192)

[30] CN (201710959434.8) 2017-10-16

[11] **3,080,790**  
[13] C

[51] **Int.Cl. G03G 15/04 (2006.01) G03G 15/06 (2006.01)**

[25] EN

[54] **DRUM UNIT, CARTRIDGE, ELECTROPHOTOGRAPHIC IMAGE FORMING APPARATUS AND COUPLING MEMBER**

[54] **UNITE DE TAMBOUR, CARTOUCHE, APPAREIL DE FORMATION D'IMAGE ELECTROPHOTOGRAPHIQUE ET ELEMENT D'ACCOUPLLEMENT**

[72] MORI, TOMONORI, JP

[72] UESUGI, TETSUO, JP

[73] CANON KABUSHIKI KAISHA, JP

[86] (3080790)

[87] (3080790)

[22] 2016-08-26

[62] 3,034,218

[11] **3,083,180**  
[13] C

[51] **Int.Cl. F03D 80/40 (2016.01) F03D 17/00 (2016.01)**

[25] EN

[54] **ICE DETECTION METHODS FOR DETECTING ICE ON BLADES OF A WIND TURBINE**

[54] **METHODES DE DETECTION DE LA GLACE POUR DETECTER LA PRESENCE DE GLACE SUR LES LAMES D'UNE EOLIENNE**

[72] SCHAPER, ULF, DE

[73] WOBEN PROPERTIES GMBH, DE

[85] 2020-05-21

[86] 2018-11-27 (PCT/EP2018/082643)

[87] (WO2019/110364)

[30] DE (10 2017 129 112.1) 2017-12-07

[11] **3,083,505**  
[13] C

[51] **Int.Cl. C01D 15/00 (2006.01)**

[25] EN

[54] **PYROMETALLURGICAL METHOD FOR OBTAINING COMPOUNDS OF LITHIUM AND INTERMEDIATES FROM ALPHA-SPODUMENE AND LEPIDOLITE**

[54] **PROCEDE PYROMETALLURGIQUE POUR L'OBTENTION DE COMPOSES DE LITHIUM ET D'INTERMEDIAIRES A PARTIR D'ALFA-SPODUMENE ET DE LEPIDOLITHE**

[72] RODRIGUEZ, MARIO HUMBERTO, AR

[72] RESENTERA BEIZA, ALEXANDER CRISTIAN, AR

[72] ROSALES, GUSTAVO DANIEL, AR

[73] CONSEJO NACIONAL DE INVESTIGACIONES CIENTIFICAS Y TECNICAS CONICET, AR

[73] UNIVERSIDAD NACIONAL DE CUYO, AR

[85] 2020-05-22

[86] 2018-11-23 (PCT/IB2018/059265)

[87] (WO2019/102416)

[30] AR (20170103282) 2017-11-24

**Canadian Patents Issued  
May 16, 2023**

---

[11] **3,083,903**  
[13] C

[51] **Int.Cl. E04F 11/18 (2006.01) F16B 9/00 (2006.01)**  
[25] EN  
[54] **BRACKET SYSTEM AND METHOD FOR INSTALLATION OF HORIZONTAL BALUSTERS**  
[54] **SYSTEME ET PROCEDE DE SUPPORT POUR L'INSTALLATION DE BALUSTRES HORIZONTAUX**  
[72] LEARY, STEVEN J., US  
[73] VINYLAST, INC., US  
[86] (3083903)  
[87] (3083903)  
[22] 2020-06-18  
[30] US (16/445,527) 2019-06-19

---

[11] **3,084,623**  
[13] C

[51] **Int.Cl. C07D 239/88 (2006.01) A61K 31/517 (2006.01) A61P 25/00 (2006.01)**  
[25] EN  
[54] **THE USE OF 3-(2-(4-(2-METHOXYPHENYL)PIPERAZIN-1-YL)ETHYL)QUINAZOLIN-4(3H)-ONE IN THE TREATMENT OF POST-TRAUMATIC STRESS DISORDER**  
[54] **UTILISATION DE 3-(2-(4-(2-METHOXYPHENYL)PIPERAZIN-1-YL)ETHYL)QUINAZOLIN-4(3H)-ONE DANS LE TRAITEMENT DU TROUBLE DE STRESS POST-TRAUMATIQUE**  
[72] MASCARELLO, ALESSANDRA, BR  
[72] GUIMARAES, CRISTIANO RUCH WERNECK, BR  
[72] AZEVEDO, HATYLAS FELYPE ZANETI DE, BR  
[72] JUNIOR, MARCOS ANTONIO FERREIRA, BR  
[73] ACHE LABORATORIOS FARMACEUTICOS S.A, BR  
[85] 2020-06-03  
[86] 2018-12-14 (PCT/BR2018/050461)  
[87] (WO2019/113668)  
[30] US (62/598,757) 2017-12-14

---

[11] **3,084,892**  
[13] C

[51] **Int.Cl. A61J 7/00 (2006.01) A61J 7/04 (2006.01) B65G 1/04 (2006.01)**  
[25] EN  
[54] **AUTOMATED PHARMACY DISPENSING MACHINE WITH AUTOCALIBRATION STATION**  
[54] **DISTRIBUTEUR AUTOMATIQUE DE PRODUITS PHARMACEUTIQUES AVEC STATION D'ETALONNAGE AUTOMATIQUE**  
[72] CROSS, JOE, US  
[72] CURL, WELDON, JR., US  
[72] SAYRES, JUSTIN, US  
[73] PARATA SYSTEMS, LLC, US  
[86] (3084892)  
[87] (3084892)  
[22] 2020-06-25  
[30] US (62/866323) 2019-06-25

---

[11] **3,085,023**  
[13] C

[51] **Int.Cl. F16M 13/02 (2006.01) A47G 1/16 (2006.01) A47G 29/00 (2006.01) A47G 33/00 (2006.01) F16B 45/00 (2006.01)**  
[25] EN  
[54] **HOOK AND LATTICE ADJUSTABLE WREATH HANGER**  
[54] **CROCHET DE COURONNE AJUSTABLE AVEC ACCROCHE ET GRILLE**  
[72] KACINES, JEFFERY J., US  
[73] KACINES, JEFFERY J., US  
[86] (3085023)  
[87] (3085023)  
[22] 2020-06-30  
[30] US (16/705,513) 2019-12-06

---

[11] **3,085,550**  
[13] C

[51] **Int.Cl. B65D 47/14 (2006.01) A45F 3/16 (2006.01) A45F 3/18 (2006.01) B65D 51/24 (2006.01)**  
[25] EN  
[54] **CAP ASSEMBLIES WITH MAGNETIC CLOSURE RETENTION MECHANISMS AND DRINK CONTAINERS INCLUDING THE SAME**  
[54] **ENSEMBLES BOUCHONS DOTES DE MECANISMES DE RETENUE DE FERMETURE MAGNETIQUE ET CONTENANTS DE BOISSON COMPRENANT CEUX-CI**  
[72] DAVIES, JEFF, US  
[73] CAMELBAK PRODUCTS, LLC, US  
[85] 2020-06-11  
[86] 2018-06-11 (PCT/US2018/036903)  
[87] (WO2018/231705)  
[30] US (62/520,001) 2017-06-15  
[30] US (15/792,332) 2017-10-24

---

[11] **3,085,947**  
[13] C

[51] **Int.Cl. B01D 24/22 (2006.01) B01J 8/00 (2006.01) B01J 19/24 (2006.01)**  
[25] EN  
[54] **SCALE COLLECTION DEVICE FOR DOWNFLOW REACTORS**  
[54] **DISPOSITIF DE COLLECTE DE TARTRE POUR REACTEURS A COURANT DESCENDANT**  
[72] XU, ZHANPING, US  
[72] LESNIAK, STEVEN J., US  
[72] BUNTING JR., ROBERT L., US  
[73] UOP LLC, US  
[85] 2020-06-15  
[86] 2018-12-20 (PCT/US2018/066682)  
[87] (WO2019/126433)  
[30] US (62/609,295) 2017-12-21

**Brevets canadiens délivrés  
16 mai 2023**

[11] **3,086,011**

[13] C

- [51] **Int.Cl. C01G 23/00 (2006.01) C09K 3/14 (2006.01) F16D 69/00 (2006.01) F16D 69/02 (2006.01)**
- [25] EN
- [54] **COMPLEX TITANATE COMPOUND, METHOD OF PREPARING SAME, AND FRICTION MATERIAL**
- [54] **COMPOSE D'OXYDE DE TITANE COMPOSITE, METHODE DE PRODUCTION DE COMPOSE D'OXYDE DE TITANE COMPOSITE ET MATERIAU DE FRICTION**
- [72] HIGASHI, KENJI, JP
- [72] YASUDA, MASAFUMI, JP
- [73] KUBOTA CORPORATION, JP
- [85] 2020-06-16
- [86] 2018-11-27 (PCT/JP2018/043474)
- [87] (WO2019/130941)
- [30] JP (2017-248821) 2017-12-26

[11] **3,086,681**

[13] C

- [51] **Int.Cl. B01L 3/00 (2006.01) G01N 33/487 (2006.01)**
- [25] EN
- [54] **DROPLET INTERFACES IN ELECTRO-WETTING DEVICES**
- [54] **INTERFACES DE GOUTTELETTES DANS DES DISPOSITIFS ELECTRO-MOILLANTS**
- [72] HOLDEN, MATTHEW, US
- [72] WHITE, JAMES, GB
- [72] HERON, ANDREW JOHN, GB
- [72] CLARKE, JAMES ANTHONY, GB
- [72] HYDE, JASON ROBERT, GB
- [72] HADWEN, BENJAMIN JAMES, GB
- [72] ANDERSON, SALLY, GB
- [73] OXFORD NANOPORE TECHNOLOGIES PLC, GB
- [73] OXFORD NANOPORE TECHNOLOGIES LTD., GB
- [85] 2020-06-22
- [86] 2018-12-21 (PCT/US2018/067219)
- [87] (WO2019/126715)
- [30] GB (1721649.0) 2017-12-21

[11] **3,086,949**

[13] C

- [51] **Int.Cl. A47B 25/00 (2006.01) A47B 13/00 (2006.01) A47B 13/08 (2006.01) A47B 13/12 (2006.01) A47B 83/02 (2006.01) A47C 9/10 (2006.01) A63B 23/10 (2006.01) A63F 7/06 (2006.01)**
- [25] EN
- [54] **GAME TABLE AND GAME EQUIPMENT**
- [54] **TABLE DE JEU ET EQUIPEMENT DE JEU**
- [72] SAARINEN, JARNO, FI
- [72] KORHONEN, MIKA, FI
- [73] 4 FEET UNDER OY, FI
- [85] 2020-06-25
- [86] 2019-01-08 (PCT/FI2019/050009)
- [87] (WO2019/138158)
- [30] FI (20185025) 2018-01-09

[11] **3,087,505**

[13] C

- [51] **Int.Cl. B65B 35/44 (2006.01) B65B 5/10 (2006.01) B65B 21/24 (2006.01) B65B 43/12 (2006.01) B65B 61/28 (2006.01) B65B 65/00 (2006.01) B65B 65/02 (2006.01)**
- [25] EN
- [54] **CONTINUOUS MOTION PACKAGING MACHINE WITH CARTON TURNING STATION**
- [54] **MACHINE D'EMBALLAGE A MOUVEMENT CONTINU DOTEE D'UNE STATION DE RETOURNEMENT DE CARTONS**
- [72] FORD, COLIN P., US
- [72] RICE, THOMAS A., US
- [73] GRAPHIC PACKAGING INTERNATIONAL, LLC, US
- [85] 2020-06-30
- [86] 2019-01-29 (PCT/US2019/015597)
- [87] (WO2019/148171)
- [30] US (62/623,208) 2018-01-29
- [30] US (62/644,019) 2018-03-16

[11] **3,088,706**

[13] C

- [51] **Int.Cl. B25J 15/00 (2006.01) B25J 11/00 (2006.01)**
- [25] EN
- [54] **A GRASPING AFFORDANCE FOR USE IN A ROBOT SYSTEM**
- [54] **MISE A DISPOSITION DE PREHENSION DESTINEE A ETRE UTILISEE DANS UN SYSTEME ROBOTISE**
- [72] RUSSELL, DUNCAN, GB
- [72] SOTIROPOULOS, PANAGIOTIS, GB
- [73] OCADO INNOVATION LIMITED, GB
- [85] 2020-07-16
- [86] 2019-01-16 (PCT/EP2019/051053)
- [87] (WO2019/141730)
- [30] GB (1800863.1) 2018-01-19

[11] **3,088,910**

[13] C

- [51] **Int.Cl. E06B 9/42 (2006.01) E06B 9/72 (2006.01)**
- [25] EN
- [54] **CORDLESS BLIND DEVICE FOR EXTERNAL POWER DRIVE**
- [54] **DISPOSITIF DE STORE SANS FIL POUR ENTRAINEMENT A ENERGIE EXTERNE**
- [72] JANG, SEONG-RYONG, KR
- [73] WINTEC KOREA INC., KR
- [85] 2020-07-07
- [86] 2019-01-04 (PCT/KR2019/000164)
- [87] (WO2019/135638)
- [30] KR (10-2018-0002498) 2018-01-08

**Canadian Patents Issued  
May 16, 2023**

---

[11] **3,089,245**  
[13] C

[51] **Int.Cl. C09K 8/035 (2006.01) C09K 8/36 (2006.01)**

[25] EN

[54] **MALEATED AMIDO-AMINE REACTION PRODUCT-CONTAINING EMULSIFIERS AND DRILLING FLUIDS COMPRISING THE SAME**

[54] **EMULSIFIANTS CONTENANT UN PRODUIT DE REACTION D'AMIDOAMINE MALEIQUE ET LIQUIDES DE FORAGE LES COMPRENANT**

[72] MAGHRABI, SHADAAB S., US

[72] FANDEL, JOSEPH J., US

[73] INGEVITY SOUTH CAROLINA, LLC, US

[85] 2020-07-21

[86] 2019-01-30 (PCT/US2019/015798)

[87] (WO2019/152485)

[30] US (62/623,689) 2018-01-30

---

[11] **3,089,660**  
[13] C

[51] **Int.Cl. H02M 1/16 (2006.01) H02M 3/24 (2006.01) H02M 7/04 (2006.01)**

[25] EN

[54] **RESONANT POWER CONVERTERS AND CONTROL METHODS FOR WIDE INPUT AND OUTPUT VOLTAGE RANGES**

[54] **CONVERTISSEURS DE PUISSANCE RESONANTS ET PROCEDES DE COMMANDE POUR LARGES PLAGES DE TENSION D'ENTREE ET DE SORTIE**

[72] LIU, YAN-FEI, CA

[72] CHEN, YANG, CA

[73] QUEEN'S UNIVERSITY AT KINGSTON, CA

[85] 2020-07-27

[86] 2019-01-28 (PCT/CA2019/050100)

[87] (WO2019/144241)

[30] US (62/623,020) 2018-01-29

[30] US (62/627,976) 2018-02-08

---

[11] **3,089,798**  
[13] C

[51] **Int.Cl. H04M 1/04 (2006.01) B60R 11/02 (2006.01) F16M 11/04 (2006.01)**

[25] EN

[54] **UNIVERSAL BRACKET FOR A TELECOMMUNICATION TERMINAL**

[54] **SUPPORT UNIVERSEL POUR UN TERMINAL DE TELECOMMUNICATIONS**

[72] WIETH, FRANZ, DE

[72] FILOSI, ANDREAS, DE

[73] WIETH, FRANZ, DE

[73] FILOSI, ANDREAS, DE

[85] 2020-07-28

[86] 2019-01-29 (PCT/EP2019/052119)

[87] (WO2019/145564)

[30] DE (10 2018 000 658.2) 2018-01-29

---

[11] **3,090,250**  
[13] C

[51] **Int.Cl. H02B 1/03 (2006.01) H01R 4/2406 (2018.01) H02G 15/06 (2006.01)**

[25] EN

[54] **METER BOX WITH INSULATION-PIERCING WIRE TERMINATION CONNECTORS**

[54] **BOITE DE COMPTEUR A CONNECTEURS DE TERMINAISON DE FIL CAPABLES DE PERCER L'ISOLATION**

[72] MCCARTHY, WILLIAM E., US

[72] LUDWIG, MATTHEW B., US

[72] OCHS, RYAN R., US

[72] HAGEN, BRIAN M., US

[72] LEACH, DOUGLAS D., US

[72] BENNETT, GREGORY E., US

[73] MILBANK MANUFACTURING CO., US

[86] (3090250)

[87] (3090250)

[22] 2020-08-17

[30] US (16/548250) 2019-08-22

---

[11] **3,090,557**  
[13] C

[51] **Int.Cl. B23K 26/70 (2014.01) B23K 10/02 (2006.01) B23K 15/00 (2006.01) B23K 26/14 (2014.01) B23P 23/04 (2006.01)**

[25] EN

[54] **A MACHINE TOOL**

[54] **MACHINE-OUTIL**

[72] JONES, JASON B., GB

[72] COATES, PETER, GB

[73] EX SCINTILLA LIMITED, GB

[86] (3090557)

[87] (3090557)

[22] 2013-07-16

[62] 2,877,982

[30] GB (1212629.8) 2012-07-16

[30] GB (1307796.1) 2013-04-30

---

[11] **3,091,559**  
[13] C

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

[25] EN

[54] **METHOD FOR ENABLING NEW RADIO (NR) INTEGRATED ACCESS AND BACKHAUL (IAB) NODES TO OPERATE IN NON-STANDALONE (NSA) CELLS**

[54] **PROCEDE POUR PERMETTRE A DES NOEUDS D'ACCES ET DE RACCORDEMENT INTEGRES (IAB) NOUVELLE RADIO (NR) DE FONCTIONNER DANS DES CELLULES NON AUTONOMES (NSA)**

[72] MILDH, GUNNAR, SE

[72] MUHAMMAD, AJMAL, SE

[72] PEISA, JANNE, FI

[72] TEYEB, OUMER, SE

[73] TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE

[85] 2020-08-17

[86] 2019-02-14 (PCT/IB2019/051211)

[87] (WO2019/159107)

[30] US (62/710,355) 2018-02-16

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **3,093,949**  
[13] C

[51] **Int.Cl. B60D 1/46 (2006.01) B60D 1/145 (2006.01) B60D 1/52 (2006.01)**  
[25] EN  
[54] **HITCH ASSEMBLY WITH A RECESSED DRAW BAR**  
[54] **ASSEMBLAGE D'ATTACHE DE REMORQUAGE AVEC BARRE D'ATTELAGAGE EFFILEE**  
[72] WORKS, JOSEPH W., US  
[72] MCCALL, TRAVIS M., US  
[72] MUELLER, MICHAEL D., US  
[73] B & W CUSTOM TRUCK BEDS, INC., US  
[86] (3093949)  
[87] (3093949)  
[22] 2020-09-18  
[30] US (62/929,286) 2019-11-01  
[30] US (62/983,189) 2020-02-28

---

[11] **3,097,606**  
[13] C

[51] **Int.Cl. H04W 48/12 (2009.01)**  
[25] EN  
[54] **METHOD, DEVICE, AND SYSTEM FOR CONFIGURING SIDELINK RESOURCES**  
[54] **PROCEDE D'ATTRIBUTION D'UNE RESSOURCE DE LIAISON LATERALE, DISPOSITIF, ET SYSTEME**  
[72] YANG, JIN, CN  
[72] XING, WEIMIN, CN  
[72] LU, YOUXIONG, CN  
[73] ZTE CORPORATION, CN  
[85] 2020-10-19  
[86] 2019-04-12 (PCT/CN2019/082415)  
[87] (WO2019/201165)  
[30] CN (201810354828.5) 2018-04-19

---

[11] **3,099,474**  
[13] C

[51] **Int.Cl. G01J 3/18 (2006.01) G01J 3/443 (2006.01) G01N 21/73 (2006.01)**  
[25] EN  
[54] **SPECTROMETERS AND INSTRUMENTS INCLUDING THEM**  
[54] **SPECTROMETRES ET INSTRUMENTS LES COMPRENANT**  
[72] FARSAF, MAHSA, US  
[72] AIKENS, DAVID, US  
[73] PERKINELMER HEALTH SCIENCES, INC., US  
[85] 2020-11-05  
[86] 2019-05-01 (PCT/US2019/030113)  
[87] (WO2019/217167)  
[30] US (62/667,973) 2018-05-07  
[30] US (16/100,587) 2018-08-10

---

[11] **3,094,771**  
[13] C

[51] **Int.Cl. C12N 15/87 (2006.01) C12N 1/15 (2006.01) C12N 15/80 (2006.01)**  
[25] EN  
[54] **METHOD FOR AGROBACTERIUM-MEDIATED GENETIC TRANSFORMATION OF LEPTOSPHAERIA BIGLOBOSA**  
[54] **PROCEDE DE TRANSFORMATION GENETIQUE PAR UNE AGROBACTERIE DE LEPTOSPHAERIA BIGLOBOSA**  
[72] SONG, PEILING, CN  
[72] LI, ZIQIN, CN  
[72] SHI, ZHIDAN, CN  
[72] ZHAO, LILI, CN  
[72] YAN, MENGJIAO, CN  
[72] YANG, YONGQING, CN  
[72] HUANGFU, HAIYAN, CN  
[72] HUANGFU, JIURU, CN  
[72] JIA, XIAOQING, CN  
[72] HAO, LIFEN, CN  
[72] GUO, CHEN, CN  
[72] ZHU, CHUNXIA, CN  
[72] ZHANG, YING, CN  
[73] INNER MONGOLIA ACADEMY OF AGRICULTURAL & ANIMAL HUSBANDRY SCIENCES, CN  
[85] 2020-09-29  
[86] 2020-06-16 (PCT/CN2020/096291)  
[87] (WO2020/253671)  
[30] CN (201910520818.9) 2019-06-17

---

[11] **3,098,583**  
[13] C

[51] **Int.Cl. C07D 413/14 (2006.01) A61K 31/438 (2006.01) A61K 31/439 (2006.01) A61K 31/444 (2006.01) A61K 31/501 (2006.01) A61K 31/506 (2006.01) A61P 25/00 (2006.01) C07D 401/04 (2006.01) C07D 413/04 (2006.01) C07D 417/04 (2006.01) C07D 417/14 (2006.01) C07D 471/04 (2006.01) C07D 471/08 (2006.01) C07D 487/04 (2006.01) C07D 513/04 (2006.01)**  
[25] EN  
[54] **SPIROPIPERIDINE ALLOSTERIC MODULATORS OF NICOTINIC ACETYLCHOLINE RECEPTORS**  
[54] **MODULATEURS ALLOSTERIQUES DE SPIROPIPERIDINE DES RECEPTEURS NICOTINIQUES DE L'ACETYLCHOLINE**  
[72] CROWLEY, BRENDAN M., US  
[72] CAMPBELL, BRIAN T., US  
[72] CHOBANIAN, HARRY R., US  
[72] FELLS, JAMES I., US  
[72] GUIADEEN, DEODIAL G., US  
[72] GRESHOCK, THOMAS J., US  
[72] LEAVITT, KENNETH J., US  
[72] RADA, VANESSA L., US  
[72] BELL, IAN M., US  
[73] MERCK SHARP & DOHME LLC, US  
[85] 2020-10-27  
[86] 2019-04-29 (PCT/US2019/029561)  
[87] (WO2019/212927)  
[30] US (62/665,091) 2018-05-01

---

[11] **3,100,472**  
[13] C

[51] **Int.Cl. G02B 27/00 (2006.01) G02B 6/10 (2006.01) G02B 27/01 (2006.01) G02F 1/01 (2006.01)**  
[25] EN  
[54] **OPTICAL SYSTEM INCLUDING LIGHT-GUIDE OPTICAL ELEMENT WITH PARTIALLY-REFLECTIVE INTERNAL SURFACES**  
[54] **SYSTEME OPTIQUE COMPRENANT UN ELEMENT OPTIQUE DE GUIDAGE DE LUMIERE DOTE DE SURFACES INTERNES PARTIELLEMENT REFLECHISSANTES**  
[72] RONEN, EITAN, IL  
[73] LUMUS LTD., IL  
[85] 2020-11-16  
[86] 2019-05-23 (PCT/IB2019/054272)  
[87] (WO2019/224764)  
[30] US (62/675,205) 2018-05-23

**Canadian Patents Issued  
May 16, 2023**

---

[11] **3,100,473**  
[13] C

[51] **Int.Cl. B60P 7/02 (2006.01) B62D 33/04 (2006.01)**  
[25] EN  
[54] **TONNEAU COVER WITH TORSION ELEMENT**  
[54] **COUVRE-CAISSE COMPORTANT UN ELEMENT DE TORSION**  
[72] FACCHINELLO, JEROME, US  
[72] CARTER, CHAD A., US  
[73] TECTUM HOLDINGS, INC., US  
[86] (3100473)  
[87] (3100473)  
[22] 2020-11-24  
[30] US (16/852,714) 2020-04-20

---

[11] **3,101,444**  
[13] C

[51] **Int.Cl. H03L 7/099 (2006.01) H03B 5/12 (2006.01) H03L 7/093 (2006.01) H03L 7/193 (2006.01)**  
[25] EN  
[54] **DUAL VOLTAGE CONTROLLED OSCILLATOR CIRCUITS FOR A BROADBAND PHASE LOCKED LOOP FOR MULTI-BAND MILLIMETER-WAVE 5G COMMUNICATION**  
[54] **CIRCUITS A DEUX OSCILLATEURS COMMANDES EN TENSION POUR UNE BOUCLE A VERROUILLAGE DE PHASE DE LARGE BANDE POUR DES COMMUNICATIONS 5G D'ONDES MILLIMETRIQUES A MULTIPLES BANDES**  
[72] JUNG, DOOHWAN, US  
[72] CHEN, THOMAS, US  
[72] WANG, HUA, US  
[73] SWIFTLINK TECHNOLOGIES INC., CA  
[85] 2020-11-24  
[86] 2019-05-21 (PCT/US2019/033403)  
[87] (WO2019/231774)  
[30] US (15/992,079) 2018-05-29

---

---

[11] **3,101,840**  
[13] C

[51] **Int.Cl. A01K 5/02 (2006.01)**  
[25] EN  
[54] **PIG FEEDER WITH FEED FLOW ADJUSTMENT**  
[54] **DISPOSITIF D'ALIMENTATION DE PORCS AVEC REGLAGE DE DEBIT D'ALIMENTATION**  
[72] KLEINSASSER, JONATHAN, CA  
[72] MCADAMS, TOM, CA  
[73] CRYSTAL SPRING COLONY FARMS LTD., CA  
[85] 2020-11-27  
[86] 2019-05-29 (PCT/CA2019/050728)  
[87] (WO2019/232616)  
[30] US (62/680,898) 2018-06-05

---

[11] **3,103,669**  
[13] C

[51] **Int.Cl. B43L 19/00 (2006.01) C08K 5/103 (2006.01)**  
[25] EN  
[54] **ERASER**  
[54] **GOMME**  
[72] MADERER, TANJA, DE  
[73] STAEDTLER MARS GMBH & CO. KG, DE  
[85] 2020-12-14  
[86] 2019-07-08 (PCT/EP2019/025219)  
[87] (WO2020/020485)  
[30] DE (10 2018 005 822.1) 2018-07-25

---

[11] **3,104,161**  
[13] C

[51] **Int.Cl. B65D 33/25 (2006.01) A44B 19/26 (2006.01)**  
[25] EN  
[54] **CHILD RESISTANT ZIPPER CLOSURE SYSTEM AND ROCKABLE SLIDER DEVICE AND METHODS**  
[54] **SYSTEME DE FERMETURE A GLISSIERE A L'EPREUVE DES ENFANTS ET DISPOSITIF DE CURSEUR BASCULABLE ET PROCEDES**  
[72] ATHANS, JOHN D., US  
[72] DERUE, NICHOLAS A., US  
[72] THOMPSON, ZACHARY R., US  
[72] THOMPSON, GREGG, US  
[72] SNYDER, SCOTT, US  
[73] REYNOLDS PRESTO PRODUCTS INC., US  
[85] 2020-12-16  
[86] 2019-07-01 (PCT/US2019/040137)  
[87] (WO2020/009996)  
[30] US (16/025,616) 2018-07-02  
[30] US (16/051,090) 2018-07-31

---

---

[11] **3,104,614**  
[13] C

[51] **Int.Cl. H01M 50/258 (2021.01) H01M 10/63 (2014.01) H01M 50/284 (2021.01) H01M 50/543 (2021.01) H01M 10/48 (2006.01)**  
[25] EN  
[54] **ELECTRIC POWER MODULE AND METHOD FOR ASSEMBLING IT**  
[54] **MODULE D'ALIMENTATION ELECTRIQUE ET SON PROCEDE D'ASSEMBLAGE**  
[72] ROSSI, CLAUDIO, IT  
[72] PILATI, ALESSIO, IT  
[72] MARANO, MATTEO, IT  
[73] ALMA MATER STUDIORUM - UNIVERSITA' DI BOLOGNA, IT  
[85] 2020-12-21  
[86] 2019-06-19 (PCT/IB2019/055139)  
[87] (WO2020/003059)  
[30] IT (102018000006642) 2018-06-25

---

[11] **3,105,006**  
[13] C

[51] **Int.Cl. C10G 3/00 (2006.01) C10G 11/00 (2006.01) C10G 50/00 (2006.01) C10G 51/00 (2006.01) C10G 57/02 (2006.01)**  
[25] EN  
[54] **METHOD TO PRODUCE BIO-RENEWABLE PROPYLENE FROM OILS AND FATS**  
[54] **PROCEDE DE PRODUCTION DE PROPYLENE BIO-RENOUVELABLE A PARTIR D'HUILES ET DE GRAISSES**  
[72] OJALA, ANTTI, FI  
[72] VAPOLA, RISTO, FI  
[72] KARVO, ANNA, FI  
[72] VAN DE VELDE, ROGIER, FI  
[73] NESTE OYJ, FI  
[85] 2021-01-05  
[86] 2019-07-25 (PCT/EP2019/070040)  
[87] (WO2020/025441)  
[30] FI (20185671) 2018-08-03

---

**Brevets canadiens délivrés  
16 mai 2023**

[11] **3,105,213**  
[13] C

- [51] **Int.Cl. H05K 5/02 (2006.01) B65D 21/02 (2006.01) B65D 21/028 (2006.01) B65D 21/08 (2006.01) B65D 90/08 (2006.01) H01R 4/64 (2006.01)**
- [25] EN
- [54] **MODULAR WALL MOUNT ENCLOSURE**
- [54] **ENCEINTE MODULAIRE DE MONTAGE MURAL**
- [72] O'CONNOR, DOUGLAS PAUL, US
- [73] HUBBELL INCORPORATED, US
- [85] 2020-12-24
- [86] 2019-07-03 (PCT/US2019/040475)
- [87] (WO2020/010184)
- [30] US (62/693,672) 2018-07-03

[11] **3,105,870**  
[13] C

- [51] **Int.Cl. B29C 70/36 (2006.01)**
- [25] EN
- [54] **SYSTEMS, METHODS, AND APPARATUS FOR FLOW MEDIA ASSOCIATED WITH THE MANUFACTURE OF COMPONENTS**
- [54] **SYSTEMES, METHODES ET APPAREILS DESTINES A L'ECOULEMENT D'UN MATERIAU ASSOCIE A LA FABRICATION DE COMPOSANTS**
- [72] NESBIT, ASHLEIGH R., AU
- [73] THE BOEING COMPANY, US
- [86] (3105870)
- [87] (3105870)
- [22] 2016-05-27
- [62] 2,931,426
- [30] US (14/812853) 2015-07-29

[11] **3,106,577**  
[13] C

- [51] **Int.Cl. F16B 37/14 (2006.01) H01R 4/30 (2006.01) H01R 4/64 (2006.01) H01R 13/52 (2006.01)**
- [25] EN
- [54] **INSERT FOR CONNECTING AN ELECTRICAL CONNECTION TO A WALL AND PROTECTIVE CAP FOR AN INSERT**
- [54] **INSERT POUR RELIER UNE CONNEXION ELECTRIQUE A UN MUR ET CAPUCHON DE PROTECTION POUR UN INSERT**
- [72] DACH, ALEXANDER SEBASTIAN, DE
- [72] JULING, DIETER, DE
- [73] FAIRCHILD FASTENERS EUROPE - CAMLOC GMBH, DE
- [85] 2021-01-15
- [86] 2019-03-22 (PCT/EP2019/057293)
- [87] (WO2020/025177)
- [30] DE (20 2018 104 479.6) 2018-08-03

[11] **3,106,815**  
[13] C

- [51] **Int.Cl. B60C 7/08 (2006.01) B60B 9/24 (2006.01) B60B 9/28 (2006.01) B60C 7/18 (2006.01) B60B 9/26 (2006.01) B60C 7/14 (2006.01) B60C 7/26 (2006.01) B60C 11/02 (2006.01)**
- [25] EN
- [54] **WHEEL ASSEMBLY INCLUDING LATERAL STOPS AND RELATED METHODS**
- [54] **ENSEMBLE ROUE COMPRENANT DES BUTEES LATERALES ET PROCEDES ASSOCIES**
- [72] KEMENY, ZOLTAN, US
- [73] GACW INCORPORATED, US
- [85] 2021-01-18
- [86] 2019-07-15 (PCT/US2019/041764)
- [87] (WO2020/018402)
- [30] US (62/764,138) 2018-07-19
- [30] US (16/237,426) 2018-12-31

[11] **3,106,819**  
[13] C

- [51] **Int.Cl. B60B 9/24 (2006.01) B60B 9/28 (2006.01) B60B 9/26 (2006.01) B60B 27/00 (2006.01) B60G 17/08 (2006.01) F15B 15/28 (2006.01)**
- [25] EN
- [54] **WHEEL ASSEMBLY INCLUDING RELATIVE MOVEMENT SENSOR AND RELATED METHODS**
- [54] **ENSEMBLE ROUE COMPRENANT UN CAPTEUR DE MOUVEMENT RELATIF, ET PROCEDES CONNEXES**
- [72] KEMENY, ZOLTAN, US
- [73] GACW INCORPORATED, US
- [85] 2021-01-18
- [86] 2019-07-15 (PCT/US2019/041769)
- [87] (WO2020/018405)
- [30] US (62/764,138) 2018-07-19
- [30] US (16/237,486) 2018-12-31

[11] **3,107,116**  
[13] C

- [51] **Int.Cl. E06B 9/88 (2006.01) H02P 7/03 (2016.01)**
- [25] EN
- [54] **STALL PROTECTION FOR A MOTORIZED WINDOW TREATMENT**
- [54] **PROTECTION ANTIBLOCCAGE DESTINE A UN HABILLAGE DE FENETRE MOTORISE**
- [72] HAUSMAN, JR, DONALD F., US
- [72] WU, CHEN MING, US
- [73] LUTRON TECHNOLOGY COMPANY LLC, US
- [85] 2021-01-20
- [86] 2019-07-30 (PCT/US2019/044019)
- [87] (WO2020/028287)
- [30] US (62/711,981) 2018-07-30

Canadian Patents Issued  
May 16, 2023

[11] **3,108,158**  
[13] C  
[51] **Int.Cl. C07D 417/14 (2006.01) A61K 31/497 (2006.01) A61P 25/00 (2006.01) A61P 25/28 (2006.01)**  
[25] EN  
[54] **5-METHYL-4-FLUORO-THIAZOL-2-YL COMPOUNDS**  
[54] **COMPOSES 5-METHYL-4-FLUORO-THIAZOL-2-YL**  
[72] DREYFUS, NICOLAS JACQUES FRANCOIS, US  
[72] LINDSAY-SCOTT, PETER JAMES, US  
[73] ELI LILLY AND COMPANY, US  
[85] 2021-01-29  
[86] 2019-07-24 (PCT/US2019/043219)  
[87] (WO2020/028115)  
[30] US (62/712,266) 2018-07-31

[11] **3,108,373**  
[13] C  
[51] **Int.Cl. C07D 487/04 (2006.01)**  
[25] EN  
[54] **CRYSTAL POLYMORPH OF 8-BROMO-2-(1-METHYLPYPERIDIN-4-YLAMINO)-4-(4-PHENOXYPHENYLAMINO)PYRIDO[4,3-D]PYRIMIDIN-5(6H)-ONE HYDROCHLORIDE AND METHOD FOR PREPARING SAME**  
[54] **POLYMORPHE CRISTALLIN DE CHLORHYDRATE DE 8-BROMO-2-(1-METHYLPYPERIDIN-4-YLAMINO)-4-(4-PHENOXYPHENYLAMINO)PYRIDO[4,3-D]PYRIMIDIN-5(6H)-ONE ET PROCEDE DE PREPARATION ASSOCIE**  
[72] KIM, JUNG-HO, KR  
[72] CHOI, JANG-SIK, KR  
[72] LEE, HEE KYU, KR  
[72] PARK, SONG-EUN, KR  
[72] JUNG, DONG-SIK, KR  
[72] CHOI, YUNG-GEUN, KR  
[72] KOH, JONG-SUNG, KR  
[72] KIM, SE-WON, KR  
[72] LEE, JAEKYO, KR  
[73] OSCOTEC INC., KR  
[85] 2021-02-01  
[86] 2019-08-12 (PCT/KR2019/010210)  
[87] (WO2020/040467)  
[30] KR (10-2018-0098681) 2018-08-23

[11] **3,108,451**  
[13] C  
[51] **Int.Cl. B60W 30/12 (2020.01) B60W 50/14 (2020.01) E01F 9/30 (2016.01) B60W 30/14 (2006.01)**  
[25] EN  
[54] **METHOD FOR GENERATING MAGNETIC FIELD, METHOD FOR DETECTING LANE BY USING MAGNETIC FIELD, AND VEHICLE USING SAME**  
[54] **PROCEDE DE GENERATION DE CHAMP MAGNETIQUE, PROCEDE DE DETECTION DE VOIE PAR UTILISATION D'UN CHAMP MAGNETIQUE, ET VEHICULE L'UTILISANT**  
[72] HONG, JONG-ILL, KR  
[72] KIM, YONG-HYUN, KR  
[72] MA, YOUNG-GIL, KR  
[72] KIM, DAE-WON, KR  
[73] JEONGSEOK CHEMICAL CORPORATION, KR  
[85] 2021-02-02  
[86] 2019-07-29 (PCT/KR2019/009436)  
[87] (WO2020/027530)  
[30] KR (10-2018-0090329) 2018-08-02  
[30] KR (10-2019-0072582) 2019-06-19

[11] **3,108,836**  
[13] C  
[51] **Int.Cl. A01B 79/02 (2006.01) A01G 20/00 (2018.01) A01G 22/00 (2018.01) A01G 24/00 (2018.01) A01C 1/00 (2006.01) A01G 17/00 (2006.01) E02D 3/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR REMEDYING SANDY LAND BY USING SIMULATED LOAM SUBSTRATE SPRAY-SEEDING TECHNOLOGY**  
[54] **PROCEDE DE CORRECTION DE TERRAIN SABLONNEUX A L'AIDE D'UNE TECHNOLOGIE D'ENSEMENCEMENT PAR PULVERISATION DE SUBSTRAT DE LIMON SIMULE**  
[72] SHEN, YIFENG, CN  
[72] ZHANG, YUQIAN, CN  
[72] ZHANG, BO, CN  
[73] JIANGSU LVYAN ECOLOGICAL TECHNOLOGY CO., LTD., CN  
[85] 2021-02-05  
[86] 2019-04-19 (PCT/CN2019/083438)  
[87] (WO2020/034655)  
[30] CN (201810929998.1) 2018-08-15

[11] **3,108,856**  
[13] C  
[51] **Int.Cl. C07D 417/12 (2006.01) A61K 31/4427 (2006.01) A61K 31/4523 (2006.01) A61K 31/496 (2006.01) A61K 31/506 (2006.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01) C07D 417/14 (2006.01) C07D 487/04 (2006.01)**  
[25] EN  
[54] **NOVEL HETEROCYCLIC AMINE DERIVATIVE AND PHARMACEUTICAL COMPOSITION COMPRISING SAME**  
[54] **NOUVEAU DERIVE D'AMINE HETEROCYCLIQUE ET COMPOSITION PHARMACEUTIQUE LE COMPRENANT**  
[72] KIM, WOL YOUNG, KR  
[72] LEE, YEON IM, KR  
[72] YOON, YOUN JUNG, KR  
[72] PARK, JOON SEOK, KR  
[72] EOM, DEOK KI, KR  
[72] BANG, KEUK CHAN, KR  
[72] JUNG, JAEHYUN, KR  
[73] DAEWOONG PHARMACEUTICAL CO., LTD., KR  
[85] 2021-02-05  
[86] 2019-08-27 (PCT/KR2019/010894)  
[87] (WO2020/045941)  
[30] KR (10-2018-0100359) 2018-08-27  
[30] KR (10-2019-0104641) 2019-08-26

[11] **3,109,068**  
[13] C  
[51] **Int.Cl. B65B 11/02 (2006.01) B65B 11/04 (2006.01)**  
[25] EN  
[54] **EFFECTIVE CIRCUMFERENCE-BASED WRAPPING**  
[54] **ENVELOPPEMENT BASE SUR UNE CIRCONFERENCE EFFECTIVE**  
[72] LANCASTER, PATRICK R., III, US  
[72] MITCHELL, MICHAEL P., US  
[72] MCCRAY, JEREMY D., US  
[72] JOHNSON, RICHARD L., US  
[73] LANTECH.COM, LLC, US  
[86] (3109068)  
[87] (3109068)  
[22] 2013-10-25  
[62] 2,889,420  
[30] US (61/718,429) 2012-10-25  
[30] US (61/718,433) 2012-10-25  
[30] US (14/062,930) 2013-10-25



**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **3,109,204**  
[13] C

[51] **Int.Cl. E21B 43/30 (2006.01) G06Q 10/04 (2023.01) E21B 43/24 (2006.01) G01V 9/00 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR PREDICTING OPTIMAL EXPLOITATION IN SHALE OIL IN-SITU CONVERSION**

[54] **METHODE ET APPAREIL POUR LA PREVISION DE L'EXPLOITATION OPTIMALE DE CONVERSION SUR PLACE D'HUILE DE SCHISTE**

[72] HOU, LIANHUA, CN

[72] WANG, JINGHONG, CN

[72] CUI, JINGWEI, CN

[72] ZHAO, ZHONGYING, CN

[73] PETROCHINA COMPANY LIMITED, CN

[85] 2021-02-09

[86] 2020-02-24 (PCT/CN2020/076344)

[87] (WO2021/017460)

[30] CN (201910680547.3) 2019-07-26

---

[11] **3,109,521**  
[13] C

[51] **Int.Cl. E03C 1/33 (2006.01)**

[25] EN

[54] **CONNECTING ELEMENT FOR FASTENING A SINK TO A WORKTOP**

[54] **ELEMENT DE LIAISON POUR LA FIXATION D'UN EVIER SUR UN PLATEAU DE TRAVAIL**

[72] BOMATTER, CHRISTIAN W., FR

[72] NEESER, ROLF, CH

[73] FRANKE TECHNOLOGY AND TRADEMARK LTD, CH

[85] 2021-02-12

[86] 2019-07-12 (PCT/EP2019/068785)

[87] (WO2020/035235)

[30] DE (10 2018 119 845.0) 2018-08-15

---

[11] **3,109,721**  
[13] C

[51] **Int.Cl. G09B 15/00 (2006.01) G06F 16/63 (2019.01) G09B 5/02 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS OF MUSIC EDUCATION**

[54] **PROCEDE ET APPAREIL D'EDUCATION MUSICALE**

[72] DRESSER, SAM, US

[72] SITNICK, LEONARD A., US

[72] PRICE, ROBERT LOWELL, US

[73] SCHOOL OF ROCK, LLC, US

[85] 2021-02-15

[86] 2020-06-18 (PCT/US2020/038556)

[87] (WO2020/257535)

[30] US (16/443,961) 2019-06-18

---

[11] **3,109,918**  
[13] C

[51] **Int.Cl. F25J 1/00 (2006.01) F25J 1/02 (2006.01)**

[25] EN

[54] **MANAGING MAKE-UP GAS COMPOSITION VARIATION FOR A HIGH PRESSURE EXPANDER PROCESS**

[54] **GESTION DE LA VARIATION DE LA COMPOSITION DE GAZ D'APPOINT POUR UN PROCEDE DE DETENDEUR A HAUTE PRESSION**

[72] LIU, YIJUN, US

[72] PIERRE, FRITZ, JR., US

[73] EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY, US

[85] 2021-02-17

[86] 2019-07-30 (PCT/US2019/044140)

[87] (WO2020/040951)

[30] US (62/721,367) 2018-08-22

---

[11] **3,110,332**  
[13] C

[51] **Int.Cl. E21B 41/00 (2006.01) E21B 21/08 (2006.01)**

[25] EN

[54] **MANAGING GAS BUBBLE MIGRATION IN A DOWNHOLE LIQUID**

[54] **GESTION DE MIGRATION DE BULLES DE GAZ DANS UN LIQUIDE DE FOND DE TROU**

[72] LU, JIANXIN, US

[72] PELLETIER, MICHAEL T., US

[72] JAMISON, DALE E., US

[72] HAGHSHENAS, ARASH, US

[72] GAO, LI, US

[73] LANDMARK GRAPHICS CORPORATION, US

[85] 2021-02-22

[86] 2019-06-04 (PCT/US2019/035396)

[87] (WO2020/139415)

[30] US (62/785,935) 2018-12-28

---

[11] **3,110,596**  
[13] C

[51] **Int.Cl. E21B 43/26 (2006.01) E21B 41/00 (2006.01) E21B 43/12 (2006.01) F04B 49/06 (2006.01)**

[25] EN

[54] **EXPERT SYSTEM FOR WELL TREATMENT**

[54] **SYSTEME EXPERT POUR LE TRAITEMENT DE PUIITS**

[72] JAASKELAINEN, MIKKO, US

[72] CAMP, JOSHUA LANE, US

[73] HALLIBURTON ENERGY SERVICES, INC., US

[86] (3110596)

[87] (3110596)

[22] 2021-02-26

[30] US (17/066,851) 2020-10-09

**Canadian Patents Issued  
May 16, 2023**

---

[11] **3,112,404**  
[13] C

[51] **Int.Cl. B65G 47/08 (2006.01) B65B 35/36 (2006.01) B65B 57/14 (2006.01) B65G 47/51 (2006.01) B65G 54/02 (2006.01) B65G 43/08 (2006.01) B65G 47/256 (2006.01)**

[25] EN

[54] **METHOD AND DEVICE FOR FEEDING PRODUCTS FROM A FIRST PROCESS TO A SECOND PROCESS IN A PACKAGING PLANT**

[54] **PROCEDE ET DISPOSITIF D'ACHEMINEMENT DE PRODUITS D'UN PREMIER PROCESSUS VERS UN SECOND PROCESSUS DANS UNE INSTALLATION D'EMBALLAGE**

[72] HAHN, KLAUS, DE  
[73] OPTIMA CONSUMER GMBH, DE  
[85] 2021-03-10  
[86] 2019-09-13 (PCT/EP2019/074564)  
[87] (WO2020/058135)  
[30] DE (10 2018 215 854.1) 2018-09-18

---

[11] **3,112,497**  
[13] C

[51] **Int.Cl. H01R 13/52 (2006.01) B60R 16/02 (2006.01) H01Q 1/22 (2006.01) H01Q 1/32 (2006.01) H01R 4/02 (2006.01)**

[25] EN

[54] **VEHICULAR GLASS MODULE**

[54] **MODULE DE VITRE DE VEHICULE**

[72] TSURUME, YOSHINOBU, JP  
[72] MORISHITA, HIROMASA, JP  
[72] NAKANO, YUTA, JP  
[73] NIPPON SHEET GLASS CO., LTD., JP  
[85] 2021-03-10  
[86] 2019-07-18 (PCT/JP2019/028237)  
[87] (WO2020/059275)  
[30] JP (2018-175049) 2018-09-19

---

[11] **3,114,682**  
[13] C

[51] **Int.Cl. F27D 21/00 (2006.01) C21B 7/06 (2006.01) G01B 21/08 (2006.01)**

[25] EN

[54] **METHOD FOR MONITORING THE WEAR OF A REFRACTORY LINING OF A BLAST FURNACE**

[54] **PROCEDE DE SURVEILLANCE DE L'USURE D'UN REVETEMENT REFRACTAIRE D'UN HAUT-FOURNEAU**

[72] PICARD, MICHEL, FR  
[72] ZAIMI, SAMI-ALEX, PL  
[72] HUANG, FRANK, US  
[72] ABBANA BENNANI, MOUNA, FR  
[73] ARCELORMITTAL, LU  
[85] 2021-03-29  
[86] 2018-10-22 (PCT/IB2018/058187)  
[87] (WO2020/084325)

---

[11] **3,115,962**  
[13] C

[51] **Int.Cl. H02K 16/04 (2006.01)**

[25] EN

[54] **AN ELECTRIC POWER GENERATOR COMPRISING TWO STATORS AND A ROTOR**

[54] **GENERATEUR D'ENERGIE ELECTRIQUE COMPRENANT DEUX STATORS ET UN ROTOR**

[72] MAKGERU, KABU WALTER, ZA  
[73] THE TRUSTEES FOR THE TIME BEING OF THE KMN FULFILMENT TRUST, ZA  
[85] 2021-04-09  
[86] 2020-06-23 (PCT/IB2020/055916)  
[87] (WO2020/261113)  
[30] ZA (2019/04106) 2019-06-25  
[30] ZA (2019/06297) 2019-09-25

---

[11] **3,116,276**  
[13] C

[51] **Int.Cl. A42B 3/32 (2006.01) A42B 3/00 (2006.01) A42B 3/04 (2006.01)**

[25] EN

[54] **HELMET WITH GEAR-CONSTRAINT TRANSFORMABLE CHIN GUARD STRUCTURE**

[54] **CASQUE MUNI D'UNE STRUCTURE DE PROTECTION DE MACHOIRE TRANSFORMABLE A CONTRAINTE D'ENGRENAGE**

[72] LIAO, HAOTIAN, CN  
[73] JIANGMEN PENGCHENG HELMETS LTD., CN  
[85] 2021-04-13  
[86] 2019-10-25 (PCT/CN2019/113168)  
[87] (WO2020/177342)  
[30] CN (201910160133.8) 2019-03-04

---

[11] **3,117,690**  
[13] C

[51] **Int.Cl. A61F 2/04 (2013.01) A61B 17/12 (2006.01)**

[25] EN

[54] **IMPLANTABLE ARTIFICIAL BRONCHUS**

[54] **BRANCHE ARTIFICIELLE IMPLANTABLE**

[72] LIMA, MARCELO G., US  
[72] ROCHA, MURILO PUNDEK, BR  
[72] BRASE, RANDALL L., US  
[73] PULMAIR MEDICAL, INC., US  
[85] 2021-04-23  
[86] 2019-11-19 (PCT/US2019/062132)  
[87] (WO2020/106675)  
[30] US (62/769,104) 2018-11-19  
[30] US (62/805,568) 2019-02-14

**Brevets canadiens délivrés  
16 mai 2023**

[11] **3,118,466**  
[13] C

- [51] **Int.Cl. C08G 69/14 (2006.01) D01D 5/08 (2006.01) D01D 5/16 (2006.01) D01F 6/60 (2006.01)**
- [25] EN
- [54] **STAIN RESISTANT POLYAMIDE POLYMERS OBTAINED VIA HIGH END GROUP TERMINATION**
- [54] **POLYMERES DE POLYAMIDE ANTI-TACHE OBTENUS PAR L'INTERMEDIAIRE D'UNE TERMINAISON DE GROUPE TERMINAL ELEVEE**
- [72] LOY, DAVID J., US
- [72] LIU, HAoyu, US
- [72] BAUER, TIMOTHY, US
- [73] ADVANSIX RESINS & CHEMICALS LLC, US
- [85] 2021-04-30
- [86] 2019-10-23 (PCT/US2019/057653)
- [87] (WO2020/096778)
- [30] US (62/758,036) 2018-11-09
- [30] US (62/836,813) 2019-04-22

[11] **3,118,704**  
[13] C

- [51] **Int.Cl. C21D 8/10 (2006.01) C21D 9/08 (2006.01) C22C 38/00 (2006.01) C22C 38/58 (2006.01)**
- [25] EN
- [54] **DUPLEX STAINLESS STEEL SEAMLESS PIPE AND METHOD FOR MANUFACTURING SAME**
- [54] **TUYAU EN ACIER INOXYDABLE DUPLEX SANS SOUDURE ET PROCEDE POUR SA FABRICATION**
- [72] SASAKI, SHUNSUKE, JP
- [72] KATSUMURA, TATSURO, JP
- [72] OTA, HIROKI, JP
- [72] FUJIMURA, KAZUKI, JP
- [72] YUGA, MASAO, JP
- [73] JFE STEEL CORPORATION, JP
- [85] 2021-05-04
- [86] 2019-11-01 (PCT/JP2019/042969)
- [87] (WO2020/110597)
- [30] JP (2018-224332) 2018-11-30

[11] **3,122,127**  
[13] C

- [51] **Int.Cl. C12Q 1/68 (2018.01)**
- [25] EN
- [54] **ROLLING CIRCLE AMPLIFICATION METHOD, METHOD FOR PREPARING SEQUENCING LIBRARY, AND DNA NANOSPHERE PREPARED THEREFROM**
- [54] **PROCEDE D'AMPLIFICATION CIRCULAIRE, PROCEDE DE PREPARATION DE BIBLIOTHEQUE DE SEQUENCAGE ET NANOSPHERE D'ADN PREPAREE A PARTIR DE CEUX-CI**
- [72] LIAO, SHA, CN
- [72] CHEN, AO, CN
- [72] ZHANG, WENWEI, CN
- [72] XU, CHONGJUN, CN
- [72] SHEN, HANJIE, CN
- [72] HE, LIN, CN
- [72] XU, JUNQIANG, CN
- [73] EGI TECH (SHEN ZHEN) CO, LIMITED, CN
- [85] 2021-06-04
- [86] 2018-12-05 (PCT/CN2018/119335)
- [87] (WO2020/113460)

[11] **3,122,838**  
[13] C

- [51] **Int.Cl. B01D 27/04 (2006.01) B01D 27/08 (2006.01) B01D 35/02 (2006.01)**
- [25] EN
- [54] **FILTER ARRANGEMENT INCLUDING PREFILTRATION FILTER ELEMENT AND FILTER DEVICE**
- [54] **ENSEMBLE DE FILTRATION COMPRENANT UN ELEMENT FILTRANT DE PREFILTRATION ET UN DISPOSITIF FILTRANT**
- [72] WILKINSON, TIMOTHY J., GB
- [73] CYTIVA US LLC, US
- [86] (3122838)
- [87] (3122838)
- [22] 2021-06-22
- [30] US (16/909,239) 2020-06-23

[11] **3,127,016**  
[13] C

- [51] **Int.Cl. B05C 21/00 (2006.01) B05C 17/005 (2006.01)**
- [25] EN
- [54] **DEVICE FOR HOLDING AND DISPENSING VISCOUS MATERIAL**
- [54] **DISPOSITIF PERMETTANT DE CONTENIR ET DE DISTRIBUER UN MATERIAU VISQUEUX**
- [72] STEVENS, JAMES P., US
- [73] SONOCO DEVELOPMENT, INC., US
- [86] (3127016)
- [87] (3127016)
- [22] 2015-10-13
- [62] 2,961,069
- [30] US (62/064,127) 2014-10-15
- [30] US (14/591,252) 2015-01-07

[11] **3,128,493**  
[13] C

- [51] **Int.Cl. B60N 3/10 (2006.01) B65D 85/00 (2006.01)**
- [25] EN
- [54] **CONTAINER HOLDER**
- [54] **PORTE-CONTENANT**
- [72] HUMANN, DAVID, CA
- [72] FREEMAN, THOMAS, CA
- [72] GAGIE, ETHAN, CA
- [72] MOERMAN, JASON, CA
- [73] INTERNATIONAL NAME PLATE SUPPLIES LTD., CA
- [86] (3128493)
- [87] (3128493)
- [22] 2021-08-13
- [30] US (17/209,797) 2021-03-23

[11] **3,133,893**  
[13] C

- [51] **Int.Cl. G06Q 10/0631 (2023.01) G06Q 10/105 (2023.01)**
- [25] EN
- [54] **COMPUTER IMPLEMENTED METHOD AND SYSTEM FOR SIMULATING ORGANIZATIONAL SUCCESSION PLANNING**
- [54] **METHODE ET SYSTEME INFORMATIQUE POUR SIMULER UNE PLANIFICATION DE LA RELEVÉ D'UNE ORGANISATION**
- [72] MUBAYED, JONATHAN, CA
- [72] LAFRENIERE, MARC-ANDRE, CA
- [73] BANQUE NATIONALE DU CANADA, CA
- [86] (3133893)
- [87] (3133893)
- [22] 2021-10-12
- [30] US (63/092,603) 2020-10-16

**Canadian Patents Issued  
May 16, 2023**

---

[11] **3,137,680**  
[13] C

[51] **Int.Cl. B62D 25/20 (2006.01) B62D 29/00 (2006.01)**  
[25] EN  
[54] **TUNNEL HAVING INTEGRATED LATERAL REINFORCEMENTS**  
[54] **TUNNEL A RENFORTS LATERAUX INTEGRES**  
[72] DONYA, GILSON, FR  
[73] ARCELORMITTAL, LU  
[85] 2021-10-21  
[86] 2020-04-02 (PCT/IB2020/053137)  
[87] (WO2020/217122)  
[30] IB (PCT/IB2019/053328) 2019-04-23

---

[11] **3,140,835**  
[13] C

[51] **Int.Cl. G06F 18/2413 (2023.01) G06N 20/00 (2019.01)**  
[25] EN  
[54] **METHOD OF CLASSIFYING FLAVORS**  
[54] **PROCEDE DE CLASSIFICATION D'AROMES**  
[72] PICHARA, KARIM, CL  
[72] ZAMORA, PABLO, CL  
[72] MUCHNICK, MATIAS, CL  
[72] LARRANAGA, ANTONIA, CL  
[73] NOTCO DELAWARE, LLC, CL  
[85] 2021-11-16  
[86] 2020-08-03 (PCT/US2020/044770)  
[87] (WO2021/026083)  
[30] US (62/884,438) 2019-08-08

---

[11] **3,148,220**  
[13] C

[51] **Int.Cl. C25B 9/19 (2021.01) C25B 9/60 (2021.01) C25B 1/04 (2021.01) C25B 13/02 (2006.01) F16J 15/06 (2006.01) F16J 15/10 (2006.01)**  
[25] EN  
[54] **ALKALINE WATER ELECTROLYZER**  
[54] **CELLULE D'ELECTROLYSE D'EAU ALCALINE**  
[72] SUZUKI, YUSUKE, JP  
[72] UCHINO, YOUSUKE, JP  
[73] ASAHI KASEI KABUSHIKI KAISHA, JP  
[85] 2022-01-20  
[86] 2020-06-25 (PCT/JP2020/025098)  
[87] (WO2021/019986)  
[30] JP (2019-140022) 2019-07-30

---

---

[11] **3,150,510**  
[13] C

[51] **Int.Cl. F41H 5/04 (2006.01)**  
[25] EN  
[54] **ANTIBALLISTIC PANEL ARRANGED FOR OPTICAL INSPECTION AND METHOD THEREOF**  
[54] **PANNEAU ANTIBALISTIQUE CONCU POUR UNE INSPECTION OPTIQUE ET PROCEDE ASSOCIE**  
[72] JONASSEN, TOM, NO  
[72] HANSEN, PAL FRANCIS, NO  
[73] BUSCH PROTECTIVE GERMANY GMBH & CO. KG, DE  
[85] 2022-03-08  
[86] 2020-09-09 (PCT/NO2020/050231)  
[87] (WO2021/049948)  
[30] NO (20191092) 2019-09-11

---

[11] **3,151,433**  
[13] C

[51] **Int.Cl. A61K 31/765 (2006.01) A61P 9/10 (2006.01) A61P 9/14 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR RESTORING OR INCREASING TISSUE PERFUSION**  
[54] **COMPOSITIONS ET PROCEDES DE RESTAURATION OU D'AUGMENTATION DE PERFUSION TISSULAIRE**  
[72] MANGINO, MARTIN J., US  
[72] LIEBRECHT, LOREN K., US  
[73] VIRGINIA COMMONWEALTH UNIVERSITY, US  
[85] 2022-03-16  
[86] 2020-09-23 (PCT/US2020/052075)  
[87] (WO2021/061687)  
[30] US (62/907,066) 2019-09-27  
[30] US (PCT/US2020/025103) 2020-03-27

---

---

[11] **3,155,662**  
[13] C

[51] **Int.Cl. G01N 33/48 (2006.01) G01N 30/72 (2006.01) G01N 33/53 (2006.01)**  
[25] EN  
[54] **MARKERS FOR RENAL DISEASE**  
[54] **MARQUEURS DE NEPHROPATHIES**  
[72] YERRAMILI, MAHALAKSHNI, US  
[72] ATKINSON, MICHAEL RANDOLPH, US  
[72] YERRAMILI, MURTHY V. S. N., US  
[73] IDEXX LABORATORIES, INC., US  
[86] (3155662)  
[87] (3155662)  
[22] 2011-06-03  
[62] 3,067,107  
[30] US (61/351,183) 2010-06-03  
[30] US (61/411,280) 2010-11-08

---

[11] **3,158,311**  
[13] C

[51] **Int.Cl. B02C 18/22 (2006.01) B02C 7/06 (2006.01) B02C 21/02 (2006.01)**  
[25] EN  
[54] **WASTE DESTRUCTION DEVICE FOR SHARPS, NEEDLES AND SOLID WASTE**  
[54] **DISPOSITIF DE DESTRUCTION DE DECHETS POUR OBJETS TRANCHANTS, AIGUILLES ET DECHETS SOLIDES**  
[72] DAVIS, MARK, US  
[72] KEMP, ELIZABETH, US  
[73] SAFE MEDICAL TECHNOLOGY, INC., US  
[73] KEMP, ELIZABETH, US  
[85] 2022-05-12  
[86] 2020-11-17 (PCT/US2020/060856)  
[87] (WO2021/101873)  
[30] US (16/691,723) 2019-11-22

---

**Brevets canadiens délivrés  
16 mai 2023**

---

[11] **3,158,452**  
[13] C

[51] **Int.Cl. H02J 3/26 (2006.01) H01F 27/30 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR BALANCING UNBALANCED POWER CABLES**  
[54] **SYSTEMES ET PROCEDES D'EQUILIBRAGE DE CABLES D'ALIMENTATION NON EQUILIBRES**  
[72] CRANE, MITCHELL LEE, US  
[72] KREMEIER, STARK, US  
[72] MCCOY, ROBERT, US  
[73] EXTRACT MANAGEMENT COMPANY, LLC, US  
[85] 2022-05-13  
[86] 2020-11-12 (PCT/US2020/060250)  
[87] (WO2021/097099)  
[30] US (62/934,734) 2019-11-13

---

[11] **3,159,060**  
[13] A1

[51] **Int.Cl. C12N 7/01 (2006.01) A61K 35/76 (2015.01) C07K 14/015 (2006.01) C07K 14/47 (2006.01) C12N 15/12 (2006.01) C12N 15/35 (2006.01) C12N 15/864 (2006.01) C12Q 1/68 (2018.01) C12Q 1/70 (2006.01)**  
[25] EN  
[54] **A METHOD OF DETECTING AND/OR IDENTIFYING ADENO-ASSOCIATED VIRUS (AAV) SEQUENCES AND ISOLATING NOVEL SEQUENCES IDENTIFIED THEREBY**  
[54] **METHODE DE DETECTION ET/OU D'IDENTIFICATION DE SEQUENCES DE VIRUS ASSOCIES AUX ADENOVIRUS (AAV) ET D'ISOLATION DE NOUVELLES SEQUENCES AINSI IDENTIFIEES**  
[72] GAO, GUANGPING, US  
[72] WILSON, JAMES M., US  
[72] ALVIRA, MAURICIO R., US  
[73] THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, US  
[73] GAO, GUANGPING,  
[73] WILSON, JAMES M.,  
[73] ALVIRA, MAURICIO R.,  
[86] (3159060)  
[87] (3159060)  
[22] 2002-11-12  
[62] 3,066,428  
[30] US (60/350,607) 2001-11-13  
[30] US (60/341,117) 2001-12-17  
[30] US (60/377,066) 2002-05-01  
[30] US (60/386,675) 2002-06-05

---

[11] **3,159,995**  
[13] C

[51] **Int.Cl. A61B 5/00 (2006.01) G16H 50/20 (2018.01) G06N 20/00 (2019.01) A61B 5/026 (2006.01) A61B 5/055 (2006.01)**  
[25] EN  
[54] **CEREBRAL PERFUSION STATE CLASSIFICATION APPARATUS AND METHOD, DEVICE, AND STORAGE MEDIUM**  
[54] **APPAREIL ET METHODE DE CLASSIFICATION DE L'ETAT DE PERFUSION CEREBRALE, DISPOSITIF ET SUPPORT DE STOCKAGE**  
[72] WANG, ZHENCHANG, CN  
[72] ZHENG, WEI, CN  
[72] LV, HAN, CN  
[72] REN, PENGLING, CN  
[72] LUO, DEHONG, CN  
[72] CAI, LINKUN, CN  
[72] LIU, YAWEN, CN  
[72] YIN, HONGXIA, CN  
[72] ZHAO, PENGFEI, CN  
[72] LI, JING, CN  
[72] LIU, DONG, CN  
[72] ZHAO, ERWEI, CN  
[72] ZHANG, TINGTING, CN  
[73] BEIJING FRIENDSHIP HOSPITAL, CAPITAL MEDICAL UNIVERSITY, CN  
[86] (3159995)  
[87] (3159995)  
[22] 2022-05-22  
[30] CN (202110943317.9) 2021-08-17

---

[11] **3,164,732**  
[13] C

[51] **Int.Cl. A61F 5/34 (2006.01) A61B 17/135 (2006.01) A61F 5/03 (2006.01)**  
[25] EN  
[54] **PNEUMATIC COMPRESSION BANDAGE**  
[54] **PANSEMENT COMPRESSIF PNEUMATIQUE**  
[72] STEC, SEBASTIAN, PL  
[72] CHOUDHARY, SANJEEV, PL  
[72] KWIETNIAK, KAROL, PL  
[73] MEDINICE S.A., PL  
[85] 2022-06-14  
[86] 2021-07-22 (PCT/EP2021/070611)  
[87] (WO2022/023184)  
[30] EP (20461557.9) 2020-07-30

---

[11] **3,168,685**  
[13] C

[51] **Int.Cl. G01N 27/416 (2006.01) C12Q 1/6806 (2018.01) C12Q 1/6844 (2018.01) C12M 1/34 (2006.01)**  
[25] EN  
[54] **A METHOD OF MEASURING THE PH OF A SAMPLE**  
[54] **PROCEDE DE MESURE DU PH D'UN ECHANTILLON**  
[72] PUNYANI, KUSHAGR, SE  
[72] NYBERG, PER ANDREAS, SE  
[72] SOPSTAD, SINDRE, NO  
[72] PEACOCK, MARTIN, GB  
[72] XIONG, LINHONGJIA, GB  
[72] SHIN, JAE YEN, SE  
[73] DIAGONAL BIO AB, SE  
[85] 2022-08-19  
[86] 2021-04-06 (PCT/EP2021/058946)  
[87] (WO2021/198533)  
[30] EP (20168019.6) 2020-04-03  
[30] EP (20197572.9) 2020-09-22

---

[11] **3,178,862**  
[13] C

[51] **Int.Cl. B64D 45/00 (2006.01) B64C 13/16 (2006.01) G05D 1/10 (2006.01)**  
[25] EN  
[54] **AUTONOMOUS AIRCRAFT SEPARATION SYSTEM AND METHOD**  
[54] **SYSTEME DE SEPARATION D'AERONEF AUTONOME ET METHODE**  
[72] WATSON, CRAIG M., US  
[73] AIRSPEED SYSTEMS LLC, US  
[85] 2022-10-02  
[86] 2022-03-18 (PCT/US2022/021046)  
[87] (3178862)  
[30] US (17/492,904) 2021-10-04

# Canadian Applications Open to Public Inspection

April 30, 2023 to May 6, 2023

## Demandes canadiennes mises à la disponibilité du public

30 avril 2023 au 6 mai 2023

---

[21] **3,137,176**  
[13] A1  
[51] **Int.Cl. D06F 37/20 (2006.01) D06F 58/00 (2020.01) F16F 7/00 (2006.01)**  
[25] EN  
[54] **SHAKE-ABSORBER PATENT DESCRIPTION**  
[54] **DESCRIPTION DE BREVET D'AMORTISSEUR DE VIBRATIONS**  
[72] ZORN, CINDY, CA  
[72] TAYLOR, MARK, CA  
[71] ZORN, CINDY, CA  
[71] TAYLOR, MARK, CA  
[22] 2021-11-01  
[41] 2023-05-01

---

[21] **3,137,180**  
[13] A1  
[51] **Int.Cl. C25B 5/00 (2006.01) B82Y 99/00 (2011.01) H02N 11/00 (2006.01)**  
[25] EN  
[54] **NANOGENERATOR**  
[54] **NANOGENERATRICE**  
[72] GUZMAN, MIGUEL, CA  
[71] SYPHON QUANTUM ENERGY INC., CA  
[22] 2021-11-01  
[41] 2023-05-01

---

[21] **3,137,182**  
[13] A1  
[51] **Int.Cl. G01B 5/245 (2006.01) B62J 50/00 (2020.01) B62K 21/10 (2006.01) B62K 21/12 (2006.01) B62K 21/18 (2006.01) B62K 21/22 (2006.01) B62K 21/24 (2006.01)**  
[25] EN  
[54] **HANDLEBAR ALIGNMENT TOOL**  
[54] **OUTIL D'ALIGNEMENT DE GUIDON**  
[72] EVELEIGH, CEDRIC, CA  
[71] EVELEIGH, CEDRIC, CA  
[22] 2021-11-01  
[41] 2023-05-01

---

[21] **3,137,201**  
[13] A1  
[51] **Int.Cl. C09J 7/20 (2018.01) A61F 13/02 (2006.01)**  
[25] EN  
[54] **WEARABLE NON-SLIP GRIP ENHANCING ADHESIVE STRIPS FOR GAMING AND THE LIKE**  
[54] **BANDES ADHESIVES A PORTER AUX FINS D'AMELIORATION DE LA PRISE SANS GLISSEMENT POUR JOUER ET D'AUTRES ACTIVITES SEMBLABLES**  
[72] SWINWOOD-SKY, KALE, CA  
[72] BELDEN-PREZIO, ALEXANDER, CA  
[71] SWINWOOD-SKY, KALE, CA  
[71] BELDEN-PREZIO, ALEXANDER, CA  
[22] 2021-11-01  
[41] 2023-05-01

---

[21] **3,137,330**  
[13] A1  
[51] **Int.Cl. C04B 9/20 (2006.01) C04B 9/11 (2006.01)**  
[25] EN  
[54] **METHODS FOR RE-USING INDUSTRIAL WASTE FOR CARBON SEQUESTRATION AND MAGNESIUM-BASED CEMENTS**  
[54] **METHODES DE REUTILISATION DE DECHETS INDUSTRIELS POUR LA SEQUESTRATION DE CARBONE ET LES CIMENTS A BASE DE MAGNESIUM**  
[72] BROWN, DOUGLAS GEOFFREY, CA  
[71] ZS2 TECHNOLOGIES LTD., CA  
[22] 2021-11-01  
[41] 2023-05-01

---

[21] **3,137,402**  
[13] A1  
[51] **Int.Cl. G06F 17/00 (2019.01)**  
[25] EN  
[54] **A PROCESS ANALYZING DATA FROM INFORMATION TECHNOLOGY SERVICES AND MANAGEMENT THEREOF**  
[54] **PROCEDE ANALYSANT DES DONNEES DE SERVICES DE TECHNOLOGIE DE L'INFORMATION ET GESTION CONNEXE**  
[72] HARDY, JOEANNE, CA  
[72] HARDY, BOB, CA  
[72] BAILEY, BRETT, CA  
[72] BRANSTETTER, LEE, CA  
[72] CRAMPAIN, JEFF, CA  
[72] DASER, KEITH, CA  
[72] FLEMING, TAMMY, CA  
[72] JEFFERY, RYAN, CA  
[72] KLASSEN, BYRON, CA  
[72] LOCKWOOD, RYAN, CA  
[72] MACKENZIE, JAMIE, CA  
[72] RICHARDS, BRYN, CA  
[72] SAGEN, JODY, CA  
[71] WBM TECHNOLOGIES INC., CA  
[22] 2021-11-02  
[41] 2023-05-02

---

[21] **3,137,442**  
[13] A1  
[51] **Int.Cl. A01N 59/00 (2006.01) A01N 25/30 (2006.01) A01P 1/00 (2006.01) A61L 2/18 (2006.01) A61L 2/23 (2006.01) C11D 1/66 (2006.01) C11D 3/39 (2006.01) C11D 3/48 (2006.01)**  
[25] EN  
[54] **DISINFECTING COMPOSITION AND RELATED METHODS**  
[54] **COMPOSITION DE DESINFECTATION ET METHODES CONNEXES**  
[72] MIRZAEI, ARASH, CA  
[71] MIRZAEI, ARASH, CA  
[22] 2021-11-02  
[41] 2023-05-02

**Demandes canadiennes mises à la disponibilité du public**  
**30 avril 2023 au 6 mai 2023**

[21] **3,137,477**  
 [13] A1

[51] **Int.Cl. C07F 9/568 (2006.01) A61K 31/045 (2006.01) A61K 31/137 (2006.01) A61K 31/192 (2006.01) A61K 31/20 (2006.01) A61K 31/21 (2006.01) A61K 31/255 (2006.01) A61K 31/277 (2006.01) A61K 31/395 (2006.01) A61K 31/397 (2006.01) A61K 31/661 (2006.01) A61K 31/662 (2006.01) A61K 31/675 (2006.01) C07C 33/042 (2006.01) C07C 57/18 (2006.01) C07C 57/30 (2006.01) C07C 57/42 (2006.01) C07C 59/64 (2006.01) C07C 69/734 (2006.01) C07C 69/738 (2006.01) C07C 217/58 (2006.01) C07C 255/07 (2006.01) C07C 255/54 (2006.01) C07C 309/73 (2006.01) C07D 205/04 (2006.01) C07D 213/89 (2006.01) C07F 9/11 (2006.01) C07F 9/12 (2006.01) C07F 9/572 (2006.01) C07F 9/58 (2006.01) C07F 9/6512 (2006.01) C07F 9/6558 (2006.01)**

[25] EN  
 [54] **NOVEL LYSOPHOSPHATIDIC ACID DERIVATIVE**  
 [54] **NOUVEAU DERIVE D'ACIDE LYSOPHOSPHATIDIQUE**  
 [72] HAMADA, MAIKO, JP  
 [72] ARAI, YUKI, JP  
 [72] YAMAKOSHI, SHUHEI, JP  
 [72] WADA, HIROKO, JP  
 [72] OTSUKI, KAZUFUMI, JP  
 [72] SHITAMA, HIROAKI, JP  
 [72] TAKAKURA, NOBUYUKI, JP  
 [71] MITSUBISHI TANABE PHARMA CORPORATION, JP  
 [71] OSAKA UNIVERSITY, JP  
 [22] 2021-11-03  
 [41] 2023-05-03

[21] **3,137,589**  
 [13] A1

[51] **Int.Cl. H05B 47/18 (2020.01) H04W 4/38 (2018.01) H05B 47/155 (2020.01) F21S 2/00 (2016.01) H04B 1/59 (2006.01) H04L 12/40 (2006.01) G06K 7/10 (2006.01) G06K 7/14 (2006.01)**

[25] EN  
 [54] **CONTROL METHODS IN NETWORKED LIGHTING SYSTEMS**  
 [54] **METHODES DE CONTROLE DE SYSTEMES D'ECLAIRAGE EN RESEAU**  
 [72] SHAN, XINXIN, CA  
 [71] LED SMART INC., CA  
 [22] 2021-11-04  
 [41] 2023-05-04

[21] **3,137,612**  
 [13] A1

[51] **Int.Cl. G06V 10/70 (2022.01) G16H 30/40 (2018.01) G06V 10/764 (2022.01) G06V 10/77 (2022.01) G06V 10/98 (2022.01) G06N 20/00 (2019.01) A61F 9/008 (2006.01)**

[25] EN  
 [54] **HYBRID CLASSIFIER TRAINING FOR FEATURE EXTRACTION**  
 [54] **ENTRAINEMENT DE CLASSIFIEUR HYBRIDE POUR L'EXTRACTION DE CARACTERISTIQUES**  
 [72] KATCHINSKIY, NIR, CA  
 [72] CEROICI, CHRISTOPHER, CA  
 [71] PULSEMEDICA CORP., CA  
 [22] 2021-11-05  
 [41] 2023-05-05

[21] **3,137,630**  
 [13] A1

[51] **Int.Cl. G10D 13/22 (2020.01)**

[25] EN  
 [54] **SOUND IN-HANCEMENT RING (SIR)**  
 [54] **BAGUE D'AMELIORATION SONORE SOUND IN-HANCEMENT RING (SIR)**  
 [72] MELNECHENKO, KEVIN, CA  
 [71] MELNECHENKO, KEVIN, CA  
 [22] 2021-11-04  
 [41] 2023-05-04

[21] **3,137,800**  
 [13] A1

[51] **Int.Cl. G06Q 40/08 (2012.01)**

[25] EN  
 [54] **LIVELIHOOD INSURANCE**  
 [54] **ASSURANCE DE SUBSISTANCE**  
 [72] GILL, SANDEEP, CA  
 [71] GILL, SANDEEP, CA  
 [22] 2021-11-04  
 [41] 2023-05-04

[21] **3,137,821**  
 [13] A1

[51] **Int.Cl. G06Q 50/10 (2012.01) G06T 7/00 (2017.01)**

[25] EN  
 [54] **SYSTEM AND METHOD FOR RANDOMIZED VERIFICATION OF SERVICES PERFORMED**  
 [54] **SYSTEME ET METHODE DE VERIFICATION ALEATOIRE DE SERVICES REALISES**  
 [72] SADA, ALEJANDRO BREMER, MX  
 [72] WOLFE, DANIEL ERIC, CA  
 [72] PRIZANT, JASON ARTHUR, CA  
 [72] LESSER, BRAM MITCHELL, CA  
 [72] UTTAMCHANDANI, RAJIV, CA  
 [72] MANITT, CHRISTOPHER, CA  
 [72] ROBBINS, CLAIRE, CA  
 [72] STEINBERG, AVI, CA  
 [71] MODERN CLEANING CONCEPT L.P., CA  
 [22] 2021-11-04  
 [41] 2023-05-04

[21] **3,137,826**  
 [13] A1

[51] **Int.Cl. A61K 31/12 (2006.01) A61P 7/02 (2006.01) A61P 9/00 (2006.01) G01N 33/48 (2006.01) G01N 33/50 (2006.01) G01N 33/53 (2006.01) G01N 33/577 (2006.01) G01N 33/68 (2006.01)**

[25] EN  
 [54] **FACULTATIVE GLUCOSE TRANSPORTERS 1 AND 3 AS AN ANTI-THROMBOTIC AND DIAGNOSTIC TARGET**  
 [54] **TRANSPORTEURS DE GLUCOSE 1 ET 3 FACULTATIFS COMME ANTITHROMBOTIQUE ET CIBLE DE DIAGNOSTIC**  
 [72] AGBANI, EJAIFFE O., CA  
 [71] UTI LIMITED PARTNERSHIP, CA  
 [22] 2021-11-04  
 [41] 2023-05-04

**Canadian Applications Open to Public Inspection  
April 30, 2023 to May 6, 2023**

[21] **3,137,834**  
[13] A1

[51] **Int.Cl. H02G 3/04 (2006.01) B29C 53/56 (2006.01)**  
[25] EN  
[54] **CABLE TRAY FABRICATED FROM CURABLE POLYMER STRIPS**  
[54] **CHEMIN DE CABLES FABRIQUE A PARTIR DE BANDES DE POLYMERE DURCISSABLES**  
[72] KADOKO, JONAH, US  
[71] ABB SCHWEIZ AG, CH  
[22] 2021-11-05  
[41] 2023-05-05

[21] **3,137,861**  
[13] A1

[51] **Int.Cl. A01K 97/10 (2006.01)**  
[25] EN  
[54] **TELESCOPIC FISHING ROD HOLDER WITH ANCHOR BASE**  
[54] **SUPPORT DE CANNE A PECHE TELESCOPIQUE AVEC BASE D'ANCRAGE**  
[72] MEEHAN, SHANE, CA  
[71] MEEHAN, SHANE, CA  
[22] 2021-11-05  
[41] 2023-05-05

[21] **3,138,129**  
[13] A1

[51] **Int.Cl. F04D 29/70 (2006.01) E02D 19/10 (2006.01) E21F 16/02 (2006.01) F04D 13/00 (2006.01) F04D 29/00 (2006.01) F04D 29/40 (2006.01)**  
[25] EN  
[54] **DEWATERING PUMP SUPPORT APPARATUS**  
[54] **APPAREIL DE SUPPORT DE POMPE D'EPUISEMENT**  
[72] GERVAIS, DARREN, CA  
[71] GERVAIS, DARREN, CA  
[22] 2021-11-03  
[41] 2023-05-02  
[30] US (17/453,203) 2021-11-02

[21] **3,138,728**  
[13] A1

[51] **Int.Cl. G16Z 99/00 (2019.01) G06F 8/00 (2018.01)**  
[25] EN  
[54] **# ULTIMATION (TITLE OF WORK DEVOTED TO THE DESCRIPTION OF "METAMATION" METHOD)**  
[54] **# ULTIMATION (TITRE DE TRAVAIL CONSACRE A LA DESCRIPTION DE LA METHODE DE « METAMATION »)**  
[72] BALANTZIAN, MARK G., CA  
[71] BALANTZIAN, MARK G., CA  
[22] 2021-11-05  
[41] 2023-05-05

[21] **3,140,547**  
[13] A1

[51] **Int.Cl. E03D 9/05 (2006.01) A47K 17/00 (2006.01) F24F 13/06 (2006.01)**  
[25] EN  
[54] **VENTILATED TOILET**  
[54] **TOILETTE VENTILEE**  
[72] JONES, JASON JOHN, US  
[71] TAYLOR, R. JAY, US  
[71] ECOAIR LLC, US  
[22] 2021-11-25  
[41] 2023-05-02  
[30] US (17/517,131) 2021-11-02

[21] **3,140,823**  
[13] A1

[51] **Int.Cl. B23D 45/02 (2006.01) B23D 59/00 (2006.01)**  
[25] EN  
[54] **ELECTRIC SAW**  
[54] **SCIE ELECTRIQUE**  
[72] SARMIENTO, MIGUEL ANGEL, ES  
[72] IPATENKO, ALEK, ES  
[71] GERMANS BOADA, S.A., ES  
[22] 2021-11-30  
[41] 2023-05-05  
[30] US (17/520,167) 2021-11-05

[21] **3,152,895**  
[13] A1

[51] **Int.Cl. G01S 15/32 (2006.01) G01S 15/36 (2006.01) G01S 15/88 (2006.01)**  
[25] FR  
[54] **SYSTEM AND ACOUSTIC METHOD FOR FAST ASSESSMENT OF BLOCKAGES IN PIPES**  
[54] **SYSTEME ET METHODE ACOUSTIQUE D'EVALUATION RAPIDE D'OBSTRUCTIONS DE TUYAUX**  
[72] TARAS, ANDRE ROMAN, CA  
[72] SOARES, MATHIEU, CA  
[71] HYDRO-QUEBEC, CA  
[22] 2022-03-22  
[41] 2023-05-03

[21] **3,153,025**  
[13] A1

[51] **Int.Cl. A61B 5/372 (2021.01) G16H 50/20 (2018.01) A61B 5/369 (2021.01) A61B 5/11 (2006.01)**  
[25] EN  
[54] **SYSTEMS FOR SUPPRESSION OF BALLISTOCARDIOGRAM ARTIFACTS IN ELECTROENCEPHALOGRAPHY SIGNALS VIA DYNAMIC HEARTBEAT MODELING**  
[54] **SYSTEMES POUR SUPPRIMER LES ARTEFACTS DE BALLISTOCARDIOGRAMME DANS LES SIGNAUX D'ELECTROENCEPHALOGRAPHIE AU MOYEN DE LA MODELISATION DYNAMIQUE DES BATTEMENTS DE COEUR**  
[72] LIN, FA-HSUAN, CA  
[71] SUNNYBROOK RESEARCH INSTITUTE, CA  
[22] 2022-03-22  
[41] 2023-05-02  
[30] DE (202021105989.3) 2021-11-02



**Demandes canadiennes mises à la disponibilité du public**  
**30 avril 2023 au 6 mai 2023**

[21] **3,155,378**  
[13] A1

[51] **Int.Cl. A01D 90/00 (2006.01)**  
[25] EN  
[54] **TRANSPORTING AND PROCESSING LARGE BALES**  
[54] **TRANSPORT ET TRANSFORMATION DE GRANDES BALLEES AGRICOLES**  
[72] COCHRAN, ROBERT, CA  
[72] BARROS, DEVIN, CA  
[72] HARDER, MATT, CA  
[71] BOURGAULT INDUSTRIES LTD., CA  
[22] 2021-11-04  
[41] 2023-05-04

[21] **3,158,226**  
[13] A1

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 40/42 (2020.01) A24F 40/44 (2020.01)**  
[25] EN  
[54] **HEATING ASSEMBLY AND VAPING DEVICE COMPRISING THE SAME**  
[54] **ASSEMBLAGE DE CHAUFFAGE ET DISPOSITIF DE VAPOTAGE LE COMPRENANT**  
[72] LIU, TUANGFANG, CN  
[71] LIU, TUANGFANG, CN  
[22] 2022-05-10  
[41] 2023-05-01  
[30] CN (202111282506.2) 2021-11-01  
[30] CN (202122645578.0) 2021-11-01

[21] **3,165,126**  
[13] A1

[51] **Int.Cl. G01C 21/28 (2006.01)**  
[25] EN  
[54] **CREATING OFFROAD MAPS WITH VEHICLE DATA**  
[54] **CREATION DE CARTES HORS ROUTE AVEC DES DONNEES DE VEHICULE**  
[72] BHARWANI, KIRAN KUMAR RAM, US  
[71] RIVIAN IP HOLDINGS, LLC, US  
[22] 2022-06-23  
[41] 2023-05-03  
[30] US (17/517918) 2021-11-03

[21] **3,156,338**  
[13] A1

[51] **Int.Cl. E06B 3/54 (2006.01) E06B 3/263 (2006.01)**  
[25] EN  
[54] **THERMAL DAMPENING DEVICES FOR WINDOW SYSTEMS**  
[54] **DISPOSITIFS D'ATTENUATION THERMIQUE POUR DES SYSTEMES DE FENETRAGE**  
[72] MONTZ, STEPHEN, US  
[72] BARBULESCU, ION-HORATIU, US  
[71] ARCONIC TECHNOLOGIES LLC, US  
[22] 2022-04-19  
[41] 2023-05-05  
[30] US (63/276,395) 2021-11-05

[21] **3,158,228**  
[13] A1

[51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/46 (2020.01) A24F 40/50 (2020.01)**  
[25] EN  
[54] **VAPING DEVICE**  
[54] **DISPOSITIF DE VAPOTAGE**  
[72] LIU, TUANFANG, CN  
[71] LIU, TUANFANG, CN  
[22] 2022-05-10  
[41] 2023-05-01  
[30] CN (202111282512.8) 2021-11-01  
[30] CN (202122647445.7) 2021-11-01

[21] **3,166,036**  
[13] A1

[25] EN  
[54] **BNC WITH INTERGRATED SWITCH**  
[54] **CONNECTEUR BNC AVEC COMMUTATEUR INTEGRE**  
[72] FARRELL, ROD, CA  
[72] DELAY, SHAWN, CA  
[72] TODORIC, SAVO, CA  
[72] TESSIER, MATTHEW, CA  
[72] FRY, WILLIAM, CA  
[71] COMTEST NETWORKS INC., CA  
[22] 2022-06-29  
[41] 2023-05-02  
[30] US (63/274,735) 2021-11-02

[21] **3,157,005**  
[13] A1

[51] **Int.Cl. A24F 40/42 (2020.01) A24F 40/40 (2020.01)**  
[25] EN  
[54] **HEATED TOBACCO PRODUCT**  
[54] **PRODUIT DE TABAC CHAUFFE**  
[72] LIU, TUANFANG, CN  
[71] SHENZHEN EIGATE TECHNOLOGY CO., LTD., CN  
[22] 2022-04-29  
[41] 2023-04-30  
[30] CN (202111278685.2) 2021-10-31  
[30] CN (202122632718.0) 2021-10-31

[21] **3,162,776**  
[13] A1

[51] **Int.Cl. E06B 9/326 (2006.01) B65H 75/44 (2006.01) E06B 9/32 (2006.01)**  
[25] EN  
[54] **CORD RETRACTOR AND WINDOW COVERING HAVING SAME**  
[54] **CORDON RETRACTEUR ET COUVERTURE DE FENETRE LE COMPRENANT**  
[72] CHEN, LIN, TW  
[71] NIEN MADE ENTERPRISE CO., LTD., TW  
[22] 2022-06-14  
[41] 2023-05-04  
[30] CN (202122684475.5) 2021-11-04

**Canadian Applications Open to Public Inspection  
April 30, 2023 to May 6, 2023**

[21] **3,169,575**  
[13] A1

- [51] **Int.Cl. C08L 23/12 (2006.01) C08K 3/01 (2018.01) C08J 3/12 (2006.01) C08J 3/22 (2006.01) C08J 9/16 (2006.01) C08J 9/228 (2006.01)**
- [25] EN
- [54] **EXPANDED POLYPROPYLENE BEAD AND PREPARATION METHOD THEREFOR, AND MOLDED PART**
- [54] **PERLE DE POLYPROPYLENE EXPANSEE, METHODE DE PREPARATION ET PIECE MOULEE**
- [72] ZHU, MIN, CN  
[72] GAO, HAORUI, CN  
[72] ZENG, JIA, CN  
[72] LIU, HUANHUAN, CN  
[72] JIANG, FANHUI, CN  
[72] HE, RUOXU, CN  
[72] XIONG, YEZHI, CN  
[72] YANG, LIANGJIONG, CN  
[71] WUXI HI-TEC ENVIRONMENTAL MATERIAL CO., LTD, CN  
[22] 2022-08-05  
[41] 2023-05-02  
[30] CN (202111287859.1) 2021-11-02  
[30] CN (202210489731.1) 2022-05-06

[21] **3,170,441**  
[13] A1

- [25] EN
- [54] **CIRCUIT CARD ASSEMBLIES**
- [54] **CARTES DE CIRCUITS IMPRIMES**
- [72] KIM, JOO-HAN, US  
[72] HODEN, BRIAN, US  
[72] AKALANNE, LUCIUS, GB  
[71] AMETEK, INC., US  
[22] 2022-08-16  
[41] 2023-05-02  
[30] US (63/274,557) 2021-11-02

[21] **3,172,502**  
[13] A1

- [25] EN
- [54] **CHARGING METHOD AND BACKUP POWER SUPPLY DEVICE**
- [54] **METHODE DE RECHARGE ET DISPOSITIF D'ALIMENTATION DE SECOURS**
- [72] MOCHIZUKI, SHUN, JP  
[71] FDK CORPORATION, JP  
[22] 2022-09-06  
[41] 2023-05-02  
[30] JP (2021-179506) 2021-11-02

[21] **3,173,573**  
[13] A1

- [51] **Int.Cl. A47G 29/00 (2006.01) B65D 43/00 (2006.01) B65D 51/00 (2006.01) E04F 19/08 (2006.01)**
- [25] EN
- [54] **A PUSH-TO-OPEN LID AND CONTAINER**
- [54] **COUVERCLE OUVERT PAR PRESSION ET CONTENANT**
- [72] WANG, ENLIANG, CA  
[71] BLACKBERRY LIMITED, CA  
[22] 2022-09-08  
[41] 2023-05-01  
[30] US (17/516,020) 2021-11-01

[21] **3,173,741**  
[13] A1

- [51] **Int.Cl. C09K 8/80 (2006.01) E21B 43/267 (2006.01)**
- [25] EN
- [54] **RESIN-COATED PETROLEUM COKE AS PROPPANT PARTICULATE MATERIAL AND METHODS RELATED THERETO**
- [54] **COKE DE PETROLE REVETU DE RESINE COMME MATERIAU PARTICULAIRE DE SOUTENEMENT ET METHODES CONNEXES**
- [72] DECKER, KENDAL K., US  
[72] STOJKOVIC, DRAGAN, US  
[72] HALL, LEE J., US  
[71] EXXONMOBIL UPSTREAM RESEARCH COMPANY, US  
[22] 2022-09-09  
[41] 2023-05-02  
[30] US (63/263,394) 2021-11-02

[21] **3,174,042**  
[13] A1

- [51] **Int.Cl. B64C 13/50 (2006.01)**
- [25] EN
- [54] **SYSTEM ARCHITECTURE FOR OPERATION OF AIRCRAFT FLAPS**
- [54] **ARCHITECTURE DE SYSTEME POUR L'OPERATION DE VOILETS D'AERONEF**
- [72] SMITH, PAUL, GB  
[72] BACON, PETER WILLIAM, GB  
[71] GOODRICH ACTUATION SYSTEMS LIMITED, GB  
[22] 2022-09-12  
[41] 2023-05-03  
[30] EP (21275155.6) 2021-11-03

[21] **3,174,052**  
[13] A1

- [51] **Int.Cl. F02K 1/76 (2006.01) B64C 13/50 (2006.01)**
- [25] EN
- [54] **BACK-UP THRUST REVERSER ACTUATION SYSTEM CONTROL**
- [54] **COMMANDE DE SYSTEME D'ACTIONNEUR DU RENVERSEUR DE POUSSEE DE SECOURS**
- [72] BACON, PETER WILLIAM, GB  
[72] BENAROUS, MAAMAR, GB  
[71] GOODRICH ACTUATION SYSTEMS LIMITED, GB  
[22] 2022-09-12  
[41] 2023-05-04  
[30] EP (21206425.7) 2021-11-04

[21] **3,175,781**  
[13] A1

- [51] **Int.Cl. E05F 15/73 (2015.01)**
- [25] EN
- [54] **SAFETY STRIP FOR A DOOR AND METHOD FOR OPERATING THE SAFETY STRIP**
- [54] **BANDE DE SECURITE POUR UNE PORTE ET METHODE D'EXPLOITATION**
- [72] BURHENN, MARCEL, DE  
[72] FRANZ, FREDERIK, DE  
[72] HUBSCH, DANIEL, DE  
[71] HUBNER GMBH & CO. KG, DE  
[22] 2022-09-21  
[41] 2023-05-03  
[30] EP (21206246.7) 2021-11-03

[21] **3,176,278**  
[13] A1

- [51] **Int.Cl. B65B 5/10 (2006.01) B65B 11/50 (2006.01) B65D 75/36 (2006.01)**
- [25] EN
- [54] **SYSTEM AND METHOD FOR GRABBING AND FILLING PILLS INTO BLISTER PACKS**
- [54] **SYSTEME ET METHODE POUR PRENDRE ET INSERER DES PILULES DANS DES EMBALLAGES-COQUES**
- [72] BOUTHINETTE, ETIENNE, CA  
[71] 9155-0020 QUEBEC INC., CA  
[22] 2022-09-28  
[41] 2023-05-01  
[30] US (63/263.351) 2021-11-01

**Demandes canadiennes mises à la disponibilité du public**  
**30 avril 2023 au 6 mai 2023**

[21] **3,178,145**  
 [13] A1

[51] **Int.Cl. A61N 1/04 (2006.01) A61N 1/40 (2006.01)**  
 [25] EN  
 [54] **DEVICE AND METHOD FOR UNATTENDED TREATMENT OF THE PATIENT**  
 [54] **DISPOSITIF ET METHODE POUR LE TRAITEMENT SANS SUPERVISION DU PATIENT**  
 [72] SCHWARZ, TOMAS, CS  
 [72] JELINKOVA, LUCIA, CS  
 [72] KUBIK, VOJTECH, CS  
 [71] BTL HEALTHCARE TECHNOLOGIES A.S., CS  
 [22] 2022-09-30  
 [41] 2023-05-03  
 [30] US (17/518,243) 2021-11-03  
 [30] US (17/664,161) 2022-05-19

[21] **3,178,725**  
 [13] A1

[25] EN  
 [54] **ELECTRICAL POWER COUPLING**  
 [54] **ACCOUPEMENT ELECTRIQUE**  
 [72] RINER, RAYMOND H., US  
 [72] RUPERT, BRIAN K., US  
 [71] GROUP DEKKO, INC., US  
 [22] 2022-10-07  
 [41] 2023-05-04  
 [30] US (17/453545) 2021-11-04

[21] **3,178,728**  
 [13] A1

[25] EN  
 [54] **STACKING OUTLET ENCLOSURES**  
 [54] **ENCEINTES DE PRISES ELECTRIQUES EMPILABLES**  
 [72] RINER, RAYMOND H., US  
 [72] RUPERT, BRIAN K., US  
 [71] GROUP DEKKO, INC., US  
 [22] 2022-10-07  
 [41] 2023-05-04  
 [30] US (17/518,924) 2021-11-04

[21] **3,178,987**  
 [13] A1

[51] **Int.Cl. B60D 1/46 (2006.01)**  
 [25] EN  
 [54] **TRAILER COUPLER RISER**  
 [54] **CONTREMARCHE D'ATTELAGE DE REMORQUE**  
 [72] GARCIA, MARCO, US  
 [71] U-HAUL INTERNATIONAL, INC., US  
 [22] 2022-10-13  
 [41] 2023-05-03  
 [30] US (17/453,366) 2021-11-03

[21] **3,179,069**  
 [13] A1

[51] **Int.Cl. C25B 13/07 (2021.01) C25B 9/60 (2021.01) C25B 9/70 (2021.01)**  
 [25] EN  
 [54] **SOLID OXIDE ELECTROLYZER CELL INCLUDING ELECTROLYSIS-TOLERANT AIR-SIDE ELECTRODE**  
 [54] **CELLULE D'ELECTROLYSEUR A OXYDE SOLIDE COMPRENANT UNE ELECTRODE OXYDOREDUCTRICE TOLERANTE A L'ELECTROLYSE**  
 [72] ARMSTRONG, TAD, US  
 [72] RAILSBACK, JUSTIN, US  
 [71] BLOOM ENERGY CORPORATION, US  
 [22] 2022-10-12  
 [41] 2023-05-05  
 [30] US (17/519,996) 2021-11-05

[21] **3,179,135**  
 [13] A1

[25] EN  
 [54] **MULTI-THREADED VEHICLE COMMUNICATION SYSTEM AND METHOD**  
 [54] **SYSTEME DE COMMUNICATION DE VEHICULE MULTIFILIERE ET METHODE**  
 [72] MAROMATY, ALEXANDER, US  
 [71] TRANSPORTATION IP HOLDINGS, LLC, US  
 [22] 2022-10-18  
 [41] 2023-05-05  
 [30] US (63/276,042) 2021-11-05  
 [30] US (17/960,613) 2022-10-05

[21] **3,179,210**  
 [13] A1

[51] **Int.Cl. A01D 90/02 (2006.01) A01D 90/12 (2006.01)**  
 [25] EN  
 [54] **TRANSPORTING AND PROCESSING LARGE BALES**  
 [54] **TRANSPORT ET TRANSFORMATION DE GRANDES BALLES AGRICOLES**  
 [72] COCHRAN, ROBERT, CA  
 [72] BARROS, DEVIN, CA  
 [72] HARDER, MATT, CA  
 [71] BOURGAULT INDUSTRIES LTD., CA  
 [22] 2022-10-14  
 [41] 2023-05-04  
 [30] CA (3155378) 2021-11-04

[21] **3,179,268**  
 [13] A1

[51] **Int.Cl. F24C 1/14 (2021.01) F24C 1/02 (2021.01) F24C 7/02 (2006.01) F24C 15/16 (2006.01)**  
 [25] EN  
 [54] **TWO-LEVEL RAPID COOKING OVEN AND MULTI-TIERED RACK ASSEMBLY FOR THE SAME**  
 [54] **FOUR DE CUISSON RAPIDE A DEUX NIVEAUX ET ASSEMBLAGE CONNEXE DE RATELIER A ETAGES MULTIPLES**  
 [72] STORIZ, PAUL, US  
 [72] HOPPER, CHRISTOPHER, US  
 [72] TSIOGKAS, DIONYSIOS, US  
 [72] LINTON, JOSHUA, US  
 [71] ILLINOIS TOOL WORKS INC., US  
 [22] 2022-10-18  
 [41] 2023-05-01  
 [30] US (63/274,086) 2021-11-01  
 [30] US (17/955,836) 2022-09-29

**Canadian Applications Open to Public Inspection  
April 30, 2023 to May 6, 2023**

[21] **3,179,273**  
[13] A1

[51] **Int.Cl. A21B 2/00 (2006.01) A23L 5/00 (2016.01) A21B 1/26 (2006.01) A21B 1/40 (2006.01) F24C 1/04 (2021.01) F24C 7/08 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR PROCESSING FOOD PRODUCT MASS ALTERATION DURING A COOKING PROCESS INVOLVING RF APPLICATION**

[54] **METHODE ET APPAREIL POUR LE TRAITEMENT DE LA MODIFICATION A GRANDE ECHELLE D'ALIMENTS PENDANT UN PROCEDE DE CUISSON COMPORTANT UNE APPLICATION DE RADIOFREQUENCES**

[72] STORIZ, PAUL, US

[72] HOPPER, CHRISTOPHER, US

[72] CHIRICO, DANIELE, US

[72] TSIOGKAS, DIONYSIOS, US

[72] LINTON, JOSHUA, US

[71] ILLINOIS TOOL WORKS INC., US

[22] 2022-10-18

[41] 2023-05-01

[30] US (63/274,079) 2021-11-01

[30] US (17/953,754) 2022-09-27

[21] **3,179,490**  
[13] A1

[51] **Int.Cl. B25J 18/06 (2006.01) B25J 11/00 (2006.01)**

[25] EN

[54] **INSERTION TOOL WITH FLEXIBLE SPINE**

[54] **OUTIL D'INSERTION AVEC EPINE FLEXIBLE**

[72] CURLE, JASON RALPH GORDON, GB

[72] NISBET, PETER JOHN, GB

[72] FRANCOIS, TIM HENRI ANN, GB

[71] OLIVER CRISPIN ROBOTICS LIMITED, GB

[22] 2022-10-21

[41] 2023-05-01

[30] US (63/274,421) 2021-11-01

[30] US (17/693,126) 2022-03-11

[21] **3,179,491**  
[13] A1

[51] **Int.Cl. F04B 53/16 (2006.01) E21B 41/00 (2006.01) E21B 43/26 (2006.01) F04B 37/12 (2006.01)**

[25] EN

[54] **FLUID END WITH SELECTIVELY COATED SURFACES**

[54] **EXTREMITE FLUIDE A SURFACES SELECTIVEMENT REVETUES**

[72] BARNHOUSE, JAMES A., JR, US

[72] KABRICH, TODD R., US

[71] SPM OIL & GAS INC., US

[22] 2022-10-19

[41] 2023-05-01

[30] US (17/516222) 2021-11-01

[21] **3,179,511**  
[13] A1

[51] **Int.Cl. A01K 5/00 (2006.01) B60P 3/04 (2006.01)**

[25] EN

[54] **FEEDING DEVICE FOR LIVESTOCK TRANSPORT TRAILERS**

[54] **DISPOSITIF D'ALIMENTATION POUR DES REMORQUES DE TRANSPORT DE BETAIL**

[72] WIGEMYR, DWIGHT, CA

[71] AMPLE CONSTRUCTION LTD., CA

[22] 2022-10-19

[41] 2023-05-01

[30] US (63/274,124) 2021-11-01

[21] **3,179,592**  
[13] A1

[51] **Int.Cl. F28F 1/32 (2006.01) F24H 9/1809 (2022.01) F28D 7/16 (2006.01)**

[25] EN

[54] **HEAT EXCHANGER AND WATER HEATER**

[54] **ECHANGEUR DE CHALEUR ET CHAUFFE-EAU**

[72] TAKEUCHI, MAKOTO, JP

[71] PALOMA CO., LTD., JP

[22] 2022-10-12

[41] 2023-05-04

[30] JP (2021-180258) 2021-11-04

[21] **3,179,666**  
[13] A1

[51] **Int.Cl. B60K 15/063 (2006.01) B60K 15/067 (2006.01) B65G 47/90 (2006.01) B65G 65/00 (2006.01)**

[25] EN

[54] **A WORKING MACHINE**

[54] **MACHINE DE TRAVAIL**

[72] SMITH, DUNCAN ANDREW, GB

[72] YOUNG, NIGEL, GB

[72] PRICE, DAVID, GB

[71] J.C. BAMFORD EXCAVATORS LIMITED, GB

[22] 2022-10-21

[41] 2023-05-03

[30] GB (2115761.5) 2021-11-03

[21] **3,179,685**  
[13] A1

[51] **Int.Cl. B61C 17/12 (2006.01) B61L 3/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR REMOTELY CONTROLLING LOCOMOTIVES WITH GESTURES**

[54] **SYSTEMES ET METHODES DE COMMANDE A DISTANCE DE LOCOMOTIVES A L'AIDE DE GESTES**

[72] JOVENALL, JEREMY, US

[72] FETTE, BRIAN, US

[72] BAILEY, RONALD TIMOTHY, JR, US

[72] WOOTEN, RYAN, US

[71] CATTRON NORTH AMERICA, INC., US

[22] 2022-10-20

[41] 2023-04-30

[30] US (63/273,893) 2021-10-30

[30] US (17/959,159) 2022-10-03

[21] **3,179,689**  
[13] A1

[51] **Int.Cl. B25B 7/10 (2006.01) B25B 7/04 (2006.01)**

[25] EN

[54] **ADJUSTABLE PLIERS**

[54] **PINCE REGLABLE**

[72] THOMPSON, CHRISTOPHER D., US

[72] EGGERT, DANIEL M., US

[71] SNAP-ON INCORPORATED, US

[22] 2022-10-24

[41] 2023-05-01

[30] US (17/516680) 2021-11-01

**Demandes canadiennes mises à la disponibilité du public**  
**30 avril 2023 au 6 mai 2023**

---

[21] **3,179,871**  
[13] A1

[51] **Int.Cl. B28B 23/00 (2006.01) B33Y 10/00 (2015.01) B33Y 40/00 (2020.01) B29C 64/106 (2017.01) B28B 19/00 (2006.01)**

[25] EN

[54] **ADDITIVELY MANUFACTURED STRUCTURE WITH REINFORCED ACCESS OPENING**

[54] **STRUCTURE PRODUITE PAR FABRICATION ADDITIVE COMPRENANT UNE OUVERTURE D'ACCES RENFORCEE**

[72] LI, XIAOPENG, US  
[72] FANG, BIAO, US  
[72] MEYER, PASCAL, US  
[72] KENNY, CHRISTOPHER JAMES, US  
[71] GENERAL ELECTRIC COMPANY, US

[22] 2022-10-20  
[41] 2023-05-01  
[30] US (17/515608) 2021-11-01

---

[21] **3,179,926**  
[13] A1

[51] **Int.Cl. E05C 3/12 (2006.01)**

[25] EN

[54] **GATE LATCHING SYSTEM**

[54] **SYSTEME DE LOQUET DE PORTE**

[72] STEWART, IAN THOMAS, CA  
[71] STEWART, IAN THOMAS, CA

[22] 2022-10-27  
[41] 2023-05-02  
[30] US (17/517,048) 2021-11-02

---

[21] **3,179,930**  
[13] A1

[51] **Int.Cl. B25B 23/00 (2006.01) B25B 11/00 (2006.01)**

[25] EN

[54] **ALIGNMENT ATTACHMENT FOR SCREW GUN**

[54] **ACCESSOIRE D'ALIGNEMENT POUR UN FUSIL A VIS**

[72] PHELPS, WILLIAM, US  
[71] PHELPS, WILLIAM, US

[22] 2022-10-28  
[41] 2023-05-02  
[30] US (17/517,344) 2021-11-02

---

---

[21] **3,180,059**  
[13] A1

[51] **Int.Cl. F02M 26/29 (2016.01) F02M 26/30 (2016.01)**

[25] EN

[54] **UNDERMOUNT FOR EGR COOLER**

[54] **SOUS-MONTAGE POUR REFROIDISSEUR DE RECIRCULATION DES GAZ D'ECHAPPEMENT**

[72] CHEN, ALLEN Y., US  
[72] WALTERS, DEAN W., US  
[72] VAN FAROWE, JASON L., US  
[72] GOULD, DEFOREST C., US  
[71] CATERPILLAR INC., US

[22] 2022-10-26  
[41] 2023-05-03  
[30] US (17/518200) 2021-11-03

---

[21] **3,180,072**  
[13] A1

[51] **Int.Cl. F17C 9/02 (2006.01) B60K 15/073 (2006.01) F17C 3/02 (2006.01) F17C 13/04 (2006.01)**

[25] EN

[54] **HYDROGEN TANK, METHOD OF COOLING A HYDROGEN TANK, AND VEHICLE HAVING A HYDROGEN DRIVE AND HYDROGEN TANK**

[54] **RESERVOIR D'HYDROGENE, METHODE DE REFROIDISSEMENT D'UN RESERVOIR D'HYDROGENE ET VEHICULE AYANT UN MOTEUR A L'HYDROGENE ET UN RESERVOIR D'HYDROGENE**

[72] WENDT, CHRISTIAN, DE  
[72] ISSELHORST, ARMIN, DE  
[72] KONOPKA, MARTIN, DE  
[71] ARIANEGROUP GMBH, DE

[22] 2022-10-26  
[41] 2023-05-02  
[30] DE (10 2021 128 436.8) 2021-11-02

---

---

[21] **3,180,077**  
[13] A1

[51] **Int.Cl. B26B 29/00 (2006.01) B26B 23/00 (2006.01)**

[25] EN

[54] **BLADE COVER AND AXE ASSEMBLY**

[54] **COUVERTURE DE LAME ET ASSEMBLAGE DE HACHE**

[72] KEMPPI, MIKKO, FI  
[71] FISKARS FINLAND OY AB, FI

[22] 2022-10-26  
[41] 2023-05-05  
[30] EP (21206680.7) 2021-11-05

---

[21] **3,180,081**  
[13] A1

[51] **Int.Cl. B08B 9/093 (2006.01) C13B 99/00 (2011.01) B08B 9/28 (2006.01) B08B 9/42 (2006.01)**

[25] EN

[54] **A SYSTEM AND A METHOD FOR PROCESSING CONTAINERS AND HIGH VISCOSITY MATERIAL CONTAINED THEREIN**

[54] **SYSTEME ET METHODE DE TRAITEMENT DE CONTENEURS ET DU MATERIAU DE GRANDE VISCOSITE CONTENU A L'INTERIEUR**

[72] SAIGHI, AHMED, CA  
[72] BADAN, CHRISTOPHE, FR  
[72] LONGCHAMP-AUBE, ANTOINE, CA  
[72] GAGNE, REMI, CA  
[71] GROUPE SINOX INC., CA

[22] 2022-10-26  
[41] 2023-05-01  
[30] US (63/263,376) 2021-11-01

---

[21] **3,180,082**  
[13] A1

[51] **Int.Cl. B26B 23/00 (2006.01) B29C 39/10 (2006.01)**

[25] EN

[54] **AXE AND A METHOD FOR MANUFACTURING AN AXE**

[54] **HACHE ET METHODE DE FABRICATION D'UNE HACHE**

[72] KEMPPI, MIKKO, FI  
[72] RIIKONEN, JOUNI, FI  
[72] KUNNAS, KARI, FI  
[71] FISKARS FINLAND OY AB, FI

[22] 2022-10-26  
[41] 2023-05-05  
[30] EP (21206671.6) 2021-11-05

---

**Canadian Applications Open to Public Inspection  
April 30, 2023 to May 6, 2023**

[21] **3,180,089**  
[13] A1

[51] **Int.Cl. A63C 5/00 (2006.01) A63C 5/04 (2006.01)**  
[25] FR  
[54] **CORE FOR SKI AND SKI COMPRISING SUCH A CORE**  
[54] **NOYAU POUR SKI ET SKI INCLUANT UN TEL NOYAU**  
[72] MIETTE, PHILIPPE, FR  
[71] SALOMÓN S.A.S., FR  
[22] 2022-10-26  
[41] 2023-05-03  
[30] FR (FR2111643) 2021-11-03  
[30] FR (FR2206009) 2022-06-20

[21] **3,180,097**  
[13] A1

[51] **Int.Cl. B64C 9/02 (2006.01) B64C 3/38 (2006.01)**  
[25] EN  
[54] **ATTACHMENT FOR ROTARY ACTUATOR TO WING**  
[54] **ACCESSOIRE POUR UN ACTIONNEUR ROTATIF D'AILE**  
[72] DARBY, JONATHAN, GB  
[71] GOODRICH ACTUATION SYSTEMS LIMITED, GB  
[22] 2022-10-27  
[41] 2023-05-04  
[30] EP (21275156.4) 2021-11-04

[21] **3,180,118**  
[13] A1

[51] **Int.Cl. B25C 1/06 (2006.01) B25C 7/00 (2006.01)**  
[25] EN  
[54] **LOCKING DEVICE FOR ADJUSTING THE NAILING FORCE OF ELECTRIC NAILING GUN**  
[54] **DISPOSITIF DE VERROUILLAGE POUR AJUSTER LA FORCE DE CLOUAGE D'UN FUSIL A CLOUS ELECTRIQUE**  
[72] YIN, ZHENXING, CN  
[72] WEI, JUNPENG, CN  
[72] CHEN, ZHENHUI, CN  
[72] YANG, FAZHENG, CN  
[72] LI, XIAORONG, CN  
[71] YIN, ZHENXING, CN  
[71] WEI, JUNPENG, CN  
[71] CHEN, ZHENHUI, CN  
[71] YANG, FAZHENG, CN  
[71] LI, XIAORONG, CN  
[22] 2022-10-21  
[41] 2023-05-02  
[30] CN (PCT/CN2021/128074) 2021-11-02

[21] **3,180,204**  
[13] A1

[51] **Int.Cl. A61C 8/00 (2006.01) A61C 9/00 (2006.01)**  
[25] EN  
[54] **SCAN BODY WITH HEALING ABUTMENT**  
[54] **CORPS DE BALAYAGE AVEC PILIER DE CICATRISATION**  
[72] ABENAIM, JONATHAN, US  
[71] ABENAIM, JONATHAN, US  
[22] 2022-10-27  
[41] 2023-05-05  
[30] US (17/519,874) 2021-11-05

[21] **3,180,260**  
[13] A1

[51] **Int.Cl. F17C 9/04 (2006.01) B64D 37/30 (2006.01) B64G 1/22 (2006.01) F17C 7/04 (2006.01) F17C 11/00 (2006.01)**  
[25] EN  
[54] **SPACECRAFT TANK WITH HEAT EXCHANGER, SPACECRAFT AND METHOD FOR COOLING THE CONTENTS OF A TANK**  
[54] **RESERVOIR D'ASTRONEF AVEC ECHANGEUR DE CHALEUR, ASTRONEF ET METHODE DE REFROIDISSEMENT DU CONTENU D'UN RESERVOIR**  
[72] WENDT, DR. CHRISTIAN, DE  
[72] ISSELHORST, DR. ARMIN, DE  
[72] KONOPKA, DR.-ING. MARTIN, DE  
[71] ARIANEGROUP GMBH, DE  
[22] 2022-10-27  
[41] 2023-05-02  
[30] DE (10 2021 128 437.6) 2021-11-02

[21] **3,180,306**  
[13] A1

[51] **Int.Cl. F02C 7/04 (2006.01)**  
[25] EN  
[54] **AIR INLET STRUT FOR AIRCRAFT ENGINE**  
[54] **ENTRETOISE DE PRISE D'AIR POUR UN MOTEUR D'AERONEF**  
[72] LE PAPE, DAMIEN, CA  
[72] YAN, GUORONG, CA  
[72] CUNNINGHAM, MARK, CA  
[72] BEAUCHESNE-MARTEL, PHILIPPE, CA  
[72] ISKRA, OLEG, CA  
[72] IVAKITCH, RICHARD, CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2022-10-27  
[41] 2023-05-03  
[30] US (17/453,387) 2021-11-03

[21] **3,180,364**  
[13] A1

[51] **Int.Cl. C11D 3/04 (2006.01) C11D 1/12 (2006.01) C11D 1/75 (2006.01) C11D 3/37 (2006.01) C23G 1/14 (2006.01)**  
[25] EN  
[54] **NON-CHLORINATED OXIDIZING ALKALINE DEGREASING GELS AND USES THEREOF**  
[54] **GELS DEGRAISSANTS ALCALINS OXYDANTS NON CHLORES ET UTILISATIONS CONNEXES**  
[72] ROMANENS, ALEXANDRE, CA  
[72] AYOTTE-NADEAU, PIERRE-LUC, CA  
[72] MARCHAND, PATRICK, CA  
[71] SANI-MARC INC., CA  
[22] 2022-10-31  
[41] 2023-05-01  
[30] US (63/274,254) 2021-11-01

[21] **3,180,388**  
[13] A1

[25] EN  
[54] **COMPACT AIR PLENUM SILENCER**  
[54] **SILENCIEUX DE PLENUM COMPACT**  
[72] FARIS, EUGENE WILLIAM MICHAEL, US  
[71] NAILOR INDUSTRIES OF TEXAS, INC., US  
[22] 2022-10-31  
[41] 2023-05-01  
[30] US (63/263,380) 2021-11-01

[21] **3,180,480**  
[13] A1

[51] **Int.Cl. A61B 50/36 (2016.01) B65F 1/00 (2006.01) B65F 1/14 (2006.01)**  
[25] EN  
[54] **MEDICAL WASTE CONTAINER TRANSPORT DEVICE AND SYSTEM**  
[54] **DISPOSITIF DE TRANSPORT DE CONTENANT A DECHETS MEDICAUX ET SYSTEME**  
[72] LATORRE, MATTHEW S., US  
[72] RIESS, WILLIAM, US  
[71] STERICYCLE, INC., US  
[22] 2022-10-27  
[41] 2023-05-01  
[30] US (63/274,291) 2021-11-01  
[30] US (17/973,315) 2022-10-25

**Demandes canadiennes mises à la disponibilité du public**  
**30 avril 2023 au 6 mai 2023**

[21] **3,180,594**  
[13] A1

[51] **Int.Cl. B60W 40/12 (2012.01) B60W 40/13 (2012.01)**  
 [25] EN  
 [54] **AUTOMATIC QUALIFICATION OF PAYLOAD FOR AUTONOMOUS VEHICLES**  
 [54] **QUALIFICATION AUTOMATIQUE D'UNE CHARGE UTILE POUR VEHICULES AUTONOMES**  
 [72] LATIMER, CRAIG, US  
 [72] KIM, ERIC, US  
 [72] SMITH, DAVID, US  
 [71] WAYMO LLC, US  
 [22] 2022-10-31  
 [41] 2023-05-04  
 [30] US (17/453,544) 2021-11-04

[21] **3,180,603**  
[13] A1

[51] **Int.Cl. B65D 6/00 (2006.01) B65D 21/00 (2006.01)**  
 [25] EN  
 [54] **SECURE STORAGE CONTAINER**  
 [54] **CONTENANT DE RANGEMENT SECURISE**  
 [72] JOLIVETTE, WILBERT L., US  
 [71] SOUTHWIRE COMPANY, LLC, US  
 [22] 2022-11-01  
 [41] 2023-05-01  
 [30] US (63/263,383) 2021-11-01

[21] **3,180,606**  
[13] A1

[51] **Int.Cl. B08B 5/04 (2006.01) E04B 1/62 (2006.01) E04G 23/02 (2006.01)**  
 [25] EN  
 [54] **SYSTEM AND METHOD FOR REMOVING INSULATION**  
 [54] **SYSTEME ET METHODE POUR RETIRER L'ISOLATION**  
 [72] HUDON, SEBASTIEN, CA  
 [71] HUDON, SEBASTIEN, CA  
 [22] 2022-11-01  
 [41] 2023-05-02  
 [30] US (63/274/938) 2021-11-02

[21] **3,180,624**  
[13] A1

[25] EN  
 [54] **SAFETY GLASSES**  
 [54] **LUNETTES DE SECURITE**  
 [72] GROSS, CLIFFORD, US  
 [71] LUCYD LTD., GB  
 [22] 2022-11-01  
 [41] 2023-05-02  
 [30] US (63/274,920) 2021-11-02

[21] **3,180,625**  
[13] A1

[51] **Int.Cl. A42B 3/04 (2006.01)**  
 [25] EN  
 [54] **SYSTEM AND METHOD FOR BICYCLE HELMET MIRROR**  
 [54] **SYSTEME ET METHODE POUR UN MIROIR DE CASQUE DE VELO**  
 [72] KELLY, MICHAEL JOHN, CA  
 [71] KELLY, MICHAEL JOHN, CA  
 [22] 2022-11-01  
 [41] 2023-05-02  
 [30] US (17/517,631) 2021-11-02

[21] **3,180,627**  
[13] A1

[51] **Int.Cl. F21K 9/00 (2016.01) A62B 3/00 (2006.01)**  
 [25] EN  
 [54] **LASER DEVICE AND SYSTEM**  
 [54] **DISPOSITIF LASER ET SYSTEME**  
 [72] GRIFFITHS, MICHAEL, CA  
 [71] GRIFFITHS, MICHAEL, CA  
 [22] 2022-11-01  
 [41] 2023-05-01  
 [30] US (63/274,088) 2021-11-01

[21] **3,180,744**  
[13] A1

[25] EN  
 [54] **BATTERY BANK UNIT, REMAINING CHARGE TIME CALCULATION METHOD, AND REMAINING CHARGE TIME CALCULATION PROGRAM**  
 [54] **UNITE DE GROUPE DE BATTERIES, METHODE DE CALCUL DU TEMPS DE RECHARGE RESTANT ET PROGRAMME DE CALCUL DU TEMPS DE RECHARGE RESTANT**  
 [72] TAMAKI, KATSUHIKO, JP  
 [71] FDK CORPORATION, JP  
 [22] 2022-11-01  
 [41] 2023-05-05  
 [30] JP (JP 2021-181217) 2021-11-05

[21] **3,180,747**  
[13] A1

[25] EN  
 [54] **BATTERY BANK UNIT, REMAINING CHARGE TIME CALCULATION METHOD, AND REMAINING CHARGE TIME CALCULATION PROGRAM**  
 [54] **UNITE DE GROUPE DE BATTERIES, METHODE DE CALCUL DU TEMPS DE RECHARGE RESTANT ET PROGRAMME DE CALCUL DU TEMPS DE RECHARGE RESTANT**  
 [72] MOCHIZUKI, SHUN, JP  
 [72] KITAMURA, KENJI, JP  
 [72] KATSUBE, YASUYUKI, JP  
 [71] FDK CORPORATION, JP  
 [22] 2022-11-01  
 [41] 2023-05-05  
 [30] JP (2021-181218) 2021-11-05

**Canadian Applications Open to Public Inspection  
April 30, 2023 to May 6, 2023**

---

[21] **3,180,766**  
[13] A1

[51] **Int.Cl. B62D 55/24 (2006.01) B62D 55/30 (2006.01)**  
[25] EN  
[54] **ENDLESS TRACK FOR TRACK SYSTEM AND TRACK SYSTEM COMPRISING SAME**  
[54] **CHENILLE POUR SYSTEME DE CHENILLE ET LEDIT SYSTEME COMPRENANT LA CHENILLE**  
[72] PROVENCHER, GUILLAUME, CA  
[72] CHAMPAGNE, OLIVIER, CA  
[72] BEDARD, MAGELLA, CA  
[72] PLANTE, MARTIN, CA  
[72] LANDRY, GABRIEL, CA  
[72] SAUVAGEAU, YVES, CA  
[71] SOUCY INTERNATIONAL INC., CA  
[22] 2022-11-02  
[41] 2023-05-02  
[30] US (63/274,810) 2021-11-02

---

[21] **3,180,824**  
[13] A1

[51] **Int.Cl. B63H 25/00 (2006.01) B63H 20/00 (2006.01) B63H 21/12 (2006.01) B63H 21/21 (2006.01)**  
[25] EN  
[54] **MARINE PROPULSION SYSTEM AND MARINE VESSEL**  
[54] **SYSTEME DE PROPULSION MARIN ET NAVIRE**  
[72] IKEGAYA, YUJI, JP  
[71] YAMAHA HATSUDOKI KABUSHIKI KAISHA, JP  
[22] 2022-11-02  
[41] 2023-05-04  
[30] US (2021-180212) 2021-11-04

---

[21] **3,180,832**  
[13] A1

[51] **Int.Cl. B63H 21/21 (2006.01) B63H 21/20 (2006.01) B63H 25/02 (2006.01) B63H 25/42 (2006.01)**  
[25] EN  
[54] **MARINE PROPULSION SYSTEM AND MARINE VESSEL**  
[54] **SYSTEME DE PROPULSION MARIN ET NAVIRE**  
[72] IKEGAYA, YUJI, JP  
[71] YAMAHA HATSUDOKI KABUSHIKI KAISHA, JP  
[22] 2022-11-02  
[41] 2023-05-04  
[30] JP (2021-180106) 2021-11-04

---

[21] **3,180,833**  
[13] A1

[51] **Int.Cl. G06F 16/242 (2019.01) G06F 40/226 (2020.01)**  
[25] EN  
[54] **FLINK SQL STATEMENT VERIFICATION METHOD AND DEVICE, COMPUTER EQUIPMENT AND STORAGE MEDIUM**  
[54] **METHODE ET DISPOSITIF DE VERIFICATION D'UN ENONCE SQL FLINK, MATERIEL INFORMATIQUE ET SUPPORT DE STOCKAGE**  
[72] WANG, GUANGBANG, CN  
[72] SUN, QIAN, CN  
[72] GUO, WENPING, CN  
[72] ZHANG, YI, CN  
[72] YANG, SHUAI, CN  
[71] 10353744 CANADA LTD., CA  
[22] 2022-11-02  
[41] 2023-05-02  
[30] CN (202111288534.5) 2021-11-02

---

[21] **3,180,859**  
[13] A1

[51] **Int.Cl. G06Q 20/06 (2012.01) G06Q 20/36 (2012.01)**  
[25] EN  
[54] **PURCHASE AND TRANSFER OF CRYPTOCURRENCY WITHOUT PREEXISTING WALLETS**  
[54] **ACHAT ET TRANSFERT DE CRYPTOMONNAIE SANS PORTEFEUILLES PREEXISTANTS**  
[72] YEOM, DAVID, US  
[72] WOO, JASON, US  
[72] WANG, ALEX, US  
[72] TORCHE, GUILLAUME, US  
[72] LAZARO, MARIO CERDAN, US  
[71] EVITE, INC., US  
[71] EMBER FUND, INC., US  
[22] 2022-11-02  
[41] 2023-05-02  
[30] US (63/274,923) 2021-11-02

---

[21] **3,180,895**  
[13] A1

[51] **Int.Cl. B27M 3/00 (2006.01) E04C 2/40 (2006.01) E04C 3/00 (2006.01) E04F 15/04 (2006.01)**  
[25] EN  
[54] **MULTIPURPOSE INTERLOCKABLE BOARD SYSTEM**  
[54] **SYSTEME A PANNEAUX IMBRIQUES POLYVALENT**  
[72] MARTIN, PHILIPPE MATHIEU, CA  
[71] IRVING LICENSING INC., CA  
[22] 2022-11-02  
[41] 2023-05-04  
[30] US (63/275,509) 2021-11-04

---

[21] **3,180,898**  
[13] A1

[25] EN  
[54] **HAIR CUT TRAINING DEVICE**  
[54] **DISPOSITIF D'ENTRAINEMENT A COUPER LES CHEVEUX**  
[72] KLEINFELLER, EMIL GYULA, CA  
[71] KLEINFELLER, EMIL GYULA, CA  
[22] 2022-11-02  
[41] 2023-05-02  
[30] US (63/274,861) 2021-11-02

---

[21] **3,180,901**  
[13] A1

[25] EN  
[54] **MULT-FRACTION SAMPLE HOLDER FOR 3D PARTICLE ANALYSIS**  
[54] **SUPPORT A ECHANTILLON MULTIFRACTION POUR UNE ANALYSE DE PARTICULES 3D**  
[72] ANDREW, MATTHEW, US  
[71] CARL ZEISS X-RAY MICROSCOPY, INC., US  
[22] 2022-11-04  
[41] 2023-05-05  
[30] US (63/263,625) 2021-11-05



**Demandes canadiennes mises à la disponibilité du public**  
**30 avril 2023 au 6 mai 2023**

[21] **3,180,919**  
[13] A1

[25] EN  
 [54] **METHOD AND SYSTEM FOR ANALYTICAL X-RAY CALIBRATION, RECONSTRUCTION AND INDEXING USING SIMULATION**  
 [54] **METHODE ET SYSTEME POUR L'ETALONNAGE DE RAYON X ANALYTIQUE, LA RECONSTITUTION ET L'INDEXAGE PAR SIMULATION**  
 [72] ANDREW, MATTHEW, US  
 [71] CARL ZEISS X-RAY MICROSCOPY, INC., US  
 [22] 2022-11-04  
 [41] 2023-05-05  
 [30] US (63/263,626) 2021-11-05

[21] **3,180,929**  
[13] A1

[51] **Int.Cl. B60C 9/02 (2006.01) B60C 9/04 (2006.01)**  
 [25] EN  
 [54] **CORD AND TIRE WITH SPECIFIED CORD CONSTRUCTION**  
 [54] **CABLE ET PNEU COMPRENANT UNE CONSTRUCTION DE CABLE SPECIFIEE**  
 [72] LIONETTI, ROBERT EDWARD, LU  
 [71] THE GOODYEAR TIRE & RUBBER COMPANY, US  
 [22] 2022-11-03  
 [41] 2023-05-04  
 [30] US (17/519,031) 2021-11-04

[21] **3,180,932**  
[13] A1

[51] **Int.Cl. B60G 7/00 (2006.01) B60G 7/02 (2006.01)**  
 [25] EN  
 [54] **VEHICLE**  
 [54] **VEHICULE**  
 [72] HANSEN, DONALD S., US  
 [72] GIESE, TIMOTHY J., US  
 [72] TAYLOR, MATTHEW S., US  
 [71] POLARIS INDUSTRIES INC., US  
 [22] 2022-11-03  
 [41] 2023-05-04  
 [30] US (17/518,733) 2021-11-04

[21] **3,180,933**  
[13] A1

[25] EN  
 [54] **3D PARTICLE ANALYSIS AND SEPARATION USING DUAL SEEDING**  
 [54] **ANALYSE DE PARTICULES 3D ET SEPARATION PAR DOUBLE ENSEMENCEMENT**  
 [72] DRAKE, EVAN, US  
 [72] ANDREW, MATTHEW, US  
 [71] CARL ZEISS X-RAY MICROSCOPY, INC., US  
 [22] 2022-11-04  
 [41] 2023-05-05  
 [30] US (63/263,628) 2021-11-05

[21] **3,180,937**  
[13] A1

[51] **Int.Cl. B65D 67/02 (2006.01) B65B 17/02 (2006.01)**  
 [25] EN  
 [54] **ARTICLE CARRIERS, MULTIPACK PACKAGES AND BLANKS, AND METHODS FOR FORMING THE SAME**  
 [54] **SUPPORTS A ARTICLES, EMBALLAGES MULTIPAQUETS ET DECOUPES, ET METHODES DE FABRICATION**  
 [72] SHULTZ, DONALD A., US  
 [71] WESTROCK SHARED SERVICES, LLC, US  
 [22] 2022-11-04  
 [41] 2023-05-04  
 [30] US (63/275729) 2021-11-04

[21] **3,180,938**  
[13] A1

[51] **Int.Cl. D21F 11/00 (2006.01) B32B 7/09 (2019.01) B32B 5/06 (2006.01) B32B 27/12 (2006.01) D21F 7/08 (2006.01)**  
 [25] EN  
 [54] **WEB MATERIAL STRUCTURE BELT, METHOD FOR MAKING AND METHOD FOR USING**  
 [54] **COURROIE DE STRUCTURE DE MATERIAU EN TOILE, METHODE DE FABRICATION ET METHODE D'UTILISATION**  
 [72] KIEN, KATHRYN CHRISTIAN, US  
 [72] SHEEHAN, JEFFREY GLEN, US  
 [72] OSTENDORF, WARD WILLIAM, US  
 [72] MIGNOT, LAURENT JOSE MARIE BERNARD, US  
 [71] THE PROCTER & GAMBLE COMPANY, US  
 [22] 2022-11-03  
 [41] 2023-05-04  
 [30] US (63/275,510) 2021-11-04

[21] **3,180,968**  
[13] A1

[51] **Int.Cl. G06Q 40/08 (2012.01) G06Q 30/0283 (2023.01) G06K 7/14 (2006.01)**  
 [25] EN  
 [54] **SYSTEMS AND METHODS FOR INSURANCE APPLICATION PROCESSING**  
 [54] **SYSTEMES ET METHODES DE TRAITEMENT DE DEMANDE D'ASSURANCE**  
 [72] MAROTTA, NICK, US  
 [71] THE TORONTO-DOMINION BANK, CA  
 [22] 2022-11-04  
 [41] 2023-05-04  
 [30] US (63/275,712) 2021-11-04  
 [30] US (63/278,186) 2021-11-11  
 [30] US (17/980,107) 2022-11-03

**Canadian Applications Open to Public Inspection  
April 30, 2023 to May 6, 2023**

[21] **3,180,990**  
[13] A1

[51] **Int.Cl. D21F 11/00 (2006.01) B32B 7/05 (2019.01) B32B 7/09 (2019.01) B29D 29/00 (2006.01) B32B 3/02 (2006.01) B32B 5/06 (2006.01) B32B 27/12 (2006.01) D21F 7/08 (2006.01)**

[25] EN

[54] **WEB MATERIAL STRUCTURING BELT, METHOD FOR MAKING AND METHOD FOR USING**

[54] **COURROIE DE STRUCTURE DE MATERIAU EN TOILE, METHODE DE FABRICATION ET METHODE D'UTILISATION**

[72] KIEN, KATHRYN CHRISTIAN, US  
[72] SHEEHAN, JEFFREY GLEN, US  
[72] OSTENDORF, WARD WILLIAM, US  
[72] MIGNOT, LAURENT JOSE MARIE BERNARD, US

[71] THE PROCTER & GAMBLE COMPANY, US

[22] 2022-11-03  
[41] 2023-05-04  
[30] US (63/275,514) 2021-11-04

[21] **3,180,998**  
[13] A1

[51] **Int.Cl. D21F 11/00 (2006.01) B32B 7/05 (2019.01) B32B 7/09 (2019.01) B32B 5/06 (2006.01) B32B 7/14 (2006.01) B32B 37/00 (2006.01) D21F 7/08 (2006.01)**

[25] EN

[54] **WEB MATERIAL STRUCTURING BELT, METHOD FOR MAKING AND METHOD FOR USING**

[54] **COURROIE DE STRUCTURE DE MATERIAU EN TOILE, METHODE DE FABRICATION ET METHODE D'UTILISATION**

[72] KIEN, KATHRYN CHRISTIAN, US  
[72] SHEEHAN, JEFFREY GLEN, US  
[72] OSTENDORF, WARD WILLIAM, US  
[72] MIGNOT, LAURENT JOSE MARIE BERNARD, US

[71] THE PROCTER & GAMBLE COMPANY, US

[22] 2022-11-03  
[41] 2023-05-04  
[30] US (63/275,520) 2021-11-04

[21] **3,181,019**  
[13] A1

[51] **Int.Cl. D21F 7/08 (2006.01) D21F 3/00 (2006.01) D21F 11/00 (2006.01)**

[25] EN

[54] **WEB MATERIAL STRUCTURING BELT, METHOD FOR MAKING AND METHOD FOR USING**

[54] **COURROIE DE STRUCTURE DE MATERIAU EN TOILE, METHODE DE FABRICATION ET METHODE D'UTILISATION**

[72] KIEN, KATHRYN CHRISTIAN, US  
[72] SHEEHAN, JEFFREY GLEN, US  
[72] OSTENDORF, WARD WILLIAM, US  
[72] MIGNOT, LAURANT JOSE MARIE BERNARD, US

[71] THE PROCTER & GAMBLE COMPANY, US

[22] 2022-11-03  
[41] 2023-05-04  
[30] US (63/275,522) 2021-11-04

[21] **3,181,031**  
[13] A1

[51] **Int.Cl. D21F 11/00 (2006.01) B32B 7/05 (2019.01) B32B 7/09 (2019.01) B32B 3/02 (2006.01) B32B 5/06 (2006.01) B32B 27/12 (2006.01) D21F 7/08 (2006.01)**

[25] EN

[54] **WEB MATERIAL STRUCTURING BELT, METHOD FOR MAKING AND METHOD FOR USING**

[54] **COURROIE DE STRUCTURE DE MATERIAU EN TOILE, METHODE DE FABRICATION ET METHODE D'UTILISATION**

[72] KIEN, KATHRYN CHRISTIAN, US  
[72] SHEEHAN, JEFFREY GLEN, US  
[72] OSTENDORF, WARD WILLIAM, US  
[72] MIGNOT, LAURANT JOSE MARIE BERNARD, US

[71] THE PROCTER & GAMBLE COMPANY, US

[22] 2022-11-03  
[41] 2023-05-04  
[30] US (63/275,525) 2021-11-04

[21] **3,181,034**  
[13] A1

[51] **Int.Cl. E21B 23/01 (2006.01)**

[25] EN

[54] **DOWNHOLE ANCHORING MECHANISM**

[54] **MECANISME D'ANCRAGE EN FOND DE TROU**

[72] SAPONJA, JEFFREY CHARLES, CA  
[72] HARI, ROBBIE SINGH, CA  
[72] DEUGO, SHAWN, CA  
[72] LITALIEN, STEFAN, CA  
[72] STRETCH, CARL, CA

[71] OILIFY NEW-TECH SOLUTIONS INC., CA

[22] 2022-11-03  
[41] 2023-05-03  
[30] US (63/275,021) 2021-11-03  
[30] US (63/400,263) 2022-08-23

[21] **3,181,036**  
[13] A1

[51] **Int.Cl. D21F 11/00 (2006.01) B32B 7/09 (2019.01) B32B 5/06 (2006.01) B32B 37/00 (2006.01) D21F 7/08 (2006.01)**

[25] EN

[54] **WEB MATERIAL STRUCTURING BELT, METHOD FOR MAKING AND METHOD FOR USING**

[54] **COURROIE DE STRUCTURE DE MATERIAU EN TOILE, METHODE DE FABRICATION ET METHODE D'UTILISATION**

[72] KIEN, KATHRYN CHRISTIAN, US  
[72] SHEEHAN, JEFFREY GLEN, US  
[72] OSTENDORF, WARD WILLIAM, US  
[72] MIGNOT, LAURANT JOSE MARIE BERNARD, US

[71] THE PROCTER & GAMBLE COMPANY, US

[22] 2022-11-03  
[41] 2023-05-04  
[30] US (63/275,530) 2021-11-04

**Demandes canadiennes mises à la disponibilité du public**  
**30 avril 2023 au 6 mai 2023**

[21] **3,181,140**  
[13] A1

[51] **Int.Cl. G01N 1/28 (2006.01) G01N 1/31 (2006.01)**  
 [25] EN  
 [54] **METHOD AND APPARATUS FOR DISLODGING CORE TISSUE BIOPSY SAMPLES FROM CORE COLLECTORS AND FOR STORING AND PREPARING SAMPLES FOR PATHOLOGY**  
 [54] **METHODE ET APPAREIL POUR DELOGER DES ECHANTILLONS DE MICROBIOPSIE DE TISSUS DE MICROCOLLECTEURS ET POUR STOCKER ET PREPARER LES ECHANTILLONS AUX FINS DE PATHOLOGIE**  
 [72] SNOKE, PHILLIP JACK, US  
 [72] PRESNELL, SHARON COLLINS, US  
 [72] ALLRED III, PHILIP MORRISON, US  
 [72] BELLEZA, TED, US  
 [71] URO-1, INC., US  
 [22] 2022-11-03  
 [41] 2023-05-03  
 [30] US (17/518,442) 2021-11-03

[21] **3,181,211**  
[13] A1

[51] **Int.Cl. E21B 43/16 (2006.01) E21B 43/24 (2006.01) E21B 43/30 (2006.01) E21B 49/00 (2006.01)**  
 [25] EN  
 [54] **OPTIMIZING STEAM AND SOLVENT INJECTION TIMING IN OIL PRODUCTION**  
 [54] **OPTIMISATION DE LA SYNCHRONISATION D'INJECTION DE VAPEUR ET DE SOLVANT DANS LA PRODUCTION DE PETROLE**  
 [72] FILSTEIN, ALEX, US  
 [71] CONOCOPHILLIPS COMPANY, US  
 [22] 2022-11-04  
 [41] 2023-05-05  
 [30] US (63/276,095) 2021-11-05

[21] **3,181,224**  
[13] A1

[25] EN  
 [54] **METHOD OF ASSEMBLY SUITABLE FOR INSERTING THROUGH-HOLE COMPONENTS INTO A PRINTED CIRCUIT BOARD PCB**  
 [54] **METHODE D'ASSEMBLAGE APPROPRIE POUR INSERER DES ELEMENTS DE TROU DEBOUCHANT DANS UNE CARTE DE CIRCUITS IMPRIMES**  
 [72] BOREK, PAWEL, PL  
 [72] GRZADZIEL, MICHAL, PL  
 [72] HUBCZAK, MARIUSZ, PL  
 [72] MISTRZYK, PIOTR, PL  
 [72] PLAECZNY, PAWEL, PL  
 [72] POREBSKI, LUKASZ, PL  
 [72] SZEWCZYK, DOMINIK, PL  
 [72] TRZNADEL, MIROSLAW, PL  
 [72] PYCLIK, KRZYSTOF, PL  
 [71] FITECH SP. Z O.O., PL  
 [22] 2022-11-04  
 [41] 2023-05-06  
 [30] EP (21461617.9) 2021-11-06

[21] **3,181,230**  
[13] A1

[51] **Int.Cl. B29C 48/15 (2019.01) B29C 48/16 (2019.01) B29C 70/18 (2006.01)**  
 [25] EN  
 [54] **OUTDOOR BUILDING MATERIALS INCLUDING POLYMER MATRIX AND FIRST AND SECONDRINFORCEMENT MATERIALS**  
 [54] **MATERIAUX DE CONSTRUCTION EXTERIEURS COMPRENANT UNE MATRICE POLYMER ET UN PREMIER ET UN DEUXIEME MATERIAU DE RENFORCEMENT**  
 [72] MANN, ALEX, CA  
 [72] PLANETA, MIREK, CA  
 [72] CLIMOV, VLADIMIR, CA  
 [71] SINGULAR SOLUTIONS INC., CA  
 [22] 2022-11-04  
 [41] 2023-05-05  
 [30] US (63/276,328) 2021-11-05

[21] **3,181,232**  
[13] A1

[51] **Int.Cl. B25J 15/08 (2006.01) B25J 9/12 (2006.01) B25J 15/02 (2006.01)**  
 [25] EN  
 [54] **GRIPPER**  
 [54] **PREHENSEUR**  
 [72] KFOURY, FARES, FR  
 [72] GROSSARD, MATHIEU, FR  
 [71] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, FR  
 [22] 2022-11-02  
 [41] 2023-05-04  
 [30] FR (2111736) 2021-11-04

[21] **3,181,291**  
[13] A1

[51] **Int.Cl. G06F 21/12 (2013.01)**  
 [25] EN  
 [54] **SYSTEM, METHOD, AND DEVICE FOR PROVIDING MULTIPLE SOFTWARE RESOURCES**  
 [54] **SYSTEME, METHODE ET DISPOSITIF POUR FOURNIR DE MULTIPLES RESSOURCES LOGICIELLES**  
 [72] DUBE, PATRICK, CA  
 [72] GODARD-TREMBLY, SIMON, CA  
 [72] GARCIA, FRANZ, CA  
 [72] VAILLANCOURT, MARC, CA  
 [71] CLOUDOPS INC., CA  
 [22] 2022-11-04  
 [41] 2023-05-05  
 [30] US (63/276,269) 2021-11-05

**Canadian Applications Open to Public Inspection  
April 30, 2023 to May 6, 2023**

[21] **3,181,404**  
[13] A1

[51] **Int.Cl. G06N 3/09 (2023.01) G06Q 40/02 (2023.01) G06F 16/23 (2019.01) G06F 16/24 (2019.01) G06N 3/088 (2023.01)**

[25] EN

[54] **SUPERVISED AND/OR UNSUPERVISED MACHINE LEARNING MODELS FOR SUPPLEMENTING RECORDS STORED IN A DATABASE FOR RETRIEVAL**

[54] **MODELES D'APPRENTISSAGE AUTOMATIQUE SUPERVISES ET/OU NON SUPERVISES POUR COMPLETER LES DOSSIERS STOCKES DANS UNE BASE DE DONNEES AUX FINS DE RECUPERATION**

[72] WURMFELD, DAVID KELLY, US  
[72] OSBORN, KEVIN, US  
[71] CAPITAL ONE SERVICES, LLC, US  
[22] 2022-11-03  
[41] 2023-05-03  
[30] US (17/453429) 2021-11-03

[21] **3,181,410**  
[13] A1

[51] **Int.Cl. E06B 9/326 (2006.01) E06B 9/32 (2006.01) E06B 9/382 (2006.01)**

[25] EN

[54] **ROMAN BLIND WITH SHROUD PROTECTION**

[54] **STORE ROMAIN AVEC PROTECTION DE TOILE**

[72] MAROCCO, MARIO, CA  
[72] MAROCCO, STEVEN, CA  
[71] MAXXMAR INC., CA  
[22] 2022-11-08  
[41] 2023-05-03

[21] **3,181,434**  
[13] A1

[51] **Int.Cl. G06V 10/70 (2022.01) G06V 10/26 (2022.01) G06Q 10/087 (2023.01) B65B 11/02 (2006.01) B65B 11/04 (2006.01)**

[25] EN

[54] **DELIVERY SYSTEM**

[54] **SYSTEME DE DISTRIBUTION**

[72] JACKSON, PETER DOUGLAS, US  
[72] MARTIN, ROBERT LEE, JR, US  
[72] THYER, DANIEL JAMES, US  
[72] BROWN, JUSTIN MICHAEL, US  
[71] REHRIG PACIFIC COMPANY, US  
[22] 2022-11-01  
[41] 2023-05-01  
[30] US (63/274,303) 2021-11-01  
[30] US (63/274,310) 2021-11-01

[21] **3,181,435**  
[13] A1

[51] **Int.Cl. F17C 13/04 (2006.01)**

[25] EN

[54] **PRESSURE VESSEL WITH MULTIPLE LATERAL OUTFLOW OPENINGS**

[54] **RECIPIENT SOUS PRESSION COMPRENANT DE MULTIPLES OUVERTURES DE SORTIE LATERALES**

[72] JAHN, ANDREAS, DE  
[71] JAHN, ANDREAS, DE  
[22] 2022-11-01  
[41] 2023-05-02  
[30] DE (10 2021 212 342.2) 2021-11-02

[21] **3,181,444**  
[13] A1

[51] **Int.Cl. F17C 1/00 (2006.01) F17C 13/02 (2006.01)**

[25] EN

[54] **PRESSURE CONTAINERS AND PRESSURE CONTAINER ASSORTMENT**

[54] **RECIPIENTS SOUS PRESSION ET ASSORTIMENT**

[72] JAHN, ANDREAS, DE  
[71] JAHN, ANDREAS, DE  
[22] 2022-11-02  
[41] 2023-05-04  
[30] DE (10 2021 128 723.5) 2021-11-04

[21] **3,181,446**  
[13] A1

[25] EN

[54] **UNIFIED, CROSS-CHANNEL, MULTIDIMENSIONAL INSIGHT GENERATION**

[54] **GENERATION DE CONNAISSANCES UNIFIEES, INTEGREGES ET MULTIDIMENSIONNELLES**

[72] COPELAND, SHANNON L., US  
[71] ACCENTURE GLOBAL SOLUTIONS LIMITED, GB  
[22] 2022-11-04  
[41] 2023-05-05  
[30] US (17/453,700) 2021-11-05

[21] **3,181,447**  
[13] A1

[51] **Int.Cl. F23B 80/02 (2006.01) F23B 50/12 (2006.01) F23B 99/00 (2006.01) F24B 1/02 (2006.01) F24B 1/08 (2021.01) F24B 13/04 (2006.01)**

[25] EN

[54] **HEATING DEVICE WITH IMPROVED EFFICIENCY**

[54] **DISPOSITIF DE CHAUFFAGE A EFFICACITE AMELIOREE**

[72] DZEBBA, GORDAN, CH  
[72] FLUCKIGER, MIKE, CH  
[71] SUTER ENTFEUCHTUNGSTECHNIK AG, CH  
[22] 2022-11-03  
[41] 2023-05-03  
[30] EP (21206283.0) 2021-11-03

[21] **3,182,692**  
[13] A1

[25] EN

[54] **AUTOMATIC GENERATION OF A CONTEXTUAL MEETING SUMMARY**

[54] **GENERATION ATOMIQUE D'UN RESUME CONTEXTUEL DE REUNION**

[72] EDEN, GRANT, US  
[72] GOODSITT, JEREMY, US  
[72] WALTERS, AUSTIN, US  
[72] TRUONG, ANH, US  
[71] CAPITAL ONE SERVICES, LLC, US  
[22] 2022-11-01  
[41] 2023-05-02  
[30] US (17/517,644) 2021-11-02

**Demandes canadiennes mises à la disponibilité du public**  
**30 avril 2023 au 6 mai 2023**

---

[21] **3,184,361**

[13] A1

[51] **Int.Cl. B03D 1/08 (2006.01)**

[25] EN

[54] **SEPARATION OF WARM WATER  
FROM FROTH TAILINGS**

[54] **SEPARATION D'EAU TIEDE DE  
RESIDUS DE MOUSSE**

[72] YAZDI ZEHTAB, ALIREZA, CA

[72] CEBULA, SCOTT, CA

[72] COOK, CHARLES J., CA

[72] KOROLUK, DEVON C., CA

[72] ABEL, KEITH A., CA

[72] JHA, RAHUL, CA

[71] IMPERIAL OIL RESOURCES  
LIMITED, CA

[22] 2022-12-05

[41] 2023-05-05

---

[21] **3,184,654**

[13] A1

[51] **Int.Cl. G06Q 10/063 (2023.01) G06F  
3/0484 (2022.01) G06F 3/04883  
(2022.01) G06Q 30/01 (2023.01) G06F  
3/16 (2006.01)**

[25] EN

[54] **DYNAMIC DASHBOARD  
ADMINISTRATION**

[54] **GESTION DE TABLEAU DE BORD  
DYNAMIQUE**

[72] COPELAND, SHANNON L., US

[71] ACCENTURE GLOBAL SOLUTIONS  
LIMITED, GB

[22] 2022-10-19

[41] 2023-05-05

[30] US (17/453,676) 2021-11-05

# PCT Applications Entering the National Phase

## Demandes PCT entrant en phase nationale

---

[21] **3,133,915**  
[13] A1

[51] **Int.Cl. A63F 13/55 (2014.01) A63F 13/40 (2014.01) A63F 13/52 (2014.01)**

[25] EN

[54] **VIRTUAL OBJECT CONTROL METHOD AND APPARATUS, DEVICE, AND STORAGE MEDIUM**

[54] **METHODE DE COMMANDE D'UN OBJET VIRTUEL, ET APPAREIL, DISPOSITIF ET SUPPORT DE STOCKAGE**

[72] CHEN, YU, CN

[72] WANG, LE, CN

[72] WENG, JIANMIAO, CN

[72] HU, XUN, CN

[72] WAN, YULIN, CN

[72] SU, SHANDONG, CN

[72] ZHANG, YONG, CN

[71] TENCENT TECHNOLOGY (SHENZHEN) COMPANY LIMITED, CN

[85] 2021-10-15

[86] 2021-03-01 (PCT/CN2021/078458)

[87] (WO2021/208614)

[30] CN (202010297051.0) 2020-04-15

---

[21] **3,149,547**  
[13] A1

[51] **Int.Cl. E04B 1/80 (2006.01) B32B 7/027 (2019.01) B32B 37/00 (2006.01) E04B 2/02 (2006.01)**

[25] EN

[54] **HEAT INSULATION WALL AND MANUFACTURING METHOD AND MOUNTING METHOD THEREOF**

[54] **PAROI D'ISOLATION THERMIQUE ET METHODES DE FABRICATION ET D'INSTALLATION**

[72] BAO, CHENGJI, CN

[71] CHENGJI PASSIVE HOUSE (HANGZHOU) CO. LTD., CN

[85] 2022-02-18

[86] 2021-12-23 (PCT/CN2021/140927)

[87] (3149547)

[30] CN (202111281479.7) 2021-11-01

---

[21] **3,151,027**  
[13] A1

[51] **Int.Cl. A61L 2/10 (2006.01)**

[25] EN

[54] **UVC GERMICIDAL LIGHT FOR INDOOR APPLICANCES**

[54] **LUMIERE GERMICIDE UVC POUR UTILISATION INTERIEURE**

[72] ABEHASERA, BENYAMIN, US

[72] PINHASI, ZOHAR, US

[71] UV 426, LLC, US

[85] 2022-03-02

[86] 2021-11-01 (PCT/US2021/057592)

[87] (3151027)

---

[21] **3,162,183**  
[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 BLOOD VESSELS DURING FLUORESCENCE IMAGING**

[54] **SYSTEME ET PROCEDE D'IDENTIFICATION DES VAISSEAUX SANGUINS DURANT L'IMAGERIE PAR FLUORESCENCE**

[72] LUND, MORTEN TOFT, DK

[72] MADSEN, MADS HOLST AAGAARD, DK

[71] PERFUSION TECH APS, DK

[85] 2022-06-16

[86] 2020-12-21 (PCT/EP2020/087507)

[87] (WO2021/123446)

[30] EP (19218169.1) 2019-12-19

---

[21] **3,162,830**  
[13] A1

[51] **Int.Cl. H05B 45/58 (2020.01) H05B 45/56 (2020.01)**

[25] EN

[54] **LED END OF LIFE DETECTION**

[54] **DETECTION DE FIN DE VIE A DEL**

[72] OTTEN, DHR. ANDY JOHANNA ELISABETH, DE

[71] ELDOLAB HOLDING B.V., NL

[85] 2022-06-22

[86] 2020-12-24 (PCT/EP2020/087859)

[87] (WO2021/130361)

[30] NL (2024577) 2019-12-24

---

[21] **3,188,740**  
[13] A1

[51] **Int.Cl. G06F 9/44 (2018.01) G06F 16/903 (2019.01) G06F 9/455 (2018.01)**

[25] EN

[54] **SYSTEME ET PROCEDE D'OPTIMISATION D'UN OUTIL DE SIMULATION**

[54] **SYSTEM AND PROCESS FOR OPTIMIZING A SIMULATION TOOL**

[72] LEPAGE, ALAIN, CA

[72] VINCENT, PASCAL, CA

[71] SERVICES MAKILA INC., CA

[85] 2023-02-06

[86] 2022-03-14 (PCT/CA2022/050377)

[87] (3188740)

## Demandes PCT entrant en phase nationale

[21] **3,189,227**  
[13] A1

[51] **Int.Cl. C07K 19/00 (2006.01) A61K 47/68 (2017.01) C07K 14/705 (2006.01) C07K 14/715 (2006.01) C07K 16/00 (2006.01) C07K 16/28 (2006.01) C12N 15/62 (2006.01) C12P 21/00 (2006.01)**

[25] EN

[54] **A FUSION PROTEIN COMPRISING AN ANTIGEN BINDING DOMAIN AND A CYTOKINE TRIMER DOMAIN**

[54] **PROTEINE DE FUSION COMPRENANT UN DOMAINE DE LIAISON D'ANTIGENE ET UN DOMAINE DE CYTOKINE-TRIMERE**

[72] SON, KKA BI, KR  
[72] BAK, JEONG HYEON, KR  
[72] LEE, DAE HEE, KR  
[72] JANG, SE II, KR  
[72] LEE, JUNG MIN, KR  
[72] YOON, HI HYE, KR  
[72] JEONG, JONG GWAN, KR  
[71] CTCELLS, INC., KR  
[85] 2023-02-10  
[86] 2022-06-22 (PCT/KR2022/008883)  
[87] (3189227)  
[30] KR (10-2022-0022526) 2022-02-21  
[30] KR (10-2022-0046740) 2022-04-15

[21] **3,191,121**  
[13] A1

[51] **Int.Cl. A23L 13/00 (2016.01) C12N 5/071 (2010.01) C12N 5/077 (2010.01) A23P 10/25 (2016.01) C12N 5/00 (2006.01)**

[25] EN

[54] **EXTRUDATE FOOD COMPOSITIONS COMPRISING CULTIVATED ANIMAL CELLS AND METHODS OF PRODUCTION THEREOF**

[54] **COMPOSITIONS ALIMENTAIRES EXTRUDEES COMPRENANT DES CELLULES ANIMALES CULTIVEES ET LEURS PROCEDES DE PRODUCTION**

[72] LI, MENG, US  
[72] PARK, NATHANIEL, US  
[72] SANTO, VITOR ESPIRITO, US  
[71] GOOD MEAT, INC., US  
[85] 2023-02-27  
[86] 2021-08-27 (PCT/US2021/048106)  
[87] (WO2022/047263)  
[30] US (63/071,806) 2020-08-28

[21] **3,192,333**  
[13] A1

[51] **Int.Cl. F41A 5/24 (2006.01) F41A 9/38 (2006.01)**

[25] EN

[54] **A COMPACT GAS-OPERATED AUTOLOADING FIREARM MECHANISM**

[54] **MECANISME COMPACT A GAZ DE CHARGEMENT AUTOMATIQUE D'ARME A FEU**

[72] COZANITIS, MATHEW, AU  
[71] COZANITIS, MATHEW, AU  
[85] 2023-03-09  
[86] 2022-10-05 (PCT/AU2022/051192)  
[87] (3192333)  
[30] AU (AU2021903530) 2021-11-04

[21] **3,193,469**  
[13] A1

[51] **Int.Cl. B60D 1/46 (2006.01) B62D 53/06 (2006.01)**

[25] EN

[54] **TOWING ARRANGEMENT FOR A TOWING VEHICLE, SYSTEM, TRAILER, AND METHOD**

[54] **AGENCEMENT DE REMORQUAGE POUR UN VEHICULE REMORQUEUR, SYSTEME, REMORQUE ET PROCEDE**

[72] MIETTINEN, JOONA, FI  
[71] SLEIPNER FINLAND OY, FI  
[85] 2023-03-22  
[86] 2021-09-22 (PCT/FI2021/050622)  
[87] (WO2022/064104)  
[30] FI (20205918) 2020-09-22

[21] **3,193,506**  
[13] A1

[51] **Int.Cl. A01B 1/22 (2006.01) B25G 3/14 (2006.01)**

[25] EN

[54] **GARDEN IMPLEMENT**

[54] **OUTIL DE JARDIN**

[72] JUNKIN, ANGUS, US  
[72] FLAHERTY, MICHAEL, US  
[71] BOTANIWORLD, LLC, US  
[85] 2023-03-22  
[86] 2020-09-25 (PCT/US2020/052921)  
[87] (WO2022/066172)

[21] **3,193,507**  
[13] A1

[51] **Int.Cl. B25C 1/04 (2006.01)**

[25] EN

[54] **PNEUMATIC FASTENING TOOL WITH WIRELESS SENSOR PACKAGE**

[54] **OUTIL DE FIXATION PNEUMATIQUE AVEC BOITIER DE CAPTEUR SANS FIL**

[72] ROBINSON, DERICK C., US  
[72] KLEIN, CHRISTOPHER D., US  
[71] KYOCERA SENCO INDUSTRIAL TOOLS, INC., US  
[85] 2023-03-22  
[86] 2021-10-05 (PCT/US2021/053522)  
[87] (WO2022/076376)  
[30] US (63/088,164) 2020-10-06

[21] **3,193,508**  
[13] A1

[51] **Int.Cl. C07K 14/705 (2006.01) A61P 37/06 (2006.01)**

[25] EN

[54] **IMPROVED METHODS AND COMPOSITIONS FOR EXPRESSION OF NUCLEIC ACIDS IN CELLS**

[54] **PROCEDES ET COMPOSITIONS AMELIORES POUR L'EXPRESSION D'ACIDES NUCLEIQUES DANS DES CELLULES**

[72] GETTS, DANIEL, US  
[72] WANG, YUXIAO, US  
[72] BISARIA, NAMITA, US  
[72] SCHERBAKOVA, INNA, US  
[72] ROWLEY JR., WILLIAM F., US  
[71] MYELOID THERAPEUTICS, INC., US  
[85] 2023-03-22  
[86] 2021-09-22 (PCT/US2021/051539)  
[87] (WO2022/066757)  
[30] US (63/082,388) 2020-09-23

## PCT Applications Entering the National Phase

[21] **3,193,509**  
[13] A1

[51] **Int.Cl. G06V 10/44 (2022.01)**  
[25] EN  
[54] **PROCESS FOR IDENTIFYING A SUB-SAMPLE AND A METHOD FOR DETERMINING THE TROPHYSICAL PROPERTIES OF A ROCK SAMPLE**  
[54] **PROCEDE D'IDENTIFICATION D'UN SOUS-ECHANTILLON ET PROCEDE DE DETERMINATION DES PROPRIETES PETROPHYSIQUES D'UN ECHANTILLON DE ROCHE**  
[72] MIARELLI, MARCO, IT  
[71] ENI S.P.A., IT  
[85] 2023-03-22  
[86] 2021-12-02 (PCT/IB2021/061223)  
[87] (WO2022/118234)  
[30] IT (10202000029744) 2020-12-03

[21] **3,193,510**  
[13] A1

[51] **Int.Cl. B32B 37/12 (2006.01) B32B 43/00 (2006.01)**  
[25] EN  
[54] **PANEL, IN PARTICULAR A FLOOR, CEILING, OR WALL PANEL; A COVERING CONSTRUCTED BY A MULTITUDE OF SUCH PANELS; AND A METHOD FOR THE RECYCLING OF SUCH A PANEL**  
[54] **PANNEAU, EN PARTICULIER PANNEAU DE PLANCHER, DE PLAFOND OU DE MUR ; REVETEMENT CONSTRUIT PAR UNE MULTITUDE DE TELS PANNEAUX ; ET PROCEDE DE RECYCLAGE D'UN TEL PANNEAU**  
[72] BOUCKE, EDDY ALBERIC, BE  
[71] I4F LICENSING NV, BE  
[85] 2023-03-22  
[86] 2021-09-30 (PCT/EP2021/076942)  
[87] (WO2022/069629)  
[30] NL (2026580) 2020-09-30

[21] **3,193,511**  
[13] A1

[51] **Int.Cl. B67D 1/08 (2006.01)**  
[25] EN  
[54] **BEVERAGE DISPENSING ASSEMBLY**  
[54] **ENSEMBLE DE DISTRIBUTION DE BOISSON**  
[72] WIGMAN, PETER HENRI SAMUEL, NL  
[72] KOUTERS, LUCAS JOHANNES CORNELIS, NL  
[71] HEINEKEN SUPPLY CHAIN B.V., NL  
[85] 2023-03-22  
[86] 2021-10-26 (PCT/NL2021/050650)  
[87] (WO2022/093018)  
[30] EP (20203953.3) 2020-10-26

[21] **3,193,512**  
[13] A1

[51] **Int.Cl. A61K 31/7068 (2006.01)**  
[25] EN  
[54] **LINE-1 INHIBITORS TO TREAT DISEASE**  
[54] **INHIBITEURS DE LINE-1 POUR TRAITER UNE MALADIE**  
[72] DOSHI, MALAY, CA  
[72] WEBER, ECKARD, US  
[72] CORDINGLEY, MICHAEL GRAHAM, CA  
[72] STURINO, CLAUDIO, CA  
[71] TRANSPON THERAPEUTICS, INC., US  
[85] 2023-03-22  
[86] 2021-09-23 (PCT/US2021/051716)  
[87] (WO2022/066880)  
[30] US (63/082,185) 2020-09-23  
[30] US (63/161,055) 2021-03-15

[21] **3,193,513**  
[13] A1

[51] **Int.Cl. H04W 4/02 (2018.01) H04W 4/90 (2018.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR GEO-TARGETED AUTOMATED EMERGENCY ALERTING THROUGH ANALOG RADIO BROADCAST**  
[54] **SYSTEME ET PROCEDE D'ALERTE AUTOMATISEE GEO-CIBLEE SUR URGENCE PAR DIFFUSION RADIO ANALOGIQUE**  
[72] TYAGI, VIPIN, IN  
[72] DALELA, PANKAJ KUMAR, IN  
[72] SALDHI, ANKITA, IN  
[72] BHAVE, PRAMOD, IN  
[72] BASU, SAURABH, IN  
[72] MAJUMDAR, SABYASACHI, IN  
[72] YADAV, ARUN, IN  
[72] KUSHWAHA, NIRAJ KANT, IN  
[71] CENTRE FOR DEVELOPMENT OF TELEMATICS, IN  
[85] 2023-03-22  
[86] 2021-09-21 (PCT/IB2021/058586)  
[87] (WO2022/064358)  
[30] IN (202041041216) 2020-09-23

[21] **3,193,516**  
[13] A1

[51] **Int.Cl. A61M 3/00 (2006.01) A61M 5/00 (2006.01) A61M 5/142 (2006.01) A61M 5/178 (2006.01) A61M 5/31 (2006.01) A61M 5/315 (2006.01)**  
[25] EN  
[54] **MEDICAL INJECTION DEVICE HAVING A BIASING COMPONENT ENGAGEABLE WITH A PLUNGER ROD**  
[54] **DISPOSITIF D'INJECTION MEDICALE AYANT UN COMPOSANT DE SOLLICITATION POUVANT VENIR EN PRISE AVEC UNE TIGE DE PISTON**  
[72] SIMMONS, STEPHEN C., US  
[72] LEIBOWITZ, EVAN, US  
[72] ROTHERY, DAVID, GB  
[72] SIMANTIRAS, STEPHEN, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-03-22  
[86] 2021-09-23 (PCT/US2021/051702)  
[87] (WO2022/066870)  
[30] US (63/083,588) 2020-09-25



## Demandes PCT entrant en phase nationale

[21] **3,193,517**  
[13] A1

[51] **Int.Cl. A41D 13/12 (2006.01) A41D 27/24 (2006.01) B29C 65/50 (2006.01) B32B 3/00 (2006.01) B32B 3/06 (2006.01) B32B 5/02 (2006.01) B32B 27/00 (2006.01)**

[25] EN  
[54] **PROTECTIVE GARMENT AND SEAM TAPE USED THEREWITH**  
[54] **VETEMENT DE PROTECTION ET BANDE DE COUTURE UTILISEE AVEC CELUI-CI**

[72] TERRY, NATHANIEL M., US  
[72] MEASE, TAMARA R., US  
[72] BEBO, III NELSON J., US  
[72] DIANNI, WILLIAM J., US  
[71] BURLINGTON INDUSTRIES LLC, US

[85] 2023-03-22  
[86] 2021-09-21 (PCT/US2021/051239)  
[87] (WO2022/066612)  
[30] US (63/081,535) 2020-09-22  
[30] US (63/184,878) 2021-05-06

[21] **3,193,518**  
[13] A1

[51] **Int.Cl. E05D 13/00 (2006.01) E05D 15/16 (2006.01) E06B 1/00 (2006.01) E06B 1/52 (2006.01) E06B 3/48 (2006.01) E06B 7/16 (2006.01) E06B 9/58 (2006.01)**

[25] EN  
[54] **JAMB FOR LOADING DOCK DOOR AND SYSTEM INCLUDING SAME**  
[54] **MONTANT POUR CHARGEMENT DE PORTE DE QUAI ET SYSTEME LE COMPRENANT**

[72] MAUG, JAMES A., US  
[72] FIELDS, JAMES P., US  
[71] PITT-OHIO EXPRESS LLC, US

[85] 2023-03-22  
[86] 2021-10-07 (PCT/US2021/054045)  
[87] (WO2022/076738)  
[30] US (63/088,910) 2020-10-07

[21] **3,193,519**  
[13] A1

[51] **Int.Cl. H01L 21/56 (2006.01)**

[25] EN  
[54] **ELECTRONICS UNIT AND METHOD OF MANUFACTURING THE SAME**  
[54] **UNITE ELECTRONIQUE ET SON PROCEDE DE FABRICATION**

[72] POTRECK, JANINE-MELANIE, DE  
[71] SPHERA TECHNOLOGY GMBH, DE

[85] 2023-03-22  
[86] 2021-09-24 (PCT/EP2021/076343)  
[87] (WO2022/063977)  
[30] DE (10 2020 124 955.1) 2020-09-24

[21] **3,193,521**  
[13] A1

[51] **Int.Cl. G01N 33/543 (2006.01) G01N 33/553 (2006.01)**

[25] EN  
[54] **SURFACE MODIFIED PARTICLES**  
[54] **PARTICULES A SURFACE MODIFIEE**

[72] CIGLER, PETR, CZ  
[72] NEBURKOVA, JITKA, CZ  
[72] SCHIMER, JIRI, CZ  
[72] GURICOVA, MIROSLAVA, SK  
[72] HAJDUCH, MARIAN, CZ  
[72] JAWOREK, HANA, CZ  
[72] ONDRA, MARTIN, CZ  
[72] KUBICKOVA, AGATA, CZ  
[71] USTAV ORGANICKE CHEMIE A BIOCHEMIE AV CR, V.V.I., CZ  
[71] UNIVERZITA PALACKEHO V OLUMOUCI, CZ

[85] 2023-03-22  
[86] 2021-09-29 (PCT/CZ2021/050103)  
[87] (WO2022/068982)  
[30] CZ (PV 2020-535) 2020-09-29

[21] **3,193,524**  
[13] A1

[51] **Int.Cl. B02B 1/08 (2006.01) B02C 4/06 (2006.01) B02C 9/04 (2006.01) B02C 15/02 (2006.01) B02C 15/04 (2006.01) B02C 23/12 (2006.01) B02C 23/14 (2006.01)**

[25] EN  
[54] **PROCESS FOR THE MILLING OF VEGETABLE-BASED MATERIALS, IN PARTICULAR PLANTS LIKE SEEDS**  
[54] **PROCEDE DE BROYAGE DE MATIERES A BASE VEGETALE, EN PARTICULIER DE PLANTES TELLES QUE DES GRAINES**

[72] MOTTE, JEAN-CHARLES, FR  
[72] CHEREAU, DENIS, FR  
[72] LEROY, FRANCK, FR  
[72] MARECHAL, JEAN-FRANCOIS, FR  
[71] IMPROVE, FR  
[71] SOCIETE FINANCIERE INDUSTRIELLE, FR

[85] 2023-03-22  
[86] 2020-10-12 (PCT/EP2020/078628)  
[87] (WO2022/078570)

[21] **3,193,527**  
[13] A1

[51] **Int.Cl. B23K 11/14 (2006.01)**

[25] EN  
[54] **PROJECTION NUT FEEDER**  
[54] **DISPOSITIF D'ALIMENTATION D'ECROU PAR PROJECTION**

[72] AOYAMA, YOSHITAKA, JP  
[72] AOYAMA, SHOJI, JP  
[71] AOYAMA, SHOJI, JP

[85] 2023-03-22  
[86] 2020-10-28 (PCT/JP2020/040487)  
[87] (WO2022/091262)

## PCT Applications Entering the National Phase

[21] **3,193,528**  
[13] A1

[51] **Int.Cl. F24H 1/10 (2022.01) H05B 3/06 (2006.01) H05B 3/42 (2006.01)**

[25] EN

[54] **COUPLING BOX HAIRPIN REPLACEMENT FOR HIGH VOLTAGE HEATING ELEMENT**

[54] **REPLACEMENT EN EPINGLE A CHEVEUX DE BOITE DE COUPLAGE POUR ELEMENT CHAUFFANT A HAUTE TENSION**

[72] JONES, MICHAEL A., US  
[72] GAULKE, KEN, US  
[72] OHSE, JEREMY, US  
[72] BRUMMELL, ROGER, US  
[72] BOEHMER, SCOTT H., US  
[72] LINDLEY, JACOB, US  
[71] WATLOW ELECTRIC MANUFACTURING COMPANY, US

[85] 2023-03-22  
[86] 2021-09-27 (PCT/US2021/052244)  
[87] (WO2022/067207)  
[30] US (63/083,854) 2020-09-25

[21] **3,193,530**  
[13] A1

[51] **Int.Cl. H01M 10/0562 (2010.01) C01B 17/22 (2006.01)**

[25] EN

[54] **SOLID ELECTROLYTE MATERIAL AND SOLID-STATE BATTERY MADE THEREWITH**

[54] **MATERIAU D'ELECTROLYTE SOLIDE ET BATTERIE A L'ETAT SOLIDE FABRIQUEE AU MOYEN DE CE DERNIER**

[72] FRANCISCO, BRIAN E., US  
[72] CULVER, SEAN P., US  
[71] SOLID POWER OPERATING, INC., US

[85] 2023-03-22  
[86] 2021-09-23 (PCT/US2021/051773)  
[87] (WO2022/066924)  
[30] US (63/082,146) 2020-09-23

[21] **3,193,532**  
[13] A1

[51] **Int.Cl. H01Q 1/02 (2006.01) H01Q 1/42 (2006.01) H01Q 19/19 (2006.01)**

[25] EN

[54] **REFLECTOR ANTENNA HEATING SYSTEM**

[54] **SYSTEME DE CHAUFFAGE D'ANTENNE A REFLECTEUR**

[72] ZIMMERMAN, KURT A., US  
[71] VIASAT, INC., US

[85] 2023-03-22  
[86] 2021-09-13 (PCT/US2021/050104)  
[87] (WO2022/098429)  
[30] US (63/083,839) 2020-09-25

[21] **3,193,533**  
[13] A1

[51] **Int.Cl. A24F 40/30 (2020.01) A24F 40/42 (2020.01) A61L 9/03 (2006.01)**

[25] EN

[54] **AROMA DELIVERY SYSTEM FOR AEROSOL DELIVERY DEVICE**

[54] **SYSTEME DE DISTRIBUTION D'AROME POUR DISPOSITIF DE DISTRIBUTION D'AEROSOL**

[72] HEJAZI, VAHID, US  
[71] RAI STRATEGIC HOLDINGS, INC., US

[85] 2023-03-22  
[86] 2021-09-22 (PCT/IB2021/058644)  
[87] (WO2022/064385)  
[30] US (17/032,522) 2020-09-25

[21] **3,193,534**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61N 1/04 (2006.01) A61N 1/36 (2006.01)**

[25] EN

[54] **WEARABLE DEVICE FOR DECREASING THE RESPIRATORY EFFORT OF A SLEEPING SUBJECT**

[54] **DISPOSITIF PORTABLE POUR DIMINUER L'EFFORT RESPIRATOIRE D'UN SUJET ENDORMI**

[72] MARTINOT, PIERRE, BE  
[71] SUNRISE SA, BE

[85] 2023-03-22  
[86] 2021-10-01 (PCT/EP2021/077190)  
[87] (WO2022/069748)  
[30] EP (20199684.0) 2020-10-01

[21] **3,193,535**  
[13] A1

[51] **Int.Cl. A61M 16/04 (2006.01) A61M 16/10 (2006.01)**

[25] EN

[54] **TWIST TO LOCK TRACHEOSTOMA HEAT AND MOISTURE EXCHANGER**

[54] **ECHANGEUR DE CHALEUR ET D'HUMIDITE DE TRACHEOSTOMIE A VERROUILLAGE PAR TORSION**

[72] GLEN, KEVIN ALAN, US  
[72] STROUMPOULIS, DIMITRIOS, US  
[72] SUBRAMANYA, TEJASVI, US  
[71] FREUDENBERG MEDICAL LLC, US

[85] 2023-03-22  
[86] 2021-10-26 (PCT/US2021/056538)  
[87] (WO2022/093735)  
[30] US (17/079,929) 2020-10-26

[21] **3,193,537**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) C07K 16/00 (2006.01) C12N 15/09 (2006.01) C12N 15/13 (2006.01)**

[25] EN

[54] **POTENT BINDING AGENTS FOR ACTIVATION OF THE HEDGEHOG SIGNALING PATHWAY**

[54] **AGENTS DE LIAISON PUISSANTS POUR L'ACTIVATION DE LA VOIE DE SIGNALISATION HEDGEHOG**

[72] LU, WAN-JIN, US  
[72] ZHANG, YUNXIAO, US  
[72] BEACHY, PHILIP A., US  
[72] MANGLIK, AASHISH, US  
[72] HAN, SHUO, US  
[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US

[85] 2023-03-22  
[86] 2021-09-27 (PCT/US2021/052192)  
[87] (WO2022/067178)  
[30] US (63/083,544) 2020-09-25

## Demandes PCT entrant en phase nationale

[21] **3,193,538**  
[13] A1

[51] **Int.Cl. A47J 37/07 (2006.01)**  
[25] EN  
[54] **PELLET AUGER RELEASE SYSTEM**  
[54] **SYSTEME DE LIBERATION DE VIS SANS FIN DE GRANULES**  
[72] HAMILTON, ANTHONY, US  
[72] ROBERTS, BRUCE, US  
[72] TERKALAS, DONNIE, US  
[72] ABDALLAH, SLEIMAN, US  
[72] DIXON, WILLIAM, US  
[71] W.C. BRADLEY CO., US  
[85] 2023-03-22  
[86] 2021-09-22 (PCT/US2021/051537)  
[87] (WO2022/066755)  
[30] US (63/081,867) 2020-09-22

[21] **3,193,539**  
[13] A1

[51] **Int.Cl. F17C 13/00 (2006.01) G01M 3/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR LEAK TESTING A SEALED AND THERMALLY INSULATING TANK FOR STORING A FLUID**  
[54] **PROCEDE DE CONTROLE DE L'ETANCHEITE D'UNE CUVE ETANCHE ET THERMIQUEMENT ISOLANTE DE STOCKAGE D'UN FLUIDE**  
[72] CHAMPAGNAC, MAXIME, FR  
[72] JOLIVET, PIERRE, FR  
[72] BLEOMELEN, MAEL, FR  
[71] GAZTRANSPORT ET TECHNIGAZ, FR  
[85] 2023-03-22  
[86] 2021-10-11 (PCT/EP2021/078035)  
[87] (WO2022/078950)  
[30] FR (FR2010578) 2020-10-15

[21] **3,193,540**  
[13] A1

[51] **Int.Cl. F04D 13/06 (2006.01) F04D 15/00 (2006.01) F04D 29/40 (2006.01) G01D 11/30 (2006.01)**  
[25] EN  
[54] **MOUNTING POCKET FOR REMOTE EQUIPMENT MONITORING DEVICE**  
[54] **CAVITE DE MONTAGE POUR DISPOSITIF DE SURVEILLANCE D'EQUIPEMENT A DISTANCE**  
[72] LINDEMAN, ADAM, US  
[72] JOHNSON, ERICK, US  
[72] O'CALLAGHAN, COLIN, US  
[72] ENTERLINE, ANDREW, US  
[71] CORNELL PUMP COMPANY, US  
[85] 2023-03-22  
[86] 2021-09-15 (PCT/US2021/050464)  
[87] (WO2022/066482)  
[30] US (63/083,158) 2020-09-25

[21] **3,193,541**  
[13] A1

[51] **Int.Cl. G06F 8/38 (2018.01) G06F 8/34 (2018.01)**  
[25] EN  
[54] **USING A MOBILE APPLICATION WITH A CLOUD SERVER TO MANAGE A HOME NETWORK**  
[54] **UTILISATION D'UNE APPLICATION MOBILE AVEC UN SERVEUR EN NUAGE POUR GERER UN RESEAU DOMESTIQUE**  
[72] NARAYANAN, MURALIDHARAN, IN  
[72] CHANDRASEKARAN, SATHISH ARUMUGAM, IN  
[72] BRUMBAUGH, DAVID F., US  
[71] ARRIS ENTERPRISES LLC, US  
[85] 2023-03-22  
[86] 2021-09-01 (PCT/US2021/048592)  
[87] (WO2022/066379)  
[30] US (63/082,097) 2020-09-23

[21] **3,193,543**  
[13] A1

[51] **Int.Cl. B64G 1/40 (2006.01) B64G 1/10 (2006.01)**  
[25] EN  
[54] **THERMASAT SOLAR THERMAL PROPULSION SYSTEM**  
[54] **SYSTEME DE PROPULSION THERMIQUE SOLAIRE THERMASAT**  
[72] HOWE, TROY MICHAEL, US  
[72] HOWE, STEVEN DANIEL, US  
[72] MILLER, JACK R., US  
[71] HOWE INDUSTRIES LLC, US  
[85] 2023-03-22  
[86] 2021-09-30 (PCT/US2021/052875)  
[87] (WO2022/103509)  
[30] US (63/085,915) 2020-09-30

[21] **3,193,545**  
[13] A1

[51] **Int.Cl. G06F 21/41 (2013.01)**  
[25] EN  
[54] **CLIENT DEVICE BASED MANAGEMENT OF MULTIPLE DEVICES WITH SINGLE USER ACCOUNT**  
[54] **GESTION BASEE SUR UN DISPOSITIF CLIENT DE MULTIPLES DISPOSITIFS AVEC UN COMPTE UTILISATEUR UNIQUE**  
[72] CHANDRASEKARAN, SATHISH ARUMUGAM, IN  
[72] NARAYANAN, MURALIDHARAN, IN  
[72] BRUMBAUGH, DAVID F., US  
[72] GANAPATHY, JALAGANDESWARI, IN  
[71] ARRIS ENTERPRISES LLC, US  
[85] 2023-03-22  
[86] 2021-08-18 (PCT/US2021/046458)  
[87] (WO2022/072074)  
[30] US (63/084,831) 2020-09-29

## PCT Applications Entering the National Phase

---

[21] **3,193,547**  
[13] A1

[51] **Int.Cl. H04W 72/04 (2023.01) H04W 88/06 (2009.01)**

[25] EN

[54] **BANDWIDTH MANAGEMENT FOR DOUBLE-RADIO USER EQUIPMENT**

[54] **GESTION DE LA BANDE PASSANTE POUR UN EQUIPEMENT UTILISATEUR A DOUBLE RADIO**

[72] SEVINDIK, VOLKAN, US

[71] CHARTER COMMUNICATIONS OPERATING, LLC, US

[85] 2023-03-22

[86] 2021-10-14 (PCT/US2021/054926)

[87] (WO2022/098484)

[30] US (17/088,036) 2020-11-03

---

[21] **3,193,548**  
[13] A1

[51] **Int.Cl. A23D 9/04 (2006.01) A23K 20/158 (2016.01) A23L 5/30 (2016.01) A23L 33/115 (2016.01)**

[25] FR

[54] **ULTRAVIOLET TREATMENT OF OIL FROM BEETLE LARVAE FOR VITAMIN D3 ENRICHMENT**

[54] **TRAITEMENT ULTRAVIOLET SUR DE L'HUILE DE LARVES DE COLEOPTERES POUR UN ENRICHISSEMENT EN VITAMINE D3**

[72] DEFRIZE, JEREMY, FR

[72] DORMIGNY, THOMAS, FR

[72] DESTAILLEUR, CHARLES-ANTOINE, FR

[71] NUTRI'EARTH, FR

[85] 2023-03-22

[86] 2021-10-13 (PCT/FR2021/051784)

[87] (WO2022/079390)

[30] FR (FR2010673) 2020-10-16

[30] FR (FR2101193) 2021-02-08

---

[21] **3,193,549**  
[13] A1

[51] **Int.Cl. G06Q 30/02 (2023.01) H04W 4/02 (2018.01)**

[25] EN

[54] **INCENTIVIZING REPEAT TRANSACTIONS WITH MERCHANTS WITHIN A PRESCRIBED GEOGRAPHIC AREA USING PAYMENT PROCESSING NETWORK DATA**

[54] **INCITATION DE TRANSACTIONS RECURRENTES AVEC DES COMMERCANTS DANS UNE ZONE GEOGRAPHIQUE PREETABLIE UTILISANT DES DONNEES DE RESEAU DE TRAITEMENT DE PAIEMENTS**

[72] YATES, RODNEY, US

[71] YATES, RODNEY, US

[85] 2023-03-22

[86] 2021-09-24 (PCT/US2021/052045)

[87] (WO2022/067095)

[30] US (63/083,658) 2020-09-25

[30] US (63/087,046) 2020-10-02

[30] US (63/088,518) 2020-10-07

[30] US (63/112,928) 2020-11-12

[30] US (63/244,123) 2021-09-14

---

[21] **3,193,550**  
[13] A1

[51] **Int.Cl. F24C 15/00 (2006.01) F24C 15/20 (2006.01)**

[25] EN

[54] **DEVICE FOR TREATING VAPOURS**

[54] **DISPOSITIF DE TRAITEMENT DE VAPEURS**

[72] LACATUSU, PHILIPP, AT

[72] KURZ, PHILIPP, AT

[72] APPEL, NIKOLAUS, AT

[72] HOLLERIEETH, TOBIAS, AT

[72] WEILAND, ANDREAS, AT

[72] ADLMAIER, MARTIN, AT

[72] VOGL, LEONARD, AT

[71] BRUCKBAUER, WILHELM, DE

[85] 2023-03-22

[86] 2021-10-06 (PCT/EP2021/077594)

[87] (WO2022/074062)

[30] DE (10 2020 212 820.0) 2020-10-09

[30] DE (10 2020 212 821.9) 2020-10-09

[30] DE (10 2020 212 822.7) 2020-10-09

[30] DE (10 2020 212 823.5) 2020-10-09

[30] DE (10 2020 212 824.3) 2020-10-09

[30] DE (10 2020 212 825.1) 2020-10-09

[30] DE (10 2020 212 827.8) 2020-10-09

---

[21] **3,193,551**  
[13] A1

[51] **Int.Cl. F16N 13/16 (2006.01) F16N 7/38 (2006.01) F16N 11/10 (2006.01)**

[25] EN

[54] **LUBRICANT DELIVERY APPARATUS**

[54] **APPAREIL DE DISTRIBUTION DE LUBRIFIANT**

[72] SMID, JOHN PETER, CA

[72] SMID, CALEB GORDON, CA

[72] EISSES, JAN, CA

[71] LUBECORE INTERNATIONAL INC., CA

[85] 2023-03-22

[86] 2021-09-23 (PCT/CA2021/051324)

[87] (WO2022/061459)

[30] US (63/082,878) 2020-09-24

[30] US (63/139,578) 2021-01-20

---

[21] **3,193,552**  
[13] A1

[51] **Int.Cl. A24F 40/42 (2020.01) A24F 15/015 (2020.01) A24F 40/485 (2020.01)**

[25] EN

[54] **LIQUID-TIGHT REFILLABLE CARTRIDGE FOR AN ELECTRONIC SMOKING DEVICE**

[54] **CARTOUCHE RECHARGABLE ETANCHE AUX LIQUIDES POUR UN DISPOSITIF A FUMER ELECTRONIQUE**

[72] DICKSON, DAMIAN, GB

[72] SHEN, PIFA, CN

[71] JT INTERNATIONAL SA, CH

[85] 2023-03-22

[86] 2021-09-24 (PCT/EP2021/076354)

[87] (WO2022/063983)

[30] CN (PCT/CN2020/117450) 2020-09-24

## Demandes PCT entrant en phase nationale

[21] **3,193,555**  
[13] A1

[51] **Int.Cl. G01B 11/30 (2006.01) G01B 21/04 (2006.01)**  
[25] EN  
[54] **Z-AXIS MEASUREMENT FIXTURE AND METHOD OF DETERMINING THE PLANARITY OF OBJECTS USING THE FIXTURE**  
[54] **APPAREIL DE MESURE D'AXE Z ET PROCEDE DE DETERMINATION DE LA PLANEITE D'OBJETS A L'AIDE DE L'APPAREIL**  
[72] GIROUX, DAVID C., US  
[72] WILLIAMS, NATHANAEL, US  
[71] IDEXX LABORATORIES, INC., US  
[85] 2023-03-22  
[86] 2021-09-30 (PCT/US2021/052891)  
[87] (WO2022/072642)  
[30] US (63/085,283) 2020-09-30

[21] **3,193,556**  
[13] A1

[51] **Int.Cl. E02D 7/00 (2006.01) E02D 7/02 (2006.01) E02D 7/16 (2006.01) E02D 9/00 (2006.01) E02D 11/00 (2006.01) E21B 41/00 (2006.01)**  
[25] EN  
[54] **MACHINE FOR MAKING FOUNDATIONS EQUIPPED WITH SENSORS TO PROTECT PERSON FROM DANGEROUS AREAS OF THE MACHINE**  
[54] **ENGIN DE CONSTRUCTION DE FONDATIONS EQUIPE DE CAPTEURS POUR PROTEGER UNE PERSONNE VIS-A-VIS DES ZONES DANGEREUSES DE L'ENGIN**  
[72] LAGHI, MATTEO, IT  
[71] SOILMEC SPA, IT  
[85] 2023-03-22  
[86] 2021-10-06 (PCT/IB2021/059154)  
[87] (WO2022/074576)  
[30] IT (10202000023608) 2020-10-07

[21] **3,193,557**  
[13] A1

[51] **Int.Cl. B66F 7/06 (2006.01)**  
[25] EN  
[54] **AN ARTICLE HANDLING SYSTEM**  
[54] **SYSTEME DE MANIPULATION D'ARTICLES**  
[72] VARANASI, RAMA KRISHNA, IN  
[72] NANDAGOPAN, OBLA RAMANANDAM, IN  
[72] MALLYA, PARIKSHITH, IN  
[72] KUMAR, UPPADA URBAN, IN  
[72] KULKARNI, CHANDRU PATREYYA, IN  
[71] CHAIRMAN, DEFENCE RESEARCH & DEVELOPMENT ORGANISATION (DRDO), IN  
[85] 2023-03-22  
[86] 2021-03-04 (PCT/IN2021/050208)  
[87] (WO2022/070203)  
[30] IN (202011042842) 2020-10-01

[21] **3,193,558**  
[13] A1

[51] **Int.Cl. A61F 2/95 (2013.01)**  
[25] EN  
[54] **OSMOTIC DRUG DELIVERY IMPLANTS**  
[54] **IMPLANTS OSMOTIQUES DE DISTRIBUTION DE MEDICAMENTS**  
[72] PALASIS, MARIA, US  
[72] YOU, CHANGCHENG, US  
[72] CONCAGH, DANNY, US  
[71] LYRA THERAPEUTICS, INC., US  
[85] 2023-03-22  
[86] 2021-09-28 (PCT/US2021/052331)  
[87] (WO2022/072318)  
[30] US (63/086,390) 2020-10-01

[21] **3,193,559**  
[13] A1

[51] **Int.Cl. B61G 3/10 (2006.01) B61G 7/08 (2006.01)**  
[25] EN  
[54] **EXTENDABLE COUPLER**  
[54] **ATTELAGE HYDRAULIQUE POUVANT SE DEPLOYER**  
[72] KINGHORN, JOHN RITCHIE, GB  
[71] KINGHORN, JOHN RITCHIE, GB  
[85] 2023-03-22  
[86] 2021-10-27 (PCT/GB2021/052792)  
[87] (WO2022/090715)  
[30] GB (2016999.1) 2020-10-27

[21] **3,193,560**  
[13] A1

[51] **Int.Cl. A61M 25/00 (2006.01) A61M 25/06 (2006.01) A61M 39/22 (2006.01)**  
[25] EN  
[54] **CATHETER ASSEMBLY WITH DIRECTIONAL PORT OPENING**  
[54] **ENSEMBLE CATHETER MUNI D'UNE OUVERTURE DE PASSAGE DIRECTIONNELLE**  
[72] MA, YIPING, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-03-22  
[86] 2021-10-04 (PCT/US2021/053336)  
[87] (WO2022/081363)  
[30] US (63/090,585) 2020-10-12  
[30] US (17/490,989) 2021-09-30

[21] **3,193,561**  
[13] A1

[51] **Int.Cl. A61K 31/506 (2006.01) A61K 31/519 (2006.01) A61K 39/395 (2006.01)**  
[25] EN  
[54] **METHODS OF TREATING 4-REPEAT TAUOPATHIES**  
[54] **METHODES DE TRAITEMENT DE TAUOPATHIES A 4 REPETITIONS**  
[72] MACALLISTER, THOMAS, US  
[72] JACOBSON, SVEN, US  
[71] WOOLSEY PHARMACEUTICALS, INC., US  
[85] 2023-03-22  
[86] 2021-01-08 (PCT/US2021/012638)  
[87] (WO2022/086581)  
[30] US (63/104,121) 2020-10-22

[21] **3,193,562**  
[13] A1

[51] **Int.Cl. A62B 18/02 (2006.01)**  
[25] EN  
[54] **REUSABLE, RESTERILIZABLE SMART HALF-MASK RESPIRATOR APPARATUS AND SYSTEM**  
[54] **SYSTEME ET APPAREIL RESPIRATEUR A SEMI-MASQUE INTELLIGENT REUTILISABLE ET RESTERILISABLE**  
[72] LITTLE, BRANDEN, CA  
[72] PENNER, TREVOR, CA  
[72] PETRAK, MARTIN, CA  
[71] PRECISION ADM INC., CA  
[85] 2023-03-22  
[86] 2021-09-22 (PCT/CA2021/051318)  
[87] (WO2022/061453)  
[30] US (63/081,868) 2020-09-22

## PCT Applications Entering the National Phase

[21] **3,193,564**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) C12N 5/0783 (2010.01) A61P 35/00 (2006.01) C07K 7/02 (2006.01) C07K 7/06 (2006.01) C07K 14/725 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **AMIDATED PEPTIDES AND THEIR DEAMIDATED COUNTERPARTS DISPLAYED BY HLA-A\*02 FOR USE IN IMMUNOTHERAPY AGAINST DIFFERENT TYPES OF CANCERS**

[54] **PEPTIDES AMIDES ET LEURS HOMOLOGUES DESAMIDES AFFICHES PAR HLA-A\*02 DESTINES A ETRE UTILISES EN IMMUNOTHERAPIE CONTRE DIFFERENTS TYPES DE CANCERS**

[72] HUKELMANN, JENS, DE  
[72] SCHUSTER, HEIKO, DE  
[72] HANNEN, RICARDA, DE  
[72] SCHRADER, CHRISTOPH, DE  
[72] FRITSCH, JENS, DE  
[72] HOFFGAARD, FRANZISKA, DE  
[72] KOWALEWSKI, DANIEL, DE  
[72] SCHOOR, OLIVER, DE  
[71] IMMATICS BIOTECHNOLOGIES GMBH, DE  
[85] 2023-03-22  
[86] 2021-09-29 (PCT/EP2021/076821)  
[87] (WO2022/069557)  
[30] DE (10 2020 125 457.1) 2020-09-29  
[30] US (63/084,963) 2020-09-29

[21] **3,193,565**  
[13] A1

[51] **Int.Cl. C07K 14/715 (2006.01)**

[25] EN

[54] **PEPTIDES AND METHODS OF USE**

[54] **PEPTIDES ET PROCEDES D'UTILISATION**

[72] KRISHNA, NEEL K., US  
[72] CUNNION, KENJI, US  
[72] THIENEL, ULRICH, US  
[71] REALTA LIFE SCIENCES, INC., US  
[85] 2023-03-22  
[86] 2021-09-27 (PCT/US2021/052174)  
[87] (WO2022/072272)  
[30] US (63/085,556) 2020-09-30  
[30] US (63/185,831) 2021-05-07

[21] **3,193,566**  
[13] A1

[51] **Int.Cl. E03C 1/05 (2006.01) E03D 3/06 (2006.01) E03D 5/10 (2006.01) F16K 21/04 (2006.01) F16K 31/02 (2006.01) F16K 31/12 (2006.01)**

[25] EN

[54] **FLUSH VALVE APPARATUS**

[54] **APPAREIL DE ROBINET DE CHASSE**

[72] SOBERANO, ERIC B., US  
[72] PITSCH, WALTER, US  
[71] AS AMERICA, INC., US  
[85] 2023-03-22  
[86] 2021-10-11 (PCT/US2021/054374)  
[87] (WO2022/081456)  
[30] US (63/090,322) 2020-10-12

[21] **3,193,567**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) C12N 5/0783 (2010.01) A61P 35/00 (2006.01) C07K 7/02 (2006.01) C07K 7/06 (2006.01) C07K 14/725 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **AMIDATED PEPTIDES AND THEIR DEAMIDATED COUNTERPARTS DISPLAYED BY NON-HLA-A\*02 FOR USE IN IMMUNOTHERAPY AGAINST DIFFERENT TYPES OF CANCERS**

[54] **PEPTIDES AMIDES ET LEURS EQUIVALENTS DESAMIDES EXPRIMES PAR NON-HLA-A\*02 DESTINES A ETRE UTILISES EN IMMUNOTHERAPIE CONTRE DIFFERENTS TYPES DE CANCERS**

[72] HUKELMANN, JENS, DE  
[72] SCHUSTER, HEIKO, DE  
[72] WULLKOPF, LENA, DE  
[72] SCHRADER, CHRISTOPH, DE  
[72] FRITSCH, JENS, DE  
[72] KOWALEWSKI, DANIEL, DE  
[72] ROMER, MICHAEL, DE  
[72] SCHOOR, OLIVER, DE  
[71] IMMATICS BIOTECHNOLOGIES GMBH, DE  
[85] 2023-03-22  
[86] 2021-09-29 (PCT/EP2021/076848)  
[87] (WO2022/069579)  
[30] DE (10 2020 125 465.2) 2020-09-29  
[30] US (63/084,919) 2020-09-29  
[30] US (63/223,291) 2021-07-19

[21] **3,193,569**  
[13] A1

[51] **Int.Cl. C07K 16/22 (2006.01)**

[25] EN

[54] **ANTI-SCLEROSTIN CONSTRUCTS AND USES THEREOF**

[54] **CONSTRUCTIONS ANTI-SCLEROSTINE ET LEURS UTILISATIONS**

[72] LIU, XIAOFENG, CN  
[72] LIU, KUNFENG, CN  
[72] YUAN, BAOZHI, CN  
[72] LI, MUYU, CN  
[72] KE, HUAZHU, CN  
[71] ANGITIA BIOMEDICINES LIMITED, CN  
[85] 2023-03-22  
[86] 2021-09-26 (PCT/CN2021/120612)  
[87] (WO2022/063262)  
[30] CN (PCT/CN2020/118387) 2020-09-28

[21] **3,193,570**  
[13] A1

[51] **Int.Cl. B64G 1/40 (2006.01)**

[25] EN

[54] **LOW NOISE VERTICAL TAKE-OFF AND LANDING (VTOL) UNMANNED AIR VEHICLE (UAV)**

[54] **VEHICULE AERIEN SANS PILOTE A DECOLLAGE ET ATERRISSAGE VERTICAUX (VTOL) A FAIBLE BRUIT**

[72] PRIBANIC, TOMAS A., US  
[71] UNDEFINED TECHNOLOGIES CORP., US  
[85] 2023-03-22  
[86] 2021-09-23 (PCT/US2021/051636)  
[87] (WO2022/086667)  
[30] US (63/083,965) 2020-09-27

## Demandes PCT entrant en phase nationale

---

[21] **3,193,571**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2023.01) G06Q 50/12 (2012.01)**

[25] EN

[54] **DEVICE-AWARE COMMUNICATION REQUESTS REQUETES DE COMMUNICATION SENSIBLES AU DISPOSITIF**

[72] MAHANTI, ARJUN, US  
[72] KURSMARK, MATTHEW T., US  
[72] STEGALL, BRIAN, US  
[71] BLOCK, INC., US  
[85] 2023-03-22  
[86] 2021-09-29 (PCT/US2021/052673)  
[87] (WO2022/072511)  
[30] US (17/039,193) 2020-09-30  
[30] US (17/039,542) 2020-09-30  
[30] US (17/039,405) 2020-09-30

---

[21] **3,193,572**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/0538 (2021.01) A61M 60/126 (2021.01) A61M 60/165 (2021.01) A61M 60/178 (2021.01) A61B 5/053 (2021.01) A61M 25/00 (2006.01)**

[25] EN

[54] **ELECTRODE ASSEMBLY PATCH FOR CONDUCTANCE AND ADMITTANCE MEASUREMENTS ENSEMBLE D'ELECTRODES POUR MESURES DE CONDUCTANCE ET D'ADMITTANCE**

[72] NIX, CHRISTOPH, DE  
[72] RAJARAM, MITHUN, DE  
[72] ZSCHERLICH, VERENA, DE  
[71] ABIOMED EUROPE GMBH, DE  
[85] 2023-03-22  
[86] 2021-10-07 (PCT/EP2021/077732)  
[87] (WO2022/074136)  
[30] US (63/088,784) 2020-10-07  
[30] US (63/173,709) 2021-04-12  
[30] US (63/252,434) 2021-10-05

---

[21] **3,193,573**  
[13] A1

[51] **Int.Cl. B65D 88/12 (2006.01) B65D 47/20 (2006.01) B65D 88/30 (2006.01) B65D 90/54 (2006.01) B65D 90/64 (2006.01) B67D 3/04 (2006.01)**

[25] EN

[54] **INTERMEDIATE BULK CONTAINER, VALVE AND CONNECTOR SYSTEM RECIPIENT INTERMEDIAIRE EN VRAC, SOUPAPE ET SYSTEME DE RACCORD**

[72] HUSTON, CHARLES A., US  
[71] ELKHART PLASTICS, INC., US  
[85] 2023-03-22  
[86] 2021-09-23 (PCT/US2021/051729)  
[87] (WO2022/066889)  
[30] US (63/081,954) 2020-09-23

---

[21] **3,193,574**  
[13] A1

[51] **Int.Cl. A01G 31/04 (2006.01) A01G 9/029 (2018.01)**

[25] EN

[54] **A HYDROPONIC SYSTEM, AND A PROCESS FOR PRODUCING A HYDROPONIC SYSTEM SYSTEME HYDROPONIQUE ET PROCEDE DE PRODUCTION D'UN SYSTEME HYDROPONIQUE**

[72] JACOBSEN, PETER MELDGAARD, DK  
[72] TRANBERG, THOMAS LINDBERG, DK  
[71] ELLEPOT A/S, DK  
[85] 2023-03-22  
[86] 2021-10-05 (PCT/EP2021/077362)  
[87] (WO2022/078809)  
[30] DK (PA 2020 01170) 2020-10-14

---

[21] **3,193,575**  
[13] A1

[51] **Int.Cl. A61K 31/7088 (2006.01) A61K 47/54 (2017.01) A61K 47/64 (2017.01) A61K 48/00 (2006.01) A61P 25/28 (2006.01)**

[25] EN

[54] **COMPOSITION FOR PREVENTING OR TREATING DEMENTIA, CONTAINING PEPTIDE NUCLEIC ACID COMPLEX AS ACTIVE INGREDIENT COMPOSITION POUR PREVENIR OU TRAITER LA DEMENCE, CONTENANT UN COMPLEXE D'ACIDES NUCLEIQUES PEPTIDIQUES EN TANT QUE PRINCIPE ACTIF**

[72] PARK, MIN-JUNG, KR  
[72] KIM, HYE JOO, KR  
[72] YU, JI-YEON, KR  
[72] PARK, HEE KYUNG, KR  
[71] SEASUN THERAPEUTICS, KR  
[85] 2023-03-22  
[86] 2021-09-24 (PCT/KR2021/013049)  
[87] (WO2022/065919)  
[30] KR (10-2020-0124531) 2020-09-25

---

[21] **3,193,583**  
[13] A1

[51] **Int.Cl. G06F 40/30 (2020.01) G06F 40/284 (2020.01) G06F 40/289 (2020.01) G06F 40/35 (2020.01)**

[25] EN

[54] **SYSTEMS AND METHODS RELATING TO BOT AUTHORIZING BY MINING INTENTS FROM NATURAL LANGUAGE CONVERSATIONS SYSTEMES ET PROCEDES SE RAPPORTANT A LA CREATION DE ROBOT PAR MINAGE D'INTENTIONS A PARTIR DE CONVERSATIONS EN LANGAGE NATUREL**

[72] GEORGE, BASIL, US  
[72] SUNDARAM, RAMASUBRAMANIAN, US  
[71] GENESYS CLOUD SERVICES, INC., US  
[85] 2023-03-23  
[86] 2021-09-27 (PCT/US2021/052125)  
[87] (WO2022/067148)  
[30] US (63/083,561) 2020-09-25

## PCT Applications Entering the National Phase

[21] **3,193,586**  
[13] A1

[51] **Int.Cl. G06F 40/30 (2020.01) G06F 40/284 (2020.01) G06F 40/289 (2020.01) G06F 40/35 (2020.01)**

[25] EN

[54] **SYSTEMS AND METHODS RELATING TO BOT AUTHORIZING BY MINING INTENTS FROM CONVERSATION DATA USING KNOWN INTENTS FOR ASSOCIATED SAMPLE UTTERANCES**

[54] **SYSTEMES ET PROCEDES SE RAPPORTANT A LA CREATION D'UN ROBOT PAR LE BIAIS DU MINAGE D'INTENTIONS DE DONNEES DE CONVERSATION A L'AIDE D'INTENTIONS CONNUES POUR DES ENONCES ECHANTILLONS ASSOCIE**

[72] GEORGE, BASIL, US

[72] SUNDARAM, RAMASUBRAMANIAN, US

[71] GENESYS CLOUD SERVICES, INC., US

[85] 2023-03-23

[86] 2021-09-27 (PCT/US2021/052127)

[87] (WO2022/067149)

[30] US (63/083,561) 2020-09-25

[21] **3,193,587**  
[13] A1

[51] **Int.Cl. H04N 21/439 (2011.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR DYNAMIC PLAYBACK SWITCHING OF LIVE AND PREVIOUSLY RECORDED AUDIO CONTENT**

[54] **SYSTEME ET PROCEDE DE COMMUTATION DE LECTURE DYNAMIQUE D'UN CONTENU AUDIO EN DIRECT ET EN DIFFERE**

[72] PACINO, JOHN MICHAEL, US

[72] BOOTH, NICHOLAS CONSTANTINE, US

[72] CROWLEY, JOHN DAVID, US

[71] AUDACY OPERATIONS, INC., US

[85] 2023-03-23

[86] 2021-09-29 (PCT/US2021/052544)

[87] (WO2022/072419)

[30] US (17/036,153) 2020-09-29

[30] US (17/221,522) 2021-04-02

[21] **3,193,595**  
[13] A1

[51] **Int.Cl. E04D 1/00 (2006.01) E04D 3/30 (2006.01) E04D 3/363 (2006.01)**

[25] EN

[54] **INTERLOCKING ROOFING PANEL SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE DE PANNEAU DE TOITURE D'INTERVERROUILLAGE**

[72] TRIPOD, JOSEPH F., US

[71] ENGLERT, INC., US

[85] 2023-03-23

[86] 2021-10-12 (PCT/US2021/054539)

[87] (WO2022/081551)

[30] US (17/068,464) 2020-10-12

[21] **3,193,617**  
[13] A1

[51] **Int.Cl. G06F 12/02 (2006.01) G06F 13/40 (2006.01) G06F 13/42 (2006.01)**

[25] EN

[54] **UNIFIED MEMORY MANAGEMENT FOR A MULTIPLE PROCESSOR SYSTEM**

[54] **GESTION DE MEMOIRE UNIFIEE POUR UN SYSTEME A PROCESEURS MULTIPLES**

[72] BHATIA, GAURAV, US

[72] HANTZ, DANIEL C., US

[72] VARHALE, ASHISH A., US

[72] KAKKAR, KARAN, US

[72] CHENG, YINGQUAN, US

[72] SETHI, YOGESH, US

[71] HUGHES NETWORK SYSTEMS, LLC, US

[85] 2023-03-23

[86] 2021-09-23 (PCT/US2021/051669)

[87] (WO2022/066850)

[30] US (17/031,432) 2020-09-24

[21] **3,193,619**  
[13] A1

[51] **Int.Cl. G01N 33/542 (2006.01)**

[25] EN

[54] **METHOD FOR DETECTING EXPRESSION OR CLUSTERING OF CELL SURFACE MOIETIES**

[54] **METHODE DE DETECTION D'EXPRESSION OU DE GROUPEMENT DE FRACTIONS DE SURFACE CELLULAIRE**

[72] GEUIJEN, CECILIA ANNA WILHELMINA, NL

[71] MERUS N.V., NL

[85] 2023-03-23

[86] 2021-09-28 (PCT/EP2021/076688)

[87] (WO2022/064068)

[30] NL (2026558) 2020-09-28

[21] **3,193,624**  
[13] A1

[51] **Int.Cl. A61G 10/00 (2006.01) A61L 2/00 (2006.01) A61L 2/18 (2006.01) A61L 2/20 (2006.01) A62D 3/00 (2007.01) F24F 7/06 (2006.01) F24F 11/00 (2018.01)**

[25] EN

[54] **ANTI-PATHOGENIC SYSTEM**

[54] **SYSTEME ANTIPATHOGENE**

[72] HOWARD, FREDRICK TODD, US

[71] HOWARD, FREDRICK TODD, US

[85] 2023-03-23

[86] 2021-10-11 (PCT/US2021/054453)

[87] (WO2022/081496)

[30] US (63/090,285) 2020-10-12

[30] US (63/122,474) 2020-12-08

[30] US (63/176,369) 2021-05-06

[30] US (63/194,890) 2021-05-28

[21] **3,193,628**  
[13] A1

[51] **Int.Cl. E21B 33/128 (2006.01)**

[25] EN

[54] **CONTROLLED DEFORMATION AND SHAPE RECOVERY OF PACKING ELEMENTS**

[54] **DEFORMATION CONTROLEE ET RECUPERATION DE FORME D'ELEMENTS DE GARNITURE D'ETANCHEITE**

[72] MITCHELL, MICHAEL WILBERT, US

[72] INGRAM, GARY DURON, US

[71] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US

[85] 2023-03-23

[86] 2021-10-08 (PCT/US2021/054162)

[87] (WO2022/093519)

[30] US (17/085,910) 2020-10-30



## Demandes PCT entrant en phase nationale

---

[21] **3,193,629**  
[13] A1

[51] **Int.Cl. B60L 3/12 (2006.01) B60L 53/14 (2019.01) B60L 53/60 (2019.01) B66F 9/075 (2006.01) B66F 9/24 (2006.01) H02J 7/00 (2006.01)**

[25] EN

[54] **HANDLING MACHINE AND METHOD FOR MANAGING BATTERY CHARGE**

[54] **MACHINE DE MANUTENTION ET PROCEDE DE GESTION DE CHARGE DE BATTERIE**

[72] KAMBA, ELIE, FR

[71] MANITOU BF, FR

[85] 2023-03-23

[86] 2021-09-29 (PCT/FR2021/051688)

[87] (WO2022/069837)

[30] FR (FR2009922) 2020-09-29

---

[21] **3,193,630**  
[13] A1

[51] **Int.Cl. B65D 75/58 (2006.01)**

[25] EN

[54] **FLEXIBLE PACKAGING STRUCTURE WITH INTEGRAL TAMPER-EVIDENCE FEATURES AND METHOD FOR MAKING THE SAME**

[54] **STRUCTURE D'EMBALLAGE SOUPLE A CARACTERISTIQUES D'INVOLABILITE INTEGRES ET SON PROCEDE DE FABRICATION**

[72] HUFFER, SCOTT WILLIAM, US

[71] SONOCO PRODUCTS CO., US

[85] 2023-03-23

[86] 2021-08-10 (PCT/US2021/045303)

[87] (WO2022/066305)

[30] US (17/031,154) 2020-09-24

---

[21] **3,193,633**  
[13] A1

[51] **Int.Cl. H04H 20/33 (2009.01) H04H 60/72 (2009.01)**

[25] EN

[54] **SYSTEM AND METHODS OF REAL-TIME CREATION OF ELECTRONIC PROGRAMMING GUIDES FOR RADIO BROADCASTS**

[54] **SYSTEME ET PROCEDES DE CREATION EN TEMPS REEL DE GUIDES DE PROGRAMMATION ELECTRONIQUE POUR RADIODIFFUSIONS**

[72] PACINO, JOHN MICHAEL, US

[72] BOOTH, NICHOLAS CONSTANTINE, US

[72] CROWLEY, JOHN DAVID, US

[71] AUDACY OPERATIONS, INC., US

[85] 2023-03-23

[86] 2021-09-29 (PCT/US2021/052538)

[87] (WO2022/072413)

[30] US (17/036,165) 2020-09-29

[30] US (17/224,243) 2021-04-07

---

[21] **3,193,634**  
[13] A1

[51] **Int.Cl. B29C 55/00 (2006.01) B29C 71/02 (2006.01) C08J 5/18 (2006.01)**

[25] EN

[54] **HEAT SHRINKABLE FILMS, AND METHOD OF MANUFACTURING THE SAME**

[54] **FILMS THERMORETRACTABLES, ET PROCEDE DE FABRICATION ASSOCIE**

[72] ZHANG, HONGLIANG, CN

[72] SCHURR, MANUEL, DE

[72] DUX, CHRISTIAN, DE

[71] KLOCKNER PENTAPLAST OF AMERICA, INC., US

[85] 2023-03-23

[86] 2021-09-29 (PCT/US2021/052620)

[87] (WO2022/072477)

[30] CN (202011056708.0) 2020-09-30

---

[21] **3,193,635**  
[13] A1

[51] **Int.Cl. G06N 20/00 (2019.01)**

[25] EN

[54] **STATISTICAL DISTANCE MATRIX CALCULATION METHOD, AND STATISTICAL DISTANCE MATRIX VISUALIZATION METHOD, DEVICE, AND PROGRAM**

[54] **PROCEDE DE CALCUL DE MATRICE DE DISTANCE STATISTIQUE, ET PROCEDE, DISPOSITIF ET PROGRAMME DE VISUALISATION DE MATRICE DE DISTANCE STATISTIQUE**

[72] LU, XIN, JP

[71] LU, XIN, JP

[85] 2023-03-23

[86] 2021-09-21 (PCT/JP2021/034509)

[87] (WO2022/065278)

[30] JP (2020-158384) 2020-09-23

---

[21] **3,193,638**  
[13] A1

[51] **Int.Cl. H04L 67/63 (2022.01) H04L 67/1008 (2022.01) H04L 67/101 (2022.01) H04L 67/1012 (2022.01) H04L 67/51 (2022.01)**

[25] EN

[54] **DISTRIBUTED CONTENT DISTRIBUTION NETWORK**

[54] **RESEAU DE DIFFUSION DE CONTENU DISTRIBUE**

[72] CASEY, STEVEN M., US

[72] OPFERMAN, STEPHEN, US

[71] CENTURYLINK INTELLECTUAL PROPERTY LLC, US

[85] 2023-03-23

[86] 2021-09-27 (PCT/US2021/052169)

[87] (WO2022/067169)

[30] US (63/084,061) 2020-09-28

## PCT Applications Entering the National Phase

[21] **3,193,639**  
[13] A1

[51] **Int.Cl. A61K 8/49 (2006.01) A61K 8/60 (2006.01)**  
[25] EN  
[54] **SYNERGISTIC ANTIOXIDANT COSMETIC COMPOSITION CONTAINING AT LEAST ONE HYDROXYTYROSOL AND AT LEAST ONE SULFORAPHANE**  
[54] **COMPOSITION COSMETIQUE ANTIOXYDANTE SYNERGIQUE CONTENANT AU MOINS UN HYDROXYTYROSOL ET AU MOINS UN SULFORAPHANE**  
[72] HUSS, NICKOLAS, US  
[72] LU, YIMING, US  
[72] LANZA, ROSSANA, US  
[71] BARNET PRODUCTS, LLC, US  
[71] HUSS, NICKOLAS, US  
[71] LU, YIMING, US  
[71] LANZA, ROSSANA, US  
[85] 2023-03-23  
[86] 2021-09-21 (PCT/US2021/051275)  
[87] (WO2022/066626)  
[30] US (63/082,198) 2020-09-23

[21] **3,193,640**  
[13] A1

[51] **Int.Cl. H05H 1/40 (2006.01) B23K 9/073 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR FEEDING MATERIAL INTO A PLASMA**  
[54] **PROCEDE ET APPAREIL D'ALIMENTATION EN MATERIAU DANS UN PLASMA**  
[72] MATYS, PAWEL, US  
[72] KOZLOWSKI, MICHAEL, US  
[72] REDJDAL, MAKHLOUF, US  
[72] CARUSO, JOSEPH ROBERT, US  
[72] SHANG, ZONGREN, US  
[71] 6K INC., US  
[85] 2023-03-23  
[86] 2021-09-24 (PCT/US2021/071591)  
[87] (WO2022/067338)  
[30] US (63/083,204) 2020-09-25

[21] **3,193,642**  
[13] A1

[51] **Int.Cl. A61K 8/49 (2006.01) A61K 9/00 (2006.01) A61K 9/51 (2006.01) A61K 31/506 (2006.01) A61K 31/58 (2006.01) A61K 47/02 (2006.01) A61K 47/14 (2017.01) A61P 17/14 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR THE TREATMENT OF HAIR LOSS AND OTHER CONDITIONS**  
[54] **COMPOSITIONS ET METHODES DE TRAITEMENT DE LA CHUTE DE CHEVEUX ET AUTRES ETATS**  
[72] MADSEN, GARY L., US  
[72] BURNHAM, PHILIPPE, US  
[72] PORTER, CHRISTOPHER L., US  
[71] PRO TRANSIT NANOTHERAPY LLC, US  
[85] 2023-03-23  
[86] 2021-09-24 (PCT/US2021/051910)  
[87] (WO2022/067008)  
[30] US (63/082,613) 2020-09-24

[21] **3,193,643**  
[13] A1

[51] **Int.Cl. A61K 39/39 (2006.01)**  
[25] EN  
[54] **MODULATING TH1/TH2 IMMUNE RESPONSE BY ADMINISTERING TWO POPULATIONS OF POLYMERSOMES HAVING AN ASSOCIATED ANTIGEN AND AN ASSOCIATED ADJUVANT**  
[54] **MODULATION DE LA REPOSE IMMUNITAIRE TH1/TH2 PAR ADMINISTRATION DE DEUX POPULATIONS DE POLYMERSOMES PRESENTANT UN ANTIGENE ASSOCIE ET UN ADJUVANT ASSOCIE**  
[72] NALLANI, MADHAVAN, SG  
[72] LAM, JIAN HANG, SG  
[72] DECAILLOT, FABIEN, SG  
[72] CORNELL, THOMAS ANDREW, SG  
[72] KHAN, AMIT KUMAR, SG  
[71] ACM BIOLABS PTE LTD, SG  
[85] 2023-03-23  
[86] 2021-12-13 (PCT/EP2021/085366)  
[87] (WO2022/123070)  
[30] EP (20213488.8) 2020-12-11

[21] **3,193,647**  
[13] A1

[51] **Int.Cl. G01N 21/01 (2006.01) G01N 21/17 (2006.01) G01N 21/25 (2006.01) G01N 21/64 (2006.01) G01N 33/53 (2006.01)**  
[25] EN  
[54] **MULTI-MODAL DIAGNOSTIC TEST APPARATUS**  
[54] **APPAREIL DE TEST DE DIAGNOSTIC MULTIMODAL**  
[72] HOPPER, WILLIAM ROBB, AU  
[72] MURAWCZUK, DANIEL, AU  
[72] LAWLOR, ANTHONY STEPHEN, AU  
[72] RAMANATHAN, GAVIN, AU  
[72] DO, ANTHONY, AU  
[71] AXXIN PTY LTD, AU  
[85] 2023-03-23  
[86] 2021-10-14 (PCT/AU2021/051200)  
[87] (WO2022/077065)  
[30] AU (2020903729) 2020-10-14

[21] **3,193,652**  
[13] A1

[51] **Int.Cl. C01G 41/00 (2006.01) H01M 4/00 (2006.01)**  
[25] EN  
[54] **PEROVSKITE STRUCTURE, METHOD FOR PRODUCING AND APPLICATION IN ELECTRODES AND SOLID OXIDE CELLS**  
[54] **STRUCTURE DE PEROVSKITE, METHODE DE PRODUCTION ET APPLICATION DANS DES ELECTRODES ET DES PILES A OXYDE SOLIDE**  
[72] HU, DINGYUE, GB  
[72] ROSSEINSKY, MATTHEW, GB  
[72] CLARIDGE, JOHN, GB  
[71] CERES INTELLECTUAL PROPERTY COMPANY LIMITED, GB  
[85] 2023-03-23  
[86] 2021-09-22 (PCT/GB2021/052467)  
[87] (WO2022/064196)  
[30] GB (2015136.1) 2020-09-24  
[30] GB (2016089.1) 2020-10-09

## Demandes PCT entrant en phase nationale

[21] **3,193,653**  
[13] A1

[51] **Int.Cl. F16D 1/076 (2006.01) F01D 5/04 (2006.01)**

[25] EN

[54] **TURBOMACHINE WITH A SHAFT COUPLED TO AN IMPELLER WITH AN AXIALLY INTERPOSED FRICTION RING**

[54] **TURBOMACHINE AYANT UN ARBRE COUPLE A UNE ROUE A AUBES AVEC UN ANNEAU DE FRICTION INTERPOSE AXIALEMENT**

[72] BAL, GUIDO, BE

[72] LYBEERT, MART, BE

[72] VAGNOLI, STEFANO, BE

[72] MEEUS, HANS, BE

[72] PEETERS, KOEN, BE

[72] VERRELST, BJORN, BE

[71] ATLAS COPCO AIRPOWER, N.V., BE

[85] 2023-03-23

[86] 2021-11-10 (PCT/EP2021/081261)

[87] (WO2022/101277)

[30] BE (2020/5829) 2020-11-16

[21] **3,193,654**  
[13] A1

[51] **Int.Cl. A61K 38/00 (2006.01) A61K 47/68 (2017.01) A61K 38/17 (2006.01) C07K 14/505 (2006.01) C07K 14/71 (2006.01)**

[25] EN

[54] **METHODS OF USING ACTIVIN RECEPTOR TYPE II VARIANTS**

[54] **PROCEDES D'UTILISATION DE VARIANTS DU RECEPTEUR DE L'ACTIVINE DE TYPE 2**

[72] SEEHRA, JASBIR S., US

[72] ROVALDI, CHRISTOPHER R., US

[71] KEROS THERAPEUTICS, INC., US

[85] 2023-03-23

[86] 2021-10-01 (PCT/US2021/053239)

[87] (WO2022/072882)

[30] US (63/086,858) 2020-10-02

[30] US (63/086,894) 2020-10-02

[30] US (63/086,860) 2020-10-02

[30] US (63/156,870) 2021-03-04

[30] US (63/111,337) 2020-11-09

[30] US (63/111,476) 2020-11-09

[30] US (63/111,460) 2020-11-09

[30] US (63/163,655) 2021-03-19

[21] **3,193,655**  
[13] A1

[51] **Int.Cl. C07C 29/09 (2006.01) C07C 29/10 (2006.01) C07C 29/12 (2006.01)**

[25] EN

[54] **CONTINUOUS PROCESSES FOR THE SELECTIVE CONVERSION OF ALDOHEXOSE-YIELDING CARBOHYDRATE TO ETHYLENE GLYCOL USING LOW CONCENTRATIONS OF RETRO-ALDOL CATALYST**

[54] **PROCEDES CONTINUS POUR LA CONVERSION SELECTIVE DE GLUCIDE PRODUCTEUR DE L'ALDOHEXOSE EN ETHYLENE GLYCOL A L'AIDE DE FAIBLES CONCENTRATIONS DE CATALYSEUR RETRO-ALDOLIQUE**

[72] SCHRECK, DAVID JAMES, US

[72] BUNNING, DONALD, US

[72] KAPICAK, LOU, US

[72] ALBIN, BROOKE, US

[72] NUNLEY, MARK, US

[72] BRADFORD, MICHAEL, US

[71] T.EN PROCESS TECHNOLOGY, INC., US

[85] 2023-03-23

[86] 2020-09-24 (PCT/US2020/052579)

[87] (WO2022/066160)

[21] **3,193,658**  
[13] A1

[51] **Int.Cl. A61B 5/06 (2006.01) A61B 17/00 (2006.01) A61M 25/00 (2006.01) A61M 25/01 (2006.01) A61M 25/06 (2006.01) A61M 25/09 (2006.01)**

[25] EN

[54] **INTRODUCER SHEATH HAVING A DISPLACEMENT SENSOR**

[54] **GAINE D'INTRODUCTION POURVUE D'UN CAPTEUR DE DEPLACEMENT**

[72] HEBERT, CASEY, US

[71] BECTON, DICKINSON AND COMPANY, US

[85] 2023-03-23

[86] 2021-10-04 (PCT/US2021/053338)

[87] (WO2022/081364)

[30] US (63/090,572) 2020-10-12

[30] US (17/492,361) 2021-10-01

[21] **3,193,661**  
[13] A1

[51] **Int.Cl. A61K 31/397 (2006.01) A61K 31/41 (2006.01) A61K 31/4162 (2006.01)**

[25] EN

[54] **PHARMACEUTICAL FORMULATIONS FOR TREATING DISEASES MEDIATED BY KDM1A**

[54] **FORMULATIONS PHARMACEUTIQUES POUR LE TRAITEMENT DE MALADIES MEDIEES PAR KDM1A**

[72] TAPPER, AMY, US

[72] CELATKA, CASSANDRA, US

[72] SOULLIAC, PATRICIA, US

[72] VED, PARAG, US

[72] VORA, NAMRATA, US

[71] IMAGO BIOSCIENCES, INC., US

[85] 2023-03-23

[86] 2021-10-01 (PCT/US2021/053141)

[87] (WO2022/072811)

[30] US (63/086,353) 2020-10-01

[21] **3,193,663**  
[13] A1

[51] **Int.Cl. C07C 1/207 (2006.01) C07C 9/22 (2006.01) C09K 5/10 (2006.01) C10G 3/00 (2006.01) H01B 3/22 (2006.01)**

[25] EN

[54] **ELECTROTECHNICAL FLUID AND A METHOD FOR MANUFACTURING THE SAME**

[54] **FLUIDE ELECTROTECHNIQUE ET SON PROCEDE DE PRODUCTION**

[72] RAMO, VIRPI, FI

[72] KOUVA, SONJA, FI

[71] NESTE OYJ, FI

[85] 2023-03-23

[86] 2020-11-11 (PCT/FI2020/050743)

[87] (WO2022/101540)

## PCT Applications Entering the National Phase

[21] **3,193,665**  
[13] A1

[51] **Int.Cl. A23K 20/163 (2016.01) A23L 29/20 (2016.01) A23L 29/206 (2016.01) A23L 29/238 (2016.01) A23L 29/256 (2016.01) A23L 33/21 (2016.01)**

[25] EN

[54] **NATURAL HYDROCOLLOID SYSTEMS FOR PET FOOD COMPOSITIONS, PET FOOD COMPOSITIONS COMPRISING SAME, AND PREPARATIONS THEREOF**

[54] **SYSTEMES HYDROCOLLOIDES NATURELS POUR COMPOSITIONS ALIMENTAIRES DESTINEES A DES ANIMAUX DE COMPAGNIE, COMPOSITIONS ALIMENTAIRES DESTINEES A DES ANIMAUX DE COMPAGNIE LES COMPRENANT ET LEURS PREPARATION**

[72] FERNANDES, PAULO ALEXANDRE BRAGA, FR

[72] PETIT, LISA, FR

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

[85] 2023-03-23

[86] 2021-09-20 (PCT/IB2021/058552)

[87] (WO2022/069994)

[30] US (63/086,629) 2020-10-02

[21] **3,193,666**  
[13] A1

[51] **Int.Cl. E21B 47/00 (2012.01) G06Q 10/06 (2023.01) E21B 47/04 (2012.01) E21B 47/09 (2012.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR MONITORING WELL OPERATIONS**

[54] **SYSTEME ET PROCEDE DE SURVEILLANCE D'OPERATIONS DANS UN PUIT**

[72] DUNCAN, ROBERT, CA

[71] INTELLIGENT WELLHEAD SYSTEMS INC., CA

[85] 2023-03-23

[86] 2021-10-06 (PCT/CA2021/051409)

[87] (WO2022/073125)

[30] US (63/088,350) 2020-10-06

[21] **3,193,667**  
[13] A1

[51] **Int.Cl. F01N 9/00 (2006.01) F02D 41/02 (2006.01)**

[25] EN

[54] **APPARATUS, SYSTEM, AND METHOD FOR OXIDIZING METHANE IN A LEAN-BURN ENGINE EXHAUST**

[54] **APPAREIL, SYSTEME ET PROCEDE D'OXYDATION DU METHANE DANS UN ECHAPPEMENT DE MOTEUR A MELANGE PAUVRE**

[72] STALLER, TRACY D., US

[72] DECICCO, STEVEN G., US

[71] MIRATECH GROUP, LLC, US

[85] 2023-03-23

[86] 2021-09-23 (PCT/US2021/051638)

[87] (WO2022/066829)

[30] US (63/082,705) 2020-09-24

[21] **3,193,668**  
[13] A1

[51] **Int.Cl. G06Q 50/26 (2012.01) H04L 65/40 (2022.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR OPTIMIZING MONETIZATION OPPORTUNITIES FOR CLIMATE-CHANGE-RELATED PROGRAM BENEFITS**

[54] **SYSTEMES ET PROCEDES D'OPTIMISATION D'OPPORTUNITES DE MONETISATION POUR DES AVANTAGES DE PROGRAMMES LIES AU CHANGEMENT CLIMATIQUE**

[72] KARATHUR, KARTHIK N., US

[71] LOCUS SOLUTIONS IPCO, LLC., US

[85] 2023-03-23

[86] 2021-10-29 (PCT/US2021/057222)

[87] (WO2022/094192)

[30] US (63/108,393) 2020-11-01

[21] **3,193,669**  
[13] A1

[51] **Int.Cl. B29B 11/14 (2006.01) B29C 49/00 (2006.01) C08K 5/00 (2006.01) C08L 67/04 (2006.01)**

[25] EN

[54] **PRE-FORMS FOR MAKING BIODEGRADABLE CONTAINERS AND RESIN THEREFOR**

[54] **PREFORMES POUR FABRIQUER DES RECIPIENTS BIODEGRADABLES ET RESINE A CET EFFET**

[72] DURIE, KARSON, US

[72] MANG, MICHAEL, US

[71] MEREDIAN, INC., US

[85] 2023-03-23

[86] 2021-09-23 (PCT/US2021/051725)

[87] (WO2022/066885)

[30] US (63/082,570) 2020-09-24

[21] **3,193,670**  
[13] A1

[51] **Int.Cl. B29C 44/14 (2006.01)**

[25] EN

[54] **PANEL ASSEMBLY WITH MOLDED FOAM BACKING**

[54] **ENSEMBLE PANNEAU A SUPPORT MOULE EN MOUSSE**

[72] KOZLOWSKI, ERIC, US

[72] PRASATEK, CRAIG, US

[72] VIVIAN, ANDREW M., US

[72] CHAUVIN, RENE, CA

[72] WYATT, DANIEL, US

[71] MAGNA SEATING INC., CA

[85] 2023-03-23

[86] 2021-02-05 (PCT/US2021/016784)

[87] (WO2022/076024)

[30] US (17/062,762) 2020-10-05

[21] **3,193,672**  
[13] A1

[25] EN

[54] **BIODEGRADABLE LABELS AND RESIN THEREFOR**

[54] **ETIQUETTES BIODEGRADABLES ET RESINE POUR CELLES-CI**

[72] SAMANTA, SATYABRATA, US

[72] JOHNSON, ADAM, US

[72] DURIE, KARSON, US

[71] MEREDIAN, INC., US

[85] 2023-03-23

[86] 2021-09-23 (PCT/US2021/051714)

[87] (WO2022/066878)

[30] US (63/082,565) 2020-09-24

## Demandes PCT entrant en phase nationale

[21] **3,193,673**  
[13] A1

[51] **Int.Cl. A61B 6/14 (2006.01)**  
[25] EN  
[54] **DENTAL X-RAY DEVICE**  
[54] **DISPOSITIF DE RADIOGRAPHIE DENTAIRE**  
[72] YASUI, SHIGEAKI, JP  
[72] YOSHIDA, HITOSHI, JP  
[72] KODAMA, MUNEHIRO, JP  
[71] TAKARA BELMONT CORPORATION, JP  
[85] 2023-03-23  
[86] 2020-10-07 (PCT/JP2020/038040)  
[87] (WO2022/074774)

[21] **3,193,674**  
[13] A1

[51] **Int.Cl. B29C 43/00 (2006.01) B29C 45/00 (2006.01) C08K 5/00 (2006.01) C08L 67/04 (2006.01)**  
[25] EN  
[54] **BIODEGRADABLE CONTAINER CLOSURE AND RESIN THEREFOR**  
[54] **FERMETURE DE RECIPIENT BIODEGRADABLE ET RESINE A CET EFFET**  
[72] JOHNSON, ADAM, US  
[72] MCCLANAHAN, ERIC, US  
[72] DURIE, KARSON, US  
[71] MEREDIAN, INC., US  
[85] 2023-03-23  
[86] 2021-09-23 (PCT/US2021/051695)  
[87] (WO2022/066866)  
[30] US (63/082,558) 2020-09-24

[21] **3,193,676**  
[13] A1

[51] **Int.Cl. G01D 5/353 (2006.01) G08B 13/186 (2006.01)**  
[25] EN  
[54] **FIBRE OPTIC SENSING METHOD AND SYSTEM FOR GENERATING A DYNAMIC DIGITAL REPRESENTATION OF OBJECTS AND EVENTS IN AN AREA**  
[54] **PROCEDE ET SYSTEME DE DETECTION PAR FIBRE OPTIQUE POUR GENERER UNE REPRESENTATION NUMERIQUE DYNAMIQUE D'OBJETS ET D'EVENEMENTS DANS UNE ZONE**  
[72] ENGLUND, MARK ANDREW, AU  
[71] FIBER SENSE LIMITED, AU  
[85] 2023-03-23  
[86] 2021-09-28 (PCT/AU2021/051129)  
[87] (WO2022/061422)  
[30] AU (2020903494) 2020-09-28

[21] **3,193,677**  
[13] A1

[51] **Int.Cl. B29B 11/14 (2006.01) B29C 49/00 (2006.01) C08K 5/00 (2006.01) C08L 67/04 (2006.01)**  
[25] EN  
[54] **BIODEGRADABLE CONTAINERS AND RESIN THEREFOR**  
[54] **RECIPIENTS BIODEGRADABLES ET RESINE POUR CEUX-CI**  
[72] DURIE, KARSON, US  
[72] MANG, MICHAEL, US  
[71] MEREDIAN, INC., US  
[85] 2023-03-23  
[86] 2021-09-23 (PCT/US2021/051689)  
[87] (WO2022/066862)  
[30] US (63/082,551) 2020-09-24

[21] **3,193,678**  
[13] A1

[51] **Int.Cl. G02B 6/42 (2006.01) G02B 6/12 (2006.01)**  
[25] EN  
[54] **OPTICAL ASSEMBLY**  
[54] **ENSEMBLE OPTIQUE**  
[72] LEMOS ALVARES DOS SANTOS, RUI MANUEL, NL  
[71] PHOTONIP B.V., NL  
[85] 2023-03-23  
[86] 2021-09-27 (PCT/NL2021/050580)  
[87] (WO2022/066016)  
[30] NL (2026563) 2020-09-28

[21] **3,193,679**  
[13] A1

[51] **Int.Cl. F16C 27/02 (2006.01) F16C 17/04 (2006.01)**  
[25] EN  
[54] **THRUST FOIL BEARING**  
[54] **PALIER DE BUTEE A FEUILLES**  
[72] IIDA, TSUTOMU, JP  
[72] YOSHINAGA, SEIICHIRO, JP  
[72] NAKAJIMA, MASAHIRO, JP  
[72] AOYAMA, SHIGEKAZU, JP  
[72] OMORI, NAOMICHI, JP  
[71] IHI CORPORATION, JP  
[85] 2023-03-23  
[86] 2021-09-22 (PCT/JP2021/034847)  
[87] (WO2022/065375)  
[30] JP (2020-159534) 2020-09-24

[21] **3,193,680**  
[13] A1

[51] **Int.Cl. A61B 5/11 (2006.01) A61B 5/00 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM TO ASSESS DISEASE USING MULTI-SENSOR SIGNALS**  
[54] **PROCEDE ET SYSTEME D'EVALUATION D'UNE MALADIE AU MOYEN DE SIGNAUX DE CAPTEURS MULTIPLES**  
[72] SHADFORTH, IAN, US  
[72] WOODWARD, JONATHAN JAMES, CA  
[72] RAMCHANDANI, SHYAMLAL, CA  
[71] ANALYTICS FOR LIFE INC., CA  
[85] 2023-03-23  
[86] 2021-09-27 (PCT/IB2021/058810)  
[87] (WO2022/064464)  
[30] US (63/083,371) 2020-09-25

## PCT Applications Entering the National Phase

[21] **3,193,681**  
[13] A1

[51] **Int.Cl. B01J 8/02 (2006.01) B01J 8/06 (2006.01) B01J 19/00 (2006.01) C10G 2/00 (2006.01)**

[25] EN

[54] **METHOD FOR SHUTTING DOWN A FISCHER-TROPSCH REACTOR**

[54] **PROCEDE D'ARRET D'UN REACTEUR FISCHER-TROPSCH**

[72] BAKER, ROBERT MILES, GB

[72] CLARKSON, JAY SIMON, GB

[72] COE, ANDREW JAMES, GB

[72] GALLEN, ROBERT WILLIAM, GB

[72] PEARSON, RICHARD PHILIP DAVID, GB

[72] TAMSETT, COLIN, GB

[71] JOHNSON MATTHEY DAVY TECHNOLOGIES LIMITED, GB

[85] 2023-03-23

[86] 2021-11-12 (PCT/GB2021/052926)

[87] (WO2022/117984)

[30] GB (2019079.9) 2020-12-03

[21] **3,193,682**  
[13] A1

[51] **Int.Cl. A61K 31/7084 (2006.01) A61K 47/64 (2017.01) A61K 47/14 (2017.01)**

[25] EN

[54] **CRYSTALLINE POLYMORPHIC FORMS OF STING AGONISTS ASSOCIATED WITH METAL IONS CAPABLE OF MODULATING AN IMMUNE RESPONSE**

[54] **FORMES POLYMORPHES CRISTALLINES D'AGONISTES STING ASSOCIEES A DES IONS METALLIQUES PERMETTANT DE MODULER UNE REPONSE IMMUNITAIRE**

[72] MOON, JAMES J., US

[72] SUN, XIAOQI, US

[72] PARK, KYUNG SOO, US

[72] HUANG, XUEHUI, US

[71] THE REGENTS OF THE UNIVERSITY OF MICHIGAN, US

[85] 2023-03-23

[86] 2021-10-15 (PCT/US2021/055212)

[87] (WO2022/081993)

[30] US (63/092,295) 2020-10-15

[21] **3,193,683**  
[13] A1

[51] **Int.Cl. C12N 15/52 (2006.01) G01N 33/50 (2006.01)**

[25] EN

[54] **GENETICALLY ENCODED CALCIUM INDICATORS (GECIS) AND METHODS OF MAKING AND USING**

[54] **INDICATEURS DE CALCIUM GENETIQUEMENT CODES (GECI) ET METHODES DE PRODUCTION ET D'UTILISATION CORRESPONDANTES**

[72] LOOGER, LOREN L., US

[72] ZHANG, YAN, US

[72] SCHREITER, ERIC R., US

[72] HASSEMAN, JEREMY P., US

[72] KOLB, ILYA, US

[72] SVOBODA, KAREL, US

[71] HOWARD HUGHES MEDICAL INSTITUTE, US

[85] 2023-03-23

[86] 2021-09-23 (PCT/US2021/051844)

[87] (WO2022/066975)

[30] US (63/082,222) 2020-09-23

[21] **3,193,684**  
[13] A1

[51] **Int.Cl. H03M 1/68 (2006.01) H03M 1/70 (2006.01) H03M 1/74 (2006.01)**

[25] EN

[54] **DIAGNOSTIC SYSTEM**

[54] **SYSTEME DE DIAGNOSTIC**

[72] WANG, LIFENG, US

[72] WANG, HAO, US

[72] ZHOU, ZHILI, US

[72] HUANG, XIAOYAN, US

[72] AO, RAN, US

[71] BAKER HUGHES OILFIELD OPERATIONS LLC, US

[85] 2023-03-23

[86] 2021-08-31 (PCT/US2021/071326)

[87] (WO2022/067289)

[30] US (17/034,738) 2020-09-28

[21] **3,193,685**  
[13] A1

[51] **Int.Cl. A61P 21/00 (2006.01) A61P 25/00 (2006.01) C07K 14/005 (2006.01) C12N 15/86 (2006.01)**

[25] EN

[54] **RECOMBINANT ADENO-ASSOCIATED VIRUSES FOR CNS OR MUSCLE DELIVERY**

[54] **VIRUS ADENO-ASSOCIES RECOMBINANTS POUR ADMINISTRATION MUSCULAIRE OU DANS LE SNC**

[72] DANOS, OLIVIER, US

[72] YOST, SAMANTHA, US

[72] MERCER, ANDREW, US

[72] LIU, YE, US

[72] BRUDER, JOSEPH, US

[72] KARUMUTHIL-MELETHIL, SUBHA, US

[72] FIRNBERG, ELAD, US

[72] QIAN, RANDOLPH, US

[72] TEPE, APRIL R., US

[72] EGLEY, JENNIFER M., US

[71] REGENXBIO INC., US

[85] 2023-03-23

[86] 2021-10-07 (PCT/US2021/054058)

[87] (WO2022/076750)

[30] US (63/088,988) 2020-10-07

[21] **3,193,686**  
[13] A1

[51] **Int.Cl. B22F 1/00 (2022.01) B22F 9/08 (2006.01)**

[25] FR

[54] **DEVICE AND METHOD FOR PRODUCING METAL POWDERS**

[54] **DISPOSITIF ET PROCEDE DE PRODUCTION DE POUDRES METALLIQUES**

[72] DOUBLET, SEBASTIEN, FR

[72] VERNA, ERIC, FR

[72] DEBELLEMANIERE, OLIVIER, FR

[71] ADDUP, FR

[71] L'AIR LIQUIDE SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, FR

[85] 2023-03-23

[86] 2021-09-27 (PCT/EP2021/076490)

[87] (WO2022/069404)

[30] FR (FR2009909) 2020-09-29

## Demandes PCT entrant en phase nationale

[21] **3,193,687**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) C12N 5/0783 (2010.01) A61P 35/00 (2006.01) A61P 37/02 (2006.01) G01N 33/574 (2006.01)**

[25] EN

[54] **METABOLIC AUGMENTATION TO PROMOTE AND ENHANCE IMMUNE RESPONSE BY TCF1+ T CELL REPOPULATION**

[54] **AUGMENTATION METABOLIQUE POUR FAVORISER ET AMELIORER LA REPOSE IMMUNITAIRE PAR REPOPULATION DE LYMPHOCYTES T TCF1+**

[72] REINER, STEVEN L., US  
[72] HENICK, BRIAN S., US  
[72] RIZVI, NAIYER A., US  
[72] MANIAR, ROHAN, US  
[71] THE TRUSTEES OF COLUMBIA UNIVERSITY, US

[85] 2023-03-23  
[86] 2021-09-23 (PCT/US2021/051805)  
[87] (WO2022/066945)  
[30] US (63/082,238) 2020-09-23  
[30] US (63/232,549) 2021-08-12

[21] **3,193,688**  
[13] A1

[51] **Int.Cl. G16B 25/10 (2019.01) G16B 40/30 (2019.01)**

[25] EN

[54] **NOVEL PREDICTION METHOD AND GENE SIGNATURES FOR THE TREATMENT OF CANCER**

[54] **NOUVEAU PROCEDE DE PREDICTION ET SIGNATURES GENIQUES POUR LE TRAITEMENT DU CANCER**

[72] LAZAR, VLADIMIR, FR  
[72] MAGIDI, SHAI, IL  
[71] WORLDWIDE INNOVATIVE NETWORK, FR

[85] 2023-03-23  
[86] 2021-10-07 (PCT/EP2021/077670)  
[87] (WO2022/074107)  
[30] EP (20306181.7) 2020-10-09

[21] **3,193,690**  
[13] A1

[51] **Int.Cl. B22F 1/00 (2022.01) B22F 9/08 (2006.01)**

[25] FR

[54] **DEVICE AND METHOD FOR PRODUCING METAL POWDERS**

[54] **DISPOSITIF ET PROCEDE DE PRODUCTION DE POUDRES METALLIQUES**

[72] DOUBLET, SEBASTIEN, FR  
[72] VERNA, ERIC, FR  
[72] DEBELLEMANIERE, OLIVIER, FR  
[71] ADDUP, FR  
[71] L'AIR LIQUIDE SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, FR

[85] 2023-03-23  
[86] 2021-09-27 (PCT/EP2021/076492)  
[87] (WO2022/069405)  
[30] FR (FR2009909) 2020-09-29

[21] **3,193,691**  
[13] A1

[51] **Int.Cl. B01L 3/00 (2006.01) C12Q 1/6816 (2018.01) G01N 21/65 (2006.01) G01N 33/543 (2006.01)**

[25] EN

[54] **SYSTEMS, APPARATUS, AND METHODS FOR DETECTING PATHOGENS**

[54] **SYSTEMES, APPAREIL ET PROCEDES DE DETECTION DE PATHOGENES**

[72] KHOSRAVI-FAR, ROYA, US  
[72] MOLLAAGHABABA, REZA, US  
[71] INNOTECH PRECISION MEDICINE, INC., US

[85] 2023-03-23  
[86] 2021-09-24 (PCT/US2021/052022)  
[87] (WO2022/067079)  
[30] US (63/082,694) 2020-09-24  
[30] US (63/143,690) 2021-01-29

[21] **3,193,692**  
[13] A1

[51] **Int.Cl. H04L 12/18 (2006.01)**

[25] EN

[54] **SD-WAN MULTICAST REPLICATOR SELECTION CENTRALIZED POLICY**

[54] **POLITIQUE CENTRALISEE DE SELECTION DE REPLICATEUR DE MULTIDIFFUSION DE SD-WAN**

[72] LINDEM, ALFRED C., US  
[72] CHINTALLAPUDI, RAVI KIRAN, US  
[72] SHRIVASTAVA, GUARAV, US  
[72] TIAN, JINING, US  
[72] PATEL, PRALESHKUMAR GUVANTRAY, US  
[71] CISCO TECHNOLOGY, INC., US

[85] 2023-03-23  
[86] 2021-11-11 (PCT/US2021/072354)  
[87] (WO2022/109528)  
[30] US (17/101,968) 2020-11-23

[21] **3,193,693**  
[13] A1

[51] **Int.Cl. B01D 53/02 (2006.01) B01D 53/047 (2006.01) C10L 3/10 (2006.01)**

[25] EN

[54] **CHARACTERISTICS OF TUNABLE ADSORBENTS FOR RATE SELECTIVE SEPARATION OF NITROGEN FROM METHANE**

[54] **CARACTERISTIQUES D'ADSORBANTS ACCORDABLES POUR LA SEPARATION SELECTIVE D'AZOTE A PARTIR DE METHANE**

[72] STUCKERT, NICHOLAS R., US  
[72] STEPHENSON, NEIL A., US  
[72] BARRETT, PHILIP A., US  
[72] PONTONIO, STEVEN J., US  
[71] PRAXAIR TECHNOLOGY, INC., US

[85] 2023-03-23  
[86] 2021-08-30 (PCT/US2021/048186)  
[87] (WO2022/066365)  
[30] US (17/034,831) 2020-09-28

## PCT Applications Entering the National Phase

[21] **3,193,694**  
[13] A1

[51] **Int.Cl. C07K 14/47 (2006.01) C07K 14/725 (2006.01)**  
[25] EN  
[54] **T CELL RECEPTORS DIRECTED AGAINST BOB1 AND USES THEREOF**  
[54] **RECEPTEURS DE LYMPHOCYTES T DIRIGES CONTRE BOB1 ET LEURS UTILISATIONS**  
[72] HEEMSKERK, MW MIRJAM H. M., NL  
[72] FALKENBURG, DE HEER J. H. FREDERIK, NL  
[71] ACADEMISCH ZIEKENHUIS LEIDEN (H.O.D.N. LUMC), NL  
[85] 2023-03-23  
[86] 2021-09-22 (PCT/NL2021/050570)  
[87] (WO2022/071795)  
[30] NL (2026614) 2020-10-02

[21] **3,193,697**  
[13] A1

[51] **Int.Cl. C12N 15/35 (2006.01) A61P 27/02 (2006.01) C07K 14/015 (2006.01) C12N 7/01 (2006.01) C12N 7/02 (2006.01) C12N 15/864 (2006.01) C12N 15/87 (2006.01)**  
[25] EN  
[54] **ADENO-ASSOCIATED VIRUSES FOR OCULAR DELIVERY OF GENE THERAPY**  
[54] **VIRUS ADENO-ASSOCIES POUR ADMINISTRATION OCULAIRE DE THERAPIE GENIQUE**  
[72] BRUDER, JOSEPH, US  
[72] WANG, XU, US  
[72] LEE, WEI-HUA, US  
[72] FIRNBERG, ELAD, US  
[72] YOST, SAMATHA, US  
[72] MERCER, ANDREW, US  
[72] LIU, YE, US  
[72] DANOS, OLIVIER, US  
[72] TEPE, APRIL R., US  
[71] REGENXBIO INC., US  
[85] 2023-03-23  
[86] 2021-10-07 (PCT/US2021/054008)  
[87] (WO2022/076711)  
[30] US (63/088,982) 2020-10-07  
[30] US (63/187,197) 2021-05-11

[21] **3,193,699**  
[13] A1

[51] **Int.Cl. F16L 47/22 (2006.01)**  
[25] FR  
[54] **FLUID CONDUIT FOR AIRCRAFT, COMPRISING A THERMOPLASTIC PIPE AND A CONNECTOR**  
[54] **CONDUITE DE FLUIDE POUR AERONEF COMPRENANT UNE CANALISATION THERMOPLASTIQUE ET UN CONNEXTEUR**  
[72] PERHERIN, DANIEL, FR  
[72] BOULZE, DANIEL, FR  
[71] AIRBUS ATLANTIC, FR  
[85] 2023-03-23  
[86] 2021-09-14 (PCT/EP2021/075150)  
[87] (WO2022/073723)  
[30] FR (FR2010157) 2020-10-05

[21] **3,193,700**  
[13] A1

[51] **Int.Cl. C08L 23/00 (2006.01) C08L 23/06 (2006.01)**  
[25] EN  
[54] **COLORABLE THERMOPLASTIC POLYMERIC COMPOSITIONS**  
[54] **COMPOSITIONS POLYMERES THERMOPLASTIQUES COLORABLES**  
[72] HE, CHAO, CN  
[72] MIAO, WENKE, CN  
[72] XU, XIANMIN, CN  
[72] LAI, YUMING, US  
[72] ESSEGHIR, MOHAMED, US  
[72] MIAO, XIAOXIONG, CN  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2023-03-23  
[86] 2020-09-29 (PCT/CN2020/118982)  
[87] (WO2022/067546)

[21] **3,193,701**  
[13] A1

[51] **Int.Cl. A61F 9/00 (2006.01) A61M 5/20 (2006.01) A61M 5/31 (2006.01) A61M 5/315 (2006.01) A61M 5/50 (2006.01)**  
[25] EN  
[54] **ADMINISTRATION DEVICE FOR IN PARTICULAR INTRAVITREAL ADMINISTRATION OF A FLUID**  
[54] **DISPOSITIF D'ADMINISTRATION DESTINE, EN PARTICULIER, A L'ADMINISTRATION INTRAVITREENNE D'UN FLUIDE**  
[72] ROTH, AXEL, DE  
[72] SCHUY, STEFFEN, DE  
[72] CULLIS WATSON, BENJAMIN HARRY, GB  
[72] LABAT-ROCHECOUSTE, ANDREW GUY, GB  
[72] QATTAN, AHLAM JAWDAT, GB  
[72] HAYTON, PAUL GRAHAM, GB  
[72] FOGG, OLIVER DAVID, GB  
[71] BOEHRINGER INGELHEIM INTERNATIONAL GMBH, DE  
[85] 2023-03-23  
[86] 2021-10-29 (PCT/EP2021/080118)  
[87] (WO2022/090463)  
[30] EP (20205001.9) 2020-10-30

[21] **3,193,702**  
[13] A1

[51] **Int.Cl. A24F 40/42 (2020.01)**  
[25] EN  
[54] **AIRFLOW CHANNEL BETWEEN CONSUMABLE AND DEVICE**  
[54] **CANAL D'ECOULEMENT D'AIR ENTRE UN CONSOMMABLE ET UN DISPOSITIF**  
[72] ROGAN, ANDREW ROBERT JOHN, GB  
[71] JT INTERNATIONAL SA, CH  
[85] 2023-03-23  
[86] 2021-09-24 (PCT/EP2021/076359)  
[87] (WO2022/063985)  
[30] EP (20198042.2) 2020-09-24



## Demandes PCT entrant en phase nationale

[21] **3,193,703**  
[13] A1

[51] **Int.Cl. C08F 2/48 (2006.01)**  
[25] EN  
[54] **METHODS OF MAKING COATED SUBSTRATES HAVING BLOCK RESISTANCE**  
[54] **PROCEDES DE FABRICATION DE SUBSTRATS REVETUS A RESISTANCE AU BLOCAGE**  
[72] SZEWCZYK, JANAH C., US  
[72] WILLIAMS, DREW E., US  
[72] FABER, KATHERINE A., US  
[72] BOWE, MICHAEL D., US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2023-03-23  
[86] 2021-09-27 (PCT/US2021/052141)  
[87] (WO2022/072264)  
[30] US (63/085,535) 2020-09-30

[21] **3,193,704**  
[13] A1

[51] **Int.Cl. C08L 23/08 (2006.01) C08F 4/659 (2006.01) C08F 210/16 (2006.01)**  
[25] EN  
[54] **BIMODAL POLYETHYLENE COPOLYMERS FOR PE-80 PIPE APPLICATIONS**  
[54] **COPOLYMERES DE POLYETHYLENE BIMODAL POUR DES APPLICATIONS DANS DES CONDUITES EN PE-80**  
[72] MEHTA, RUJUL M., US  
[72] LYNN, TIMOTHY R., US  
[72] MURE, CLIFF R., US  
[72] HE, CHUAN C., US  
[71] UNIVATION TECHNOLOGIES, LLC, US  
[85] 2023-03-23  
[86] 2021-09-24 (PCT/US2021/051861)  
[87] (WO2022/072223)  
[30] US (63/085,396) 2020-09-30

[21] **3,193,705**  
[13] A1

[51] **Int.Cl. G02B 6/44 (2006.01) H01B 11/18 (2006.01) H01B 11/20 (2006.01) H01B 11/22 (2006.01) H01B 13/14 (2006.01) H01B 13/24 (2006.01)**  
[25] EN  
[54] **CABLE WITH SEPARABLE ELECTRICAL CONDUCTORS**  
[54] **CABLE A CONDUCTEURS ELECTRIQUES SEPARABLES**  
[72] REGISTER, JAMES ARTHUR, III, US  
[71] CORNING RESEARCH & DEVELOPMENT CORPORATION, US  
[85] 2023-03-23  
[86] 2021-09-13 (PCT/US2021/050014)  
[87] (WO2022/066452)  
[30] US (63/082,607) 2020-09-24

[21] **3,193,706**  
[13] A1

[51] **Int.Cl. A61K 31/7125 (2006.01) C12N 15/113 (2010.01) A61P 27/02 (2006.01)**  
[25] EN  
[54] **TREATMENT OF OPTIC ATROPHY**  
[54] **TRAITEMENT DE L'ATROPHIE OPTIQUE**  
[72] CHEN, FRED, AU  
[72] PITOUT, IANTHE, AU  
[72] GRAINOK, JANYA, AU  
[72] UTAMA, SASIWIMON, AU  
[72] RICE, KIM, AU  
[71] PYC THERAPEUTICS LIMITED, AU  
[85] 2023-03-23  
[86] 2021-10-01 (PCT/AU2021/051154)  
[87] (WO2022/067398)  
[30] AU (2020903577) 2020-10-02

[21] **3,193,707**  
[13] A1

[51] **Int.Cl. B01J 4/00 (2006.01) B01J 8/08 (2006.01)**  
[25] EN  
[54] **CHEMICAL FEED DISTRIBUTORS AND METHODS OF USING THE SAME**  
[54] **DISTRIBUTEURS D'ALIMENTATION EN PRODUITS CHIMIQUES ET LEURS PROCEDES D'UTILISATION**  
[72] PRETZ, MATTHEW T., US  
[72] YUAN, QUAN, US  
[72] KAMAT, PRITISH M., US  
[72] LI, LIWEI, US  
[72] LUO, LIN, US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2023-03-23  
[86] 2021-09-30 (PCT/US2021/052817)  
[87] (WO2022/072599)  
[30] US (63/085,264) 2020-09-30

[21] **3,193,708**  
[13] A1

[51] **Int.Cl. B01J 3/02 (2006.01) B01J 4/00 (2006.01) B01J 8/18 (2006.01) F23C 10/20 (2006.01)**  
[25] EN  
[54] **DISTRIBUTOR SUPPORT SYSTEM FOR CHEMICAL FEED DISTRIBUTORS IN FLUIDIZED BED SYSTEMS**  
[54] **SYSTEME DE SUPPORT DE DISTRIBUTEUR POUR DISTRIBUTEURS D'ALIMENTATION EN PRODUITS CHIMIQUES DANS DES SYSTEMES A LIT FLUIDISE**  
[72] PRETZ, MATTHEW T., US  
[72] SHAW, DONALD F., US  
[72] WALTER, RICHARD E., US  
[72] MEZA, ALBERT, US  
[72] SANDOVAL, FERMIN, US  
[72] YUAN, QUAN, US  
[72] LI, LIWEI, US  
[72] KAMAT, PRITISH, US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2023-03-23  
[86] 2021-09-28 (PCT/US2021/052329)  
[87] (WO2022/072317)  
[30] US (63/085,261) 2020-09-30

## PCT Applications Entering the National Phase

---

[21] **3,193,709**  
[13] A1

[51] **Int.Cl. B01D 35/30 (2006.01) B01D 46/00 (2022.01) B01D 46/52 (2006.01)**  
[25] EN  
[54] **FILTRATION DEVICE HAVING A LATCH MECHANISM ADAPTER**  
[54] **DISPOSITIF DE FILTRATION AYANT UN ADAPTEUR DE MECANISME DE VERROUILLAGE**  
[72] FINN, TIMOTHY SEAN, US  
[72] RYON, SHAWN M., US  
[72] COLANTONI, DAVID J., US  
[71] CATERPILLAR INC., US  
[85] 2023-03-23  
[86] 2021-09-03 (PCT/US2021/048958)  
[87] (WO2022/072117)  
[30] US (17/039,372) 2020-09-30

---

[21] **3,193,711**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS, DEVICES, AND METHODS FOR DEVELOPING A FETAL OXIMETRY MODEL FOR USE TO DETERMINE A FETAL OXIMETRY VALUE**  
[54] **SYSTEMES, DISPOSITIFS ET PROCEDES SERVANT A DEVELOPPER UN MODELE D'OXYMETRIE FETALE DESTINE A ETRE UTILISE POUR DETERMINER UNE VALEUR D'OXYMETRIE FETALE**  
[72] RAY, NEIL PADHARIA, US  
[72] KAINERSTORFER, JANA, US  
[72] JACOBS, ADAM, US  
[72] PRESCOTT, ANDREW, US  
[71] RAYDIANT OXIMETRY, INC., US  
[85] 2023-03-23  
[86] 2021-09-24 (PCT/US2021/052092)  
[87] (WO2022/067125)  
[30] US (63/083,064) 2020-09-24

---

[21] **3,193,712**  
[13] A1

[51] **Int.Cl. B01D 46/00 (2022.01) B01D 46/10 (2006.01) B01D 46/52 (2006.01)**  
[25] EN  
[54] **FILTRATION DEVICE HAVING A LATCH MECHANISM**  
[54] **DISPOSITIF DE FILTRATION DOTE D'UN MECANISME DE VERROUILLAGE**  
[72] FINN, TIMOTHY S., US  
[72] NASH, JEFFREY P., US  
[71] CATERPILLAR INC., US  
[85] 2023-03-23  
[86] 2021-09-01 (PCT/US2021/048649)  
[87] (WO2022/072109)  
[30] US (17/039,385) 2020-09-30

---

[21] **3,193,713**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61M 37/00 (2006.01)**  
[25] EN  
[54] **INTRADERMAL ACTIVE INGREDIENT DELIVERY SYSTEM**  
[54] **SYSTEME D'ADMINISTRATION INTRADERMIQUE D'UN PRINCIPE ACTIF**  
[72] SCHOMISCH, SEBASTIAN, DE  
[71] LTS LOHMANN THERAPIE-SYSTEME AG, DE  
[85] 2023-03-23  
[86] 2021-10-27 (PCT/EP2021/079871)  
[87] (WO2022/101017)  
[30] DE (10 2020 129 916.8) 2020-11-12

---

[21] **3,193,714**  
[13] A1

[51] **Int.Cl. H04W 48/18 (2009.01)**  
[25] EN  
[54] **METHODS, DEVICES, AND SYSTEMS FOR CONFIGURING ENHANCED NON-PUBLIC NETWORK**  
[54] **PROCEDES, DISPOSITIFS ET SYSTEMES DE CONFIGURATION D'UN RESEAU PRIVE AMELIORE**  
[72] LI, WENTING, CN  
[72] HUANG, HE, CN  
[71] ZTE CORPORATION, CN  
[85] 2023-03-23  
[86] 2021-01-14 (PCT/CN2021/071730)  
[87] (WO2022/151142)

---

[21] **3,193,715**  
[13] A1

[51] **Int.Cl. A01N 25/00 (2006.01) A01N 25/26 (2006.01) B01J 13/10 (2006.01) B01J 13/22 (2006.01)**  
[25] EN  
[54] **AGRICULTURAL BIOPOLYMER COATING PLATFORM**  
[54] **PLATE-FORME DE REVETEMENT DE BIOPOLYMERE AGRICOLE**  
[72] FRANK, JOSEPH, US  
[72] ZOMORODI, SEPEHR, US  
[72] CARBALLO, SERGIO MADRIGAL, US  
[72] SHAKEEL, AMEER HAMZA, US  
[72] POURTAHERI, PAYAM, US  
[71] AGROSPHERES, INC., US  
[85] 2023-03-23  
[86] 2021-10-08 (PCT/US2021/054259)  
[87] (WO2022/076877)  
[30] US (63/090,017) 2020-10-09

---

[21] **3,193,716**  
[13] A1

[51] **Int.Cl. A01N 25/04 (2006.01) A61K 8/31 (2006.01) A61K 8/34 (2006.01) A61K 8/81 (2006.01) A61K 47/00 (2006.01) A61P 31/04 (2006.01) A61Q 17/00 (2006.01) A61Q 19/00 (2006.01)**  
[25] EN  
[54] **MOISTURIZING ANTIBACTERIAL COMPOSITION**  
[54] **COMPOSITION ANTIBACTERIENNE HYDRATANTE**  
[72] CHANDAR, PREM, US  
[72] DASGUPTA, BIVASH RANJAN, US  
[72] FREY, GABRIELLASATCHIOLIVIA, US  
[72] MOADDEL, TEANOOSH, US  
[72] SHILOACH, ANAT, US  
[71] UNILEVER GLOBAL IP LIMITED, GB  
[85] 2023-03-23  
[86] 2021-09-08 (PCT/EP2021/074689)  
[87] (WO2022/063576)  
[30] US (63/083,570) 2020-09-25

## Demandes PCT entrant en phase nationale

[21] **3,193,717**  
[13] A1

[51] **Int.Cl. H02K 1/02 (2006.01)**  
[25] EN  
[54] **PERMANENT MAGNET GENERATOR FOR ON-BOARD VEHICLE CHARGING**  
[54] **GENERATEUR A AIMANT PERMANENT DESTINE A LA CHARGE EMBARQUEE D'UN VEHICULE**  
[72] REGAZZI, NICOLO, IT  
[72] REGAZZI, GIANNI, IT  
[72] BERGHI, ALESSANDRO, IT  
[72] POPOV, ADRIAN, IT  
[72] COMPRI, ANDREA, IT  
[71] DUCATI ENERGIA S.P.A., IT  
[85] 2023-03-23  
[86] 2021-09-27 (PCT/IB2021/058791)  
[87] (WO2022/070018)  
[30] IT (10202000022951) 2020-09-29

[21] **3,193,718**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2023.01) G06Q 30/02 (2023.01) G06Q 50/30 (2012.01) G06N 20/20 (2019.01) H04L 41/0823 (2022.01) H04L 41/16 (2022.01) G06N 3/04 (2023.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR IDENTIFYING AN OPTIMISED INTERNET CONNECTIVITY CONFIGURATION**  
[54] **PROCEDE ET SYSTEME D'IDENTIFICATION D'UNE CONFIGURATION DE CONNECTIVITE INTERNET OPTIMISEE**  
[72] HAYOT, LAURENT, CH  
[72] GRANDCHAMP, YVES HENRI, CH  
[72] FRAMMERY, HUGO PIERRE RODOLPHE, CH  
[72] BENAIN, PIERRE-YVES, CH  
[71] SITA SWITZERLAND SARL, CH  
[85] 2023-03-23  
[86] 2021-09-29 (PCT/EP2021/076874)  
[87] (WO2022/069592)  
[30] EP (20199440.7) 2020-09-30

[21] **3,193,719**  
[13] A1

[51] **Int.Cl. A01G 9/20 (2006.01) A01G 27/00 (2006.01)**  
[25] EN  
[54] **VERTICAL FARMING SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES D'AGRICULTURE VERTICALE**  
[72] BERTRAM, SAMUEL BERNARD CLIFFORD, US  
[72] BERTRAM, JOHN RUSSELL, US  
[72] MORITZ, ALON, US  
[72] COLEMAN, JOHN, US  
[71] ONEPOINTONE, INC., US  
[85] 2023-03-23  
[86] 2021-09-22 (PCT/US2021/051534)  
[87] (WO2022/066753)  
[30] US (63/082,389) 2020-09-23

[21] **3,193,720**  
[13] A1

[51] **Int.Cl. H04M 9/02 (2006.01)**  
[25] EN  
[54] **VOLUME CONTROL OVER SHARED TRUNK LINES IN INTERCOM SYSTEMS**  
[54] **COMMANDE DE VOLUME SUR DES LIGNES DE JONCTION PARTAGEES DANS DES SYSTEMES D'INTERPHONE**  
[72] PUTTICK, JAMES, CA  
[71] ROBERT BOSCH GMBH, DE  
[85] 2023-03-23  
[86] 2021-09-28 (PCT/EP2021/076638)  
[87] (WO2022/078752)  
[30] US (17/071,688) 2020-10-15

[21] **3,193,721**  
[13] A1

[51] **Int.Cl. A61K 8/49 (2006.01) A61K 8/34 (2006.01) A61K 8/368 (2006.01) A61K 8/84 (2006.01)**  
[25] EN  
[54] **ORAL RINSE COMPOSITION, ORAL CLEANSING KIT, METHOD OF CLEANSING ORAL CAVITY AND METHOD OF MAKING ORAL RINSE COMPOSITION**  
[54] **COMPOSITION DE RINCAGE BUCCAL, KIT DE NETTOYAGE BUCCAL, METHODE DE NETTOYAGE DE LA CAVITE BUCCALE ET PROCEDE DE FABRICATION DE LA COMPOSITION DE RINCAGE BUCCAL**  
[72] BRYZEK, JOSEPH, US  
[72] MAALOUF, SHARBEL, US  
[72] WALSH, CLARE, US  
[71] MEDLINE INDUSTRIES, LP, US  
[85] 2023-03-23  
[86] 2021-09-10 (PCT/US2021/049883)  
[87] (WO2022/066444)  
[30] US (63/082,859) 2020-09-24

[21] **3,193,722**  
[13] A1

[51] **Int.Cl. C07K 1/22 (2006.01)**  
[25] EN  
[54] **METHODS FOR REDUCING HOST CELL PROTEIN CONTENT IN ANTIBODY PURIFICATION PROCESSES AND ANTIBODY COMPOSITIONS HAVING REDUCED HOST CELL PROTEIN CONTENT**  
[54] **PROCEDES POUR REDUIRE LA TENEUR EN PROTEINES DE CELLULES HOTES DANS DES PROCESSUS DE PURIFICATION D'ANTICORPS ET COMPOSITIONS D'ANTICORPS PRESENTANT UNE TENEUR REDUITE EN PROTEINES DE CELLULES HOTE**  
[72] BOWES, BRIAN DAVID, US  
[72] KREBS, LARA ELLEN, US  
[72] RICHER, SARAH M., US  
[72] HUANG, LIHUA, US  
[72] PLICHTA, STEVEN A., US  
[71] ELI LILLY AND COMPANY, US  
[85] 2023-03-23  
[86] 2021-10-04 (PCT/US2021/053407)  
[87] (WO2022/072934)  
[30] US (63/086,915) 2020-10-02

## PCT Applications Entering the National Phase

---

[21] **3,193,724**  
[13] A1

[51] **Int.Cl. G05D 16/06 (2006.01)**  
[25] EN  
[54] **GAS REGULATOR DIAPHRAGM-  
POSITION AND PRESSURE-  
RELIEF DETECTION**  
[54] **DETECTION DE LA POSITION ET  
DE LA DETENTE DE LA  
MEMBRANE DU REGULATEUR  
DE GAZ**  
[72] KANN, JAMES LEE, US  
[72] CORNWALL, MARK K., US  
[71] ITRON, INC, US  
[85] 2023-03-23  
[86] 2021-09-30 (PCT/US2021/053001)  
[87] (WO2022/132283)  
[30] US (17/127,841) 2020-12-18

---

[21] **3,193,725**  
[13] A1

[51] **Int.Cl. F17D 1/04 (2006.01)**  
[25] EN  
[54] **NETWORK EDGE DETECTION  
AND NOTIFICATION OF GAS  
PRESSURE SITUATION**  
[54] **DETECTION DE PERIPHERIE DE  
RESEAU ET NOTIFICATION DE  
SITUATION DE PRESSION DE  
GAZ**  
[72] KANN, JAMES LEE, US  
[72] PENZ, JANET, US  
[72] POLK, KATRINA, US  
[71] ITRON, INC, US  
[85] 2023-03-23  
[86] 2021-09-30 (PCT/US2021/053007)  
[87] (WO2022/132284)  
[30] US (17/127,896) 2020-12-18

---

[21] **3,193,726**  
[13] A1

[51] **Int.Cl. C22B 3/42 (2006.01) C22B 3/44  
(2006.01) C22B 60/02 (2006.01)**  
[25] EN  
[54] **PROCESSES FOR THE  
RECOVERY OF URANIUM**  
[54] **PROCESSUS POUR LA  
RECUPERATION D'URANIUM**  
[72] DHIBA, DRISS, MA  
[72] EL MAHDI, MOUNIR, MA  
[72] BERRY, WILLIAM W., US  
[72] BAROODY, THOMAS E., US  
[71] OCP S.A., MA  
[85] 2023-03-23  
[86] 2020-09-25 (PCT/US2020/052777)  
[87] (WO2022/066169)

---

[21] **3,193,727**  
[13] A1

[25] EN  
[54] **ROOFING COMPOSITES WITH  
INTEGRATED SELVAGE EDGES**  
[54] **COMPOSITES DE TOITURE A  
LISIERES INTEGRES**  
[72] RUFUS, ISAAC BERNARD, US  
[72] CHICH, ADEM, US  
[72] CHIN, RICHARD, US  
[72] DOUGHETRY, MICHAEL, US  
[71] BMIC LLC, US  
[85] 2023-03-23  
[86] 2021-09-24 (PCT/US2021/051915)  
[87] (WO2022/067012)  
[30] US (63/083,595) 2020-09-25

---

[21] **3,193,728**  
[13] A1

[51] **Int.Cl. B64C 39/00 (2023.01) H01G  
7/00 (2006.01) H02G 1/00 (2006.01)**  
[25] EN  
[54] **POWER LINE STRINGING  
SYSTEM AND METHOD**  
[54] **SYSTEME ET PROCEDE  
D'INSTALLATION DE LIGNE  
ELECTRIQUE**  
[72] VAN DER BERG, CAMERON, AU  
[72] VAN DER BERG, DANIEL, AU  
[71] INFRAVISION HOLDINGS PTY LTD,  
AU  
[85] 2023-03-23  
[86] 2021-09-23 (PCT/AU2021/051115)  
[87] (WO2022/061411)  
[30] AU (2020903435) 2020-09-24  
[30] AU (2021902353) 2021-07-30  
[30] AU (2021106947) 2021-08-24

---

[21] **3,193,729**  
[13] A1

[51] **Int.Cl. B02C 2/06 (2006.01)**  
[25] EN  
[54] **GYRATORY CRUSHER SPIDER  
BUSHING**  
[54] **BAGUE DE CROISILLON POUR  
CONCASSEUR GIRATOIRE**  
[72] JOHANSSON, JAN, SE  
[72] GUNNARSSON, JOHAN, SE  
[71] SANDVIK SRP AB, SE  
[85] 2023-03-23  
[86] 2020-10-01 (PCT/EP2020/077467)  
[87] (WO2022/069044)

---

[21] **3,193,730**  
[13] A1

[51] **Int.Cl. G06F 40/20 (2020.01) G06Q  
10/06 (2023.01) G06F 40/30 (2020.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR  
DYNAMIC ADAPTIVE ROUTING  
OF DEFERRABLE WORK IN A  
CONTACT CENTER**  
[54] **PROCEDE ET SYSTEME DE  
ROUTAGE ADAPTATIF  
DYNAMIQUE DE TRAVAIL  
POUVANT ETRE REPORTE DANS  
UN CENTRE DE CONTACT**  
[72] WICAKSONO, BAYU, US  
[72] HUMPHREYS, TRAVIS, US  
[72] D'ATTILIO, WILLIAM, US  
[72] TSE, JOHNSON, US  
[72] CHEN, ABEL, US  
[71] GENESYS CLOUD SERVICES, INC.,  
US  
[85] 2023-03-24  
[86] 2021-09-30 (PCT/US2021/053032)  
[87] (WO2022/072739)  
[30] US (63/085,373) 2020-09-30

---

[21] **3,193,732**  
[13] A1

[51] **Int.Cl. C03B 7/086 (2006.01) C03B  
7/094 (2006.01) C03B 7/096 (2006.01)**  
[25] EN  
[54] **FLUID-COOLED MECHANISM  
FOR MOLTEN MATERIAL FLOW  
CONTROL**  
[54] **MECANISME REFROIDI PAR  
FLUIDE POUR LA REGULATION  
DE L'ECOULEMENT DE  
MATERIAU FONDU**  
[72] RASHLEY, SHANE T., US  
[72] FLEETWOOD, RUSSEL K., US  
[71] OWENS-BROCKWAY GLASS  
CONTAINER INC., US  
[85] 2023-03-24  
[86] 2021-09-29 (PCT/US2021/052567)  
[87] (WO2022/072437)  
[30] US (17/039,734) 2020-09-30

## Demandes PCT entrant en phase nationale

[21] **3,193,745**  
[13] A1

[51] **Int.Cl. A61K 31/4725 (2006.01) A61K 31/4985 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **IMIDAZOPIPERAZINE INHIBITORS OF TRANSCRIPTION ACTIVATING PROTEINS**

[54] **INHIBITEURS IMIDAZOPIPERAZINE DE PROTEINES D'ACTIVATION DE LA TRANSCRIPTION**

[72] LE, KANG, US

[72] SOTH, MICHAEL, US

[72] JONES, PHILIP, US

[72] CROSS, JASON, US

[72] MCAFOOS, TIMOTHY, US

[71] BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, US

[85] 2023-03-24

[86] 2021-09-30 (PCT/US2021/052898)

[87] (WO2022/072648)

[30] US (63/086,728) 2020-10-02

[21] **3,193,750**  
[13] A1

[51] **Int.Cl. B25J 15/00 (2006.01) B25J 15/02 (2006.01) B25J 15/10 (2006.01) B65G 47/90 (2006.01) C03B 7/14 (2006.01) C03B 7/18 (2006.01) C03B 9/34 (2006.01) C03B 9/347 (2006.01) C03B 9/36 (2006.01)**

[25] EN

[54] **MOLTEN GLASS FEEDING AND MOLDING**

[54] **ALIMENTATION ET MOULAGE DE VERRE FONDU**

[72] WEIL, SCOTT, US

[72] ANDERSON, WALTER, US

[72] JOHNSTON, KARL, US

[72] FLYNN, ROBIN L., US

[72] NAFZIGER, GREGORY W., US

[72] FULLER, ALEXANDRA, DE

[72] ALTENDORFER, BERNARD, DE

[71] OWENS-BROCKWAY GLASS CONTAINER INC., US

[85] 2023-03-24

[86] 2021-09-30 (PCT/US2021/052753)

[87] (WO2022/072566)

[30] US (63/085,640) 2020-09-30

[21] **3,193,758**  
[13] A1

[51] **Int.Cl. C03B 9/40 (2006.01) C03B 9/44 (2006.01)**

[25] EN

[54] **CULLET AND CULLET WATER HANDLING SYSTEM**

[54] **SYSTEME DE GESTION DE CALCIN ET D'EAU DE CALCIN**

[72] RAUSCH, PHILIP J., US

[72] HOLMES-LIBBIS, JOHN, US

[72] ASMUS, JOSEPH, US

[72] BEABER, COREY, US

[71] OWENS-BROCKWAY GLASS CONTAINER INC., US

[85] 2023-03-24

[86] 2021-09-30 (PCT/US2021/052762)

[87] (WO2022/072569)

[30] US (63/085,644) 2020-09-30

[21] **3,193,764**  
[13] A1

[51] **Int.Cl. C03B 3/00 (2006.01)**

[25] EN

[54] **SUBMERGED FEEDSTOCK CHARGING OF MELTING VESSELS**

[54] **CHARGEMENT DE MATIERE PREMIERE IMMERGEE DE RECIPIENTS DE FUSION**

[72] HOLMES, KIRK, US

[72] BASTARRACHEA, KARIN GABRIELA, US

[72] DUFFY, DAVID L., US

[72] HOUCK, ROY J., US

[72] PLUMBO, VICTOR A. II, US

[71] OWENS-BROCKWAY GLASS CONTAINER INC., US

[85] 2023-03-24

[86] 2021-09-30 (PCT/US2021/052930)

[87] (WO2022/072670)

[30] US (63/085,883) 2020-09-30

[21] **3,193,765**  
[13] A1

[51] **Int.Cl. A61K 8/44 (2006.01) A61K 8/49 (2006.01)**

[25] EN

[54] **A PERSONAL CARE COMPOSITION COMPRISING AMINO ACIDS**

[54] **COMPOSITION DE SOINS PERSONNELS COMPRENANT DES ACIDES AMINES**

[72] DASGUPTA, ANINDYA, IN

[72] MALLEMALA, PRATHYUSHA, IN

[72] WASKAR, MORRIS, IN

[71] UNILEVER GLOBAL IP LIMITED, GB

[85] 2023-03-24

[86] 2021-09-26 (PCT/EP2021/076426)

[87] (WO2022/069379)

[30] EP (20199044.7) 2020-09-29

[21] **3,193,767**  
[13] A1

[51] **Int.Cl. C03B 5/235 (2006.01) C03B 5/425 (2006.01) C03B 5/44 (2006.01)**

[25] EN

[54] **SUBMERGED COMBUSTION MELTING EXHAUST SYSTEMS**

[54] **SYSTEMES D'ECHAPPEMENT DE FUSION PAR COMBUSTION IMMERGEE**

[72] RASHLEY, SHANE T., US

[72] KUHLMAN, ROBERT W., US

[72] GOBRECHT III, RICHARD C., US

[72] THOMAS, WILLIAM, US

[72] SHI, LIMING, US

[71] OWENS-BROCKWAY GLASS CONTAINER INC., US

[85] 2023-03-24

[86] 2021-09-30 (PCT/US2021/052792)

[87] (WO2022/072588)

[30] US (63/085,646) 2020-09-30

## PCT Applications Entering the National Phase

[21] **3,193,768**  
[13] A1

[51] **Int.Cl. E05D 15/24 (2006.01) E05D 15/26 (2006.01) E06B 3/00 (2006.01) E06B 9/06 (2006.01)**

[25] EN

[54] **VERTICALLY STACKING PANEL DOOR WITH CAM LEVERS**

[54] **PORTE DE PANNEAU A EMPILEMENT VERTICAL DOTEE DE LEVIERS DE CAME**

[72] JANICK, JAMES, US

[72] BALAY, THOMAS, US

[72] SMITH, BRANDON C., US

[71] CORNELLCOOKSON, LLC, US

[85] 2023-03-24

[86] 2021-09-29 (PCT/US2021/052510)

[87] (WO2022/072395)

[30] US (17/039,980) 2020-09-30

[21] **3,193,769**  
[13] A1

[51] **Int.Cl. B01D 15/36 (2006.01) A61K 47/50 (2017.01) A61P 39/04 (2006.01)**

[25] EN

[54] **PROCESS FOR REMOVING IONS FROM BODILY FLUIDS USING SMALL MOLECULE METAL CHELATORS AND METALLATE ION EXCHANGE COMPOSITIONS**

[54] **PROCEDE D'ELIMINATION D'IONS DE FLUIDES CORPORELS A L'AIDE DE CHELATEURS DE METAUX A PETITES MOLECULES ET DE COMPOSITIONS D'ECHANGE D'IONS METALLATES**

[72] LUPTON, FRANCIS STEPHEN, US

[72] LEWIS, GREGORY J., US

[72] HODGES, JAMES M., US

[72] JAKUBCZAK, PAULINA, US

[72] SYLEJMANI-REKALIU, MIMOZA, US

[72] SHEETS, WILLIAM, US

[71] UOP LLC, US

[85] 2023-03-24

[86] 2021-09-29 (PCT/US2021/071641)

[87] (WO2022/173523)

[30] US (63/085,834) 2020-09-30

[21] **3,193,771**  
[13] A1

[51] **Int.Cl. G06Q 50/26 (2012.01) G06Q 50/12 (2012.01) G16H 50/80 (2018.01)**

[25] EN

[54] **INTEGRATED MANAGEMENT METHOD TO PREVENT THE SPREAD OF CONTAGIOUS DISEASES**

[54] **PROCEDE DE GESTION INTEGREE POUR PREVENIR LA PROPAGATION DE MALADIES CONTAGIEUSES**

[72] JO, WANGJE, KR

[71] AGARAM.COM, LTD., KR

[85] 2023-03-24

[86] 2021-10-02 (PCT/KR2021/013544)

[87] (WO2022/075672)

[30] KR (10-2020-0128703) 2020-10-05

[21] **3,193,775**  
[13] A1

[51] **Int.Cl. A61M 1/14 (2006.01) A62D 3/33 (2007.01) B01J 39/09 (2017.01) B01D 15/36 (2006.01) B01J 39/02 (2006.01) C01B 33/36 (2006.01)**

[25] EN

[54] **PROCESS FOR REMOVING LEAD IONS FROM BODILY FLUIDS**

[54] **PROCEDE D'ELIMINATION D'IONS DE PLOMB DE FLUIDES CORPORELS**

[72] LEWIS, GREGORY, US

[72] JAKUBCZAK, PAULINA, US

[72] HODGES, JAMES, US

[72] KOLEV, EVGENY, US

[72] SHEETS, WILLIAM, US

[72] SYLEJMANI-REKALIU, MIMOZA, US

[71] UOP LLC, US

[85] 2023-03-24

[86] 2021-09-28 (PCT/US2021/071625)

[87] (WO2022/072998)

[30] US (63/085,784) 2020-09-30

[21] **3,193,776**  
[13] A1

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

[25] EN

[54] **SYSTEMS AND METHODS FOR MACHINE-LEARNING-ASSISTED COGNITIVE EVALUATION AND TREATMENT**

[54] **SYSTEMES ET PROCEDES D'EVALUATION COGNITIVE ASSISTEE PAR APPRENTISSAGE AUTOMATIQUE ET DE TRAITEMENT**

[72] PASCUAL-LEONE, ALVARO, US

[72] SOUILLARD-MANDAR, WILLIAM, US

[72] ROGERS, EMILY, US

[72] BACON, JEFF, US

[72] LANGTON, JOHN, US

[72] THOMPSON, KARL, US

[72] BATES, DAVID, US

[72] TOBYNE, SEAN, US

[71] LINUS HEALTH, INC., US

[85] 2023-03-24

[86] 2021-09-27 (PCT/US2021/052218)

[87] (WO2022/067189)

[30] US (63/083,266) 2020-09-25

[21] **3,193,778**  
[13] A1

[51] **Int.Cl. A61M 1/34 (2006.01) B01J 39/09 (2017.01) B01J 47/127 (2017.01) B01D 15/36 (2006.01) B01D 69/02 (2006.01) B01D 69/08 (2006.01) B01J 39/02 (2006.01) B01J 39/14 (2006.01) B01J 47/02 (2017.01)**

[25] EN

[54] **REMOVING IONS FROM BODILY FLUIDS**

[54] **ELIMINATION D'IONS DE FLUIDES CORPORELS**

[72] SYLEJMANI-REKALIU, MIMOZA, US

[72] HODGES, JAMES, US

[72] JAKUBCZAK, PAULINA, US

[72] KOLEV, EVGENY, US

[72] LEWIS, GREGORY, US

[72] SHEETS, WILLIAM, US

[71] UOP LLC, US

[85] 2023-03-24

[86] 2021-09-28 (PCT/US2021/071626)

[87] (WO2022/072999)

[30] US (63/085,804) 2020-09-30

## Demandes PCT entrant en phase nationale

[21] **3,193,779**  
[13] A1

[51] **Int.Cl. E03D 9/08 (2006.01) F24H 1/10 (2022.01) F24H 9/00 (2022.01) F24H 9/18 (2022.01) F24H 9/20 (2022.01) H05K 7/20 (2006.01)**

[25] EN

[54] **INSTANT HEATING UNIT, TOILET, AND INSTANT HEATING METHOD**

[54] **UNITE DE CHAUFFAGE INSTANTANE, W.C. ET PROCEDE DE CHAUFFAGE INSTANTANE**

[72] YAN, PEIHUA, CN

[72] ZHU, JING, CN

[72] MAKINO, MASAYUKI, CN

[71] LIXIL LIVING TECHNOLOGY (SUZHOU) CORPORATION, CN

[85] 2023-03-24

[86] 2021-09-23 (PCT/CN2021/119803)

[87] (WO2022/063154)

[30] CN (202011015556.X) 2020-09-24

[21] **3,193,785**  
[13] A1

[51] **Int.Cl. A61K 36/38 (2006.01) A61K 36/58 (2006.01) A61P 17/00 (2006.01)**

[25] EN

[54] **HYPERICUM EXTRACT IN NEEM OIL FOR THE TREATMENT OF EPIDERMOLYSIS BULLOSA**

[54] **EXTRAIT DE MILLEPERTUIS DANS DE L'HUILE DE MARGOUSIER POUR LE TRAITEMENT DE L'EPIDERMOLYSE BULLEUSE**

[72] GORNI, MARIA, IT

[72] LATORRE, STEFANO, IT

[71] R.I.M.O.S. S.R.L., IT

[85] 2023-03-24

[86] 2021-09-20 (PCT/EP2021/075818)

[87] (WO2022/063726)

[30] IT (10202000022618) 2020-09-24

[21] **3,193,786**  
[13] A1

[51] **Int.Cl. B29B 7/24 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR MASTERBATCH FEED CONTROL BASED ON COLOR FEEDBACK**

[54] **SYSTEMES ET PROCEDES DE REGULATION D'ALIMENTATION EN MELANGE MAITRE EN FONCTION D'UN RETOUR D'INFORMATIONS DE COULEUR**

[72] REGELMAN, VADIM (DAN), US

[72] MARGALIT, ELI, US

[72] HOFMANN, DANIEL, US

[71] AMPACET CORPORATION, US

[85] 2023-03-24

[86] 2021-10-01 (PCT/US2021/053170)

[87] (WO2022/076260)

[30] US (17/066,023) 2020-10-08

[21] **3,193,789**  
[13] A1

[51] **Int.Cl. F25B 9/00 (2006.01) F25B 9/10 (2006.01) F25B 9/14 (2006.01) F25D 19/00 (2006.01)**

[25] EN

[54] **CRYOGENIC APPARATUS**

[54] **APPAREIL CRYOGENIQUE**

[72] KELLY, PAUL, GB

[72] GRAF, GERGO, GB

[71] ICEOXFORD LIMITED, GB

[85] 2023-03-24

[86] 2021-10-05 (PCT/GB2021/052565)

[87] (WO2022/074372)

[30] GB (2015839.0) 2020-10-06

[21] **3,193,794**  
[13] A1

[51] **Int.Cl. G01J 1/02 (2006.01) G01J 1/04 (2006.01) G01J 5/04 (2006.01) G01J 5/08 (2022.01) G06M 1/02 (2006.01)**

[25] FR

[54] **DEVICE FOR COUNTING OBJECTS**

[54] **DISPOSITIF DE COMPTAGE D'OBJETS**

[72] MILON, CHRISTOPHE, FR

[72] ROUGEOLLE, MATHIEU, FR

[71] ECO COMPTEUR, FR

[85] 2023-03-24

[86] 2021-09-22 (PCT/EP2021/076108)

[87] (WO2022/078723)

[30] FR (FR2010618) 2020-10-16

[21] **3,193,796**  
[13] A1

[51] **Int.Cl. H04B 1/04 (2006.01) H04B 10/588 (2013.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR ARTIFICIAL INTELLIGENCE DRIVEN DIGITAL PREDISTORTION IN TRANSMISSION SYSTEMS HAVING MULTIPLE IMPAIRMENTS**

[54] **APPAREIL ET PROCEDE DE PREDISTORSION NUMERIQUE COMMANDEE PAR INTELLIGENCE ARTIFICIELLE DANS DES SYSTEMES DE TRANSMISSION COMPORTANT DE MULTIPLES INSUFFISANCES**

[72] GHANNOUCHI, FADHEL, CA

[72] MOTAQI, AHMADREZA, CA

[72] HELAOUI, MOHAMED, CA

[71] GHANNOUCHI, FADHEL, CA

[71] MOTAQI, AHMADREZA, CA

[71] HELAOUI, MOHAMED, CA

[85] 2023-03-24

[86] 2022-02-09 (PCT/CA2022/050185)

[87] (WO2022/192986)

[30] US (63/161,912) 2021-03-16

[21] **3,193,797**  
[13] A1

[51] **Int.Cl. F16H 55/36 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR PULLEY WEAR MONITORING**

[54] **SYSTEME ET PROCEDE DE SURVEILLANCE D'USURE DE POULIE**

[72] WHEAT, JOHNATHAN NORMAN, US

[71] BRAIME GROUP PLC, GB

[85] 2023-03-24

[86] 2021-09-24 (PCT/GB2021/052496)

[87] (WO2022/064217)

[30] US (17/032,214) 2020-09-25

## PCT Applications Entering the National Phase

---

[21] **3,193,804**  
[13] A1

[51] **Int.Cl. E21B 21/10 (2006.01) E21B 21/12 (2006.01)**  
[25] EN  
[54] **KELLY VALVE**  
[54] **SOUPAPE DE TIGE D'ENTRAINEMENT**  
[72] STAPLES, TRIPP CAPPEL, US  
[72] MONTET, SHAUN PAUL, US  
[72] HINCAPIE, JUAN CARLOS, US  
[71] M & M INTERNATIONAL, LLC, US  
[85] 2023-03-24  
[86] 2021-09-29 (PCT/US2021/052514)  
[87] (WO2022/072398)  
[30] US (63/084,874) 2020-09-29

---

[21] **3,193,805**  
[13] A1

[51] **Int.Cl. A61B 5/157 (2006.01) G01N 27/32 (2006.01)**  
[25] EN  
[54] **APTAMER SENSORS WITH REFERENCE AND COUNTER VOLTAGE CONTROL**  
[54] **CAPTEURS APTAMERES AVEC COMMANDE DE REFERENCE ET DE CONTRE-TENSION**  
[72] HEIKENFELD, JASON, US  
[71] UNIVERSITY OF CINCINNATI, US  
[85] 2023-03-24  
[86] 2021-09-24 (PCT/US2021/051972)  
[87] (WO2022/067051)  
[30] US (63/083,023) 2020-09-24  
[30] US (63/215,605) 2021-06-28  
[30] US (63/197,669) 2021-06-07  
[30] US (63/150,675) 2021-02-18

---

[21] **3,193,806**  
[13] A1

[51] **Int.Cl. A61B 5/145 (2006.01) A61B 5/1455 (2006.01) G01N 27/00 (2006.01) G01N 27/327 (2006.01) G01N 27/333 (2006.01)**  
[25] EN  
[54] **CONTINUOUS APTAMER SENSING DEVICES WITH IMPROVED LONGEVITY BY GATING OF SAMPLE FLUID**  
[54] **DISPOSITIFS DE DETECTION CONTINUE D'APTAMERES A LONGEVITE AMELIOREE PAR DECLANCHEMENT D'UN FLUIDE ECHANTILLON**  
[72] HEIKENFELD, JASON, US  
[71] UNIVERSITY OF CINCINNATI, US  
[85] 2023-03-24  
[86] 2021-09-24 (PCT/US2021/051939)  
[87] (WO2022/072233)  
[30] US (63/085,456) 2020-09-30  
[30] US (63/150,921) 2021-02-18

---

[21] **3,193,807**  
[13] A1

[51] **Int.Cl. C10B 53/02 (2006.01) C10B 57/10 (2006.01) C10B 57/16 (2006.01) C10G 31/09 (2006.01) C10G 45/08 (2006.01) C10G 45/12 (2006.01) C10G 45/62 (2006.01) C10G 45/64 (2006.01) C10G 49/04 (2006.01) C10G 49/06 (2006.01) C10G 49/08 (2006.01)**  
[25] EN  
[54] **CONVERTING BIOMASS TO DIESEL**  
[54] **CONVERSION DE BIOMASSE EN DIESEL**  
[72] ATKINS, MARTIN, GB  
[71] ABUNDIA BIOMASS-TO-LIQUIDS LIMITED, GB  
[85] 2023-03-24  
[86] 2021-09-23 (PCT/EP2021/076262)  
[87] (WO2022/063930)  
[30] GB (2015244.3) 2020-09-25

---

[21] **3,193,808**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/145 (2006.01)**  
[25] EN  
[54] **SMALL VOLUME APTAMER SENSING WITHOUT SOLUTION IMPEDANCE OR ANALYTE DEPLETION**  
[54] **DETECTION PAR APTAMERES DANS UN PETIT VOLUME SANS IMPEDANCE DE LA SOLUTION OU APPAUVRISSEMENT EN ANALYTE**  
[72] HEIKENFELD, JASON, US  
[71] UNIVERSITY OF CINCINNATI, US  
[85] 2023-03-24  
[86] 2021-09-24 (PCT/US2021/051931)  
[87] (WO2022/067026)  
[30] US (63/083,031) 2020-09-24  
[30] US (63/197,674) 2021-06-07  
[30] US (63/150,717) 2021-02-18

---

[21] **3,193,809**  
[13] A1

[51] **Int.Cl. C12N 15/115 (2010.01) G01N 27/327 (2006.01) G01N 33/53 (2006.01)**  
[25] EN  
[54] **REDUCED ELECTRONIC SAMPLING OF APTAMER SENSORS**  
[54] **ECHANTILLONNAGE ELECTRONIQUE REDUIT DE CAPTEURS A BASE D'APTAMERE**  
[72] HEIKENFELD, JASON, US  
[72] FRIEDEL, MARK, US  
[72] DEBROSSE, MADELEINE, US  
[71] UNIVERSITY OF CINCINNATI, US  
[85] 2023-03-24  
[86] 2021-09-24 (PCT/US2021/051914)  
[87] (WO2022/067011)  
[30] US (63/083,023) 2020-09-24  
[30] US (63/215,605) 2021-06-28  
[30] US (63/150,675) 2021-02-18  
[30] US (63/197,669) 2021-06-07



## Demandes PCT entrant en phase nationale

[21] **3,193,810**  
[13] A1

[51] **Int.Cl. G01R 33/02 (2006.01) G01R 33/20 (2006.01) G01R 33/24 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR A MAGNETIC SENSOR ARRAY CIRCUIT**

[54] **SYSTEME ET PROCEDE POUR CIRCUIT DE RESEAU DE CAPTEURS MAGNETIQUES**

[72] LABANOWSKI, DOMINIC, US

[72] DEKA, NISHITA, US

[71] SONERA MAGNETICS, INC., US

[85] 2023-03-24

[86] 2021-09-30 (PCT/US2021/052774)

[87] (WO2022/072578)

[30] US (63/085,467) 2020-09-30

[21] **3,193,812**  
[13] A1

[51] **Int.Cl. C12N 15/115 (2010.01)**

[25] EN

[54] **HIGHLY CHEMICALLY STABLE APTAMER SENSORS**

[54] **CAPTEURS D'APTAMERES HAUTEMENT STABLES CHIMIQUEMENT**

[72] WHITE, RYAN JEFFREY, US

[72] HEIKENFELD, JASON, US

[71] UNIVERSITY OF CINCINNATI, US

[85] 2023-03-24

[86] 2021-09-24 (PCT/US2021/051869)

[87] (WO2022/066988)

[30] US (63/082,825) 2020-09-24

[30] US (63/150,663) 2021-02-18

[21] **3,193,813**  
[13] A1

[51] **Int.Cl. B60L 53/14 (2019.01) B60L 53/80 (2019.01)**

[25] EN

[54] **ROTARY TELESCOPIC BOOM LIFT**

[54] **ELEVATEUR A FLECHE TELESCOPIQUE ROTATIVE**

[72] MAGNI, RICCARDO, IT

[71] MAGNI REAL ESTATE S.R.L., IT

[85] 2023-03-24

[86] 2021-06-24 (PCT/EP2021/067403)

[87] (WO2022/073659)

[30] IT (10202000023365) 2020-10-05

[21] **3,193,815**  
[13] A1

[51] **Int.Cl. C10B 53/02 (2006.01) C10B 57/10 (2006.01) C10B 57/16 (2006.01) C10G 31/09 (2006.01) C10G 45/08 (2006.01) C10G 45/12 (2006.01) C10G 45/62 (2006.01) C10G 45/64 (2006.01) C10G 49/04 (2006.01) C10G 49/06 (2006.01) C10G 49/08 (2006.01) C10L 1/04 (2006.01) C10L 5/44 (2006.01) C10L 9/08 (2006.01)**

[25] EN

[54] **CONVERTING BIOMASS TO JET-FUEL**

[54] **CONVERSION DE BIOMASSE EN CARBUREACTEUR**

[72] ATKINS, MARTIN, GB

[71] ABUNDIA BIOMASS-TO-LIQUIDS LIMITED, GB

[85] 2023-03-24

[86] 2021-09-23 (PCT/EP2021/076253)

[87] (WO2022/063926)

[30] GB (2015245.0) 2020-09-25

[21] **3,193,816**  
[13] A1

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

[25] EN

[54] **ABRASION PROTECTED MICRONEEDLE AND INDWELLING ELECTROCHEMICAL, APTAMER-BASED SENSORS**

[54] **MICRO-AIGUILLE PROTEGEE CONTRE L'ABRASION ET CAPTEURS ELECTROCHIMIQUES A DEMEURE A BASE D'APTAMERES**

[72] HEIKENFELD, JASON, US

[71] UNIVERSITY OF CINCINNATI, US

[85] 2023-03-24

[86] 2021-09-24 (PCT/US2021/051865)

[87] (WO2022/066985)

[30] US (63/082,810) 2020-09-24

[30] US (63/150,634) 2021-02-18

[21] **3,193,818**  
[13] A1

[51] **Int.Cl. C09K 8/66 (2006.01) C09K 8/62 (2006.01) C09K 8/80 (2006.01) E21B 43/26 (2006.01) E21B 43/267 (2006.01)**

[25] EN

[54] **THE USE OF MICRO-PARTICLE AMORPHOUS SILICATE IN WELL STIMULATION**

[54] **UTILISATION DE SILICATE AMORPHE EN MICROPARTICULES POUR LA STIMULATION DES Puits**

[72] CAPLE, MICHAEL JOHN, US

[72] STABENAU, JOHN, US

[71] OIL FIELD PACKAGING LLC, US

[85] 2023-03-24

[86] 2020-09-25 (PCT/US2020/052599)

[87] (WO2021/062072)

[30] US (62/906,102) 2019-09-26

[30] US (17/024,706) 2020-09-18

[30] US (17/024,707) 2020-09-18

[21] **3,193,819**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) A61P 37/06 (2006.01) C07K 14/705 (2006.01)**

[25] EN

[54] **RETRO-INVERSO REGULATORY T CELL EPITOPES**

[54] **EPITOPES DE LYMPHOCYTES T REGULATEURS RETRO-INVERSO**

[72] DE GROOT, ANNE, US

[72] MARTIN, WILLIAM, US

[71] EPIVAX, INC., US

[85] 2023-03-24

[86] 2021-09-24 (PCT/US2021/052017)

[87] (WO2022/067076)

[30] US (63/083,392) 2020-09-25

## PCT Applications Entering the National Phase

[21] **3,193,820**  
[13] A1

[51] **Int.Cl. A01D 33/00 (2006.01) G01S 13/08 (2006.01)**  
[25] EN  
[54] **A CROP SCANNING SYSTEM, PARTS THEREOF, AND ASSOCIATED METHODS**  
[54] **SYSTEME DE BALAYAGE DE RECOLTE, PARTIES DE CELUI-CI ET PROCEDES ASSOCIES**  
[72] WRIGHT, ALISON, GB  
[72] GURURAJAN, VIDYANATH, GB  
[72] GREEN, RICHARD, GB  
[71] B-HIVE INNOVATIONS LIMITED, GB  
[85] 2023-03-24  
[86] 2021-09-24 (PCT/GB2021/052494)  
[87] (WO2022/064215)  
[30] GB (2015219.5) 2020-09-25

[21] **3,193,824**  
[13] A1

[51] **Int.Cl. A61K 45/06 (2006.01) A61P 25/14 (2006.01) A61P 25/18 (2006.01)**  
[25] EN  
[54] **RILUZOLE FOR THE TREATMENT OF ALZHEIMER'S DISEASE**  
[54] **RILUZOLE POUR LE TRAITEMENT DE LA MALADIE D'ALZHEIMER**  
[72] PEREIRA, ANA, US  
[71] ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI, US  
[85] 2023-03-24  
[86] 2021-10-04 (PCT/US2021/053403)  
[87] (WO2022/076321)  
[30] US (63/087,610) 2020-10-05  
[30] US (63/141,383) 2021-01-25

[21] **3,193,826**  
[13] A1

[51] **Int.Cl. C01B 32/914 (2017.01) C01B 32/921 (2017.01) C01B 32/949 (2017.01) C01B 32/956 (2017.01) C01B 32/991 (2017.01) C01F 7/02 (2022.01)**  
[25] EN  
[54] **ULTRAFAST FLASH JOULE HEATING SYNTHESIS METHODS AND SYSTEMS FOR PERFORMING SAME**  
[54] **PROCEDES DE SYNTHESE DE CHAUFFAGE PAR EFFET JOULE FLASH ULTRARAPIDE ET SYSTEMES POUR LA MISE EN OEUVRE DE CEUX-CI**  
[72] DENG, BING, US  
[72] TOUR, JAMES M., US  
[71] WILLIAM MARSH RICE UNIVERSITY, US  
[85] 2023-03-24  
[86] 2021-09-24 (PCT/US2021/052043)  
[87] (WO2022/067093)  
[30] US (63/082,592) 2020-09-24

[21] **3,193,827**  
[13] A1

[51] **Int.Cl. A45C 13/10 (2006.01) B60R 11/02 (2006.01) F16M 13/02 (2006.01) H01F 7/00 (2006.01) H01R 13/62 (2006.01) H04M 1/04 (2006.01)**  
[25] EN  
[54] **MAGNETIC GRIP ACCESSORY**  
[54] **ACCESSOIRE DE PREHENSION MAGNETIQUE**  
[72] CHIANG, RANDY YANG, US  
[72] FONG, LAWRENCE HERMAN, US  
[72] KORY, MICHAEL, US  
[72] CZARNECKI, DAVID, US  
[72] VON BARGEN, NICHOLAS, US  
[72] CHEN, YINJU, US  
[72] NAHUM, ALTAN, US  
[71] POPSOCKETS LLC, US  
[85] 2023-03-24  
[86] 2021-10-13 (PCT/US2021/054832)  
[87] (WO2022/081746)  
[30] US (63/091,300) 2020-10-13  
[30] US (63/091,297) 2020-10-13  
[30] US (63/091,302) 2020-10-13  
[30] US (63/091,908) 2020-10-14

[21] **3,193,828**  
[13] A1

[51] **Int.Cl. A45C 1/06 (2006.01) A45C 11/00 (2006.01) A45C 11/18 (2006.01) A45C 13/18 (2006.01) H04M 1/02 (2006.01) H05K 5/02 (2006.01)**  
[25] EN  
[54] **MAGNETIC WALLET ACCESSORY**  
[54] **ACCESSOIRE DE PORTEFEUILLE MAGNETIQUE**  
[72] CHIANG, RANDY YANG, US  
[72] FONG, LAWRENCE HERMAN, US  
[72] KORY, MICHAEL, US  
[72] CZARNECKI, DAVID, US  
[72] CANTOLI-ALVES, VANESSA, US  
[72] HEINRICH, ANDREW, US  
[72] ROACH, JOHN, US  
[71] POPSOCKETS LLC, US  
[85] 2023-03-24  
[86] 2021-10-13 (PCT/US2021/054833)  
[87] (WO2022/081747)  
[30] US (63/091,298) 2020-10-13

[21] **3,193,829**  
[13] A1

[51] **Int.Cl. A61K 9/14 (2006.01) A61K 9/20 (2006.01) A61K 9/48 (2006.01) A61K 31/506 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITIONS**  
[54] **COMPOSITIONS PHARMACEUTIQUES**  
[72] WANG, ZEREN, US  
[72] CHEN, SHUN, CN  
[72] PENG, JIQIAN, CN  
[72] SUN, LONGWEI, CN  
[72] ZHAO, YANXIN, CN  
[71] SHENZHEN PHARMACIN CO., LTD., CN  
[85] 2023-03-24  
[86] 2021-09-29 (PCT/CN2021/121695)  
[87] (WO2022/068876)  
[30] CN (PCT/CN2020/118608) 2020-09-29

## Demandes PCT entrant en phase nationale

[21] **3,193,830**  
[13] A1

[51] **Int.Cl. A61K 31/7088 (2006.01) C12N 15/113 (2010.01) A61K 31/7125 (2006.01) A61P 25/28 (2006.01)**

[25] EN

[54] **SNCA IRNA COMPOSITIONS AND METHODS OF USE THEREOF FOR TREATING OR PREVENTING SNCA-ASSOCIATED NEURODEGENERATIVE DISEASES**

[54] **COMPOSITIONS A BASE D'ARNI DE SNCA ET LEURS PROCEDES D'UTILISATION POUR TRAITER OU PREVENIR DES MALADIES NEURODEGENERATIVES ASSOCIEES A SNCA**

[72] SOUNDARAPANDIAN, MANGALA MEENAKSHI, US

[72] DANG, LAN THI HOANG, US

[72] MCININCH, JAMES D., US

[72] SCHLEGEL, MARK K., US

[72] CASTORENO, ADAM, US

[72] KAITTANIS, CHARALAMBOS, US

[71] ALNYLAM PHARMACEUTICALS, INC., US

[85] 2023-03-24

[86] 2021-09-29 (PCT/US2021/052580)

[87] (WO2022/072447)

[30] US (63/086,495) 2020-10-01

[21] **3,193,835**  
[13] A1

[51] **Int.Cl. A61B 5/145 (2006.01) A61B 5/1455 (2006.01) G01N 27/00 (2006.01) G01N 27/327 (2006.01) G01N 27/333 (2006.01)**

[25] EN

[54] **CONTINUOUS SENSING WITH ADAPTERS AND APTAMERS**

[54] **DETECTION CONTINUE AVEC ADAPTATEURS ET APTAMERES**

[72] HEIKENFELD, JASON, US

[71] UNIVERSITY OF CINCINNATI, US

[85] 2023-03-24

[86] 2021-09-24 (PCT/US2021/051879)

[87] (WO2022/066992)

[30] US (63/083,029) 2020-09-24

[30] US (63/082,834) 2020-09-24

[30] US (63/082,999) 2020-09-24

[30] US (63/150,677) 2021-02-18

[30] US (63/150,953) 2021-02-18

[30] US (63/150,986) 2021-02-18

[30] US (63/122,071) 2020-12-07

[30] US (63/150,894) 2021-02-18

[30] US (63/150,712) 2021-02-18

[30] US (63/122,076) 2020-12-07

[30] US (63/150,944) 2021-02-18

[30] US (63/197,674) 2021-06-07

[30] US (63/136,262) 2021-01-12

[30] US (63/150,667) 2021-02-18

[30] US (63/150,865) 2021-02-18

[30] US (63/150,856) 2021-02-18

[30] US (63/085,484) 2020-09-30

[21] **3,193,837**  
[13] A1

[51] **Int.Cl. C12N 15/115 (2010.01) G01N 21/01 (2006.01) G01N 21/77 (2006.01) G01N 33/50 (2006.01) G01N 33/543 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **CONTINUOUS OPTICAL APTAMER SENSORS**

[54] **CAPTEURS D'APTAMERES OPTIQUES CONTINUS**

[72] HEIKENFELD, JASON, US

[71] UNIVERSITY OF CINCINNATI, US

[85] 2023-03-24

[86] 2021-09-24 (PCT/US2021/051967)

[87] (WO2022/067046)

[30] US (63/083,029) 2020-09-24

[30] US (63/150,712) 2021-02-18

[30] US (63/122,071) 2020-12-07

[30] US (63/085,484) 2020-09-30

[30] US (63/122,076) 2020-12-07

[30] US (63/150,667) 2021-02-18

[30] US (63/136,262) 2021-01-12

[30] US (63/150,677) 2021-02-18

[30] US (63/150,865) 2021-02-18

[30] US (63/150,894) 2021-02-18

[30] US (63/150,944) 2021-02-18

[30] US (63/197,674) 2021-06-07

[30] US (63/150,856) 2021-02-18

[30] US (63/150,953) 2021-02-18

[30] US (63/150,986) 2021-02-18

[30] US (63/082,999) 2020-09-24

[30] US (63/082,834) 2020-09-24

[21] **3,193,833**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) C12N 9/40 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR TREATMENT OF FABRY DISEASE**

[54] **COMPOSITIONS ET METHODES DE TRAITEMENT DE LA MALADIE DE FABRY**

[72] HORDEAUX, JULIETTE, US

[71] THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, US

[85] 2023-03-24

[86] 2021-10-08 (PCT/US2021/054145)

[87] (WO2022/076803)

[30] US (63/089,850) 2020-10-09

[30] US (63/186,092) 2021-05-08

[30] US (63/146,286) 2021-02-05

[21] **3,193,836**  
[13] A1

[51] **Int.Cl. B60L 53/00 (2019.01) B60L 50/60 (2019.01) B60L 53/51 (2019.01)**

[25] EN

[54] **SOLAR CHARGE CONTROLLER ADAPTABLE FOR MULTIPLE SOLAR SUBSTRING CHEMISTRIES AND CONFIGURATIONS**

[54] **DISPOSITIF DE COMMANDE DE CHARGE SOLAIRE POUVANT ETRE ADAPTE A DE MULTIPLES COMPOSITIONS CHIMIQUES ET CONFIGURATIONS DE SOUS-CHAINE SOLAIRE**

[72] IRISH, LINDA, US

[71] OPTIVOLT LABS, INC., US

[85] 2023-03-24

[86] 2021-09-24 (PCT/US2021/051985)

[87] (WO2022/067059)

[30] US (63/083,817) 2020-09-25

[21] **3,193,838**  
[13] A1

[51] **Int.Cl. B29C 33/38 (2006.01) B29C 64/10 (2017.01) D21J 7/00 (2006.01)**

[25] EN

[54] **POROUS MOLDS FOR MOLDED FIBER PART MANUFACTURING AND METHOD FOR ADDITIVE MANUFACTURING OF SAME**

[54] **MOULES POREUX POUR FABRIQUER DES PARTIES EN FIBRES MOULEES ET LEUR PROCEDE DE FABRICATION ADDITIVE**

[72] GOLDBERG, JOSHUA GOULED, US

[72] SUAREZ, GEORGE DAVID, US

[72] LEEMAN, PAUL, US

[72] PALEY, DANIEL NOAH, US

[71] ZUME, INC., US

[85] 2023-03-24

[86] 2021-09-29 (PCT/US2021/052731)

[87] (WO2022/072555)

[30] US (63/084,736) 2020-09-29

## PCT Applications Entering the National Phase

[21] **3,193,840**  
[13] A1

[51] **Int.Cl. H04W 24/02 (2009.01)**  
[25] EN  
[54] **COMMUNICATION METHOD, APPARATUS AND SYSTEM**  
[54] **PROCEDE, APPAREIL ET SYSTEME DE COMMUNICATION**  
[72] HUANG, XIETIAN, CN  
[72] QIN, DONGRUN, CN  
[72] WANG, CHUIJIE, CN  
[72] XIN, YANG, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2023-03-24  
[86] 2021-04-02 (PCT/CN2021/085428)  
[87] (WO2022/062362)  
[30] CN (PCT/CN2020/117940) 2020-09-25

[21] **3,193,843**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61K 39/215 (2006.01) A61P 31/14 (2006.01)**  
[25] EN  
[54] **MULTIVALENT CARRIERS AND RELATED VACCINE COMPOSITIONS**  
[54] **SUPPORTS POLYVALENTS ET COMPOSITIONS VACCINALES ASSOCIEES**  
[72] COHEN, ALEXANDER A., US  
[72] BJORKMAN, PAMELA J., US  
[71] CALIFORNIA INSTITUTE OF TECHNOLOGY, US  
[85] 2023-03-24  
[86] 2021-11-10 (PCT/US2021/058856)  
[87] (WO2022/103891)  
[30] US (63/112,495) 2020-11-11

[21] **3,193,844**  
[13] A1

[51] **Int.Cl. B01D 46/10 (2006.01) A62B 18/02 (2006.01) A62B 23/00 (2006.01)**  
[25] EN  
[54] **AIR FILTER**  
[54] **FILTRE A AIR**  
[72] CARTIER, RICHARD, CA  
[71] CARTIER, RICHARD, CA  
[85] 2023-03-24  
[86] 2021-09-24 (PCT/CA2021/051337)  
[87] (WO2022/061470)  
[30] US (63/082,673) 2020-09-24

[21] **3,193,845**  
[13] A1

[51] **Int.Cl. C12N 1/19 (2006.01) C12N 9/10 (2006.01) C12N 9/48 (2006.01) C12N 9/50 (2006.01) C12P 21/02 (2006.01)**  
[25] EN  
[54] **RECOMBINANT YEAST FOR THE PRODUCTION OF OLIGOPEPTIDE**  
[54] **LEVURE RECOMBINANTE DESTINEE A LA PRODUCTION D'OLIGOPEPTIDES**  
[72] DALY, SIMONA, IT  
[72] GALLIANI, STEFANO, IT  
[72] BUSIELLO, IMMACOLATA, CH  
[72] GRIGIS, MATTEO, CH  
[72] TAGLIANI, AURO ROBERTO, IT  
[71] LESAFFRE ET COMPAGNIE, FR  
[85] 2023-03-24  
[86] 2021-09-27 (PCT/EP2021/076468)  
[87] (WO2022/064027)  
[30] IT (10202000022846) 2020-09-28

[21] **3,193,847**  
[13] A1

[51] **Int.Cl. B64D 27/24 (2006.01) B64D 35/08 (2006.01) B64D 27/02 (2006.01)**  
[25] FR  
[54] **METHOD FOR DETERMINING AT LEAST ONE POWER LIMIT OF A HYBRID DRIVE TRAIN FOR A TRANSPORT VEHICLE, IN PARTICULAR AN AIRCRAFT**  
[54] **PROCEDE DE DETERMINATION D'AU MOINS UNE LIMITE DE PUISSANCE D'UNE CHAINE PROPULSIVE HYBRIDE POUR VEHICULE DE TRANSPORT, EN PARTICULIER, UN AERONEF**  
[72] LEMAY, DAVID BERNARD MARTIN, FR  
[72] MARIN, JEAN-PHILIPPE JACQUES, FR  
[71] SAFRAN HELICOPTER ENGINES, FR  
[85] 2023-03-24  
[86] 2021-11-08 (PCT/EP2021/080910)  
[87] (WO2022/101129)  
[30] FR (FR2011522) 2020-11-10

[21] **3,193,848**  
[13] A1

[51] **Int.Cl. G06N 10/00 (2022.01)**  
[25] EN  
[54] **A QUANTUM PROCESSING SYSTEM**  
[54] **SYSTEME DE TRAITEMENT QUANTIQUE**  
[72] SIMMONS, MICHELLE YVONNE, AU  
[72] HOUSE, MATTHEW GREGORY, AU  
[72] GORMAN, SAMUEL KEITH, AU  
[72] HOGG, MARK RICHARD, AU  
[71] SILICON QUANTUM COMPUTING PTY LIMITED, AU  
[85] 2023-03-24  
[86] 2021-11-04 (PCT/AU2021/051300)  
[87] (WO2022/094660)  
[30] AU (2020904014) 2020-11-04

[21] **3,193,849**  
[13] A1

[51] **Int.Cl. G06Q 30/06 (2023.01) G06Q 50/08 (2012.01)**  
[25] FR  
[54] **METHODS AND SYSTEMS FOR MANAGING A VEHICLE FLEET**  
[54] **PROCEDES ET SYSTEMES DE GESTION D'UNE FLOTTE DE VEHICULES**  
[72] THEVENON, LUC, FR  
[72] HOURNE, ROMAIN, FR  
[72] SILVEIRA, CHRISTOPHE, FR  
[71] HAULOTTE GROUP, FR  
[85] 2023-03-24  
[86] 2021-10-07 (PCT/EP2021/077765)  
[87] (WO2022/074147)  
[30] FR (2010287) 2020-10-08

## Demandes PCT entrant en phase nationale

[21] **3,193,850**  
[13] A1

[51] **Int.Cl. D06C 13/06 (2006.01) D06H 7/02 (2006.01) D06H 7/14 (2006.01)**

[25] EN

[54] **CUTTING DEVICE AND METHOD FOR SEVERING NON-WOVEN-IN SECTIONS OF THREADS OR FILAMENTS WOVEN IN TEXTILE RIBBONS**

[54] **DISPOSITIF DE COUPE ET PROCEDE DE SECTIONNEMENT DE SECTIONS NON TISSEES DE FILS OU DE FILAMENTS TISSES DANS DES RUBANS TEXTILES**

[72] BUHLER, STEPHAN, CH

[72] BOLTERS DORF, DIRK, DE

[71] TEXTRACE AG, CH

[85] 2023-03-24

[86] 2020-09-29 (PCT/EP2020/077188)

[87] (WO2022/069015)

[21] **3,193,852**  
[13] A1

[51] **Int.Cl. F23G 7/06 (2006.01) F23G 5/14 (2006.01) F23G 5/38 (2006.01) F23M 3/00 (2006.01)**

[25] EN

[54] **DEVICE FOR ENHANCING REACTION KINETICS FOR INCINERATION PROCESS**

[54] **DISPOSITIF POUR AMELIORER LA CINETIQUE DE REACTION D'INCINERATION**

[72] NASATO, ELMO, CA

[72] ABUKHDEIR, NASSER MOHIEDDIN, CA

[71] INDUSTRIAL CERAMICS LIMITED, CA

[85] 2023-03-24

[86] 2021-09-27 (PCT/CA2021/051342)

[87] (WO2022/061473)

[30] US (63/083,683) 2020-09-25

[21] **3,193,853**  
[13] A1

[51] **Int.Cl. B01J 8/02 (2006.01) B01J 8/06 (2006.01)**

[25] FR

[54] **FIXED-BED TUBULAR REACTOR**

[54] **REACTEUR TUBULAIRE A LIT FIXE**

[72] CHAISE, ALBIN, FR

[72] BENG AOUE R, ALAIN, FR

[72] DUCROS, FREDERIC, FR

[71] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES, FR

[85] 2023-03-24

[86] 2021-09-22 (PCT/FR2021/051624)

[87] (WO2022/069816)

[30] FR (FR2009861) 2020-09-29

[21] **3,193,855**  
[13] A1

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

[25] EN

[54] **PLK1 POLO BOX DOMAIN INHIBITORS AND METHOD OF TREATING CANCER**

[54] **INHIBITEUR DU DOMAINE POLO-BOX PLK1 ET METHODE DE TRAITEMENT DU CANCER**

[72] LEE, KYUNG S., US

[72] JACOBSON, KENNETH A., US

[72] ALVEREZ, CELESTE N., US

[72] PARK, JUNG-EUN, US

[72] OLIVA, PAOLA, US

[72] LEE, HOBIN, US

[72] PONGORNE KIRSCH, KLARA, US

[71] THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES, US

[85] 2023-03-24

[86] 2021-09-24 (PCT/US2021/052054)

[87] (WO2022/067100)

[30] US (63/082,813) 2020-09-24

[21] **3,193,856**  
[13] A1

[51] **Int.Cl. A61K 31/05 (2006.01) A61K 47/62 (2017.01) A61P 35/00 (2006.01)**

[25] EN

[54] **CANNABIS PLANT DERIVED EXTRACELLULAR VESICLES AND THERAPEUTIC METHODS USING THE SAME**

[54] **VESICULES EXTRACELLULAIRES DERIVEES DE PLANTS DE CANNABIS ET METHODES THERAPEUTIQUES UTILISANT CELLES-CI**

[72] AZARI, HASSAN, US

[72] SCHMITTGEN, THOMAS D., US

[72] NASSIRI KOOPAEI, NASSER, US

[72] REYNOLDS, BRENT, US

[71] UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INCORPORATED, US

[85] 2023-03-24

[86] 2021-09-28 (PCT/US2021/052284)

[87] (WO2022/067223)

[30] US (63/084,193) 2020-09-28

[21] **3,193,857**  
[13] A1

[51] **Int.Cl. B01J 8/02 (2006.01) B01J 8/06 (2006.01)**

[25] FR

[54] **TUBULAR FIXED-BED REACTOR**

[54] **REACTEUR TUBULAIRE A LIT FIXE**

[72] CHAISE, ALBIN, FR

[72] BENG AOUE R, ALAIN, FR

[72] DUCROS, FREDERIC, FR

[71] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES, FR

[85] 2023-03-24

[86] 2021-09-22 (PCT/FR2021/051625)

[87] (WO2022/069817)

[30] FR (FR2009864) 2020-09-29

## PCT Applications Entering the National Phase

[21] **3,193,858**  
[13] A1

[51] **Int.Cl. H01M 50/342 (2021.01)**  
[25] EN  
[54] **PRESSURE RELIEF APPARATUS, BATTERY CELL, BATTERY, AND ELECTRICAL DEVICE**

[54]  
[72] GU, MINGGUANG, CN  
[72] CHEN, XIAOBO, CN  
[72] WANG, XUEHUI, CN  
[72] HAO, YUCANG, CN  
[72] GAO, XIONGWEL, CN  
[71] CONTEMPORARY AMPEREX TECHNOLOGY CO., LIMITED, CN  
[85] 2023-03-24  
[86] 2021-09-28 (PCT/CN2021/121474)  
[87] (3193858)

[21] **3,193,859**  
[13] A1

[51] **Int.Cl. B29C 65/34 (2006.01)**  
[25] FR  
[54] **SYSTEM AND METHOD FOR JOINING HIGH-PERFORMANCE THERMOPLASTIC COMPONENTS**

[54] **SYSTEME ET PROCEDE DE SOLIDARISATION DE PIECES THERMOPLASTIQUES HAUTES PERFORMANCES**

[72] DUBREUIL, LAURENT, FR  
[71] AIRBUS ATLANTIC, FR  
[85] 2023-03-24  
[86] 2021-12-09 (PCT/EP2021/084926)  
[87] (WO2022/122881)  
[30] FR (FR2013043) 2020-12-11

[21] **3,193,861**  
[13] A1

[51] **Int.Cl. D04B 1/12 (2006.01) A61F 13/537 (2006.01) D04B 21/08 (2006.01)**  
[25] EN  
[54] **REUSABLE MOISTURE-REGULATING TEXTILE SHEET**

[54] **FEUILLE TEXTILE REUTILISABLE REGULANT L'HUMIDITE**

[72] BENDT, ELLEN, DE  
[72] RICHTER, CHRISTOPH, DE  
[72] CHISI, TOWELA, DE  
[72] BUSCHKENS-GOTZ, ANN-KATHRIN, DE  
[71] MEDICAL SYSTEM PROTECT GMBH, DE  
[85] 2023-03-24  
[86] 2021-10-04 (PCT/IB2021/022222)  
[87] (WO2022/069950)  
[30] DE (10 2020 006 022.6) 2020-10-01

[21] **3,193,862**  
[13] A1

[51] **Int.Cl. A61K 38/00 (2006.01) A61P 17/06 (2006.01) A61P 19/02 (2006.01) A61P 21/00 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01) C07K 14/00 (2006.01) C07K 16/18 (2006.01) C12N 15/62 (2006.01)**

[25] EN  
[54] **RECOMBINANT FUSION PROTEINS COMPRISING INTERLEUKIN- 18-BINDING PROTEIN AND ANTIGEN BINDING FRAGMENT TO SERUM ALBUMIN, AND COMPOSITIONS AND USES THEREOF**

[54] **PROTEINES DE FUSION RECOMBINANTES COMPRENANT UNE PROTEINE DE LIAISON A L'INTERLEUKINE 18 ET UN FRAGMENT DE LIAISON A L'ANTIGENE CONTRE L'ALBUMINE SERIQUE, COMPOSITIONS ET UTILISATIONS ASSOCIEE**

[72] CHA, SANG HOON, KR  
[71] APRILBIO CO., LTD., KR  
[85] 2023-03-24  
[86] 2021-09-29 (PCT/IB2021/058964)  
[87] (WO2022/070112)  
[30] KR (10-2020-0127395) 2020-09-29

[21] **3,193,864**  
[13] A1

[51] **Int.Cl. G06Q 10/04 (2023.01) G06Q 50/06 (2012.01)**

[25] EN  
[54] **METHOD FOR EVALUATING AN ENERGY EFFICIENCY OF A SITE**

[54] **PROCEDE D'EVALUATION DE L'EFFICACITE ENERGETIQUE D'UN SITE**

[72] LENDERS, FELIX, DE  
[72] GUTERMUTH, GEORG, DE  
[72] PRIMAS, BERNHARD, DE  
[71] ABB SCHWEIZ AG, CH  
[85] 2023-03-24  
[86] 2021-09-28 (PCT/EP2021/076578)  
[87] (WO2022/073798)  
[30] EP (20200081.6) 2020-10-05

[21] **3,193,865**  
[13] A1

[51] **Int.Cl. C07D 487/04 (2006.01)**  
[25] EN  
[54] **INDAZOLES AS HEMATOPOIETIC PROGENITOR KINASE 1 (HPK1) INHIBITORS AND METHODS OF USING SAME**

[54] **INDAZOLES EN TANT QU'INHIBITEURS DE KINASE 1 PROGENITRICE HEMATOPOIETIQUE (HPK1) ET LEURS PROCEDES D'UTILISATION**

[72] LEE, JINHWA, KR  
[72] JO, SUYEON, KR  
[72] LIM, KEONSEUNG, KR  
[72] PARK, A YEONG, KR  
[72] GORAKSHNATH, GADHE CHANGDEV, KR  
[72] NAM, HWAJUNG, KR  
[72] JEON, YEONGUK, KR  
[72] HWANG, YEJIN, KR  
[72] KIM, JAE EUN, KR  
[72] KIM, MISOOON, KR  
[72] LIM, SEUNG MOOK, KR  
[71] 1ST BIOTHERAPEUTICS, INC., KR  
[85] 2023-03-24  
[86] 2021-09-27 (PCT/IB2021/058794)  
[87] (WO2022/064458)  
[30] US (63/084,059) 2020-09-28

[21] **3,193,866**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) C12N 9/02 (2006.01) C12N 15/86 (2006.01)**

[25] EN  
[54] **HUMAN PAH EXPRESSION CASSETTE FOR TREATMENT OF PKU BY LIVER-DIRECTED GENE REPLACEMENT THERAPY**

[54] **CASSETTE D'EXPRESSION DE PAH HUMAIN POUR LE TRAITEMENT DE LA PKU PAR UNE THERAPIE DE REMPLACEMENT DE GENE DIRIGEE SUR LE FOIE**

[72] KYOSTIO-MOORE, SIRKKA R.M., US  
[71] GENZYME CORPORATION, US  
[85] 2023-03-24  
[86] 2021-09-30 (PCT/US2021/052913)  
[87] (WO2022/072657)  
[30] US (63/086,537) 2020-10-01  
[30] US (63/121,797) 2020-12-04

## Demandes PCT entrant en phase nationale

[21] **3,193,868**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) C12N 15/10 (2006.01) C12N 15/11 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR INHIBITING THE EXPRESSION OF MULTIPLE GENES**

[54] **COMPOSITIONS ET METHODES POUR INHIBER L'EXPRESSION DE MULTIPLES GENES**

[72] BEECH, LAUREN MARIE, US  
[72] SMITH, JESSE JEROME, US  
[72] KARNIK, RAHUL, US  
[72] GOSS, KENDRICK ALAN, US  
[72] SCHEIDEGGER, ADAM WALTER, US  
[72] KENNEDY, JODI MICHELLE, US  
[72] FARELLI, JEREMIAH DALE, US  
[72] BELAGHZAL, HOUDA, US  
[72] NGUYEN, LAURA ANH, US  
[72] O'DONNELL, CHARLES W., US  
[71] FLAGSHIP PIONEERING INNOVATIONS V, INC., US  
[85] 2023-03-24  
[86] 2021-09-29 (PCT/US2021/052720)  
[87] (WO2022/072546)  
[30] US (63/085,013) 2020-09-29  
[30] US (63/216,487) 2021-06-29

[21] **3,193,869**  
[13] A1

[51] **Int.Cl. G10L 19/00 (2013.01) G10L 19/008 (2013.01) G10L 19/02 (2013.01)**

[25] EN

[54] **METHOD AND DEVICE FOR AUDIO BAND-WIDTH DETECTION AND AUDIO BAND-WIDTH SWITCHING IN AN AUDIO CODEC**

[54] **PROCEDE ET DISPOSITIF DE DETECTION DE LARGEUR DE BANDE EN AUDIOFREQUENCE ET DE COMMUTATION DE LARGEUR DE BANDE EN AUDIOFREQUENCE DANS UN CODEC AUDIO**

[72] EKSLER, VACLAV, CZ  
[71] VOICEAGE CORPORATION, CA  
[85] 2023-03-24  
[86] 2021-10-14 (PCT/CA2021/051442)  
[87] (WO2022/077110)  
[30] US (63/092,178) 2020-10-15

[21] **3,193,870**  
[13] A1

[51] **Int.Cl. A01K 11/00 (2006.01) G01K 1/024 (2021.01) A01K 29/00 (2006.01) A61B 5/00 (2006.01) A61B 5/01 (2006.01) G01K 3/00 (2006.01) G08B 21/18 (2006.01)**

[25] EN

[54] **LIVESTOCK HEALTH MONITORING SYSTEMS AND METHODS OF USE**

[54] **SYSTEMES DE SURVEILLANCE DE LA SANTE DU BETAIL ET PROCEDES D'UTILISATION**

[72] GREER, JOHN M., US  
[72] CRIDER, JR. RICHARD ARELIN, US  
[72] FULTS, ALVIN C, US  
[71] FEVERTAGS, LLC, US  
[85] 2023-03-24  
[86] 2021-09-23 (PCT/US2021/051662)  
[87] (WO2022/066846)  
[30] US (63/083,380) 2020-09-25  
[30] US (17/066,606) 2020-10-09

[21] **3,193,872**  
[13] A1

[51] **Int.Cl. G16H 10/40 (2018.01) G16H 50/20 (2018.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR INTERPRETING A DIAGNOSTIC TEST RESULT**

[54] **PROCEDES ET SYSTEMES D'INTERPRETATION DE RESULTAT DE TEST DE DIAGNOSTIC**

[72] GRISLEY, EVAN ROBERT, US  
[72] HELM, ANDREA LAURA, US  
[72] HIBBETTS, KRISTEN LYNN, US  
[72] VANDEVENTER, SARA LYN, US  
[72] WHITE, RICHARDSON CHARLES JR., US  
[71] IDEXX LABORATORIES, INC., US  
[85] 2023-03-24  
[86] 2021-09-28 (PCT/US2021/052394)  
[87] (WO2022/072342)  
[30] US (63/084,666) 2020-09-29  
[30] US (63/185,749) 2021-05-07

[21] **3,193,873**  
[13] A1

[51] **Int.Cl. E01B 1/00 (2006.01) E01B 3/46 (2006.01)**

[25] EN

[54] **RESILIENT SOLE AND METHOD FOR MANUFACTURING SAME**

[54] **SEMELLE ELASTIQUE ET SA METHODE DE FABRICATION**

[72] PRUD'HOMME, OLIVIER, BE  
[72] SEG HAR, SAID, FR  
[71] RUBBERGREEN INDUSTRIE, BE  
[85] 2023-03-24  
[86] 2021-09-29 (PCT/EP2021/076739)  
[87] (WO2022/069512)  
[30] BE (BE2020/5684) 2020-10-02

[21] **3,193,874**  
[13] A1

[51] **Int.Cl. B01J 12/00 (2006.01) B01J 19/12 (2006.01)**

[25] EN

[54] **THERMAL REACTOR COMPRISING A GAS PERMEABLE CAGE ARRANGED TO INFLUENCE A FLOW PATH OF GAS**

[54] **REACTEUR THERMIQUE COMPRENANT UNE CAGE PERMEABLE AUX GAZ AGENCEE POUR INFLUENCER UN TRAJET D'ECOULEMENT DE GAZ**

[72] FORSBERG, GUSTAF, SE  
[72] BAELING, PETER, SE  
[72] ANDERSSON, RONNIE, SE  
[71] NITROCAPT AB, SE  
[85] 2023-03-24  
[86] 2021-11-22 (PCT/SE2021/051160)  
[87] (WO2022/108514)  
[30] SE (2051365-1) 2020-11-23

## PCT Applications Entering the National Phase

---

[21] **3,193,875**  
[13] A1

[51] **Int.Cl. H01L 31/0224 (2006.01) H01M 10/052 (2010.01) H01L 31/053 (2014.01) H02S 40/38 (2014.01) H01L 31/04 (2014.01) H01M 14/00 (2006.01)**

[25] EN

[54] **PHOTO RECHARGEABLE ELECTROCHEMICAL ENERGY STORAGE DEVICE**

[54] **DISPOSITIF DE STOCKAGE D'ENERGIE ELECTROCHIMIQUE PHOTO-RECHARGEABLE**

[72] LIM, TAEHOON, US

[72] LEE, SEUNGJIN, US

[72] MARTINEZ-MORALES, ALFREDO A., US

[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US

[85] 2023-03-24

[86] 2021-10-08 (PCT/US2021/054253)

[87] (WO2022/108684)

[30] US (63/089,196) 2020-10-08

---

[21] **3,193,876**  
[13] A1

[51] **Int.Cl. C08C 19/25 (2006.01) C08C 19/22 (2006.01) C08C 19/44 (2006.01) C08F 136/06 (2006.01) C08K 3/36 (2006.01) C08K 5/548 (2006.01) C08L 9/06 (2006.01) C08L 57/02 (2006.01)**

[25] FR

[54] **RUBBER COMPOSITION FOR A TYRE TREAD**

[54] **COMPOSITION DE CAOUTCHOUC DE BANDE DE ROULEMENT DE PNEUMATIQUE**

[72] VOISIN, FLORIANDRE, FR

[71] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR

[85] 2023-03-24

[86] 2021-11-05 (PCT/FR2021/051954)

[87] (WO2022/096835)

[30] FR (2011465) 2020-11-09

---

[21] **3,193,877**  
[13] A1

[51] **Int.Cl. E06B 3/677 (2006.01) E06B 3/673 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR FILLING INSULATING GLASS WITH GAS**

[54] **APPAREIL ET PROCEDE DE REMPLISSAGE DE VERRE ISOLANT AVEC DU GAZ**

[72] VIANELLO, FORTUNATO, IT

[72] VIANELLO, RICCARDO, IT

[71] FOREL S.P.A., IT

[85] 2023-03-24

[86] 2021-10-15 (PCT/IB2021/059504)

[87] (WO2022/079683)

[30] IT (102020000024367) 2020-10-15

---

[21] **3,193,878**  
[13] A1

[51] **Int.Cl. C12Q 1/689 (2018.01)**

[25] EN

[54] **MULTIPLEX DETECTION AND TYPING OF VIBRIO CHOLERAE**

[54] **DETECTION MULTIPLEX ET TYPAGE DE VIBRIO CHOLERAE**

[72] ZHANG, QIUFENG, US

[72] FU, MANLIANG, US

[72] ZHANG, CHUANHUI, US

[71] BECTON, DICKINSON AND COMPANY, US

[85] 2023-03-24

[86] 2021-11-04 (PCT/CN2021/128618)

[87] (WO2022/095921)

[30] CN (PCT/CN2020/126682) 2020-11-05

---

[21] **3,193,879**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) A61K 45/06 (2006.01) A61P 31/12 (2006.01) C07F 9/6561 (2006.01) C07H 19/00 (2006.01)**

[25] EN

[54] **PHOSPHOLIPID COMPOUNDS AND USES THEREOF**

[54] **COMPOSES PHOSPHOLIPIDIQUES ET LEURS UTILISATIONS**

[72] LAZERWITH, SCOTT E., US

[72] MEDLEY, JONATHAN WILLIAM, US

[72] MORGANELLI, PHILIP A., US

[72] STRATTON, THOMAS P., US

[72] WANG, PEIYUAN, US

[71] GILEAD SCIENCES, INC., US

[85] 2023-03-24

[86] 2021-10-15 (PCT/US2021/055183)

[87] (WO2022/081973)

[30] US (63/093,037) 2020-10-16

[30] US (63/151,456) 2021-02-19

---

[21] **3,193,880**  
[13] A1

[51] **Int.Cl. G03H 1/16 (2006.01) G01N 21/45 (2006.01) G01N 21/956 (2006.01)**

[25] EN

[54] **APPARATUSES AND METHODS FOR EXAMINING THE MOVEMENT OF CONSTITUENTS WITHIN TISSUE CELLS**

[54] **APPAREILS ET METHODES D'EXAMEN DU MOUVEMENT DE CONSTITUANTS A L'INTERIEUR DE CELLULES TISSULAIRES**

[72] NOLTE, DAVID D., US

[72] JEONG, KWAN, KR

[72] LOPERA, MARIA JOSEF, CO

[72] TUREK, JOHN J., US

[71] PURDUE RESEARCH FOUNDATION, US

[71] NOLTE, DAVID D., US

[71] JEONG, KWAN, KR

[71] LOPERA, MARIA JOSEF, CO

[71] TUREK, JOHN J., US

[85] 2023-03-24

[86] 2021-11-10 (PCT/US2021/072340)

[87] (WO2022/104347)

[30] US (63/111,635) 2020-11-10



## Demandes PCT entrant en phase nationale

[21] **3,193,882**  
[13] A1

[51] **Int.Cl. G06K 7/10 (2006.01) G06Q 10/00 (2023.01)**

[25] EN

[54] **SYSTEM, METHOD, AND DEVICE FOR MEDICAL WASTE TRACKING**

[54] **SYSTEME, PROCEDE ET DISPOSITIF DE SUIVI DE DECHETS MEDICAUX**

[72] OSHINSKI, MATTHEW, US

[72] ROTHENBERG, ASHLEY RACHEL, US

[71] BECTON, DICKINSON AND COMPANY, US

[85] 2023-03-24

[86] 2021-09-29 (PCT/US2021/052519)

[87] (WO2022/072400)

[30] US (63/084,619) 2020-09-29

[21] **3,193,883**  
[13] A1

[51] **Int.Cl. A61M 5/14 (2006.01) A61M 39/22 (2006.01) A61M 39/24 (2006.01)**

[25] EN

[54] **CONVERGENT-DIVERGENT DRIP CHAMBER INTEGRATED WITH FLOATING VALVE MEMBER**

[54] **CHAMBRE DE GOUTTE-A-GOUTTE CONVERGENTE-DIVERGENTE INTEGREE A UN ELEMENT DE VANNE FLOTTANT**

[72] MENON, KANJIMPUREDATHIL MURALIKRISHNA, IN

[72] AGARWAL, AMAN, IN

[72] PUTHUKKAD, RAHUL, IN

[72] MURALI, ARJUN, IN

[71] CAREFUSION 303, INC., US

[85] 2023-03-24

[86] 2021-10-28 (PCT/US2021/057034)

[87] (WO2022/094067)

[30] US (17/085,803) 2020-10-30

[21] **3,193,884**  
[13] A1

[51] **Int.Cl. H02J 7/00 (2006.01) H02J 50/20 (2016.01) H02J 7/02 (2016.01)**

[25] EN

[54] **SYSTEMS, DEVICES, AND/OR METHODS FOR WIRELESS RECHARGING AND/OR POWERING ELECTRONICS ON A WIRELESS ELECTRICAL GRID LOCAL AREA NETWORK**

[54] **SYSTEMES, DISPOSITIFS ET/OU PROCEDES DE RECHARGE SANS FIL ET/OU D'ALIMENTATION SUR UN RESEAU LOCAL DE RESEAU ELECTRIQUE SANS FIL**

[72] GLOVER, AHMAD, US

[72] GLOVER, AHMAD, US

[71] GLOVER, AHMAD, US

[85] 2023-03-24

[86] 2021-09-27 (PCT/US2021/052223)

[87] (WO2022/067193)

[30] US (17/033,824) 2020-09-27

[21] **3,193,885**  
[13] A1

[51] **Int.Cl. C01B 21/20 (2006.01) C01B 21/30 (2006.01) C01B 21/38 (2006.01)**

[25] EN

[54] **METHOD FOR THE SYNTHESIS OF NITROGEN OXIDES AND NITRIC ACID IN A THERMAL REACTOR TECHNICAL FIELD**

[54] **METHODE DE SYNTHESE D'OXYDES D'AZOTE ET D'ACIDE NITRIQUE DANS UN REACTEUR THERMIQUE**

[72] FORSBERG, GUSTAF, SE

[72] BAELING, PETER, SE

[72] VAN ROOIJ, GERARD JACOBUS, NL

[71] NITROCAPT AB, SE

[85] 2023-03-24

[86] 2022-01-18 (PCT/SE2022/050051)

[87] (WO2022/159018)

[30] SE (2150049-1) 2021-01-19

[21] **3,193,886**  
[13] A1

[51] **Int.Cl. G16H 10/40 (2018.01) G16H 50/20 (2018.01) G06N 20/00 (2019.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR GENERATING AUGMENTED COMPLETE BLOOD COUNT REPORTS**

[54] **SYSTEME ET PROCEDE POUR GENERER DES RAPPORTS DE FORMULE SANGUINE COMPLETE AUGMENTEE**

[72] TETREAULT, NICOLAS, NL

[72] BARBEAU, SAMUEL, CA

[71] BIRON HEALTH GROUP INC., CA

[85] 2023-03-24

[86] 2021-09-28 (PCT/CA2021/051347)

[87] (WO2022/067426)

[30] US (63/084,724) 2020-09-29

[21] **3,193,888**  
[13] A1

[51] **Int.Cl. C12Q 1/689 (2018.01)**

[25] EN

[54] **RAPID IDENTIFICATION AND TYPING OF VIBRIO PARAHAEMOLYTICUS**

[54] **IDENTIFICATION ET TYPAGE RAPIDES DE VIBRIO PARAHAEMOLYTICUS**

[72] ZHANG, QIUFENG, US

[72] ZHANG, CHUANHUI, US

[72] TURNG, BEEN-FOO, US

[71] BECTON, DICKINSON AND COMPANY, US

[85] 2023-03-24

[86] 2021-11-04 (PCT/CN2021/128620)

[87] (WO2022/095922)

[30] CN (PCT/CN2020/126679) 2020-11-05

[21] **3,193,890**  
[13] A1

[51] **Int.Cl. E21B 31/18 (2006.01) E21B 10/60 (2006.01) E21B 17/042 (2006.01) E21B 31/20 (2006.01)**

[25] EN

[54] **OVERSHOT ASSEMBLY**

[54] **ENSEMBLE CLOCHE DE REPECHAGE**

[72] DRENTH, CHRISTOPHER L., CA

[72] PRIMEVERT, VINCENT, CA

[72] BRUBACHER, ADRIAN, CA

[71] LONGYEAR TM, INC., US

[85] 2023-03-24

[86] 2021-09-30 (PCT/US2021/052796)

[87] (WO2022/072591)

[30] US (63/085,572) 2020-09-30

[30] US (63/235,951) 2021-08-23

## PCT Applications Entering the National Phase

---

[21] **3,193,891**  
[13] A1

[51] **Int.Cl. C04B 11/05 (2006.01) C04B 11/26 (2006.01) C04B 18/12 (2006.01) C04B 28/14 (2006.01) C04B 28/16 (2006.01)**

[25] EN

[54] **METHOD FOR THE TREATMENT OF WASTE MATERIAL, ARRANGEMENT AND CONSOLIDATING BINDER**

[54] **PROCEDE DE TRAITEMENT DE DECHETS, AGENCEMENT ET LIANT DE CONSOLIDATION**

[72] LEPPANEN, JUHA, FI  
[72] PIISPANEN, MIRJA, FI  
[72] LAITINEN, ARI, FI  
[72] KIVENTERA, JENNI, FI  
[72] YLITALO, KARI, FI  
[72] KORPPI, MARIA, FI  
[71] BETOLAR OY, FI  
[85] 2023-03-24  
[86] 2021-10-21 (PCT/FI2021/050708)  
[87] (WO2022/084588)  
[30] FI (20206042) 2020-10-21

---

[21] **3,193,892**  
[13] A1

[51] **Int.Cl. A61L 27/12 (2006.01) A61L 27/52 (2006.01) A61L 27/54 (2006.01)**

[25] EN

[54] **INJECTABLE CALCIUM PHOSPHATE-BASED BONE GRAFT COMPOSITION HAVING HIGH ELASTICITY AND PREPARATION METHOD THEREOF**

[54] **COMPOSITION DE GREFFE OSSEUSE A BASE DE PHOSPHATE DE CALCIUM INJECTABLE PRESENTANT UNE ELASTICITE ELEVEE ET SON PROCEDE DE PREPARATION**

[72] RYU, HYUNSEUNG, KR  
[72] SEO, JUN-HYUK, KR  
[72] JUNG, HYOCHUL, KR  
[72] RYU, MIYOUNG, KR  
[72] LEE, JI-HYE, KR  
[72] PARK, HYUNJUNG, KR  
[71] CG BIO CO., LTD., KR  
[85] 2023-03-24  
[86] 2021-01-27 (PCT/KR2021/001110)  
[87] (WO2022/071636)  
[30] KR (10-2020-0127278) 2020-09-29

---

[21] **3,193,893**  
[13] A1

[51] **Int.Cl. A61F 13/40 (2006.01) A61B 17/00 (2006.01) A61K 31/195 (2006.01) A61M 31/00 (2006.01) A61P 7/04 (2006.01) A61P 17/02 (2006.01)**

[25] EN

[54] **DEVICES FOR BLEEDING REDUCTION AND METHODS OF MAKING AND USING THE SAME**

[54] **DISPOSITIFS DE REDUCTION DE SAIGNEMENT ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION**

[72] MANASCO, ANTON TRAVIS, US  
[72] POWELL, MARGARET BOOTH, US  
[72] GRANKO, HAZAR AWAD, US  
[71] BIO 54, LLC, US  
[85] 2023-03-24  
[86] 2021-10-05 (PCT/US2021/053641)  
[87] (WO2022/076467)  
[30] US (63/087,532) 2020-10-05  
[30] US (63/090,768) 2020-10-13  
[30] US (PCT/US2021/026714) 2021-04-09

---

[21] **3,193,894**  
[13] A1

[51] **Int.Cl. A24F 40/42 (2020.01) A24F 40/44 (2020.01) A24F 40/46 (2020.01) A24F 40/485 (2020.01) A24F 40/10 (2020.01)**

[25] EN

[54] **AN AEROSOL GENERATING SYSTEM AND A LIQUID SUBSTANCE STORING CONTAINER FOR SUCH AN AEROSOL GENERATING SYSTEM**

[54] **SYSTEME DE GENERATION D'AEROSOL ET RECIPIENT DE STOCKAGE DE SUBSTANCE LIQUIDE POUR UN TEL SYSTEME DE GENERATION D'AEROSOL**

[72] COBURN, BRODERICK, CH  
[72] SECO, JOAO, CH  
[71] JT INTERNATIONAL S.A., CH  
[85] 2023-03-24  
[86] 2021-10-01 (PCT/EP2021/077161)  
[87] (WO2022/073888)  
[30] EP (20200075.8) 2020-10-05

---

[21] **3,193,895**  
[13] A1

[51] **Int.Cl. B65D 79/02 (2006.01)**

[25] EN

[54] **HEADER BAG FOR PACKAGING AT LEAST ONE MEDICAL DEVICE**

[54] **SACHET MEDICAL POUR LE CONDITIONNEMENT D'AU MOINS UN DISPOSITIF MEDICAL**

[72] LE LOC'H, CLEMENTINE, FR  
[72] RIVIER, CEDRIC, FR  
[72] LEHEE, GUILLAUME, FR  
[72] CHABANON, JEAN-MARC, FR  
[71] BECTON, DICKINSON FRANCE, S.A., FR  
[85] 2023-03-24  
[86] 2021-11-04 (PCT/EP2021/080607)  
[87] (WO2022/096557)  
[30] EP (20306345.8) 2020-11-06

---

[21] **3,193,896**  
[13] A1

[51] **Int.Cl. F41G 3/02 (2006.01) F41A 17/08 (2006.01) F41G 3/06 (2006.01) F41G 3/12 (2006.01) F41G 3/22 (2006.01) F41G 5/24 (2006.01)**

[25] EN

[54] **DETERMINATION OF A FIRE CONTROL SOLUTION OF AN ARTILLERY WEAPON**

[54] **DETERMINATION DE SOLUTION DE GUIDAGE DE TIR D'ARME D'ARTILLERIE**

[72] SCHEIBEL, AXEL, DE  
[72] CZOK, MATTHIAS, DE  
[71] KRAUSS-MAFFEI WEGMANN GMBH & CO. KG, DE  
[85] 2023-03-24  
[86] 2021-10-06 (PCT/DE2021/100806)  
[87] (WO2022/083822)  
[30] DE (10 2020 127 430.0) 2020-10-19

## Demandes PCT entrant en phase nationale

[21] **3,193,897**  
[13] A1

[51] **Int.Cl. G06Q 30/06 (2023.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR REMOTELY PURCHASING NON-FUNGIBLE PRODUCTS WITH HOME DELIVERY**

[54] **PROCEDE ET APPAREIL D'ACHAT A DISTANCE DE PRODUITS NON FONGIBLES AVEC LIVRAISON A DOMICILE**

[72] SCHIPA, MAURIZIO, IT  
[71] E\_COMMERCE 4.0 S.R.L., IT  
[85] 2023-03-24  
[86] 2021-09-28 (PCT/IB2021/058853)  
[87] (WO2022/070037)  
[30] IT (10202000022927) 2020-09-29

[21] **3,193,898**  
[13] A1

[51] **Int.Cl. A23L 29/281 (2016.01) A23L 33/00 (2016.01) A61K 38/39 (2006.01) A61P 3/10 (2006.01) C07K 14/78 (2006.01)**

[25] EN  
[54] **DRY COLLAGEN POWDER WITH SATIATING PROPERTIES AND METHOD FOR ITS PREPARATION**

[54] **POUDRE DE COLLAGENE SEC AUX PROPRIETES RASSASIANTES ET SON PROCEDE DE PREPARATION**

[72] GONZALEZ SALAZAR, ITXASO, ES  
[72] SORET MARTON, AGUSTIN, ES  
[72] LONGO ARESO, CARLOS MARIA, ES  
[72] RECALDE IRURZUN, JOSE IGNACIO, ES  
[72] IZCO ZARATIEGUI, JESUS MARIA, ES  
[71] VISCOFAN, S.A., ES  
[85] 2023-03-24  
[86] 2021-09-21 (PCT/EP2021/075918)  
[87] (WO2022/063766)  
[30] ES (P202030966) 2020-09-25

[21] **3,193,899**  
[13] A1

[51] **Int.Cl. G06F 21/44 (2013.01) G06F 21/62 (2013.01) A24F 40/00 (2020.01)**

[25] EN  
[54] **COMPUTING DEVICE**  
[54] **DISPOSITIF INFORMATIQUE**

[72] BOHAM, SCOTT GEORGE, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-03-24  
[86] 2021-09-28 (PCT/GB2021/052512)  
[87] (WO2022/069879)  
[30] GB (2015678.2) 2020-10-02

[21] **3,193,900**  
[13] A1

[51] **Int.Cl. D21H 19/80 (2006.01) D21H 19/82 (2006.01) D21H 21/50 (2006.01) D21H 21/52 (2006.01) D21H 25/04 (2006.01)**

[25] EN  
[54] **PAPER PRODUCT FOR FLOW WRAPPING**

[54] **PRODUIT EN PAPIER POUR EMBALLAGE TUBULAIRE**

[72] GILLGREN, THOMAS, SE  
[72] LARSSON, JOHAN, SE  
[71] BILLERUD AKTIEBOLAG (PUBL), SE  
[85] 2023-03-24  
[86] 2021-09-27 (PCT/EP2021/076532)  
[87] (WO2022/064048)  
[30] EP (20198767.4) 2020-09-28

[21] **3,193,901**  
[13] A1

[51] **Int.Cl. G06F 21/44 (2013.01) G06F 21/62 (2013.01) A24F 40/00 (2020.01)**

[25] EN  
[54] **AEROSOL PROVISION DEVICE**  
[54] **DISPOSITIF DE FOURNITURE D'AEROSOL**

[72] BOHAM, SCOTT GEORGE, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-03-24  
[86] 2021-09-28 (PCT/GB2021/052513)  
[87] (WO2022/069880)  
[30] GB (2015680.8) 2020-10-02

[21] **3,193,902**  
[13] A1

[51] **Int.Cl. C03B 37/005 (2006.01) C03C 3/062 (2006.01) C03C 3/087 (2006.01) C03C 12/00 (2006.01) G21C 13/00 (2006.01) G21D 1/00 (2006.01) G21F 9/30 (2006.01)**

[25] EN  
[54] **RADIATION RESISTANT INORGANIC OXIDE FLAKES**

[54] **FLOCONS D'OXYDE INORGANIQUE RESISTANTS AU RAYONNEMENT**

[72] FUKAZAWA, HIROSHI, JP  
[71] NIPPON FIBER CORPORATION, JP  
[85] 2023-03-24  
[86] 2021-09-30 (PCT/JP2021/036084)  
[87] (WO2022/075169)  
[30] JP (2020-169452) 2020-10-06

[21] **3,193,903**  
[13] A1

[51] **Int.Cl. A24F 40/60 (2020.01) A24D 1/02 (2006.01)**

[25] EN  
[54] **ELECTRONIC AEROSOL PROVISION SYSTEM WITH SURFACE LAYER**

[54] **SYSTEME DE FOURNITURE D'AEROSOL ELECTRONIQUE COMPRENANT UNE COUCHE DE SURFACE**

[72] TAYLOR, BENJAMIN FRANCIS, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[85] 2023-03-24  
[86] 2021-09-20 (PCT/GB2021/052435)  
[87] (WO2022/074357)  
[30] GB (2015829.1) 2020-10-06

[21] **3,193,904**  
[13] A1

[51] **Int.Cl. B32B 7/12 (2006.01) B32B 27/08 (2006.01) B32B 27/30 (2006.01) B32B 27/32 (2006.01) C09J 123/08 (2006.01) C09J 131/04 (2006.01) C09J 133/00 (2006.01) C09J 175/04 (2006.01)**

[25] EN  
[54] **ROOFING SYSTEMS AND RELATED METHODS**

[54] **SYSTEMES DE TOITURE ET PROCEDES ASSOCIES**

[72] YANG, LI-YING, US  
[71] BMIC LLC, US  
[85] 2023-03-24  
[86] 2021-09-27 (PCT/US2021/052211)  
[87] (WO2022/067187)  
[30] US (63/083,548) 2020-09-25

## PCT Applications Entering the National Phase

[21] **3,193,905**  
[13] A1

[51] **Int.Cl. A61J 3/07 (2006.01) A61J 3/10 (2006.01) A61K 9/28 (2006.01) A61K 9/48 (2006.01)**

[25] EN

[54] **GASTRORETENTIVE STRUCTURED DOSAGE FORM**

[54] **FORME POSOLOGIQUE STRUCTUREE A RETENTION GASTRIQUE**

[72] SAKA, NANNAJI, US

[72] BLAESI, ARON H., US

[71] BLAESI, ARON H., US

[85] 2023-03-24

[86] 2021-09-30 (PCT/US2021/053027)

[87] (WO2022/072735)

[30] US (63/085,893) 2020-09-30

[30] US (63/229,016) 2021-08-03

[30] US (63/247,291) 2021-09-22

[30] US (63/158,870) 2021-03-09

[21] **3,193,906**  
[13] A1

[51] **Int.Cl. C07F 9/6571 (2006.01) A61P 5/14 (2006.01)**

[25] EN

[54] **CRYSTAL OF THYROID HORMONE .BETA. RECEPTOR AGONIST, PREPARATION METHOD THEREFOR AND USE THEREOF**

[54] **CRISTAL D'AGONISTE DU RECEPTEUR .BETA. DE L'HORMONE THYROIDIENNE, SON PROCEDE DE PREPARATION ET SON UTILISATION**

[72] WU, JINZI JASON, CN

[72] LIANG, BIN, CN

[72] WU, JIAN, CN

[71] GANNEX PHARMA CO., LTD., CN

[85] 2023-03-25

[86] 2020-09-30 (PCT/CN2020/119162)

[87] (WO2022/067602)

[21] **3,193,907**  
[13] A1

[51] **Int.Cl. B65D 33/16 (2006.01) B26B 27/00 (2006.01) B26F 1/44 (2006.01) B65D 45/16 (2006.01)**

[25] EN

[54] **BAG CUTTING AND CLAMPING ASSEMBLY**

[54] **ENSEMBLE DE SERRAGE ET DE DECOUPE DE SAC**

[72] LING, JOHNSON, CA

[72] RUDELLE, GREGORY ROY, CA

[72] HALAS, ROBERT J., CA

[71] RUDELLE, GREGORY ROY, CA

[71] HALAS, ROBERT J., CA

[85] 2023-03-25

[86] 2021-10-01 (PCT/CA2021/051373)

[87] (WO2022/067443)

[30] US (63/086,883) 2020-10-02

[21] **3,193,909**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 21/00 (2006.01)**

[25] EN

[54] **USE OF ANTI-PRO/LATENT MYOSTATIN ANTIBODY FOR TREATING SPINAL MUSCULAR ATROPHY**

[54] **UTILISATION D'UN ANTICORPS ANTI-PRO-MYOSTATINE/MYOSTATINE LATENTE POUR LE TRAITEMENT DE L'AMYOTROPHIE SPINALE**

[72] NOMIKOS, GEORGE, US

[72] SONG, GUOCHEN, US

[72] IARROBINO, RYAN, US

[72] CHYUNG, YUNG, US

[71] SCHOLAR ROCK, INC., US

[85] 2023-03-27

[86] 2021-10-25 (PCT/US2021/056517)

[87] (WO2022/093724)

[30] US (63/105,850) 2020-10-26

[30] US (63/106,172) 2020-10-27

[30] US (63/200,955) 2021-04-05

[30] US (63/201,157) 2021-04-15

[30] US (63/202,317) 2021-06-06

[30] US (63/202,372) 2021-06-08

[30] US (63/202,900) 2021-06-29

[30] US (63/260,725) 2021-08-30

[30] US (63/261,398) 2021-09-20

[21] **3,193,910**  
[13] A1

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

[25] EN

[54] **BED HAVING FEATURES FOR AUTOMATIC SENSING OF ILLNESS STATES**

[54] **LIT AYANT DES FONCTIONNALITES POUR UNE DETECTION AUTOMATIQUE D'ETATS DE MALADIE**

[72] GARCIA MOLINA, GARY N., US

[72] MONETTE, KEVIN, US

[72] JOCSON, CRISTINA, US

[72] GUZENKO, DMYTRO, UA

[72] BARR, SHAWN, US

[72] DEFRANCO, SUSAN, US

[72] MUSHTAQ, FAISAL, US

[72] MILLS, RAJASI, US

[71] SLEEP NUMBER CORPORATION, US

[85] 2023-03-27

[86] 2021-12-03 (PCT/US2021/061806)

[87] (WO2022/120165)

[30] US (63/121,484) 2020-12-04

[21] **3,193,912**  
[13] A1

[51] **Int.Cl. C01B 3/16 (2006.01) C25B 1/23 (2021.01) C01B 3/38 (2006.01) C01B 25/04 (2006.01) C07C 1/12 (2006.01) C07C 29/151 (2006.01) C10K 3/02 (2006.01) C10L 3/08 (2006.01) C25B 1/04 (2021.01)**

[25] EN

[54] **CONVERSION OF CO2 AND H2 TO SYNFUELS**

[54] **CONVERSION DE CO2 ET DE H2 EN COMBUSTIBLES DE SYNTHÈSE**

[72] DE SARKAR, SUDIP, DK

[72] AASBERG-PETERSEN, KIM, DK

[72] CHRISTENSEN, THOMAS SANDAHL, DK

[72] MORTENSEN, PETER MOLGAARD, DK

[71] TOPSOE A/S, DK

[85] 2023-03-27

[86] 2021-10-13 (PCT/EP2021/078304)

[87] (WO2022/079098)

[30] EP (20201822.2) 2020-10-14

[30] EP (21185825.3) 2021-07-15

## Demandes PCT entrant en phase nationale

[21] **3,193,913**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) C07D 409/14 (2006.01) C07D 413/14 (2006.01) C07D 417/14 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **MRGX2 ANTAGONISTS**

[54] **ANTAGONISTES DE MRGX2**

[72] BRNARDIC, EDWARD, US

[72] BURY, MICHAEL, US

[72] CADILLA, RODOLFO, US

[72] COLLINS, JON, US

[72] GUO, YU, US

[72] HANDLON, ANTHONY, US

[72] LI, HUIJIE, US

[72] LI, YUE, US

[72] PAONE, DANIEL, US

[72] SCHULTE, CHRISTIE, US

[72] SHEARER, BARRY, US

[72] YE, GUOSEN, US

[72] YING, MABEN, US

[72] ZHANG, HUICHANG, US

[72] LAMBERT, MILLARD HURST III, US

[71] GLAXOSMITHKLINE  
INTELLECTUAL PROPERTY  
DEVELOPMENT LIMITED, GB

[85] 2023-03-27

[86] 2021-10-04 (PCT/EP2021/077243)

[87] (WO2022/073904)

[30] US (63/087,997) 2020-10-06

[21] **3,193,914**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61P 35/00 (2006.01) C07K 14/725 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **ANTIBODIES CAPABLE OF BINDING TO ROR2 AND BISPECIFIC ANTIBODIES BINDING TO ROR2 AND CD3**

[54] **ANTICORPS POUVANT SE LIER A ROR2 ET ANTICORPS BISPECIFIQUES SE LIANT A ROR2 ET CD3**

[72] KOOPMAN, LOUISE, NL

[72] ENGELBERTS, PATRICK, NL

[72] SATIJN, DAVID, NL

[72] DANNENBERG, JAN-HERMEN, NL

[71] GENMAB A/S, DK

[85] 2023-03-27

[86] 2021-10-01 (PCT/EP2021/077130)

[87] (WO2022/069724)

[30] EP (20199893.7) 2020-10-02

[21] **3,193,916**  
[13] A1

[51] **Int.Cl. A47C 20/04 (2006.01)**

[25] EN

[54] **BED FOUNDATION ADJUSTMENT CONTROLS**

[54] **COMMANDES DE REGLAGE DE BASE DE LIT**

[72] SMITH, DAVID, US

[72] KIRK, ANTONY, US

[71] SLEEP NUMBER CORPORATION, US

[85] 2023-03-27

[86] 2021-12-10 (PCT/US2021/062851)

[87] (WO2022/132587)

[30] US (63/127,307) 2020-12-18

[21] **3,193,919**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01)**

[25] EN

[54] **ANTISENSE OLIGONUCLEOTIDES TARGETING THE EXON 51 OF DYSTROPHIN GENE**

[54] **OLIGONUCLEOTIDE ANTI-SENS CIBLANT L'EXON 51 DU GENE DE LA DYSTROPHINE**

[72] VAN DEUTEKOM, JUDITH  
CHRISTINA THEODORA, NL

[72] DE VISSER, PETER CHRISTIAN, NL

[71] BIOMARIN TECHNOLOGIES B.V., NL

[85] 2023-03-27

[86] 2021-09-29 (PCT/EP2021/076738)

[87] (WO2022/069511)

[30] US (63/085,668) 2020-09-30

[21] **3,193,927**  
[13] A1

[51] **Int.Cl. G01N 21/77 (2006.01) G01N 21/25 (2006.01) G01N 21/78 (2006.01)**

[25] EN

[54] **ANALYSIS SYSTEM AND METHOD**

[54] **SYSTEME ET PROCEDE D'ANALYSE**

[72] RADENEZ, PASCAL, JE

[72] MCGAURAN, EMMET, JE

[71] QBD (QS-IP) LIMITED, JE

[71] QUOTIENT SUISSE SA, CH

[85] 2023-03-27

[86] 2021-10-08 (PCT/EP2021/077938)

[87] (WO2022/074233)

[30] GB (2016063.6) 2020-10-09

[21] **3,193,930**  
[13] A1

[51] **Int.Cl. A61K 38/48 (2006.01) A61K 38/00 (2006.01) A61P 9/12 (2006.01) A61P 11/00 (2006.01) A61P 13/12 (2006.01) A61P 31/14 (2006.01) C07K 14/705 (2006.01) C12N 9/48 (2006.01)**

[25] EN

[54] **ACE2 FUSION PROTEINS AND USES THEREOF**

[54] **PROTEINES DE FUSION ACE2 ET LEURS UTILISATIONS**

[72] REITER, ALWIN, DE

[72] BROCKMEYER, CARSTEN, DE

[72] WOLSCHIN, FLORIAN, DE

[71] FORMYCON AG, DE

[85] 2023-03-27

[86] 2021-10-29 (PCT/EP2021/080130)

[87] (WO2022/090469)

[30] EP (20204774.2) 2020-10-29

[30] EP (20210297.6) 2020-11-27

[30] EP (21164684.9) 2021-03-24

[30] EP (21170519.9) 2021-04-26

[21] **3,193,931**  
[13] A1

[51] **Int.Cl. C08J 5/24 (2006.01) C08K 3/22 (2006.01) C08K 3/24 (2006.01) F16L 55/165 (2006.01)**

[25] EN

[54] **CURING LINERS BY MEANS OF COHERENT ELECTROMAGNETIC RADIATION**

[54] **RENETEMENTS DE DURCISSEMENT PAR RAYONNEMENT ELECTROMAGNETIQUE COHERENT**

[72] FUCHTJOHANN, NILS, DE

[71] SAERTEX MULTICOM GMBH, DE

[85] 2023-03-27

[86] 2021-09-17 (PCT/EP2021/075597)

[87] (WO2022/078708)

[30] DE (10 2020 127 230.8) 2020-10-15

## PCT Applications Entering the National Phase

[21] **3,193,933**  
[13] A1

[51] **Int.Cl. C01B 33/12 (2006.01) C09D 7/40 (2018.01) C09D 7/42 (2018.01) C09D 7/61 (2018.01) C09D 5/32 (2006.01) C09D 167/00 (2006.01) C08K 3/36 (2006.01)**

[25] EN

[54] **SPHERICAL, LOW SURFACE AREA PRECIPITATED SILICAS AS MATTING AGENTS IN POWDER COATINGS**

[54] **SILICES SPHERIQUES PRECIPITEES A FAIBLE SURFACE EN TANT QU'AGENTS DE MATAGE DANS DES REVETEMENTS EN POUVRE**

[72] LIN, BOB TSE-WENG, US  
[72] NARGIELLO, MARIA, US  
[72] RESCH, BERNHARD, US  
[72] GALLIS, KARL W., US  
[72] HAGAR, WILLIAM J., US  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2023-03-27  
[86] 2021-09-21 (PCT/EP2021/075842)  
[87] (WO2022/069286)  
[30] US (63/086,684) 2020-10-02

[21] **3,193,937**  
[13] A1

[51] **Int.Cl. C01G 53/00 (2006.01)**

[25] EN

[54] **PROCESS FOR MAKING A DOPED CATHODE ACTIVE MATERIAL**

[54] **PROCEDE DE FABRICATION D'UN MATERIAU ACTIF DE CATHODE DOPE**

[72] ERK, CHRISTOPH, DE  
[72] SOMMER, HEINO, DE  
[72] MICHEL, KATHRIN, DE  
[72] RAUSCHER, FRANK, DE  
[72] BORN, NILS-OLOF JOACHIM, DE  
[72] ROHDE, WOLFGANG, DE  
[72] SUELING, CARSTEN, DE  
[72] GERKE, BIRGIT, DE  
[71] BASF SE, DE  
[85] 2023-03-27  
[86] 2021-09-16 (PCT/EP2021/075438)  
[87] (WO2022/069236)  
[30] EP (20199327.6) 2020-09-30

[21] **3,193,939**  
[13] A1

[51] **Int.Cl. C07D 211/46 (2006.01) A61P 9/10 (2006.01) A61P 25/16 (2006.01)**

[25] EN

[54] **CRYSTALLINE FORMS OF A PHARMACEUTICAL COMPOUND**

[54] **FORMES CRISTALLINES D'UN COMPOSE PHARMACEUTIQUE**

[72] HETT, ROBERT, NL  
[72] BLATTER, FRITZ, NL  
[72] ROBIN, JENNIFER, NL  
[72] LANDSKRONER, KYLE, CH  
[71] AZAFAROS B.V., NL  
[85] 2023-03-27  
[86] 2021-10-01 (PCT/EP2021/077100)  
[87] (WO2022/069709)  
[30] EP (20199934.9) 2020-10-02

[21] **3,193,940**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 31/02 (2006.01)**

[25] EN

[54] **TOPICAL OPHTHALMOLOGICAL COMPOSITIONS**

[54] **COMPOSITIONS OPHTHALMOLOGIQUES TOPIQUES**

[72] NI, JINSONG, US  
[72] YANG, RONG, US  
[71] ADS THERAPEUTICS LLC, US  
[85] 2023-03-27  
[86] 2021-10-08 (PCT/US2021/054221)  
[87] (WO2022/076852)  
[30] US (63/089,263) 2020-10-08

[21] **3,193,941**  
[13] A1

[51] **Int.Cl. E04B 1/26 (2006.01)**

[25] EN

[54] **STABILIZING SUPPORT FOR ELEVATED STRUCTURES**

[54] **SUPPORT DE STABILISATION POUR STRUCTURES ELEVEES**

[72] LETHIN, DOUGLAS, US  
[71] LETHIN, DOUGLAS, US  
[85] 2023-03-27  
[86] 2021-09-29 (PCT/US2021/052619)  
[87] (WO2022/072476)  
[30] US (63/085,009) 2020-09-29

[21] **3,193,943**  
[13] A1

[51] **Int.Cl. B65D 41/44 (2006.01) B65D 41/48 (2006.01) B65D 41/60 (2006.01)**

[25] EN

[54] **LID WITH LOCKING FEATURE**

[54] **COUVERCLE DOTE D'UN ELEMENT DE BLOCAGE**

[72] BAIRD, KYLE, US  
[71] GRAPHIC PACKAGING INTERNATIONAL, LLC, US  
[85] 2023-03-27  
[86] 2021-09-23 (PCT/US2021/051656)  
[87] (WO2022/066841)  
[30] US (63/083,313) 2020-09-25

[21] **3,193,944**  
[13] A1

[51] **Int.Cl. F42B 5/00 (2006.01) F42B 5/28 (2006.01) F42B 5/295 (2006.01) F42B 14/00 (2006.01) F42B 14/04 (2006.01)**

[25] EN

[54] **BORON STEEL HIGH-PRESSURE CARTRIDGE CASE**

[54] **BOITIER DE CARTOUCHE HAUTE PRESSION EN ACIER AU BORE**

[72] SWANK, BRIAN, US  
[71] LUVATA OHIO INC., US  
[85] 2023-03-27  
[86] 2021-09-27 (PCT/US2021/052196)  
[87] (WO2022/067179)  
[30] US (63/083,833) 2020-09-25  
[30] US (17/484,089) 2021-09-24

[21] **3,193,945**  
[13] A1

[51] **Int.Cl. F41C 7/06 (2006.01)**

[25] EN

[54] **COCKING LEVER, PARTICULARLY FOR FIREARMS FOR USE IN HUNTING OF THE LEVER-ACTION REPEATER TYPE**

[54] **LEVIER D'ARMEMENT, EN PARTICULIER POUR ARMES A FEU DESTINEES A ETRE UTILISEES DANS LA CHASSE DU TYPE A REPETITION A LEVIER**

[72] PEDERSOLI, STEFANO, IT  
[71] DAVIDE PEDERSOLI S.R.L., IT  
[85] 2023-03-27  
[86] 2020-10-29 (PCT/IT2020/000070)  
[87] (WO2022/091143)

## Demandes PCT entrant en phase nationale

[21] **3,193,946**  
[13] A1

[51] **Int.Cl. A61F 2/07 (2013.01)**  
[25] EN  
[54] **DEVICES AND METHODS FOR TREATING OCCLUSIONS**  
[54] **DISPOSITIFS ET PROCEDES DE TRAITEMENT D'OCCLUSIONS**  
[72] CHILDERS, ERIN, US  
[72] MORGAN, PAUL, US  
[72] SHAW, EDWARD E., US  
[72] UDDIN, MAYA C., US  
[72] WUNDER, KIMBERLEY, US  
[71] W. L. GORE & ASSOCIATES, INC., US  
[85] 2023-03-27  
[86] 2021-10-18 (PCT/US2021/055399)  
[87] (WO2022/082096)  
[30] US (63/093,269) 2020-10-18

[21] **3,193,947**  
[13] A1

[51] **Int.Cl. C07D 285/08 (2006.01) A61P 3/10 (2006.01) C07F 9/09 (2006.01)**  
[25] EN  
[54] **THIADIAZOLONE DERIVATIVES AND THEIR USE AS AMPK AGONISTS FOR THE TREATMENT OF DIABETES AND RELATED DISORDERS**  
[54] **DERIVES DE THIADIAZOLONE ET LEUR UTILISATION EN TANT QU'AGONISTES DE L'AMPK POUR LE TRAITEMENT DU DIABETE ET DE TROUBLES APPARENTES**  
[72] EDLUND, THOMAS, SE  
[72] WESTMAN, JACOB, SE  
[71] BETAGENON BIO AB, SE  
[85] 2023-03-27  
[86] 2021-09-30 (PCT/GB2021/052535)  
[87] (WO2022/069894)  
[30] GB (2015585.9) 2020-10-01

[21] **3,193,948**  
[13] A1

[51] **Int.Cl. E02F 3/43 (2006.01) E02F 9/24 (2006.01) E02F 9/26 (2006.01)**  
[25] EN  
[54] **VIRTUAL BOUNDARY SYSTEM FOR WORK MACHINE**  
[54] **SYSTEME DE LIMITE VIRTUELLE POUR ENGIN DE CHANTIER**  
[72] VIERGUTZ, MICHAEL A., US  
[72] TANAKA, KENSUKE, JP  
[72] NAKAMOTO, YOZO, JP  
[72] THEES, CARSTEN, JP  
[72] SHIRANI, KIESUKE, JP  
[71] CATERPILLAR SARL, CH  
[85] 2023-03-27  
[86] 2021-09-24 (PCT/EP2021/025368)  
[87] (WO2022/069074)  
[30] US (17/060,924) 2020-10-01

[21] **3,193,949**  
[13] A1

[51] **Int.Cl. A61B 1/00 (2006.01) A61B 1/12 (2006.01)**  
[25] EN  
[54] **DETECTION OF RESIDUAL FLUID IN ENDOSCOPE CHANNELS**  
[54] **DETECTION DE FLUIDE RESIDUEL DANS DES CANAUX D'ENDOSCOPE**  
[72] NERANDZIC, MICHELLE M., US  
[72] ANTLOGA, KATHLEEN M., US  
[71] AMERICAN STERLIZER COMPANY, US  
[85] 2023-03-27  
[86] 2021-09-07 (PCT/US2021/049192)  
[87] (WO2022/072125)  
[30] US (17/060,847) 2020-10-01

[21] **3,193,951**  
[13] A1

[51] **Int.Cl. A61K 31/19 (2006.01) A61K 31/7034 (2006.01) A61K 36/19 (2006.01) A61K 36/28 (2006.01) A61K 36/53 (2006.01) A61K 36/537 (2006.01) A61K 36/70 (2006.01) A61K 36/73 (2006.01) A61P 31/12 (2006.01) A61P 31/14 (2006.01)**  
[25] EN  
[54] **FORMULATIONS COMPRISING BOTANICAL EXTRACTS**  
[54] **FORMULATIONS COMPRENANT DES EXTRAITS BOTANIQUES**  
[72] XIAO, ZHICHENG, AU  
[72] XIAO, SA, AU  
[72] PENG, GANG, AU  
[72] HE, ZHIYONG, AU  
[71] APEX BIOTECH RESEARCH PTY LTD, AU  
[85] 2023-03-27  
[86] 2021-09-28 (PCT/AU2021/051126)  
[87] (WO2022/061420)  
[30] AU (2020903493) 2020-09-28  
[30] AU (2020903527) 2020-09-30  
[30] AU (2021901178) 2021-04-21

[21] **3,193,952**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **DOSING FOR TREATMENT WITH ANTI-FCRH5/ANTI-CD3 BISPECIFIC ANTIBODIES**  
[54] **DOSAGE POUR TRAITEMENT AVEC DES ANTICORPS BISPECIFIQUES ANTI-FCRH5/ANTI-CD3**  
[72] FINE, BERNARD MARTIN, US  
[72] SUMIYOSHI, TEIKO, US  
[72] LI, MENGSONG, US  
[72] COOPER, JAMES NIAL, US  
[71] GENENTECH, INC., US  
[85] 2023-03-27  
[86] 2021-10-05 (PCT/US2021/053636)  
[87] (WO2022/076462)  
[30] US (63/087,623) 2020-10-05  
[30] US (63/116,597) 2020-11-20  
[30] US (63/229,019) 2021-08-03  
[30] US (63/239,859) 2021-09-01

## PCT Applications Entering the National Phase

[21] **3,193,954**  
[13] A1

[51] **Int.Cl. B32B 3/30 (2006.01) B32B 7/022 (2019.01) B32B 17/10 (2006.01) B32B 37/15 (2006.01) E04B 1/86 (2006.01) E04C 2/296 (2006.01)**

[25] EN

[54] **PLASTER BOARDS AND METHODS FOR MAKING THEM**

[54] **PLAQUES DE PLATRE ET LEURS PROCEDES DE FABRICATION**

[72] GLEAN, ALDO, US

[72] SHI, ZHIQIANG, US

[72] XU, XUEJUAN, US

[72] WANG, YING, US

[72] LAI, CHOUNG-HOUNG, US

[72] DIMITRAKOPOULOS, JAMES, US

[72] LIU, JIA, US

[72] LANGLOIS, JOHN, US

[72] DONG, ERIC, US

[72] GUYARD, GABRIEL, US

[72] KAMATH, MITHUN N., US

[72] EVANS, PHILLIP, US

[72] BEAUDRY, DONALD J., US

[71] CERTAINTEED GYPSUM, INC., US

[85] 2023-03-27

[86] 2021-09-28 (PCT/US2021/052439)

[87] (WO2022/067260)

[30] US (63/084,347) 2020-09-28

[21] **3,193,955**  
[13] A1

[51] **Int.Cl. A47J 45/07 (2006.01) A47J 45/06 (2006.01) B25G 3/12 (2006.01) B25G 3/18 (2006.01)**

[25] EN

[54] **COOKWARE VESSEL WITH REMOVABLE HANDLE**

[54] **RECIPIENT DE CUISINE AVEC POIGNEE AMOVIBLE**

[72] CHAN, HING FAI, US

[72] CHENG, STANLEY KIN SUI, US

[71] MEYER INTELLECTUAL PROPERTIES LIMITED, CN

[71] CHAN, HING FAI, US

[71] CHENG, STANLEY KIN SUI, US

[85] 2023-03-27

[86] 2021-09-29 (PCT/US2021/052722)

[87] (WO2022/072548)

[30] US (63/084,786) 2020-09-29

[21] **3,193,958**  
[13] A1

[51] **Int.Cl. G06N 3/04 (2023.01) G06N 3/08 (2023.01)**

[25] EN

[54] **PROCESSING IMAGES USING SELF-ATTENTION BASED NEURAL NETWORKS**

[54] **TRAITEMENT D'IMAGES A L'AIDE DE RESEAUX DE NEURONES BASE SUR L'AUTO-ATTENTION**

[72] HOULSBY, NEIL MATTHEW TINMOUTH, US

[72] GELLY, SYLVAIN, US

[72] USZKOREIT, JAKOB D., US

[72] ZHAI, XIAOHUA, US

[72] HEIGOLD, GEORG, US

[72] BEYER, LUCAS KLAUS, US

[72] KOLESNIKOV, ALEXANDER, US

[72] MINDERER, MATTHIAS JOHANNES LORENZ, US

[72] WEISSENBORN, DIRK, US

[72] DEGHANI, MOSTAFA, US

[72] DOSOVITSKIY, ALEXEY, US

[72] UNTERTHINER, THOMAS, US

[71] GOOGLE LLC, US

[85] 2023-03-27

[86] 2021-10-04 (PCT/US2021/053424)

[87] (WO2022/072940)

[30] US (63/087,135) 2020-10-02

[21] **3,193,959**  
[13] A1

[51] **Int.Cl. A61B 3/032 (2006.01) G16H 50/20 (2018.01) H04N 13/344 (2018.01) A61B 3/036 (2006.01)**

[25] EN

[54] **HOLOGRAPHIC REAL SPACE REFRACTIVE SYSTEM**

[54] **SYSTEME DE REFRACTION EN ESPACE REEL HOLOGRAPHIQUE**

[72] PADULA, WILLIAM V., US

[72] DINSMORE, TEDDI R., US

[71] VEYEZER, LLC, US

[85] 2023-03-27

[86] 2021-09-22 (PCT/US2021/051518)

[87] (WO2022/066744)

[30] US (63/083,682) 2020-09-25

[21] **3,193,960**  
[13] A1

[25] EN

[54] **MULTILAYER COATING WITH DIGITAL PRINTING**

[54] **REVETEMENT MULTICOUCHE AVEC UNE IMPRESSION NUMERIQUE**

[72] MUNS, JADE YOON JOO, US

[72] BEST, TED R., US

[71] SWIMC LLC, US

[85] 2023-03-27

[86] 2021-10-01 (PCT/US2021/053102)

[87] (WO2022/072784)

[30] US (63/086,895) 2020-10-02

[21] **3,193,962**  
[13] A1

[51] **Int.Cl. C07C 2/62 (2006.01)**

[25] EN

[54] **ALKYLATION PROCESS WITH THERMAL OXIDATION SYSTEM**

[54] **PROCEDE D'ALKYLATION AVEC SYSTEME D'OXYDATION THERMIQUE**

[72] TERTEL, JONATHAN A., US

[72] GATTUPALLI, RAJESWAR R., US

[72] DE REN, JAN, US

[72] WHYMAN, WILLIAM, US

[72] ROMAN, DAVID A., US

[71] HONEYWELL INTERNATIONAL INC., US

[85] 2023-03-27

[86] 2021-07-30 (PCT/US2021/071072)

[87] (WO2022/072960)

[30] US (63/085,250) 2020-09-30

[21] **3,193,963**  
[13] A1

[51] **Int.Cl. C07K 14/725 (2006.01)**

[25] EN

[54] **SCREENING AND ANTITUMOR USE OF KRAS MUTATION SPECIFIC T CELL RECEPTOR**

[54] **CRIBLAGE ET UTILISATION ANTITUMORALE DU RECEPTEUR DES LYMPHOCYTES T SPECIFIQUE D'UNE MUTATION KRAS**

[72] GAO, FU, CN

[72] TAN, SHUGUANG, CN

[72] LU, DAN, CN

[71] INSTITUTE OF MICROBIOLOGY, CHINESE ACADEMY OF SCIENCES, CN

[85] 2023-03-27

[86] 2021-09-29 (PCT/CN2021/121576)

[87] (WO2022/068850)

[30] CN (202011047695.0) 2020-09-29



## Demandes PCT entrant en phase nationale

[21] **3,193,965**  
[13] A1

[51] **Int.Cl. G06F 3/048 (2013.01)**  
[25] EN  
[54] **ASSEMBLY MONITORING SYSTEM**  
[54] **SYSTEME DE SURVEILLANCE D'ASSEMBLAGE**  
[72] DANZIGER, ERIC, US  
[72] SACHDEVA, PRATEEK, US  
[71] INVISIBLE AI INC., US  
[85] 2023-03-27  
[86] 2021-09-28 (PCT/US2021/052428)  
[87] (WO2022/072358)  
[30] US (63/085,606) 2020-09-30

[21] **3,193,966**  
[13] A1

[51] **Int.Cl. G01F 17/00 (2006.01) H04W 4/38 (2018.01) B65F 3/00 (2006.01) G01D 9/00 (2006.01) G01D 21/02 (2006.01) G01K 1/14 (2021.01)**  
[25] EN  
[54] **WASTE MANAGEMENT DEVICE**  
[54] **DISPOSITIF DE GESTION DES DECHETS**  
[72] ANDERSON, CARL, CA  
[72] BELL, COLIN, CA  
[71] RECYCLESMAST SOLUTIONS INC., CA  
[85] 2023-03-27  
[86] 2021-09-27 (PCT/CA2021/051338)  
[87] (WO2022/061471)  
[30] US (63/083,152) 2020-09-25

[21] **3,193,967**  
[13] A1

[51] **Int.Cl. C12Q 1/6865 (2018.01)**  
[25] EN  
[54] **METHOD AND MEANS FOR GENERATING TRANSCRIBED NUCLEIC ACIDS**  
[54] **PROCEDE ET MOYENS DE GENERATION D'ACIDES NUCLEIQUES TRANSCRITS**  
[72] SURVILA, MANTAS, AT  
[72] MOLL, PAMELA, AT  
[72] SEITZ, ALEXANDER, AT  
[71] LEXOGEN GMBH, AT  
[85] 2023-03-27  
[86] 2021-10-01 (PCT/EP2021/077088)  
[87] (WO2022/069703)  
[30] EP (20199844.0) 2020-10-02  
[30] EP (21151776.8) 2021-01-15

[21] **3,193,968**  
[13] A1

[51] **Int.Cl. G01J 1/00 (2006.01) G01J 1/10 (2006.01) G01N 15/10 (2006.01)**  
[25] EN  
[54] **HIGH THROUGHPUT MULTIPLEX SPECTROSCOPY**  
[54] **SPECTROSCOPIE MULTIPLEX A HAUT DEBIT**  
[72] PRYSTUPA, DAVID ALLAN, CA  
[72] PACAK, JOHN STEPHEN, CA  
[71] 11887041 CANADA LTD., CA  
[85] 2023-03-27  
[86] 2021-09-22 (PCT/CA2021/051317)  
[87] (WO2022/061452)  
[30] US (63/084,310) 2020-09-28

[21] **3,193,969**  
[13] A1

[51] **Int.Cl. B65G 1/04 (2006.01)**  
[25] EN  
[54] **A REMOTELY OPERATED VEHICLE FOR HANDLING A STORAGE CONTAINER ON A RAIL SYSTEM OF AN AUTOMATED STORAGE AND RETRIEVAL SYSTEM**  
[54] **VEHICULE TELECOMMANDE POUR LA MANIPULATION D'UN CONTENEUR DE STOCKAGE SUR UN SYSTEME DE RAIL D'UN SYSTEME DE STOCKAGE ET DE RECUPERATION AUTOMATISE**  
[72] DJUVE, HEGGEBORG JORGEN, NO  
[71] AUTOSTORE TECHNOLOGY AS, NO  
[85] 2023-03-27  
[86] 2021-11-22 (PCT/EP2021/082486)  
[87] (WO2022/112166)  
[30] NO (20201315) 2020-11-30  
[30] NO (20201317) 2020-11-30  
[30] NO (20210871) 2021-07-06

[21] **3,193,970**  
[13] A1

[51] **Int.Cl. A01G 9/28 (2018.01)**  
[25] EN  
[54] **FLUSH FRONT LANDSCAPE EDGING SYSTEM**  
[54] **SYSTEME DE BORDURE PAYSAGERE A FRONT AFFLEURANT**  
[72] MERANI, MARK CHRISTOPHER, US  
[72] ORGERON, KEITH J., US  
[72] KASYANENKO, VALERIY, US  
[72] ALLEN, ROBERT GLEN, US  
[71] COLMET LLC, US  
[85] 2023-03-27  
[86] 2021-09-24 (PCT/US2021/052096)  
[87] (WO2022/067129)  
[30] US (63/083,694) 2020-09-25  
[30] US (17/485,300) 2021-09-24

[21] **3,193,971**  
[13] A1

[51] **Int.Cl. A23L 3/3571 (2006.01) C07K 14/005 (2006.01) C12N 7/00 (2006.01)**  
[25] EN  
[54] **A NOVEL PHAGE FOR LISTERIA, INCLUDING LISTERIA MONOCYTOGENES.**  
[54] **NOUVEAU PHAGE POUR LISTERIA, Y COMPRIS LISTERIA MONOCYTOGENES**  
[72] HAGENS, STEVEN, NL  
[71] MICREOS FOOD SAFETY B.V., NL  
[85] 2023-03-27  
[86] 2021-09-30 (PCT/EP2021/076894)  
[87] (WO2022/069607)  
[30] EP (20199513.1) 2020-10-01

## PCT Applications Entering the National Phase

---

[21] **3,193,972**  
[13] A1

[51] **Int.Cl. B29C 70/86 (2006.01) B29C 70/44 (2006.01) B29C 70/52 (2006.01) B29C 70/54 (2006.01)**

[25] EN

[54] **A PRECURED FIBROUS STRIP FOR A LOAD-CARRYING STRUCTURE AND METHOD OF MANUFACTURING A SPAR CAP FOR A WIN TURBINE BLADE**

[54] **BANDE FIBREUSE PRE-DURCIE POUR UNE STRUCTURE PORTEUSE ET PROCEDE DE FABRICATION D'UNE SEMELLE DE LONGERON POUR UNE PALE D'EOLIENNE**

[72] JORGENSEN, JEPPE BJORN, DK  
[72] NIELSEN, OLE, DK  
[72] RAZEGHI, RAMA, GB  
[71] LM WIND POWER A/S, DK  
[71] BLADE DYNAMICS LIMITED, GB  
[85] 2023-03-27  
[86] 2021-10-05 (PCT/EP2021/077373)  
[87] (WO2022/073967)  
[30] GB (2015876.2) 2020-10-07

---

[21] **3,193,974**  
[13] A1

[51] **Int.Cl. A61F 9/007 (2006.01)**

[25] EN

[54] **VACUUM-ASSISTED FORCEPS FOR OPHTHALMIC PROCEDURES**

[54] **PINCE ASSISTEE PAR DEPRESSION DESTINEE A DES INTERVENTIONS OPHTALMIQUES**

[72] HALLEN, PAUL R., US  
[71] ALCON INC., CH  
[85] 2023-03-27  
[86] 2021-10-05 (PCT/IB2021/059136)  
[87] (WO2022/079547)  
[30] US (63/092,068) 2020-10-15

---

[21] **3,193,975**  
[13] A1

[51] **Int.Cl. B29C 70/52 (2006.01) B29D 99/00 (2010.01) B29C 70/88 (2006.01)**

[25] EN

[54] **HYBRID PULTRUSION PLATES FOR A SPAR CAP OF A WIND TURBINE BLADE**

[54] **PLAQUES DE PULTRUSION HYBRIDES POUR SEMELLE DE LONGERON DE PALE D'EOLIENNE**

[72] RAZEGHI, RAMA, GB  
[72] JORGENSEN, JEPPE, DK  
[71] BLADE DYNAMICS LIMITED, GB  
[71] LM WIND POWER A/S, DK  
[85] 2023-03-27  
[86] 2021-11-01 (PCT/EP2021/080265)  
[87] (WO2022/096416)  
[30] GB (2017398.5) 2020-11-03

---

[21] **3,193,976**  
[13] A1

[51] **Int.Cl. G16H 20/30 (2018.01)**

[25] FR

[54] **SYSTEM FOR REMOTELY APPLYING STIMULI ON A PERSON**

[54] **SYSTEME D'APPLICATION DE STIMULI SUR UNE PERSONNE A DISTANCE**

[72] JOVIC, MARC, FR  
[71] JOVIC, MARC, FR  
[85] 2023-03-27  
[86] 2021-10-07 (PCT/FR2021/051736)  
[87] (WO2022/074334)  
[30] FR (FR20/10229) 2020-10-07

---

[21] **3,193,977**  
[13] A1

[51] **Int.Cl. C12N 1/04 (2006.01) C12N 5/074 (2010.01)**

[25] EN

[54] **IMPROVED REPROGRAMMING, MAINTENANCE AND PRESERVATION FOR INDUCED PLURIPOTENT STEM CELLS**

[54] **REPROGRAMMATION, ENTRETIEN ET CONSERVATION AMELIORES POUR DES CELLULES SOUCHES PLURIPOTENTES INDUITES**

[72] LAI, YI-SHIN, US  
[72] VALAMEHR, BAHRAM, US  
[72] ABUJAROUR, RAMZEY, US  
[72] HSU, HUI-TING, US  
[71] FATE THERAPEUTICS, INC., US  
[85] 2023-03-27  
[86] 2021-10-01 (PCT/US2021/053240)  
[87] (WO2022/072883)  
[30] US (63/087,119) 2020-10-02

---

[21] **3,193,979**  
[13] A1

[51] **Int.Cl. G05B 23/02 (2006.01)**

[25] EN

[54] **METHOD FOR MANAGING ECU ON VEHICLE, ECU AND COMPUTER-READABLE STORAGE MEDIUM**

[54] **PROCEDE DE GESTION D'ECU SUR UN VEHICULE ET ECU ET SUPPORT DE STOCKAGE LISIBLE**

[72] LI, CUI, CN  
[72] CHE, ZHONGHUI, CN  
[72] SUN, XIAOYU, CN  
[71] ZTE CORPORATION, CN  
[85] 2023-03-27  
[86] 2021-11-03 (PCT/CN2021/128411)  
[87] (WO2022/095896)  
[30] CN (202011240019.5) 2020-11-09

## Demandes PCT entrant en phase nationale

[21] **3,193,980**  
[13] A1

[51] **Int.Cl. C07K 1/107 (2006.01) C07K 1/13 (2006.01) C07K 1/22 (2006.01)**  
[25] EN  
[54] **MODIFICATION OF A NANOPORE FORMING PROTEIN OLIGOMER**  
[54] **MODIFICATION D'UN OLIGOMERE PROTEIQUE FORMANT UN NANOPORE**  
[72] JAYASINGHE, LAKMAL NISHANTHA, GB  
[72] WALLACE, ELIZABETH JAYNE, GB  
[72] MALAVIARACHCHIGE RABEL, RANGA PRABHATH, GB  
[72] KILGOUR, JOHN JOSEPH, GB  
[72] BLACKWELL, KIMBERLEY EMMA, GB  
[72] SINGH, PRATIK RAJ, GB  
[71] OXFORD NANOPORE TECHNOLOGIES PLC, GB  
[85] 2023-03-27  
[86] 2021-10-08 (PCT/GB2021/052609)  
[87] (WO2022/074397)  
[30] GB (2015993.5) 2020-10-08

[21] **3,193,981**  
[13] A1

[51] **Int.Cl. A61F 9/00 (2006.01) A61F 9/007 (2006.01)**  
[25] EN  
[54] **WIRELESS INJECTOR**  
[54] **INJECTEUR SANS FIL**  
[72] HALLEN, PAUL R., US  
[71] ALCON INC., CH  
[85] 2023-03-27  
[86] 2021-10-05 (PCT/IB2021/059135)  
[87] (WO2022/079546)  
[30] US (63/092,048) 2020-10-15

[21] **3,193,984**  
[13] A1

[51] **Int.Cl. G01B 7/26 (2006.01) G01B 7/32 (2006.01) G01N 27/72 (2006.01)**  
[25] EN  
[54] **DEEP ELECTROMAGNETIC REBAR PROBE**  
[54] **SONDE DE BARRE D'ARMATURE ELECTROMAGNETIQUE PROFONDE**  
[72] LULOFF, MARK STEPHEN, CA  
[72] ZAUGG, TORIN, CA  
[72] HOGG, STEPHEN, CA  
[72] LEI, JIA, CA  
[71] ATOMIC ENERGY OF CANADA LIMITED / ENERGIE ATOMIQUE DU CANADA LIMITEE, CA  
[85] 2023-03-27  
[86] 2021-09-28 (PCT/CA2021/051348)  
[87] (WO2022/061475)  
[30] US (63/084,113) 2020-09-28

[21] **3,193,985**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 9/127 (2006.01) A61K 9/19 (2006.01) A61K 31/7105 (2006.01) A61K 31/715 (2006.01)**  
[25] EN  
[54] **PREPARATION AND STORAGE OF LIPOSOMAL RNA FORMULATIONS SUITABLE FOR THERAPY**  
[54] **PREPARATION ET STOCKAGE DE FORMULATIONS D'ARN LIPOSOMAL APPROPRIEES POUR UNE THERAPIE**  
[72] HAAS, HEINRICH, DE  
[72] HORNER, SEBASTIAN, DE  
[72] HILLER, THOMAS MICHAEL, DE  
[72] KIND, TOBIAS, DE  
[72] BACIC, TIJANA, DE  
[71] BIONTECH SE, DE  
[85] 2023-03-27  
[86] 2021-09-30 (PCT/EP2021/076947)  
[87] (WO2022/069632)  
[30] EP (PCT/EP2020/077578) 2020-10-01

[21] **3,193,987**  
[13] A1

[51] **Int.Cl. G06F 16/9535 (2019.01) G06Q 30/02 (2023.01) G06F 16/2457 (2019.01) G06F 16/28 (2019.01)**  
[25] EN  
[54] **RESPONSIVE CATEGORY PREDICTION FOR USER QUERIES**  
[54] **PREDICTION DE CATEGORIE RECEPTIVE A DES REQUETES D'UTILISATEUR**  
[72] AHMADVAND, ALI, US  
[72] KALLUMADI, SURYA, US  
[72] JAVED, FAIZAN, US  
[71] HOME DEPOT INTERNATIONAL, INC., US  
[85] 2023-03-27  
[86] 2021-09-29 (PCT/US2021/052654)  
[87] (WO2022/072496)  
[30] US (63/085,518) 2020-09-30  
[30] US (17/487,732) 2021-09-28

[21] **3,193,988**  
[13] A1

[51] **Int.Cl. G01S 13/88 (2006.01) G06Q 50/26 (2012.01) G07C 9/10 (2020.01) B64F 1/36 (2017.01) G01N 23/20 (2018.01) G01S 7/41 (2006.01) G01S 13/86 (2006.01) G01S 13/89 (2006.01)**  
[25] EN  
[54] **SCREENING DEVICE AND METHOD FOR SCREENING A PERSON**  
[54] **DISPOSITIF ET PROCEDE D'INSPECTION PERMETTANT D'INSPECTER UNE PERSONNE**  
[72] TAN, MICHAEL KIM, NL  
[71] SCARABEE SYSTEMS & TECHNOLOGY B.V., NL  
[85] 2023-03-27  
[86] 2021-09-27 (PCT/EP2021/076531)  
[87] (WO2022/064047)  
[30] NL (2026564) 2020-09-28

## PCT Applications Entering the National Phase

[21] **3,193,990**  
[13] A1

[51] **Int.Cl. C10B 47/28 (2006.01)**  
[25] EN  
[54] **PYROLYSIS SYSTEMS, METHODS, AND RESULTANTS DERIVED THEREFROM**  
[54] **SYSTEMES DE PYROLYSE, PROCEDES, ET PRODUITS RESULTANTS DERIVES DE CEUX-CI**  
[72] TUCKER, RICHARD D., US  
[71] TUCKER, RICHARD D., US  
[85] 2023-03-27  
[86] 2021-09-28 (PCT/US2021/052332)  
[87] (WO2022/067231)  
[30] US (63/204,309) 2020-09-28

[21] **3,193,991**  
[13] A1

[51] **Int.Cl. F21L 4/00 (2006.01) F21V 23/04 (2006.01) F21V 31/00 (2006.01)**  
[25] EN  
[54] **FLASHLIGHT ASSEMBLY**  
[54] **ENSEMBLE LAMPE TORCHE**  
[72] SHARRAH, JONATHAN R., US  
[71] STREAMLIGHT, INC., US  
[85] 2023-03-27  
[86] 2021-03-23 (PCT/US2021/023673)  
[87] (WO2022/066216)  
[30] US (17/032,575) 2020-09-25

[21] **3,193,994**  
[13] A1

[51] **Int.Cl. A61K 38/28 (2006.01) A61P 3/10 (2006.01) A61P 5/50 (2006.01) C07K 14/62 (2006.01) G01N 33/68 (2006.01)**  
[25] EN  
[54] **METHODS AND COMPOSITIONS FOR THE TREATMENT AND PREVENTION OF TYPE 1 DIABETES**  
[54] **METHODES ET COMPOSITIONS POUR LE TRAITEMENT ET LA PREVENTION DU DIABETE DE TYPE 1**  
[72] MORRIS, MARY S., US  
[72] DI PAOLO, RICHARD, US  
[71] DR. MARY MORRIS & ASSOCIATES, LLC, US  
[71] SAINT LOUIS UNIVERSITY, US  
[85] 2023-03-27  
[86] 2021-10-05 (PCT/US2021/053537)  
[87] (WO2022/076385)  
[30] US (63/089,122) 2020-10-08

[21] **3,193,996**  
[13] A1

[51] **Int.Cl. C12N 1/14 (2006.01) C12N 9/24 (2006.01)**  
[25] EN  
[54] **PROCESS FOR THE PRODUCTION OF A TECHNICAL ENZYME COMPOSITION WITH LOW VISCOSITY PRODUCED BY A FILAMENTOUS FUNGUS**  
[54] **PROCEDE DE PRODUCTION D'UNE COMPOSITION D'ENZYME TECHNIQUE A FAIBLE VISCOSITE PRODUITE PAR UN CHAMPIGNON FILAMENTEUX**  
[72] GAMAUF, CHRISTIAN, DE  
[72] CLAREN, JORG, DE  
[71] CLARIANT PRODUKTE (DEUTSCHLAND) GMBH, DE  
[85] 2023-03-27  
[86] 2021-11-12 (PCT/EP2021/081510)  
[87] (WO2022/101404)  
[30] EP (20207123.9) 2020-11-12

[21] **3,193,998**  
[13] A1

[51] **Int.Cl. H04B 10/80 (2013.01)**  
[25] EN  
[54] **LOW-POWER EDGE COMPUTING NETWORKS VIA WDM WEIGHT BROADCASTING**  
[54] **CALCUL DE PERIPHERIE A FAIBLE PUISSANCE AVEC RESEAUX NEURONAUX OPTIQUES PAR DIFFUSION PAR PONDERATION PAR MULTIPLEXAGE PAR REPARTITION EN LONGUEUR D'ONDE**  
[72] HAMERLY, RYAN, US  
[72] ENGLUND, DIRK ROBERT, US  
[71] MASSACHUSETTS INSTITUTE OF TECHNOLOGY, US  
[85] 2023-03-27  
[86] 2021-07-29 (PCT/US2021/043593)  
[87] (WO2022/086615)  
[30] US (63/084,600) 2020-09-29

[21] **3,193,999**  
[13] A1

[51] **Int.Cl. G01F 17/00 (2006.01) B65F 3/00 (2006.01) G01D 21/02 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR WASTE MANAGEMENT**  
[54] **SYSTEMES ET PROCEDES DE GESTION DE DECHETS**  
[72] ANDERSON, CARL, CA  
[72] BELL, COLIN, CA  
[71] RECYCLESMAST SOLUTIONS INC., CA  
[85] 2023-03-27  
[86] 2021-09-27 (PCT/CA2021/051339)  
[87] (WO2022/061472)  
[30] US (63/083,153) 2020-09-25

[21] **3,194,000**  
[13] A1

[51] **Int.Cl. E21B 23/00 (2006.01) E21B 34/10 (2006.01) E21B 43/12 (2006.01)**  
[25] EN  
[54] **A PRESSURE ACTUATED VALVE FOR USE DURING INSTALLATION AND COMMISSION OF A PRODUCTION STRING**  
[54] **SOUPAPE ACTIONNEE PAR PRESSION DESTINEE A ETRE UTILISEE PENDANT L'INSTALLATION ET LA MISE EN SERVICE D'UN TUBAGE DE PRODUCTION**  
[72] WERSWICK, BJORNAR, NO  
[72] NOMME, CHRISTIAN, NO  
[71] INFLOWCONTROL AS, NO  
[85] 2023-03-27  
[86] 2021-10-25 (PCT/EP2021/079497)  
[87] (WO2022/090132)  
[30] NO (20201163) 2020-10-26

[21] **3,194,001**  
[13] A1

[51] **Int.Cl. B65F 1/06 (2006.01)**  
[25] EN  
[54] **WASTE STORAGE FILM REFILL**  
[54] **RECHARGE DE FILM DE STOCKAGE DE DECHETS**  
[72] RONTREE, SCOTT, GB  
[71] SANGENIC INTERNATIONAL LIMITED, GB  
[85] 2023-03-27  
[86] 2021-09-16 (PCT/GB2021/052408)  
[87] (WO2022/064178)  
[30] GB (2015338.3) 2020-09-28

## Demandes PCT entrant en phase nationale

[21] **3,194,002**  
[13] A1

[51] **Int.Cl. B65G 33/22 (2006.01) B65G 33/14 (2006.01) B65G 33/18 (2006.01) C12P 7/10 (2006.01)**

[25] EN  
[54] **PRESSURE VALVE PROCESSING**  
[54] **TRAITEMENT DE VANNE DE PRESSION**

[72] SAMJITSINGH, SHARON, US  
[71] SWEETWATER ENERGY, INC., US  
[85] 2023-03-27  
[86] 2021-10-01 (PCT/US2021/053229)  
[87] (WO2022/072872)  
[30] US (63/087,077) 2020-10-02  
[30] US (63/146,608) 2021-02-06  
[30] US (63/153,740) 2021-02-25

[21] **3,194,003**  
[13] A1

[51] **Int.Cl. B22F 1/00 (2022.01) B33Y 40/00 (2020.01) B22F 10/73 (2021.01)**

[25] FR  
[54] **METHOD AND DEVICE FOR THE PURIFICATION OF POWDERS**  
[54] **PROCEDE ET DISPOSITIF POUR LA PURIFICATION DE POUDRES**

[72] DOUBLET, SEBASTIEN, FR  
[72] VERNA, ERIC, FR  
[72] DEBELLEMANIERE, OLIVIER, FR  
[72] ROSAIN-GUEU, MARC, FR  
[71] L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PRO..., FR  
[71] ADDUP, FR  
[85] 2023-03-27  
[86] 2021-09-27 (PCT/EP2021/076493)  
[87] (WO2022/069406)  
[30] FR (FR2009916) 2020-09-29

[21] **3,194,004**  
[13] A1

[51] **Int.Cl. B03C 1/034 (2006.01) B03C 1/032 (2006.01)**

[25] EN  
[54] **MAGNETIC MATRICES AND METHODS OF USING THE SAME**  
[54] **MATRICES MAGNETIQUES ET LEURS PROCEDES D'UTILISATION**

[72] RIBEIRO, CLAUDIO HENRIQUE TEIXEIRA, US  
[72] RIBEIRO, JOSE PANCRACIO, BR  
[71] RIBEIRO, CLAUDIO HENRIQUE TEIXEIRA, US  
[71] RIBEIRO, JOSE PANCRACIO, BR  
[85] 2023-03-27  
[86] 2021-10-05 (PCT/IB2021/059128)  
[87] (WO2022/074560)  
[30] US (17/067,066) 2020-10-09

[21] **3,194,005**  
[13] A1

[51] **Int.Cl. D21H 21/16 (2006.01) B65B 11/04 (2006.01)**

[25] EN  
[54] **METHOD FOR GROUPING A PLURALITY OF OBJECTS TO BE MOVED**  
[54] **PROCEDE DE REGROUPEMENT D'UNE PLURALITE D'OBJETS A DEPLACER**

[72] TRANI, GIORGIO, IT  
[72] STERNER, MARION, IT  
[72] CARIOLARO, FEDERICO, IT  
[71] TRANI, GIORGIO, IT  
[85] 2023-03-27  
[86] 2021-09-22 (PCT/IB2021/058652)  
[87] (WO2022/070005)  
[30] IT (102020000023068) 2020-09-30

[21] **3,194,006**  
[13] A1

[51] **Int.Cl. A23P 30/20 (2016.01) C08H 8/00 (2010.01) B01J 19/24 (2006.01) B01J 19/26 (2006.01) C13K 1/02 (2006.01)**

[25] EN  
[54] **INJECTOR SYSTEM FOR EXTRUDER EQUIPMENT**  
[54] **SYSTEME D'INJECTEUR POUR EQUIPEMENT D'EXTRUSION**

[72] SAMJITSINGH, SHARON, US  
[72] TUDMAN, SCOTT, US  
[71] SWEETWATER ENERGY, INC., US  
[85] 2023-03-27  
[86] 2021-10-01 (PCT/US2021/053230)  
[87] (WO2022/072873)  
[30] US (63/087,077) 2020-10-02  
[30] US (63/146,608) 2021-02-06  
[30] US (63/153,740) 2021-02-25

[21] **3,194,007**  
[13] A1

[51] **Int.Cl. D21H 17/26 (2006.01) D21H 11/14 (2006.01) D21H 17/27 (2006.01) D21H 17/28 (2006.01) D21H 17/37 (2006.01) D21H 21/18 (2006.01) D21H 21/20 (2006.01)**

[25] EN  
[54] **A TREATMENT SYSTEM FOR MANUFACTURE OF PAPER, BOARD OR THE LIKE**  
[54] **SYSTEME DE TRAITEMENT POUR LA FABRICATION DE PAPIER, CARTON OU SIMILAIRE**

[72] HIETANIEMI, MATTI, FI  
[72] KARPPI, ASKO, FI  
[72] KORHONEN, MARKUS, FI  
[72] KVIST, MARKUS, FI  
[71] KEMIRA OYJ, FI  
[85] 2023-03-27  
[86] 2021-12-01 (PCT/FI2021/050831)  
[87] (WO2022/117921)  
[30] FI (20206240) 2020-12-02

## PCT Applications Entering the National Phase

[21] **3,194,008**  
[13] A1

[51] **Int.Cl. G01V 1/20 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR DEPLOYING SEISMIC NODES**  
[54] **SYSTEMES ET PROCEDES DE DEPLOIEMENT DE N?UDS SISMIQUES**  
[72] OURABAH, AMINE, GB  
[71] STRYDE LIMITED, GB  
[85] 2023-03-27  
[86] 2021-10-11 (PCT/EP2021/078058)  
[87] (WO2022/074258)  
[30] GB (2016054.5) 2020-10-09

[21] **3,194,009**  
[13] A1

[51] **Int.Cl. A24F 40/10 (2020.01) A24F 40/42 (2020.01) A24F 40/48 (2020.01)**  
[25] EN  
[54] **AEROSOL DELIVERY DEVICE**  
[54] **DISPOSITIF DE DISTRIBUTION D'AEROSOL**  
[72] HEJAZI, VAHID, US  
[72] MCMAHAN, CASSIDY S., US  
[71] RAI STRATEGIC HOLDINGS INC, US  
[85] 2023-03-27  
[86] 2021-09-23 (PCT/IB2021/058688)  
[87] (WO2022/064418)  
[30] US (17/034,225) 2020-09-28

[21] **3,194,010**  
[13] A1

[51] **Int.Cl. A61K 9/14 (2006.01) A61K 9/16 (2006.01) A61K 9/48 (2006.01) A61K 31/519 (2006.01) A61K 47/04 (2006.01) A61K 47/12 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITIONS OF AMORPHOUS SOLID DISPERSIONS AND METHODS OF PREPERATION THEREOF**  
[54] **COMPOSITIONS PHARMACEUTIQUES DE DISPERSIONS SOLIDES AMORPHES ET LEURS PROCEDES DE PREPARATION**  
[72] WANG, ZEREN, US  
[72] CHEN, SHUN, CN  
[72] SUN, LONGWEI, CN  
[72] ZHAO, YANXIN, CN  
[71] SHENZHEN PHARMACIN CO., LTD., CN  
[85] 2023-03-27  
[86] 2021-09-29 (PCT/CN2021/121696)  
[87] (WO2022/068877)  
[30] CN (202011046895.4) 2020-09-29

[21] **3,194,011**  
[13] A1

[51] **Int.Cl. A61K 9/08 (2006.01) A61K 31/045 (2006.01) A61K 31/44 (2006.01) A61K 47/26 (2006.01) A61K 47/36 (2006.01) A61P 1/00 (2006.01) A61P 1/16 (2006.01) A61P 1/18 (2006.01) A61P 11/00 (2006.01) A61P 29/00 (2006.01) A61P 31/04 (2006.01)**  
[25] EN  
[54] **LIQUID-STATE PHARMACEUTICAL COMPOSITION EXHIBITING EXCELLENT PRESERVATIVE EFFECTIVENESS**  
[54] **COMPOSITION PHARMACEUTIQUE LIQUIDE PRESENTANT UNE EXCELLENTE EFFICACITE DE CONSERVATION**  
[72] SHINDO, TAKESHI, JP  
[71] ISHIHARA SANGYO KAISHA, LTD., JP  
[85] 2023-03-27  
[86] 2021-09-27 (PCT/JP2021/035417)  
[87] (WO2022/071233)  
[30] JP (2020-164034) 2020-09-29

[21] **3,194,012**  
[13] A1

[51] **Int.Cl. B63B 27/00 (2006.01) B63B 27/16 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR LOADING AND SECURING EQUIPMENT MODULES TO A SHIP**  
[54] **SYSTEME ET PROCEDE PERMETTANT DE CHARGER ET DE FIXER DES MODULES D'EQUIPEMENT A UN NAVIRE**  
[72] BERTELSEN, RENE, DK  
[72] PRÆST, LARS, DK  
[71] SH GROUP A/S, DK  
[85] 2023-03-27  
[86] 2021-09-28 (PCT/EP2021/076684)  
[87] (WO2022/069488)  
[30] US (63/084,733) 2020-09-29

[21] **3,194,013**  
[13] A1

[51] **Int.Cl. B63B 27/16 (2006.01) B66F 7/28 (2006.01) B66F 9/14 (2006.01)**  
[25] EN  
[54] **LIFT AND METHOD FOR LIFTING EQUIPMENT MODULES**  
[54] **DISPOSITIF DE LEVAGE ET PROCEDE DE LEVAGE DE MODULES D'EQUIPEMENT**  
[72] PRAEST, LARS, DK  
[71] SH GROUP A/S, DK  
[85] 2023-03-27  
[86] 2021-06-11 (PCT/EP2021/065793)  
[87] (WO2022/069087)  
[30] US (63/084,733) 2020-09-29  
[30] DK (BA 2021 00044) 2021-05-18

[21] **3,194,014**  
[13] A1

[51] **Int.Cl. B05B 1/34 (2006.01) B05B 7/14 (2006.01) B24C 7/00 (2006.01) B24C 5/02 (2006.01)**  
[25] EN  
[54] **AN INSERT FOR USE IN DRY BLASTING**  
[54] **INSERT DESTINE A ETRE UTILISE DANS LE TRAITEMENT AU JET A SEC**  
[72] FARROW, NIGEL RICHARD, US  
[71] FARROW, NIGEL RICHARD, US  
[85] 2023-03-27  
[86] 2021-09-30 (PCT/IB2021/059005)  
[87] (WO2022/070133)  
[30] US (63/085,329) 2020-09-30

## Demandes PCT entrant en phase nationale

---

[21] **3,194,015**  
[13] A1  
[51] **Int.Cl. B60D 1/07 (2006.01) B60D 1/36 (2006.01) B60D 1/42 (2006.01) B60D 1/52 (2006.01) B60D 1/58 (2006.01) B60R 9/06 (2006.01)**  
[25] EN  
[54] **HITCHING APPARATUS AND RELATED METHOD**  
[54] **APPAREIL D'ATTELAGE ET PROCEDE ASSOCIE**  
[72] PRETLOVE, HARRISON JAMES, AU  
[71] PRETLOVE, HARRISON JAMES, AU  
[85] 2023-03-27  
[86] 2021-09-22 (PCT/AU2021/051107)  
[87] (WO2022/061404)  
[30] AU (2020903486) 2020-09-28

---

[21] **3,194,043**  
[13] A1  
[51] **Int.Cl. A61M 16/00 (2006.01) B33Y 10/00 (2015.01) B33Y 80/00 (2015.01) B29C 64/10 (2017.01) A61M 16/01 (2006.01) A61M 16/16 (2006.01)**  
[25] EN  
[54] **VENTILATOR**  
[54]  
[72] ISHIKITA, NAOYUKI, JP  
[71] ISHIKITA, NAOYUKI, JP  
[85] 2023-03-28  
[86] 2021-09-15 (PCT/JP2021/033852)  
[87] (WO2022/070907)  
[30] JP (2020-168124) 2020-10-02

---

[21] **3,194,044**  
[13] A1  
[51] **Int.Cl. G01N 17/00 (2006.01)**  
[25] EN  
[54] **BURIED PIPING REPLACEMENT PERIOD PREDICTION APPARATUS, BURIED PIPING REPLACEMENT PERIOD PREDICTION METHOD, COMPUTER PROGRAM PRODUCT, AND COMPUTER-READABLE MEMORY**  
[54] **DISPOSITIF DE PREDICTION DE PERIODE DE REMPLACEMENT DE CANALISATION ENFOUIE, PROCEDE DE PREDICTION DE PERIODE DE REMPLACEMENT DE CANALISATION ENFOUIE, PROGRAMME ET SUPPORT D'ENREGISTREMENT LISIBLE PAR ORDINATEUR**  
[72] KAWAKATSU, TOMO, JP  
[72] FUNAHASHI, GORO, JP  
[72] OKUMURA, YUTA, JP  
[72] TAKIZAWA, SATOSHI, JP  
[71] KUBOTA CORPORATION, JP  
[85] 2023-03-28  
[86] 2021-08-27 (PCT/JP2021/031499)  
[87] (WO2022/070706)  
[30] JP (2020-162867) 2020-09-29

---

[21] **3,194,045**  
[13] A1  
[51] **Int.Cl. G06V 20/69 (2022.01)**  
[25] EN  
[54] **CONTINUOUS DETECTION AND SPECIES CLASSIFICATION OF BIOLOGICAL PARTICLES IN A SAMPLE**  
[54] **DETECTION CONTINUE ET CLASSIFICATION PAR ESPECE DE PARTICULES BIOLOGIQUES DANS UN ECHANTILLON**  
[72] ROHANI, DARIUS ADAM, DK  
[72] MERSEBAK, DANIEL LUNDT, DK  
[72] MERSEBAK, NICOLAI SCHERLING, DK  
[72] KAMPMANN, KRISTOFFER, DK  
[71] KUATRO GROUP APS, DK  
[85] 2023-03-28  
[86] 2021-10-08 (PCT/EP2021/077968)  
[87] (WO2022/074251)  
[30] EP (20200758.9) 2020-10-08

---

[21] **3,194,046**  
[13] A1  
[51] **Int.Cl. G06N 20/00 (2019.01)**  
[25] EN  
[54] **AUTOMATED GENERATION OF A MACHINE LEARNING MODEL FROM COMPUTATIONAL SIMULATION DATA**  
[54] **GENERATION AUTOMATISEE D'UN MODELE D'APPRENTISSAGE AUTOMATIQUE A PARTIR DE DONNEES DE SIMULATION INFORMATIQUE**  
[72] FREED, DAVID M., US  
[72] CAMPBELL, IAN, US  
[71] ONSCALE, INC., US  
[85] 2023-03-28  
[86] 2021-09-30 (PCT/US2021/052800)  
[87] (WO2022/072593)  
[30] US (63/085,504) 2020-09-30

---

[21] **3,194,047**  
[13] A1  
[51] **Int.Cl. H01Q 3/36 (2006.01) H01Q 9/06 (2006.01)**  
[25] EN  
[54] **INTEGRATED AND PHASE-COMPENSATED BASE STATION ANTENNA PHASE SHIFTER AND CALIBRATION BOARD**  
[54] **DEPHASEUR D'ANTENNE DE STATION DE BASE INTEGRE ET COMPENSE EN PHASE ET TABLEAU D'ETALONNAGE**  
[72] JANG, TAEHEE, US  
[72] SUNDARARAJAN, NIRANJAN, US  
[71] JOHN MEZZALINGUA ASSOCIATES, LLC, US  
[85] 2023-03-28  
[86] 2021-09-24 (PCT/US2021/051878)  
[87] (WO2022/072227)  
[30] US (63/084,889) 2020-09-29

## PCT Applications Entering the National Phase

[21] **3,194,048**  
[13] A1

- [51] **Int.Cl. G01J 3/02 (2006.01)**  
[25] EN  
[54] **FIELD-CONFIGURABLE AND MODULAR HANDHELD SPECTROMETER**  
[54] **SPECTROMETRE PORTATIF MODULAIRE A CHAMP CONFIGURABLE**  
[72] PALMER, WILLIAM, AU  
[72] GRAY, BRENTON, AU  
[72] FLYNN, JAMIE, AU  
[72] MARTIN, ANTONY, AU  
[72] RODD-ROUTLEY, SELENE, AU  
[71] RAPID PHENOTYPING PTY LIMITED, AU  
[85] 2023-03-28  
[86] 2021-09-28 (PCT/AU2021/051128)  
[87] (WO2022/061421)  
[30] AU (2020903489) 2020-09-28

[21] **3,194,050**  
[13] A1

- [51] **Int.Cl. B60N 2/28 (2006.01) B60N 2/80 (2018.01) B60N 2/809 (2018.01) B60N 2/885 (2018.01)**  
[25] EN  
[54] **CHILD CAR SEAT AND SEAT BACK ASSEMBLY THEREOF**  
[54] **SIEGE-AUTO POUR ENFANT ET ENSEMBLE DOSSIER DE SIEGE ASSOCIE**  
[72] CHEN, HONGBO, CH  
[71] BAMBINO PREZIOSO SWITZERLAND AG, CH  
[85] 2023-03-28  
[86] 2021-09-30 (PCT/EP2021/077006)  
[87] (WO2022/069667)  
[30] CN (202011073701.X) 2020-09-30

[21] **3,194,059**  
[13] A1

- [51] **Int.Cl. G05B 19/418 (2006.01) G06Q 50/04 (2012.01) G05B 23/02 (2006.01)**  
[25] EN  
[54] **DATA EXTRACTION IN INDUSTRIAL AUTOMATION SYSTEMS**  
[54] **EXTRACTION DE DONNEES DANS DES SYSTEMES D'AUTOMATISATION INDUSTRIELS**  
[72] BORRISON, REUBEN, DE  
[72] RUECKERT, JULIUS, DE  
[72] BERNING, MATTHIAS, DE  
[72] BRAUN, ROLAND, DE  
[71] ABB SCHWEIZ AG, CH  
[85] 2023-03-28  
[86] 2021-10-05 (PCT/EP2021/077408)  
[87] (WO2022/073981)  
[30] EP (20200604.5) 2020-10-07

[21] **3,194,060**  
[13] A1

- [51] **Int.Cl. H01J 61/16 (2006.01)**  
[25] EN  
[54] **PHOTOREACTOR AND SOURCE FOR GENERATING UV AND VUV**  
[54] **PHOTOREACTEUR ET SOURCE POUR GENERER DES UV ET VUV**  
[72] ROBINSON, ALEX, GB  
[72] GEAR, MATTHEW, GB  
[71] UNITED KINGDOM RESEARCH AND INNOVATION, GB  
[85] 2023-03-28  
[86] 2021-10-20 (PCT/EP2021/079112)  
[87] (WO2022/084402)  
[30] GB (2016684.9) 2020-10-21

[21] **3,194,065**  
[13] A1

- [51] **Int.Cl. A61K 31/136 (2006.01) A61P 27/00 (2006.01) C07D 213/00 (2006.01)**  
[25] EN  
[54] **CRYSTAL FORM OF PYRIDINYLPHENYL COMPOUND AND PREPARATION METHOD THEREFOR**  
[54] **FORME CRISTALLINE DE COMPOSE PYRIDINYLPHENYLE ET SON PROCEDE DE PREPARATION**  
[72] LI, PENG, CN  
[72] LI, XIAOLIN, CN  
[72] LUO, ZHI, CN  
[72] HE, HAIYING, CN  
[72] HU, GUOPING, CN  
[72] LI, JIAN, CN  
[72] CHEN, SHUHUI, CN  
[71] ZHUHAI UNITED LABORATORIES CO., LTD., CN  
[85] 2023-03-28  
[86] 2021-09-28 (PCT/CN2021/121466)  
[87] (WO2022/063325)  
[30] CN (202011044638.7) 2020-09-28

[21] **3,194,066**  
[13] A1

- [51] **Int.Cl. A01C 3/00 (2006.01) B01J 19/00 (2006.01) B09B 3/00 (2022.01) C02F 3/12 (2006.01) C02F 3/20 (2006.01) C02F 11/00 (2006.01) C02F 11/02 (2006.01) C02F 11/06 (2006.01) C05F 3/00 (2006.01) C05F 3/02 (2006.01) C05F 3/06 (2006.01) C10L 5/02 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR WASHING BIOLOGICAL WASTE TO RECOVER SAME AS SOLID BIOFUEL**  
[54] **SYSTEME DE LAVAGE DE RESIDUS BIOLOGIQUES POUR LEUR RECUPERATION COMME BIOCOMBUSTIBLE SOLIDE**  
[72] CARABALL UGARTE, JOSE ANTONIO, CL  
[71] GUZMAN BLANCO, ENRIQUE, CL  
[71] CARABALL UGARTE, JOSE ANTONIO, CL  
[85] 2023-03-28  
[86] 2020-10-02 (PCT/CL2020/050112)  
[87] (WO2022/067450)



## Demandes PCT entrant en phase nationale

[21] **3,194,068**  
[13] A1

[51] **Int.Cl. C09J 7/29 (2018.01) C09J 7/28 (2018.01) F41H 3/02 (2006.01)**

[25] EN

[54] **A CAMOUFLAGE TAPE, AND CAMOUFLAGE TAPE SYSTEM FOR TEMPORARY MULTISPECTRAL CAMOUFLAGE OF OBJECTS**

[54] **BANDE DE CAMOUFLAGE ET SYSTEME DE BANDE DE CAMOUFLAGE POUR CAMOUFLAGE MULTISPECTRAL PROVISOIRE D'OBJETS**

[72] JERSBLAD, JOHAN, SE

[71] SAAB AB, SE

[85] 2023-03-28

[86] 2021-10-13 (PCT/SE2021/051000)

[87] (WO2022/081070)

[30] SE (2000196-2) 2020-10-15

[21] **3,194,069**  
[13] A1

[51] **Int.Cl. B64C 39/02 (2023.01) B64D 1/22 (2006.01) G01N 1/10 (2006.01) G01N 1/12 (2006.01) G01N 33/18 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR MULTIPLE LIQUID SAMPLE CAPTURE FROM AERIAL DRONES**

[54] **SYSTEME ET PROCEDE DE CAPTURE D'ECHANTILLONS LIQUIDES MULTIPLES A PARTIR DE DRONES AERIENS**

[72] LEWIS, WILLIAM H., US

[72] LLOYD, THOMAS S., NZ

[71] WILL LEWIS CONSULTING, LLC, US

[85] 2023-03-28

[86] 2021-09-28 (PCT/US2021/052427)

[87] (WO2022/072357)

[30] US (63/085,540) 2020-09-30

[21] **3,194,073**  
[13] A1

[51] **Int.Cl. B27N 1/00 (2006.01) B32B 7/03 (2019.01) B27N 3/02 (2006.01) B27N 3/18 (2006.01) B32B 13/02 (2006.01) B32B 13/04 (2006.01) B32B 13/10 (2006.01) B32B 13/12 (2006.01) B32B 21/02 (2006.01) B32B 21/04 (2006.01) E04C 2/16 (2006.01)**

[25] EN

[54] **FIRE-RATED STRUCTURAL OSB PANELS WITH OVERLAID WATER-RESISTANT BARRIER**

[54] **PANNEAUX EN OSB STRUCTURAUX RESISTANTS AU FEU DOTES D'UNE BARRIERE IMPERMEABLE A L'EAU DE PLACAGE**

[72] JOHNSON, SCOTT, US

[72] ST. GERMAIN, BRIAN, US

[71] LOUISIANA-PACIFIC CORPORATION, US

[85] 2023-03-28

[86] 2021-09-30 (PCT/US2021/052988)

[87] (WO2022/072710)

[30] US (63/085,258) 2020-09-30

[21] **3,194,074**  
[13] A1

[51] **Int.Cl. E21D 21/00 (2006.01)**

[25] EN

[54] **AUTONOMOUS ROOF BOLTER WITH SENSOR AND RELATED METHODS**

[54] **DISPOSITIF AUTONOME DE POSE DE BOULONS DANS LE TOIT DOTE D'UN CAPTEUR ET PROCEDES ASSOCIES**

[72] MCQUERREY, SEAN JOSEPH, US

[71] J.H. FLETCHER & CO., US

[85] 2023-03-28

[86] 2021-09-28 (PCT/US2021/052265)

[87] (WO2022/067218)

[30] US (63/084,238) 2020-09-28

[21] **3,194,075**  
[13] A1

[51] **Int.Cl. C03C 25/1025 (2018.01) C03C 25/323 (2018.01) B29B 7/90 (2006.01) B29B 9/14 (2006.01) B29B 15/12 (2006.01) B29C 70/16 (2006.01) B29C 70/52 (2006.01) C03C 25/28 (2018.01) C04B 20/10 (2006.01) C04B 28/02 (2006.01)**

[25] FR

[54] **USE OF GLASS-RESIN COMPOSITE FIBRES FOR THE REINFORCEMENT OF CONCRETE**

[54] **UTILISATION DE FIBRES COMPOSITE VERRE-RESINE POUR LE RENFORCEMENT DU BETON**

[72] PLOUZENNEC, PIERRE, FR

[72] ROOS, KEVIN, FR

[72] MARTINEZ, RAPHAEL, FR

[71] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR

[85] 2023-03-28

[86] 2021-12-10 (PCT/FR2021/052275)

[87] (WO2022/129746)

[30] FR (FR2013357) 2020-12-16

[21] **3,194,077**  
[13] A1

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/4188 (2006.01)**

[25] EN

[54] **CRYSTAL FORM OF PYRROLO HETEROCYCLIC DERIVATIVE AND PREPARATION METHOD THEREFOR**

[54] **FORME CRISTALLINE D'UN DERIVE PYRROLO-HETEROCYCLIQUE ET SON PROCEDE DE PREPARATION**

[72] ZHOU, XIANQIANG, CN

[72] SHAO, CHENG, CN

[72] YOU, LINGFENG, CN

[72] DU, ZHENXING, CN

[72] WANG, JIE, CN

[71] JIANGSU HENGRUI PHARMACEUTICALS CO., LTD., CN

[71] SHANGHAI HENGRUI PHARMACEUTICAL CO., LTD., CN

[85] 2023-03-28

[86] 2021-09-29 (PCT/CN2021/121641)

[87] (WO2022/068860)

[30] CN (202011049402.2) 2020-09-29

## PCT Applications Entering the National Phase

[21] **3,194,079**  
[13] A1

[51] **Int.Cl. G06F 21/62 (2013.01) G06F 21/10 (2013.01) G16H 50/20 (2018.01) G06N 20/00 (2019.01) G08B 21/02 (2006.01)**

[25] EN

[54] **PROVIDING DATA FOR TRAINING A MACHINE LEARNING MODEL**

[54] **FOURNITURE DE DONNEES POUR L'ENTRAINEMENT D'UN MODELE D'APPRENTISSAGE AUTOMATIQUE**

[72] ELSMARK, LARS, SE

[72] PERNYER, KENNETH, SE

[71] ASSA ABLOY AB, SE

[85] 2023-03-28

[86] 2021-10-01 (PCT/EP2021/077080)

[87] (WO2022/069700)

[30] SE (2051156-4) 2020-10-02

[21] **3,194,080**  
[13] A1

[51] **Int.Cl. B07B 1/28 (2006.01) B07B 1/42 (2006.01) H02K 7/065 (2006.01)**

[25] EN

[54] **VIBRATING SCREEN CONTROL ARRANGEMENTS**

[54] **AGENCEMENTS DE COMMANDE DE TAMIS VIBRANT**

[72] TEYHAN, DOUGLAS ROBERT, AU

[72] WOODWARD, JACK, AU

[72] MILEWICZ, MARIUSZ, AU

[71] SCHENCK PROCESS AUSTRALIA PTY LIMITED, AU

[85] 2023-03-28

[86] 2021-10-15 (PCT/AU2021/051208)

[87] (WO2022/077073)

[30] AU (2020903764) 2020-10-16

[21] **3,194,081**  
[13] A1

[51] **Int.Cl. C12Q 1/6806 (2018.01) C12Q 1/6869 (2018.01) C40B 40/06 (2006.01)**

[25] EN

[54] **DETECTION AND ANALYSIS OF STRUCTURAL VARIATIONS IN GENOMES**

[54] **DETECTION ET ANALYSE DE VARIATIONS STRUCTURALES DANS DES GENOMES**

[72] SHOURA, MASSA, US

[72] FIRE, ANDREW Z., US

[72] LEVENE, STEPHEN, US

[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US

[71] BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, US

[85] 2023-03-28

[86] 2021-10-14 (PCT/US2021/055078)

[87] (WO2022/081906)

[30] US (63/092,315) 2020-10-15

[21] **3,194,083**  
[13] A1

[51] **Int.Cl. C08K 5/544 (2006.01) C08G 65/336 (2006.01) C09J 171/02 (2006.01) C09J 183/04 (2006.01)**

[25] EN

[54] **THERMALLY ACCELERATED ADHESIVE COMPOSITIONS BASED ON SILANE-TERMINATED POLYMERS**

[54] **COMPOSITIONS ADHESIVES A EFFET THERMO-ACCELERE A BASE DE POLYMERES A TERMINAISON SILANE**

[72] BECKER-WEIMANN, KLAUS, DE

[72] FRANK, PATRICK, DE

[72] WUNDERLICH, STEFFEN, DE

[71] KLEIBERIT SE & CO. KG, DE

[85] 2023-03-28

[86] 2021-10-29 (PCT/EP2021/080117)

[87] (WO2022/090462)

[30] DE (10 2020 128 608.2) 2020-10-30

[21] **3,194,084**  
[13] A1

[51] **Int.Cl. C08K 3/36 (2006.01) C08L 63/08 (2006.01)**

[25] FR

[54] **REINFORCED PRODUCT COMPRISING AT LEAST ONE METAL REINFORCING ELEMENT AND A RUBBER COMPOSITION**

[54] **PRODUIT RENFORCE A BASE D'AU MOINS UN ELEMENT DE RENFORT METALLIQUE ET D'UNE COMPOSITION DE CAOUTCHOUC**

[72] THUILLIEZ, ANNE-LISE, FR

[72] GAVARD-LONCHAY, ODILE, FR

[72] JEAN-BAPTISTE-DIT-DOMINIQUE, FRANCOIS, FR

[72] MAMMERI, KAHINA, FR

[71] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR

[85] 2023-03-28

[86] 2021-10-08 (PCT/FR2021/051748)

[87] (WO2022/084601)

[30] FR (FR2010880) 2020-10-23

[21] **3,194,085**  
[13] A1

[51] **Int.Cl. C12N 15/85 (2006.01) G16B 20/20 (2019.01) G16B 20/30 (2019.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR MODULATING TCF4 GENE EXPRESSION AND TREATING PITT HOPKINS SYNDROME**

[54] **COMPOSITIONS ET METHODES DE MODULATION DE L'EXPRESSION DU GENE TCF4 ET DE TRAITEMENT DU SYNDROME DE PITT HOPKINS**

[72] MUOTRI, ALYSSON R., US

[72] PAPES, FABIO, BR

[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US

[85] 2023-03-28

[86] 2021-09-30 (PCT/US2021/052987)

[87] (WO2022/072709)

[30] US (63/085,878) 2020-09-30

## Demandes PCT entrant en phase nationale

[21] **3,194,086**  
[13] A1

[51] **Int.Cl. A01N 1/02 (2006.01) B65D 81/18 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHODS FOR CONTROLLING ORGAN TEMPERATURE PRIOR TO AND/OR DURING TRANSPLANTATION PROCEDURES**  
[54] **APPAREIL ET PROCÉDES DE RÉGULATION DE LA TEMPÉRATURE D'ORGANE AVANT ET/OU PENDANT DES PROCÉDES DE TRANSPLANTATION**  
[72] MOSER, MICHAEL, CA  
[72] BHATTI, JASLEEN, CA  
[72] ZHANG, WENJUN, CA  
[72] TONY, ANTHONY, CA  
[72] ZHANG, BING, CN  
[71] THE UNIVERSITY OF SASKATCHEWAN, CA  
[85] 2023-03-28  
[86] 2021-09-29 (PCT/CA2021/051355)  
[87] (WO2022/067429)  
[30] US (63/084,638) 2020-09-29  
[30] US (63/168,958) 2021-03-31

[21] **3,194,087**  
[13] A1

[51] **Int.Cl. C07D 417/12 (2006.01) A61P 13/08 (2006.01) A61P 25/04 (2006.01) A61P 25/28 (2006.01) C07D 417/14 (2006.01)**  
[25] EN  
[54] **BENZAMIDE COMPOUND AND USE THEREOF**  
[54] **COMPOSE BENZAMIDE ET SON UTILISATION**  
[72] ZHANG, XUEJUN, CN  
[72] ZANG, YANG, CN  
[72] LI, XUEQIANG, CN  
[72] YANG, CHENGBING, CN  
[72] WANG, YONGGANG, CN  
[72] ZHANG, BO, CN  
[72] LI, YANG, CN  
[72] LIU, LIFEI, CN  
[72] YANG, JUN, CN  
[72] LI, LIE, CN  
[71] HUMANWELL HEALTHCARE (GROUP) CO., LTD., CN  
[71] WUHAN HUMANWELL INNOVATIVE DRUG RESEARCH AND DEVELOPMENT CENTER LIMITED COMPANY, CN  
[85] 2023-03-28  
[86] 2021-09-30 (PCT/CN2021/122232)  
[87] (WO2022/068930)  
[30] CN (202011059868.0) 2020-09-30  
[30] CN (202110296983.8) 2021-03-19

[21] **3,194,088**  
[13] A1

[51] **Int.Cl. G06E 1/00 (2006.01)**  
[25] EN  
[54] **SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR VASCULAR ACCESS DEVICE PLACEMENT**  
[54] **SYSTÈME, PROCÉDE ET PRODUIT PROGRAMME INFORMATIQUE DE POSITIONNEMENT DE DISPOSITIF D'ACCÈS VASCULAIRE**  
[72] ROTHENBERG, ASHLEY RACHEL, US  
[72] WITT, ERIC KURT, US  
[72] JESSER, MARK, US  
[72] KUMORDZIE, AMI, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-03-28  
[86] 2021-09-29 (PCT/US2021/052522)  
[87] (WO2022/072403)  
[30] US (63/085,294) 2020-09-30

[21] **3,194,091**  
[13] A1

[51] **Int.Cl. A61F 11/00 (2022.01)**  
[25] EN  
[54] **MYRINGOTOMY TUBE WITH A MULTI-VISUAL DESIGN**  
[54] **TUBE DE MYRINGOTOMIE A CONCEPTION MULTI-VISUELLE**  
[72] ALBERT, DR. SAMUEL, US  
[71] ALBERT, DR. SAMUEL, US  
[85] 2023-03-28  
[86] 2021-10-11 (PCT/US2021/054388)  
[87] (WO2022/076936)  
[30] US (63/089,687) 2020-10-09

[21] **3,194,095**  
[13] A1

[51] **Int.Cl. B67D 7/00 (2010.01) G06F 21/32 (2013.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR CONTROLLING A FUEL PUMP**  
[54] **SYSTÈMES ET PROCÉDES DE COMMANDE D'UNE POMPE A CARBURANT**  
[72] GINDLER, DAVID, US  
[72] HAIRSTON, HOB, US  
[72] FIEGLEIN, HENRY, US  
[72] CISEK, LUKASZ, PL  
[71] WAYNE FUELING SYSTEMS LLC, US  
[85] 2023-03-28  
[86] 2021-10-11 (PCT/US2021/054364)  
[87] (WO2022/086744)  
[30] US (17/075,347) 2020-10-20

[21] **3,194,100**  
[13] A1

[51] **Int.Cl. A47J 43/27 (2006.01)**  
[25] EN  
[54] **CAP ASSEMBLY FOR A BEVERAGE CONTAINER**  
[54] **ENSEMBLE DE CAPUCHON POUR UN RÉCIPENT DE BOISSON**  
[72] NICHOLLS, RICHARD JOHN, NL  
[72] NICHOLLS, ANDREW BRYCE, NL  
[72] VAN LEEUWEN, ERWIN CHRISTIAAN, NL  
[72] PRUISSCHER, SEBASTIAAN, NL  
[72] KAAN, WOUTER JAN, NL  
[72] RESOORT, MIKE, NL  
[71] SHAKACAN IP B.V., NL  
[85] 2023-03-28  
[86] 2021-09-27 (PCT/NL2021/050579)  
[87] (WO2022/066015)  
[30] NL (2026556) 2020-09-28

## PCT Applications Entering the National Phase

[21] **3,194,101**  
[13] A1

[51] **Int.Cl. E21B 43/116 (2006.01) E21B 43/117 (2006.01) E21B 43/1185 (2006.01) E21B 43/119 (2006.01)**

[25] EN

[54] **SHAPED CHARGE PERFORATION GUN WITH PHASING ALIGNMENT AND RELATED EQUIPMENT AND METHODS**

[54] **PERFORATEUR A CHARGES CREUSES AVEC ALIGNEMENT DE MISE EN PHASE ET EQUIPEMENT ET PROCEDES ASSOCIES**

[72] BADI, CAMERON SCOTT, US

[72] ROWELL, RYAN WAYNE, US

[72] MARTIN, WILLIAM GRANT, US

[71] REPEAT PRECISION, LLC, US

[85] 2023-03-28

[86] 2021-09-27 (PCT/US2021/052257)

[87] (WO2022/067212)

[30] US (63/084,319) 2020-09-28

[21] **3,194,102**  
[13] A1

[51] **Int.Cl. C07D 473/18 (2006.01) A61K 31/522 (2006.01)**

[25] EN

[54] **A CLASS OF FUSED RING COMPOUNDS, AND PREPARATION AND USE THEREOF**

[54] **CLASSE DE COMPOSES CYCLIQUES FUSIONNES, PREPARATION ET UTILISATION DE CEUX-CI**

[72] ZHAO, CHUANWU, CN

[72] WANG, ZHENYU, CN

[72] ZHANG, CHAOZAI, CN

[72] QI, FEI, CN

[72] CHEN, LIQIAN, CN

[72] JIANG, CHUNHUA, CN

[72] FAN, LIXUE, CN

[72] CHAI, XIAOLING, CN

[72] LI, CHUNNA, CN

[72] ZHANG, YAN, CN

[71] CSPC ZHONGQI PHARMACEUTICAL TECHNOLOGY (SHIJIAZHUANG) CO., LTD, CN

[85] 2023-03-28

[86] 2021-09-27 (PCT/CN2021/121023)

[87] (WO2022/063303)

[30] CN (202011044828.9) 2020-09-28

[30] CN (202110905531.5) 2021-08-05

[21] **3,194,107**  
[13] A1

[51] **Int.Cl. C08J 5/18 (2006.01) C08K 9/04 (2006.01) C09C 1/02 (2006.01)**

[25] EN

[54] **ULTRAFINE SURFACE-TREATED FILLERS FOR THIN BREATHABLE FILMS**

[54] **CHARGES ULTRAFINES TRAITEES EN SURFACE POUR FILMS MINCES RESPIRANTS**

[72] KNERR, MICHAEL, CH

[72] HIRSIGER, CHRISTOPH, CH

[71] OMYA DEVELOPMENT AG, CH

[85] 2023-03-28

[86] 2021-11-25 (PCT/EP2021/083033)

[87] (WO2022/112434)

[30] EP (20209918.0) 2020-11-25

[21] **3,194,110**  
[13] A1

[51] **Int.Cl. B32B 3/26 (2006.01) B32B 15/082 (2006.01) B32B 15/085 (2006.01) B32B 21/08 (2006.01) B32B 27/08 (2006.01) B32B 27/30 (2006.01) B32B 27/32 (2006.01)**

[25] EN

[54] **UV PROTECTION FILM FOR OUTDOOR USE**

[54]

[72] STRUVE, FRIEDRICH-WILHELM, DE

[72] SAGERER, DAVID, DE

[72] ROESSLE, MARTIN, DE

[71] RENOLIT AG, DE

[85] 2023-03-28

[86] 2021-10-11 (PCT/EP2021/078028)

[87] (WO2022/078946)

[30] DE (10 2020 126 708.8) 2020-10-12

[30] DE (10 2020 131 858.8) 2020-12-01

[21] **3,194,111**  
[13] A1

[51] **Int.Cl. A61P 11/06 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **METHODS FOR TREATING ASTHMA IN PEDIATRIC SUBJECTS BY ADMINISTERING AN IL-4R ANTAGONIST**

[54] **METHODES DE TRAITEMENT DE L'ASTHME CHEZ DES SUJETS PEDIATRIQUES PAR ADMINISTRATION D'UN ANTAGONISTE D'IL-4R**

[72] XU, CHRISTINE, US

[72] AKINLADE, BOLANLE, US

[72] AMIN, NIKHIL, US

[72] RUDDY, MARCELLA, US

[71] SANOFI BIOTECHNOLOGY, FR

[71] REGENERON PHARMACEUTICALS, INC., US

[85] 2023-03-28

[86] 2021-10-04 (PCT/US2021/053328)

[87] (WO2022/076289)

[30] US (63/087,668) 2020-10-05

[30] US (63/109,719) 2020-11-04

[30] US (63/144,048) 2021-02-01

[30] US (63/157,922) 2021-03-08

[30] EP (21315151.7) 2021-08-31

[21] **3,194,113**  
[13] A1

[51] **Int.Cl. H04N 21/441 (2011.01) H04N 21/475 (2011.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR PROVIDING A COMMON KEY AMONG MEDIA GATEWAY APPLIANCE SUBSYSTEMS**

[54] **SYSTEME ET PROCEDE POUR FOURNIR UNE CLE COMMUNE PARMIS DES SOUS-SYSTEMES D'APPAREIL DE PASSERELLE MULTIMEDIA**

[72] LI, JU, CN

[71] ARRIS ENTERPRISES LLC, US

[85] 2023-03-28

[86] 2020-09-29 (PCT/CN2020/118726)

[87] (WO2022/067473)

## Demandes PCT entrant en phase nationale

---

[21] **3,194,116**  
[13] A1

[51] **Int.Cl. A61K 31/015 (2006.01) C07C 13/28 (2006.01) C07C 13/32 (2006.01) C07C 13/54 (2006.01)**

[25] EN

[54] **CURCUSONE DITERPENOIDS AND USES THEREOF**

[54] **DITERPENOIDES DE CURCUSONE ET LEURS UTILISATIONS**

[72] DAI, MINGJI, US

[72] CUI, CHENGSEN, US

[72] CAI, ZHONGJIAN, CN

[72] ADIBEKIAN, ALEXANDER, US

[72] DWYER, BRENDAN, US

[71] PURDUE RESEARCH FOUNDATION, US

[71] THE UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INCORPORATED, US

[85] 2023-03-28

[86] 2021-09-27 (PCT/US2021/052148)

[87] (WO2022/072266)

[30] US (63/084,594) 2020-09-29

---

[21] **3,194,119**  
[13] A1

[51] **Int.Cl. B65H 75/22 (2006.01)**

[25] EN

[54] **REUSABLE REEL**

[54] **BOBINE REUTILISABLE**

[72] KISSELSTEIN, JAY A., US

[72] MARONEY, RICHARD, US

[72] MONTENA, NOAH P., US

[72] HANSON, BRIAN K., US

[71] PPC BROADBAND, INC., US

[85] 2023-03-28

[86] 2021-09-30 (PCT/US2021/053021)

[87] (WO2022/072730)

[30] US (63/085,995) 2020-09-30

---

[21] **3,194,120**  
[13] A1

[51] **Int.Cl. G01C 21/02 (2006.01) G01C 21/10 (2006.01) G01C 21/20 (2006.01)**

[25] EN

[54] **INTELLIGENT GEOGRAPHIC LOCATING SYSTEM BY IMAGING OF SKY, AND METHOD FOR GEOGRAPHIC LOCATING**

[54] **SYSTEME DE LOCALISATION GEOGRAPHIQUE INTELLIGENT PAR IMAGERIE DU CIEL, ET PROCEDE DE LOCALISATION GEOGRAPHIQUE**

[72] KAUFFMAN, JUDSON, US

[72] WOLFEL, JOSEF, US

[71] TERRADEPTH, INC., US

[85] 2023-03-28

[86] 2021-10-08 (PCT/US2021/054149)

[87] (WO2022/076806)

[30] US (63/089,639) 2020-10-09

---

[21] **3,194,121**  
[13] A1

[51] **Int.Cl. B65G 1/04 (2006.01) B65G 1/137 (2006.01) B65G 35/06 (2006.01) B65G 54/02 (2006.01) B65G 47/244 (2006.01)**

[25] EN

[54] **CONTAINER HANDLING MODULE**

[54] **MODULE DE MANUTENTION DE CONTENEURS**

[72] AUSTRHEIM, TROND, NO

[72] SKALERUD, AMUND, NO

[71] AUTOSTORE TECHNOLOGY AS, NO

[85] 2023-03-28

[86] 2021-11-22 (PCT/EP2021/082455)

[87] (WO2022/112153)

[30] NO (20201310) 2020-11-27

---

[21] **3,194,122**  
[13] A1

[51] **Int.Cl. C07K 14/47 (2006.01)**

[25] EN

[54] **PRODUCTS AND METHODS FOR TREATING MUSCULAR DYSTROPHY**

[54] **PRODUITS ET METHODES DE TRAITEMENT DE LA DYSTROPHIE MUSCULAIRE**

[72] FLANIGAN, KEVIN, US

[72] WEIN, NICOLAS SEBASTIEN, US

[72] SIMMONS, TABATHA, US

[71] RESEARCH INSTITUTE AT NATIONWIDE CHILDREN'S HOSPITAL, US

[85] 2023-03-28

[86] 2021-09-28 (PCT/US2021/052425)

[87] (WO2022/067257)

[30] US (63/084,259) 2020-09-28

---

[21] **3,194,124**  
[13] A1

[51] **Int.Cl. F24F 8/10 (2021.01) F24F 8/167 (2021.01) F24F 8/22 (2021.01) F24F 13/20 (2006.01) F24F 13/24 (2006.01) F24F 13/28 (2006.01)**

[25] EN

[54] **AIR TREATMENT REACTOR MODULES AND ASSOCIATED SYSTEMS, DEVICES AND METHODS**

[54] **MODULES DE REACTEUR DE TRAITEMENT DE L'AIR ET SYSTEMES, DISPOSITIFS ET PROCEDES ASSOCIES**

[72] LEE, KANG SOO, US

[71] RADIC8 PTE LTD, US

[85] 2023-03-28

[86] 2021-10-20 (PCT/US2021/055923)

[87] (WO2022/087185)

[30] KR (10-2020-0137057) 2020-10-21

## PCT Applications Entering the National Phase

---

[21] **3,194,129**  
[13] A1

[51] **Int.Cl. B01D 9/00 (2006.01) B01J 23/00 (2006.01) B01J 35/02 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR IMPROVING CATALYTIC ACTIVITIES OF NANOPARTICLES**

[54] **PROCEDES ET SYSTEMES POUR AMELIORER LES ACTIVITES CATALYTIQUES DE NANOPARTICULES**

[72] CARGNELLO, MATTEO, US

[72] HUANG, WEIXIN, US

[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US

[85] 2023-03-28

[86] 2021-09-27 (PCT/US2021/071610)

[87] (WO2022/072991)

[30] US (63/084,847) 2020-09-29

---

[21] **3,194,132**  
[13] A1

[51] **Int.Cl. B67D 7/48 (2010.01) B67D 7/02 (2010.01) B67D 7/52 (2010.01)**

[25] EN

[54] **SELF-CLOSING FILLING NOZZLE**

[54] **BUSE DE REMPLISSAGE A FERMETURE AUTOMATIQUE**

[72] MEYER, ULRICH, DE

[72] VIETS, SEBASTIAN, DE

[71] ELAFLEX HIBY GMBH & CO. KG, DE

[85] 2023-03-28

[86] 2021-09-22 (PCT/EP2021/076094)

[87] (WO2022/069319)

[30] EP (20198850.8) 2020-09-29

---

[21] **3,194,133**  
[13] A1

[51] **Int.Cl. B23B 51/02 (2006.01)**

[25] EN

[54] **TOOL**

[54] **OUTIL**

[72] KRENZER, ULRICH, DE

[71] MAPAL FABRIK FUR PRAZISIONSWERKZEUGE DR. KRESS KG, DE

[85] 2023-03-28

[86] 2021-11-02 (PCT/EP2021/080410)

[87] (WO2022/101060)

[30] DE (10 2020 214 134.7) 2020-11-10

---

[21] **3,194,134**  
[13] A1

[51] **Int.Cl. G01R 1/073 (2006.01) G01R 31/28 (2006.01)**

[25] EN

[54] **COMPLIANT GROUND BLOCK AND TESTING SYSTEM HAVING COMPLIANT GROUND BLOCK**

[54] **BLOC DE MISE A LA TERRE SOUPLE ET SYSTEME DE TEST MUNI D'UN BLOC DE MISE A LA TERRE SOUPLE**

[72] TREIBERGS, VALTS, US

[72] JOYAL, PAT, US

[72] FLIEGELMAN, LESLIE, US

[71] JOHNSTECH INTERNATIONAL CORPORATION, US

[85] 2023-03-28

[86] 2021-10-05 (PCT/US2021/053488)

[87] (WO2022/076354)

[30] US (63/088,007) 2020-10-06

---

[21] **3,194,135**  
[13] A1

[51] **Int.Cl. G01R 15/24 (2006.01) G01R 33/032 (2006.01)**

[25] EN

[54] **AN OPTICAL SENSOR SYSTEM HAVING A SEGMENTED MAGNETIC FLUX CONCENTRATOR AND METHODS OF USE THEREOF**

[54] **SYSTEME DE CAPTEUR OPTIQUE COMPORTEMENT UN CONCENTRATEUR DE FLUX MAGNETIQUE SEGMENTE ET SES PROCEDES D'UTILISATION**

[72] FIORILLE, ANTHONY, US

[72] KENNEDY, JAMES, US

[72] OSHETSKI, MICHAEL, US

[71] MICATU INC., US

[85] 2023-03-28

[86] 2021-09-28 (PCT/US2021/052352)

[87] (WO2022/067237)

[30] US (63/084,222) 2020-09-28

---

[21] **3,194,136**  
[13] A1

[51] **Int.Cl. B65D 65/24 (2006.01) B65D 75/58 (2006.01) B65D 85/04 (2006.01)**

[25] EN

[54] **PACKAGING FOR REEL-LESS BUNDLE OF CABLE**

[54] **EMBALLAGE POUR FAISCEAU DE CABLE SANS DEVIDOIR**

[72] LOZHKO, ANDRIY, US

[72] MONTENA, NOAH P., US

[72] KISSELSTEIN, JAY A., US

[72] HANSON, BRIAN K., US

[71] PPC BROADBAND, INC., US

[85] 2023-03-28

[86] 2021-09-30 (PCT/US2021/053043)

[87] (WO2022/072749)

[30] US (63/085,997) 2020-09-30

---

[21] **3,194,137**  
[13] A1

[51] **Int.Cl. H02K 33/16 (2006.01) B06B 1/04 (2006.01) B06B 1/12 (2006.01) F04B 43/04 (2006.01) F04B 45/047 (2006.01)**

[25] EN

[54] **RESONANCE-ENABLED MACHINES**

[54] **MACHINES ACTIVEES PAR RESONANCE**

[72] MICHELS, DORAN JOHN, US

[72] MUNSON, BEAUFORD EUGENE, US

[72] LUCON, PETER ANDREW, US

[72] PAFFHAUSEN, MICHAEL JAMES, US

[72] HALL, ROBERT JAMES, US

[71] LUCON ENGINEERING, INC., US

[71] LUCON, PETER ANDREW, US

[85] 2023-03-28

[86] 2021-10-08 (PCT/US2021/054112)

[87] (WO2022/076780)

[30] US (63/089,509) 2020-10-08

## Demandes PCT entrant en phase nationale

[21] **3,194,138**  
[13] A1

[51] **Int.Cl. A61B 5/01 (2006.01) A61B 5/1171 (2016.01) A61L 2/00 (2006.01) A61L 2/10 (2006.01) A61L 2/24 (2006.01)**

[25] EN  
[54] **DEVICE FOR ACCESS CONTROL WITH PHYSICAL DISINFECTION**  
[54] **DISPOSITIF DE CONTROLE D'ACCES A DESINFECTION PHYSIQUE**

[72] GERSTENMEIER, JURGEN, DE  
[71] JK-HOLDING GMBH, DE  
[85] 2023-03-28  
[86] 2021-10-20 (PCT/IB2021/059647)  
[87] (WO2022/084870)  
[30] CH (01364/20) 2020-10-23

[21] **3,194,139**  
[13] A1

[51] **Int.Cl. C07C 253/34 (2006.01) C07C 255/12 (2006.01)**

[25] EN  
[54] **A METHOD FOR THE PURIFICATION OF ETHYLENE CYANOHYDRIN**  
[54] **PROCEDE DE PURIFICATION D'ETHYLENE-CYANOHYDRINE**

[72] BESTGEN, SEBASTIAN, DE  
[72] GRAFF, GUNTHER, DE  
[72] CASPARI, MAIK, DE  
[72] SCHUTZ, THORBEN, DE  
[72] TRAUTHWEIN, HARALD, DE  
[71] EVONIK OPERATIONS GMBH, DE  
[85] 2023-03-28  
[86] 2021-11-08 (PCT/EP2021/080904)  
[87] (WO2022/122273)  
[30] EP (20212450.9) 2020-12-08

[21] **3,194,141**  
[13] A1

[51] **Int.Cl. B60C 1/00 (2006.01) B60C 19/00 (2006.01) C08K 3/04 (2006.01) C08K 3/34 (2006.01) C08L 7/00 (2006.01) C08L 9/00 (2006.01) G06K 19/077 (2006.01) H01B 3/28 (2006.01) H01Q 1/22 (2006.01) H01Q 1/36 (2006.01) C08K 3/06 (2006.01) C08K 3/22 (2006.01) C08K 3/36 (2006.01)**

[25] FR  
[54] **RADIO FREQUENCY COMMUNICATION MODULE COMPRISING AN ELECTRONIC DEVICE COATED IN AN ELASTOMERIC MATERIAL**  
[54] **MODULE DE COMMUNICATION RADIOFREQUENCE COMPRENANT UN DISPOSITIF ELECTRONIQUE ENROBE DANS UN MATERIAU ELASTOMERIQUE**

[72] PORTIER, GUILLAUME, FR  
[72] CADALEN, ALICE, FR  
[72] COUTURIER, LAURENT, FR  
[72] TOURENNE, ANNABEL, FR  
[71] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR  
[85] 2023-03-28  
[86] 2021-10-15 (PCT/FR2021/051798)  
[87] (WO2022/084608)  
[30] FR (FR2010874) 2020-10-23

[21] **3,194,143**  
[13] A1

[51] **Int.Cl. A23G 1/32 (2006.01) A61K 8/41 (2006.01)**

[25] EN  
[54] **COMPOSITIONS, KITS AND METHODS FOR COLLECTING ANALYTE IN A SALIVA SAMPLE**  
[54] **COMPOSITIONS, KITS ET PROCEDES DE COLLECTE D'ANALYTE DANS UN ECHANTILLON DE SALIVE**

[72] GIBBS, PHILLIP, US  
[71] DECIMADX, LLC, US  
[85] 2023-03-28  
[86] 2021-09-29 (PCT/US2021/052607)  
[87] (WO2022/072467)  
[30] US (63/084,897) 2020-09-29

[21] **3,194,145**  
[13] A1

[51] **Int.Cl. G06F 30/392 (2020.01) G06F 30/327 (2020.01)**

[25] EN  
[54] **CHIP PLACED IN FULL-CUSTOM LAYOUT AND ELECTRONIC DEVICE FOR IMPLEMENTING MINING ALGORITHM**  
[54] **PUCE PLACEE DANS UNE TOPOLOGIE ENTIEREMENT PERSONNALISEE ET DISPOSITIF ELECTRONIQUE DESTINE A METTRE EN OEUVRE UN ALGORITHME D'EXPLORATION**

[72] FAN, ZHIJUN, CN  
[72] YANG, ZUOXING, CN  
[72] LI, NAN, CN  
[72] TIAN, WENBO, CN  
[72] KONG, WEIXIN, CN  
[71] SHENZHEN MICROBT ELECTRONICS TECHNOLOGY CO., LTD., CN  
[85] 2023-03-28  
[86] 2022-01-10 (PCT/CN2022/070921)  
[87] (WO2022/166528)  
[30] CN (202110180554.4) 2021-02-08

[21] **3,194,146**  
[13] A1

[51] **Int.Cl. G06T 7/00 (2017.01) G06T 7/62 (2017.01)**

[25] EN  
[54] **QUANTIFICATION OF BARRETT'S OESOPHAGUS**  
[54] **QUANTIFICATION DE L'?SOPHAGE DE BARRETT**

[72] ALI, SHARIB, GB  
[72] RITTSCHER, JENS, GB  
[72] BRADEN, BARBARA, GB  
[72] EAST, JAMES EDWARD, GB  
[72] BAILEY, ADAM, GB  
[71] OXFORD UNIVERSITY INNOVATION LIMITED, GB  
[85] 2023-03-28  
[86] 2021-09-29 (PCT/GB2021/052524)  
[87] (WO2022/069885)  
[30] GB (2015356.5) 2020-09-29

## PCT Applications Entering the National Phase

[21] **3,194,147**  
[13] A1

[51] **Int.Cl. B01D 15/14 (2006.01) B01D 15/12 (2006.01) B01D 15/22 (2006.01) B01D 15/24 (2006.01) B01D 69/02 (2006.01) G01N 30/16 (2006.01) G01N 30/52 (2006.01) G01N 30/60 (2006.01)**

[25] EN

[54] **SYSTEM FOR MEMBRANE CHROMATOGRAPHY**

[54] **SYSTEME DE CHROMATOGRAPHIE SUR MEMBRANE**

[72] GRUNBERG, MARIO, DE

[72] BLUMA, ARNE, DE

[72] STEIN, DOMINIK, DE

[72] LEUTHOLD, MARTIN, DE

[71] SARTORIUS STEDIM BIOTECH GMBH, DE

[85] 2023-03-28

[86] 2021-10-28 (PCT/EP2021/079951)

[87] (WO2022/096358)

[30] EP (20205323.7) 2020-11-03

[21] **3,194,148**  
[13] A1

[51] **Int.Cl. A61K 47/18 (2017.01) A61K 47/44 (2017.01) A61P 1/16 (2006.01) C12N 15/88 (2006.01)**

[25] EN

[54] **LIPID NANOPARTICLE**

[54] **NANOPARTICULE LIPIDIQUE**

[72] SATO, YUSUKE, JP

[72] HARASHIMA, HIDEYOSHI, JP

[72] HASHIBA, KAZUKI, JP

[72] TAGUCHI, MASAMITSU, JP

[72] SAKAMOTO, SACHIKO, JP

[72] SHISHIDO, TAKUYA, JP

[72] OTSU, AYAKA, JP

[72] MAEDA, YOSHIKI, JP

[71] NATIONAL UNIVERSITY CORPORATION HOKKAIDO UNIVERSITY, JP

[71] NITTO DENKO CORPORATION, JP

[85] 2023-03-28

[86] 2021-10-01 (PCT/JP2021/036449)

[87] (WO2022/071582)

[30] JP (2020-167928) 2020-10-02

[21] **3,194,149**  
[13] A1

[51] **Int.Cl. G06Q 10/08 (2023.01) G06Q 50/28 (2012.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR RE-ESTIMATING STOCK**

[54] **PROCEDES ET SYSTEMES DE RE-ESTIMATION D'INVENTAIRE**

[72] KUMAR, AKANSHA, IN

[72] LINGAM, HARISH, IN

[72] SANTHOSH, SWARGAM, IN

[72] LAKKIREDDY, MANOJ REDDY, IN

[72] REDDY, PRANAY REDDY CHEN, IN

[72] DHONDGE, KAMLESH, IN

[72] SARASWAT, MANOJ KUMAR, IN

[72] GADEGAONKAR, KAMLAKAR, IN

[72] GARG, PARISHEKH CHANDRA, IN

[72] NAIK, MILIND, IN

[72] DALVI, SANDESH DASHRATH, IN

[71] JIO PLATFORMS LIMITED, IN

[85] 2023-03-28

[86] 2022-07-29 (PCT/IB2022/057058)

[87] (WO2023/007451)

[30] IN (202121034201) 2021-07-29

[21] **3,194,150**  
[13] A1

[51] **Int.Cl. A61K 31/185 (2006.01) A61K 36/82 (2006.01) A61N 5/06 (2006.01) A61P 17/02 (2006.01) A61Q 19/00 (2006.01) A61Q 19/08 (2006.01)**

[25] EN

[54] **METHODS AND COMPOSITIONS FOR THERAPEUTIC SKIN TREATMENTS IN DERMATOLOGICAL PROCEDURES AFFECTING SKIN'S BARRIER**

[54] **METHODES ET COMPOSITIONS POUR DES TRAITEMENTS THERAPEUTIQUES CUTANES DANS DES ACTES DERMATOLOGIQUES AFFECTANT LA BARRIERE CUTANEE**

[72] HERNANDEZ, STEVEN M., US

[71] TOPIX PHARMACEUTICALS, INC., US

[85] 2023-03-28

[86] 2021-10-08 (PCT/US2021/054194)

[87] (WO2022/076834)

[30] US (63/089,903) 2020-10-09

[21] **3,194,151**  
[13] A1

[51] **Int.Cl. C01B 25/45 (2006.01) H01M 4/131 (2010.01) H01M 4/505 (2010.01)**

[25] EN

[54] **CYCLIC SULFONE ADDITIVES FOR LITHIUM ION BATTERIES**

[54] **ADDITIFS DE SULFONE CYCLIQUE POUR BATTERIES AU LITHIUM-ION**

[72] MOGANTY, SURYA, US

[72] VAIDYA, RUTVIK, US

[72] SINICROPI, JOHN, US

[71] NOHMS TECHNOLOGIES, INC., US

[85] 2023-03-28

[86] 2021-03-31 (PCT/US2021/025136)

[87] (WO2022/071987)

[30] US (63/084,911) 2020-09-29

[21] **3,194,152**  
[13] A1

[51] **Int.Cl. F16K 5/06 (2006.01) F16K 27/06 (2006.01) F16K 27/10 (2006.01)**

[25] EN

[54] **BALL VALVE**

[54] **ROBINET A TOURNANT SPHERIQUE**

[72] DABANELLO, LUCREZIA, IT

[72] MONACA, GIORGIO, IT

[71] CASTEL S.R.L., IT

[85] 2023-03-28

[86] 2021-11-30 (PCT/IB2021/061120)

[87] (WO2022/113051)

[30] IT (10202000029099) 2020-11-30

[21] **3,194,153**  
[13] A1

[51] **Int.Cl. G06Q 50/02 (2012.01) G06Q 10/04 (2023.01) G06N 20/00 (2019.01)**

[25] EN

[54] **SYSTEM AND METHOD OF PREDICTING FAILURES**

[54] **SYSTEME ET PROCEDE DE PREDICTION DE DEFAILLANCES**

[72] KUMAR, AKANSHA, IN

[72] MUNNANGI, KRUSHEEL, IN

[72] KUMAR, SHAIKESH, IN

[71] JIO PLATFORMS LIMITED, IN

[85] 2023-03-28

[86] 2021-11-25 (PCT/IB2021/060968)

[87] (WO2022/112991)

[30] IN (202021052165) 2020-11-30



## Demandes PCT entrant en phase nationale

[21] **3,194,154**  
[13] A1

[51] **Int.Cl. A23D 7/005 (2006.01) A23L 25/00 (2016.01) A23F 5/14 (2006.01)**

[25] EN

[54] **CANNABINOIDS INFUSED CONSUMABLES**

[54] **PRODUITS CONSOMMABLES INFUSES DE CANNABINOIDES**

[72] RANDEL, MICHAEL WILLIAM, US

[71] TASTY INFUSION, INC., US

[85] 2023-03-28

[86] 2021-09-29 (PCT/US2021/052590)

[87] (WO2022/072456)

[30] US (17/039,787) 2020-09-30

[30] US (17/404,280) 2021-08-17

[21] **3,194,157**  
[13] A1

[51] **Int.Cl. B01F 27/70 (2022.01) B01F 33/502 (2022.01) B01F 35/71 (2022.01) B01F 35/88 (2022.01) B01F 35/93 (2022.01)**

[25] EN

[54] **VOLUMETRIC MIXER AND METHOD OF MIXING**

[54] **MELANGEUR VOLUMETRIQUE ET PROCEDE DE MELANGE**

[72] HUNTER, SAMUEL JOSEPH

[71] VOL-TAR LIMITED, GB

[85] 2023-03-28

[86] 2021-10-22 (PCT/GB2021/052750)

[87] (WO2022/069909)

[21] **3,194,160**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/20 (2006.01) A61K 9/28 (2006.01)**

[25] EN

[54] **MODIFIED RELEASE SOFTGEL CAPSULES**

[54] **CAPSULES DE GEL MOU A LIBERATION MODIFIEE**

[72] SUKURU, KARUNAKAR, US

[72] FANG, QI, US

[71] R.P. SCHERER TECHNOLOGIES, LLC, US

[85] 2023-03-28

[86] 2021-10-15 (PCT/US2021/071900)

[87] (WO2022/082222)

[30] US (63/092,762) 2020-10-16

[21] **3,194,155**  
[13] A1

[51] **Int.Cl. H01G 11/62 (2013.01) H01M 10/052 (2010.01) H01M 10/0567 (2010.01)**

[25] EN

[54] **LITHIUM-ION BATTERY ELECTROLYTE ADDITIVE**

[54] **ADDITIF D'ELECTROLYTE DE BATTERIE AU LITHIUM-ION**

[72] MOGANTY, SURYA, US

[72] VAIDYA, RUTVIK, US

[72] TORRES, GABRIEL, US

[72] WU, YUE, US

[72] SINICROPI, JOHN, US

[71] NOHMS TECHNOLOGIES, INC., US

[85] 2023-03-28

[86] 2021-10-01 (PCT/US2021/053190)

[87] (WO2022/072839)

[30] US (63/086,943) 2020-10-02

[21] **3,194,158**  
[13] A1

[51] **Int.Cl. F16C 33/20 (2006.01) F16C 33/26 (2006.01) F16C 39/02 (2006.01)**

[25] EN

[54] **SHOE FOR HYDRODYNAMIC BEARING AND RELEVANT MANUFACTURING PROCESS**

[54] **SABOT POUR UN PALIER HYDRODYNAMIQUE ET PROCEDE DE FABRICATION APPROPRIE**

[72] RIBONI, GIACOMO, IT

[71] EUROBEARINGS S.R.L., IT

[85] 2023-03-28

[86] 2021-09-30 (PCT/IB2021/058983)

[87] (WO2022/074517)

[30] IT (10202000023422) 2020-10-05

[21] **3,194,161**  
[13] A1

[51] **Int.Cl. A61K 31/00 (2006.01) A61K 31/70 (2006.01) A61K 31/7088 (2006.01) A61K 38/00 (2006.01) A61K 45/00 (2006.01) A61K 45/06 (2006.01)**

[25] EN

[54] **NUCLEOSIDE CONTAINING SIRNAS FOR TREATING VIRAL DISEASES**

[54] **NUCLEOSIDE CONTENANT DES ARNSI POUR TRAITER DES MALADIES VIRALES**

[72] EVANS, DAVID M., US

[71] SIRNAOMICS, INC., US

[85] 2023-03-28

[86] 2021-10-04 (PCT/US2021/053440)

[87] (WO2022/072950)

[30] US (63/087,165) 2020-10-02

[21] **3,194,156**  
[13] A1

[51] **Int.Cl. G01R 1/04 (2006.01) G01R 1/06 (2006.01) G01R 1/067 (2006.01) G01R 1/073 (2006.01) G01R 31/00 (2006.01)**

[25] EN

[54] **HOUSING WITH ANTI-DISLODGE CAPABILITY**

[54] **BOITIER A CAPACITE ANTI-DELOGEMENT**

[72] CHARTRAND, BOB, US

[72] JOHNSON, DAVID, US

[72] SHEPOSH, BRIAN, US

[72] ANDRES, MIKE, US

[71] JOHNSTECH INTERNATIONAL, US

[85] 2023-03-28

[86] 2021-10-01 (PCT/US2021/053213)

[87] (WO2022/072858)

[30] US (63/086,683) 2020-10-02

[21] **3,194,159**  
[13] A1

[51] **Int.Cl. E04C 1/39 (2006.01) H01R 13/46 (2006.01) H02G 3/14 (2006.01) H05K 5/03 (2006.01)**

[25] EN

[54] **POWER POST**

[54] **POTEAU D'ALIMENTATION**

[72] SALINE, LON BENJAMIN, US

[71] HUBBELL INCORPORATED, US

[85] 2023-03-28

[86] 2021-09-29 (PCT/US2021/052599)

[87] (WO2022/072463)

[30] US (63/084,629) 2020-09-29

[30] US (63/094,482) 2020-10-21

## PCT Applications Entering the National Phase

[21] **3,194,162**  
[13] A1

[51] **Int.Cl. C07K 16/10 (2006.01) A61P 31/14 (2006.01)**  
[25] EN  
[54] **ANTIBODIES AGAINST SARS-COV-2**  
[54] **ANTICORPS CONTRE LE SARS-COV-2**  
[72] CORTI, DAVIDE, CH  
[72] DE MARCO, ANNA, CH  
[72] PIZZUTO, MATTEO SAMUELE, CH  
[72] GUARINO, BARBARA, CH  
[72] LEMPP, FLORIAN A., US  
[72] CHEN, ALEX, US  
[72] ROSEN, LAURA, US  
[71] HUMABS BIOMED SA, CH  
[71] VIR BIOTECHNOLOGY, INC., US  
[85] 2023-03-28  
[86] 2021-09-28 (PCT/US2021/052481)  
[87] (WO2022/067269)  
[30] US (63/084,501) 2020-09-28  
[30] US (63/111,435) 2020-11-09  
[30] US (63/112,505) 2020-11-11  
[30] US (63/119,545) 2020-11-30  
[30] US (63/137,112) 2021-01-13  
[30] US (63/170,356) 2021-04-02

[21] **3,194,163**  
[13] A1

[51] **Int.Cl. A61B 5/242 (2021.01) A61B 5/243 (2021.01)**  
[25] EN  
[54] **MAGNETOENCEPHALOGRAPHY METHOD AND SYSTEM**  
[54] **PROCEDE ET SYSTEME DE MAGNETOENCEPHALOGRAPHIE**  
[72] BROOKES, MATTHEW, GB  
[72] BOTO, ELENA, GB  
[71] THE UNIVERSITY OF NOTTINGHAM, GB  
[85] 2023-03-28  
[86] 2021-09-30 (PCT/GB2021/052537)  
[87] (WO2022/069896)  
[30] GB (2015427.4) 2020-09-30

[21] **3,194,164**  
[13] A1

[51] **Int.Cl. C07D 417/04 (2006.01) C07D 417/14 (2006.01) C07D 471/04 (2006.01) C07D 491/08 (2006.01) C07D 491/10 (2006.01) C07D 498/08 (2006.01)**  
[25] EN  
[54] **PYRIMIDINE- AND NITROGEN-CONTAINING BICYCLIC COMPOUND**  
[54] **COMPOSE BICYCLIQUE CONTENANT DE L'AZOTE QUI CONTIENT DE LA PYRIMIDINE**  
[72] ARAI, KOICHIRO, JP  
[72] TAKABA, KENICHIRO, JP  
[72] ATOBE, MASAKAZU, JP  
[72] TAKASHIMA, MISATO, JP  
[72] AONO, NAOMI, JP  
[72] POTTER, ANDREW JOHN, GB  
[72] MADDOX, DANIEL PAUL, GB  
[71] ASAHI KASEI PHARMA CORPORATION, JP  
[71] VERNALIS (R&D) LIMITED, GB  
[85] 2023-03-28  
[86] 2020-09-30 (PCT/JP2020/037048)  
[87] (WO2022/070289)

[21] **3,194,166**  
[13] A1

[51] **Int.Cl. G06E 1/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR EXPOSOMIC CLINICAL APPLICATIONS**  
[54] **SYSTEMES ET PROCEDES DESTINES A DES APPLICATIONS CLINIQUES EXPOSOMIQUES**  
[72] ARORA, MANISH, US  
[72] CURTIN, PAUL, US  
[72] AUSTIN, CHRISTINE, US  
[71] ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI, US  
[85] 2023-03-28  
[86] 2021-10-06 (PCT/US2021/053838)  
[87] (WO2022/076603)  
[30] US (63/088,375) 2020-10-06  
[30] US (63/164,964) 2021-03-23  
[30] US (63/121,792) 2020-12-04

[21] **3,194,169**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) A61K 31/4545 (2006.01) A61K 31/4745 (2006.01) A61K 31/496 (2006.01) A61K 31/506 (2006.01) A61K 31/5377 (2006.01) A61K 31/551 (2006.01) A61K 31/553 (2006.01) A61P 35/00 (2006.01) C07D 401/04 (2006.01) C07D 405/14 (2006.01) C07D 413/14 (2006.01) C07D 471/04 (2006.01)**  
[25] EN  
[54] **TRICYCLIC LIGANDS FOR DEGRADATION OF IKZF2 OR IKZF4**  
[54] **LIGANDS TRICYCLIQUES POUR LA DEGRADATION D'IKZF2 OU D'IKZF4**  
[72] NASVESCHUK, CHRISTOPHER G., US  
[72] HENDERSON, JAMES A., US  
[72] MOUSTAKIM, MOSES, US  
[72] GOOD, ANDREW CHARLES, US  
[72] PROIA, DAVID, US  
[71] C4 THERAPEUTICS, INC., US  
[85] 2023-03-29  
[86] 2021-10-14 (PCT/US2021/055102)  
[87] (WO2022/081925)  
[30] US (63/091,875) 2020-10-14

## Demandes PCT entrant en phase nationale

[21] **3,194,179**  
[13] A1

[51] **Int.Cl. B01J 8/04 (2006.01) B01J 12/00 (2006.01) B01J 21/04 (2006.01) B01J 21/06 (2006.01) B01J 23/00 (2006.01) B01J 23/755 (2006.01) B01J 23/94 (2006.01) B01J 29/12 (2006.01) B01J 35/04 (2006.01) B01J 35/10 (2006.01) B01J 37/02 (2006.01) B01J 37/08 (2006.01) B01J 38/14 (2006.01) C01B 3/40 (2006.01)**

[25] EN

[54] **CATALYST SYSTEMS FOR REFORMING IN CYCLIC FLOW REACTORS, PREPARATION AND USE THEREOF**

[54] **SYSTEMES CATALYTIQUES POUR LE REFORMAGE DANS LES REACTEURS A FLUX CYCLIQUE**

[72] CHUN, CHANGMIN, US  
[72] SATTLER, WESLEY, US  
[72] GATT, JOSEPH E., US  
[72] HAJKOWSKI, KEITH R., US  
[72] O'NEAL, EVERETT J., US  
[72] GUNTHER, WILLIAM R., US  
[72] SKOULIDAS, ANASTASIOS, US  
[71] EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY, US

[85] 2023-03-29  
[86] 2021-10-07 (PCT/US2021/053978)  
[87] (WO2022/081415)  
[30] US (63/090,880) 2020-10-13

[21] **3,194,190**  
[13] A1

[51] **Int.Cl. A01G 25/09 (2006.01) A01G 25/16 (2006.01) B05B 12/08 (2006.01) B05B 12/12 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR CALIBRATING AN IRRIGATION SYSTEM**

[54] **SYSTEME ET PROCEDE D'ETALONNAGE D'UN SYSTEME D'IRRIGATION**

[72] RICKETTS, MICHAEL GEORGE, US  
[72] MAGNUSSON, BRIAN JAMES, US  
[71] LINDSAY CORPORATION, US

[85] 2023-03-29  
[86] 2021-09-21 (PCT/US2021/051182)  
[87] (WO2022/072165)  
[30] US (17/060,425) 2020-10-01

[21] **3,194,191**  
[13] A1

[51] **Int.Cl. G21D 3/04 (2006.01)**

[25] EN

[54] **CONTROL SWITCHING DEVICE**

[54] **DISPOSITIF DE COMMUTATION DE COMMANDE**

[72] HAMAYA, YOICHIRO, JP  
[71] MITSUBISHI ELECTRIC CORPORATION, JP

[85] 2023-03-29  
[86] 2020-11-30 (PCT/JP2020/044516)  
[87] (WO2022/113345)

[21] **3,194,197**  
[13] A1

[51] **Int.Cl. C08L 67/04 (2006.01) C08K 5/053 (2006.01)**

[25] EN

[54] **POLYMER COMPOSITE COMPRISING OILSEED MEAL**

[54] **COMPOSITE POLYMERE COMPRENANT DE LA FARINE DE GRAINES OLEAGINEUSES**

[72] LYNCH, DANIEL ERIC, NL  
[71] CODA INTELLECTUAL PROPERTY B.V., NL

[85] 2023-03-29  
[86] 2021-09-29 (PCT/NL2021/050591)  
[87] (WO2022/071799)  
[30] NL (2026593) 2020-09-30

[21] **3,194,199**  
[13] A1

[51] **Int.Cl. C08L 67/04 (2006.01) C08K 5/053 (2006.01)**

[25] EN

[54] **POLYMER COMPOSITE COMPRISING WHOLE GRAIN FLOUR OF CEREAL GRASSES**

[54] **COMPOSITE POLYMERE COMPRENANT DE LA FARINE DE CEREALES COMPLETES D'HERBES CEREALIERES**

[72] LYNCH, DANIEL ERIC, NL  
[71] CODA INTELLECTUAL PROPERTY B.V., NL

[85] 2023-03-29  
[86] 2021-09-29 (PCT/NL2021/050594)  
[87] (WO2022/071802)  
[30] NL (2026596) 2020-09-30

[21] **3,194,201**  
[13] A1

[51] **Int.Cl. B01D 21/24 (2006.01) C02F 3/12 (2006.01)**

[25] EN

[54] **METHOD FOR TREATING A WASTEWATER EFFLUENT IN A SEQUENCING BATCH REACTOR (SBR) HAVING A CONSTANT LEVEL AND CONTROLLED RECOVERY**

[54]

[72] PETITPAIN PERRIN, FRANCOISE, FR  
[72] DAUNAY, ALEXIS, FR  
[71] SUEZ INTERNATIONAL, FR

[85] 2023-03-29  
[86] 2021-10-01 (PCT/EP2021/077179)  
[87] (WO2022/069745)  
[30] FR (2010111) 2020-10-02

[21] **3,194,209**  
[13] A1

[51] **Int.Cl. F23N 5/24 (2006.01) G06N 20/00 (2019.01) G05B 23/02 (2006.01) G08B 31/00 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR PREDICTING SHUTDOWN ALARMS IN BOILER USING MACHINE LEARNING**

[54] **SYSTEME ET PROCEDE DE PREDICTION D'ALARMES D'ARRET DANS UNE CHAUDIERE FAISANT APPEL A L'APPRENTISSAGE AUTOMATIQUE**

[72] DICKSON, JOHN F., US  
[72] ZALA, RAKESH, US  
[72] KUMAR, NEERAJ, US  
[72] CONGER, TERRY GENE, US  
[71] CLEAVER-BROOKS, INC., US

[85] 2023-03-29  
[86] 2021-02-02 (PCT/US2021/016255)  
[87] (WO2022/071980)  
[30] US (63/085,589) 2020-09-30

## PCT Applications Entering the National Phase

[21] **3,194,221**  
[13] A1

[51] **Int.Cl. G01C 21/00 (2006.01) H04W 64/00 (2009.01) G01S 5/00 (2006.01) H04R 29/00 (2006.01)**

[25] EN

[54] **SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FACILITATING EFFICIENCY OF A GROUP WHOSE MEMBERS ARE ON THE MOVE**

[54] **SYSTEME, PROCEDE ET PRODUIT-PROGRAMME D'ORDINATEUR RENFORCANT L'EFFICACITE D'UN GROUPE DONT LES MEMBRES SONT EN DEPLACEMENT**

[72] SHARON, EREZ, IL  
[72] KANDIBA, SLAVA, IL  
[72] FRENKEL, NOAM, IL  
[72] PINTO, HEN, IL  
[71] ELTA SYSTEMS LTD., IL  
[85] 2023-03-29  
[86] 2021-11-01 (PCT/IL2021/051288)  
[87] (WO2022/113063)  
[30] IL (279076) 2020-11-29  
[30] IL (283637) 2021-05-24

[21] **3,194,224**  
[13] A1

[51] **Int.Cl. H01L 21/02 (2006.01) B32B 7/06 (2019.01) H05K 3/00 (2006.01)**

[25] EN

[54] **TECHNIQUES FOR FABRICATING AND SEPARATING FLEXIBLE MICROELECTRONICS DEVICES FROM RIGID SUBSTRATES**

[54] **TECHNIQUES DESTINEES A FABRIQUER ET A SEPARER DES DISPOSITIFS MICROELECTRONIQUES FLEXIBLES DE SUBSTRATS RIGIDES**

[72] ZAATO, FRANCIS, CA  
[72] TAZ, HUMAIRA, CA  
[72] NANAYAKKARA, AVINASH, CA  
[72] DOSHI, HARIT, CA  
[71] OMNIPLY TECHNOLOGIES INC., CA  
[85] 2023-03-29  
[86] 2021-10-05 (PCT/CA2021/051388)  
[87] (WO2022/073108)  
[30] US (63/088,133) 2020-10-06  
[30] US (63/088,150) 2020-10-06

[21] **3,194,225**  
[13] A1

[51] **Int.Cl. C01G 53/00 (2006.01) H01M 4/00 (2006.01)**

[25] EN

[54] **PROCESS FOR THE MANUFACTURE OF A CATHODE ACTIVE MATERIAL**

[54] **PROCEDE DE FABRICATION D'UN MATERIAU ACTIF DE CATHODE**

[72] HAN, ZHENJI, JP  
[72] NAKAYAMA, JUMPEI, JP  
[72] KASHIWAGI, JUNJI, JP  
[72] FUKUMITSU, HITOSHI, JP  
[72] RAUSCHER, FRANK, DE  
[72] ERK, CHRISTOPH, DE  
[72] LETZELTER, THOMAS, DE  
[71] BASF SE, DE  
[85] 2023-03-29  
[86] 2021-09-16 (PCT/EP2021/075440)  
[87] (WO2022/069237)  
[30] EP (20199673.3) 2020-10-01

[21] **3,194,228**  
[13] A1

[51] **Int.Cl. F24F 3/00 (2006.01) F25B 39/00 (2006.01)**

[25] EN

[54] **RADIATION HEAT DISSIPATION AND RADIATION HEAT COLLECTION-BASED COLD AND HOT CENTRAL AIR CONDITIONING SYSTEM**

[54] **SYSTEME DE CLIMATISATION CENTRALE DE FROID ET DE CHALEUR REPOSANT SUR UNE COLLECTE DE CHALEUR PAR RAYONNEMENT ET UNE DISSIPATION DE CHALEUR PAR RAYONNEMENT**

[72] YANG, JIANGUO, CN  
[72] ZHOU, CHENGJUN, CN  
[72] XIE, WEIBO, CN  
[72] WANG, QUANJIANG, CN  
[72] KANG, JIANHUI, CN  
[72] ZHANG, JILONG, CN  
[72] ZHAO, HUI, CN  
[72] HAO, LIXUAN, CN  
[72] MAO, TONGQIN, CN  
[72] CAO, WENJIE, CN  
[72] CHAO, HAIYING, CN  
[72] ZENG, XIANTING, CN  
[72] LI, JUNZENG, CN  
[71] BEIJING JINGKELUN ENGINEERING DESIGN AND RESEARCH INSTITUTE CO., LTD., CN  
[85] 2023-03-29  
[86] 2021-09-14 (PCT/CN2021/118124)  
[87] (WO2022/156237)  
[30] CN (202110080757.6) 2021-01-21

## Demandes PCT entrant en phase nationale

[21] **3,194,229**  
[13] A1

[51] **Int.Cl. C07K 14/725 (2006.01) A61K 35/17 (2015.01) A61K 35/12 (2015.01)**  
[25] EN  
[54] **HLA CLASS II-RESTRICTED DQ T CELL RECEPTORS AGAINST RAS WITH G13D MUTATION**  
[54] **RECEPTEURS DE LYMPHOCYTES T A RESTRICTION HLA DE CLASSE II DIRIGES CONTRE RAS AYANT UNE MUTATION G13D**  
[72] LEVIN, NOAM, US  
[72] LOWERY, III FRANK J., US  
[72] PARIA, BIMAN C., US  
[72] ROSENBERG, STEVEN A., US  
[72] YOSEPH, RAMI, US  
[71] THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES, US  
[85] 2023-03-29  
[86] 2021-10-01 (PCT/US2021/053060)  
[87] (WO2022/072760)  
[30] US (63/086,674) 2020-10-02

[21] **3,194,232**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/51 (2006.01) A61L 24/00 (2006.01) A61L 24/08 (2006.01)**  
[25] EN  
[54] **STROKE TREATMENT**  
[54] **TRAITEMENT D'UN ACCIDENT VASCULAIRE CEREBRAL**  
[72] BEARD, DANIEL, AU  
[72] INGBER, DONALD, US  
[72] UZUN, OKTAY, US  
[72] BOBE, FRANK, US  
[71] OXFORD UNIVERSITY INNOVATION LIMITED, GB  
[71] PRESIDENT AND FELLOWS OF HARVARD COLLEGE, US  
[85] 2023-03-29  
[86] 2021-09-28 (PCT/US2021/052402)  
[87] (WO2022/072348)  
[30] GB (2015386.2) 2020-09-29  
[30] GB (2107137.8) 2021-05-19

[21] **3,194,233**  
[13] A1

[51] **Int.Cl. B01J 20/22 (2006.01)**  
[25] EN  
[54] **USE OF CARBOXYLATE COMPOUND AS ABSORBENT FOR CAPTURING CARBON DIOXIDE**  
[54] **UTILISATION D'UN COMPOSE CARBOXYLATE COMME ABSORBANT POUR CAPTURER DU DIOXYDE DE CARBONE**  
[72] ZHANG, ZHAOFU, CN  
[72] HAN, BUXING, CN  
[71] BEIJING YUTAN TECHNOLOGY CO., LTD, CN  
[85] 2023-03-29  
[86] 2021-09-26 (PCT/CN2021/120628)  
[87] (WO2022/111026)  
[30] CN (202011359524.1) 2020-11-27

[21] **3,194,237**  
[13] A1

[51] **Int.Cl. E21D 20/00 (2006.01) E21D 20/02 (2006.01)**  
[25] EN  
[54] **APPARATUS FOR RESIN INJECTION, MINING MACHINE AND METHOD**  
[54] **APPAREIL D'INJECTION DE RESINE, MACHINE D'EXPLOITATION MINIERE ET PROCEDE**  
[72] RUOTSALAINEN, PASI, FI  
[71] SANDVIK MINING AND CONSTRUCTION OY, FI  
[85] 2023-03-29  
[86] 2021-12-27 (PCT/EP2021/087691)  
[87] (WO2022/090581)

[21] **3,194,238**  
[13] A1

[51] **Int.Cl. B60W 50/00 (2006.01) G01M 17/007 (2006.01) G01S 7/40 (2006.01) G01S 7/497 (2006.01)**  
[25] EN  
[54] **TARGET ALIGNMENT FOR VEHICLE SENSOR CALIBRATION**  
[54] **ALIGNEMENT DE CIBLE DESTINE A UN ETALONNAGE DE CAPTEUR DE VEHICULE**  
[72] JEFFERIES, RYAN M., US  
[72] DEBOER, DAVID M., US  
[72] LAWRENCE, JON D., US  
[71] BPG SALES AND TECHNOLOGY INVESTMENTS, LLC, US  
[85] 2023-03-29  
[86] 2021-10-01 (PCT/IB2021/059058)  
[87] (WO2022/070162)  
[30] US (63/086,116) 2020-10-01

[21] **3,194,239**  
[13] A1

[51] **Int.Cl. A61K 8/04 (2006.01) A61K 8/34 (2006.01) A61K 8/891 (2006.01) A61Q 19/00 (2006.01)**  
[25] EN  
[54] **FOAMABLE COMPOSITION, USE THEREOF, AND PROCESS FOR ITS PREPARATION**  
[54] **COMPOSITION EXPANSIBLE, SON UTILISATION ET SON PROCEDE DE PREPARATION**  
[72] SHARP, DAVID, US  
[72] COFFEY, DUNCAN, US  
[71] CHATTEM, INC., US  
[85] 2023-03-29  
[86] 2021-10-22 (PCT/US2021/056159)  
[87] (WO2022/087343)  
[30] US (63/104,749) 2020-10-23

## PCT Applications Entering the National Phase

[21] **3,194,242**  
[13] A1

[51] **Int.Cl. H01J 1/304 (2006.01) H01J 1/50 (2006.01) H01J 3/02 (2006.01) H01J 35/06 (2006.01)**

[25] EN

[54] **FIELD EMISSION CATHODE DEVICE AND METHOD FOR FORMING A FIELD EMISSION CATHODE DEVICE**

[54] **DISPOSITIF CATHODE A EMISSION DE CHAMP ET PROCEDE DE FORMATION D'UN DISPOSITIF CATHODE A EMISSION DE CHAMP**

[72] ZHANG, JIAN, US

[71] NCX CORPORATION, US

[85] 2023-03-29

[86] 2021-09-29 (PCT/IB2021/058933)

[87] (WO2022/070090)

[30] US (63/085,309) 2020-09-30

[21] **3,194,243**  
[13] A1

[51] **Int.Cl. C01B 32/174 (2017.01) C25D 13/02 (2006.01) H01J 1/304 (2006.01) H01J 9/02 (2006.01)**

[25] EN

[54] **METHODS FOR FORMING CARBON NANOTUBE/METAL COMPOSITE FILMS AND FIELD EMISSION CATHODES THEREFROM**

[54] **PROCEDES DE FORMATION DE NANOTUBES DE CARBONE/DE FILMS COMPOSITES METALLIQUES ET DE CATHODES A EMISSION DE CHAMP A PARTIR DE CES DERNIERS**

[72] QIAN, CHENG, US

[71] NCX CORPORATION, US

[85] 2023-03-29

[86] 2021-09-29 (PCT/IB2021/058938)

[87] (WO2022/070095)

[30] US (63/085,524) 2020-09-30

[21] **3,194,246**  
[13] A1

[51] **Int.Cl. F16K 1/12 (2006.01) B05B 1/06 (2006.01) F02M 61/10 (2006.01) F02M 61/12 (2006.01) F02M 61/16 (2006.01) F02M 61/18 (2006.01)**

[25] EN

[54] **PRESSURE VALVE ASSEMBLY**

[54] **ENSEMBLE SOUPEPE DE PRESSION**

[72] SAMJITSINGH, SHARON, US

[71] SWEETWATER ENERGY, INC., US

[85] 2023-03-29

[86] 2021-10-01 (PCT/US2021/053227)

[87] (WO2022/072870)

[30] US (63/087,077) 2020-10-02

[30] US (63/146,608) 2021-02-06

[30] US (63/153,740) 2021-02-25

[21] **3,194,247**  
[13] A1

[51] **Int.Cl. H01J 1/304 (2006.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR CLEANING A FIELD EMISSION CATHODE DEVICE**

[54] **PROCEDE ET SYSTEME POUR DISPOSITIF DE CATHODE A EMISSION DE CHAMP**

[72] ZHANG, JIAN, US

[72] QIAN, CHENG, US

[71] NCX CORPORATION, US

[85] 2023-03-29

[86] 2021-09-29 (PCT/IB2021/058950)

[87] (WO2022/070104)

[30] US (63/085,418) 2020-09-30

[21] **3,194,249**  
[13] A1

[51] **Int.Cl. H01J 1/304 (2006.01) H01J 3/02 (2006.01) H01J 35/06 (2006.01)**

[25] EN

[54] **FIELD EMISSION CATHODE DEVICE AND METHOD OF FORMING A FIELD EMISSION CATHODE DEVICE**

[54] **DISPOSITIF DE CATHODE A EMISSION DE CHAMP ET PROCEDE DE FORMATION D'UN DISPOSITIF DE CATHODE A EMISSION DE CHAMP**

[72] ZHANG, JIAN, US

[71] NCX CORPORATION, US

[85] 2023-03-29

[86] 2021-09-29 (PCT/IB2021/058945)

[87] (WO2022/070100)

[30] US (63/085,438) 2020-09-30

[21] **3,194,250**  
[13] A1

[51] **Int.Cl. C21C 5/52 (2006.01) C21C 5/56 (2006.01) F27B 9/12 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR FEEDING AND PREHEATING A METAL CHARGE IN A MELTING FURNACE**

[54] **APPAREIL ET PROCEDE POUR L'APPORT ET LE PRECHAUFFAGE D'UNE CHARGE METALLIQUE DANS UN FOUR DE FUSION**

[72] SCUBLA, STEFANO, IT

[72] RONDINI, NICOLA, IT

[72] BURIN, PAOLO, IT

[71] DANIELI & C. OFFICINE MECCANICHE S.P.A., IT

[85] 2023-03-29

[86] 2021-09-28 (PCT/IT2021/050294)

[87] (WO2022/070221)

[30] IT (102020000022990) 2020-09-29

[21] **3,194,251**  
[13] A1

[51] **Int.Cl. H01M 50/213 (2021.01) H01M 50/143 (2021.01) H01M 50/148 (2021.01) H01M 50/20 (2021.01) H01M 50/289 (2021.01) H01M 50/291 (2021.01) H01M 50/581 (2021.01)**

[25] EN

[54] **MITIGATING THERMAL RUNAWAY PROPAGATION IN LITHIUM-ION BATTERY PACKS**

[54] **ATTENUATION DE LA PROPAGATION D'UN EMBALLEMENT THERMIQUE DANS DES BLOCS-BATTERIES AU LITHIUM-ION**

[72] DOAK, WILLIAM J., US

[72] AKULIS, CHRISTOPHER P., US

[72] ARNOLD, PETER J., US

[72] BOECKE, MATTHEW S., US

[72] SNAVELY, DAN A., US

[72] STEWART, JOSHUA P., US

[71] BAE SYSTEMS CONTROLS INC., US

[85] 2023-03-29

[86] 2021-09-30 (PCT/US2021/052890)

[87] (WO2022/072641)

[30] US (63/086,382) 2020-10-01

## Demandes PCT entrant en phase nationale

[21] **3,194,252**  
[13] A1

[51] **Int.Cl. D03D 1/00 (2006.01) D03D 15/25 (2021.01) D03D 15/283 (2021.01) D03D 15/533 (2021.01) D03D 15/567 (2021.01)**

[25] EN

[54] **SIZE-ADJUSTABLE WOVEN FABRIC, WEARABLE ITEM AND METHODS OF RESIZING A FABRIC**

[54] **TISSU A TAILLE AJUSTABLE, ARTICLE POUVANT ETRE PORTE ET PROCEDES DE REDIMENSIONNEMENT D'UN TISSU**

[72] ISSA, SAMER, SE

[72] KHRANOVSKYY, ERIK, SE

[72] ZHYBAK, MYKHAILO, SE

[71] NANO TEXTILE SOLUTIONS AB, SE

[85] 2023-03-29

[86] 2021-10-08 (PCT/EP2021/077876)

[87] (WO2022/074203)

[30] SE (2051177-0) 2020-10-08

[30] SE (2151187-8) 2021-09-28

[21] **3,194,253**  
[13] A1

[51] **Int.Cl. A61K 31/444 (2006.01) A61K 31/4545 (2006.01)**

[25] EN

[54] **DRUGS TARGETING INFLAMMATION FOR THE TREATMENT OF OSTEOARTHRITIS AND OTHER INFLAMMATORY DISEASES**

[54] **MEDICAMENTS CIBLANT UNE INFLAMMATION POUR LE TRAITEMENT DE L'ARTHROSE ET D'AUTRES MALADIES INFLAMMATOIRES**

[72] ROBINSON, WILLIAM H., US

[72] WANG, QIAN, US

[72] BAKER, MATTHEW C., US

[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US

[85] 2023-03-29

[86] 2021-11-01 (PCT/US2021/057612)

[87] (WO2022/094422)

[30] US (63/108,072) 2020-10-30

[21] **3,194,255**  
[13] A1

[51] **Int.Cl. C12Q 1/689 (2018.01)**

[25] EN

[54] **MULTIPLEX DETECTION OF BACTERIAL RESPIRATORY PATHOGENS**

[54] **DETECTION MULTIPLEX D'AGENTS PATHOGENES RESPIRATOIRES BACTERIENS**

[72] ZHANG, QIUFENG, US

[72] FU, MANLIANG, US

[72] ZHANG, CHUANHUI, US

[71] BECTON, DICKINSON AND COMPANY, US

[85] 2023-03-29

[86] 2021-11-04 (PCT/CN2021/128667)

[87] (WO2022/095924)

[30] CN (PCT/CN2020/126728) 2020-11-05

[21] **3,194,258**  
[13] A1

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

[25] EN

[54] **PLACIDO PATTERN FOR A CORNEAL TOPOGRAPHER**

[54] **MOTIF DE PLACIDO POUR UN DISPOSITIF DE TOPOGRAPHIE CORNEENNE**

[72] ZIEGER, PETER, DE

[72] GRECU, HORIA, DE

[71] ALCON INC., CH

[85] 2023-03-29

[86] 2021-10-20 (PCT/IB2021/059670)

[87] (WO2022/090873)

[30] US (63/105,969) 2020-10-27

[21] **3,194,261**  
[13] A1

[51] **Int.Cl. E04B 2/74 (2006.01)**

[25] EN

[54] **DEMOUNTABLE WALL PARTITION SYSTEM**

[54] **SYSTEME DE SEPARATION DE PAROI DEMONTABLE**

[72] JESPERSEN, UFFE, DK

[72] TOUGNE, GAEL, DK

[71] SAINT-GOBAIN PLACO, FR

[85] 2023-03-29

[86] 2021-10-04 (PCT/EP2021/077259)

[87] (WO2022/073911)

[30] EP (20200055.0) 2020-10-05

[21] **3,194,262**  
[13] A1

[51] **Int.Cl. G01S 7/48 (2006.01) G01S 7/481 (2006.01) G01S 7/497 (2006.01) G01S 7/51 (2006.01) G01S 17/10 (2020.01) G01S 17/42 (2006.01) G01S 17/89 (2020.01)**

[25] EN

[54] **DATA MANAGEMENT OF A BUILDING CONSTRUCTION OVER TIME**

[54] **GESTION DE DONNEES D'UNE CONSTRUCTION DE BATIMENT DANS LE TEMPS**

[72] AGAAJANI, SHAHRIAR, LU

[71] SPACE TIME S.A., LU

[85] 2023-03-29

[86] 2021-09-30 (PCT/EP2021/077002)

[87] (WO2022/069665)

[30] LU (LU102102) 2020-09-30

[21] **3,194,263**  
[13] A1

[51] **Int.Cl. H01Q 3/02 (2006.01) H04B 7/185 (2006.01) H04B 7/195 (2006.01)**

[25] EN

[54] **TRACKING NON-GEO SYNCHRONOUS ORBIT SATELLITES ON ORBITING PLANES OF REGULAR MOTION PATTERNS**

[54] **POURSUITE DE SATELLITES A ORBITE NON GEOSYNCHRONE SUR DES PLANS D'ORBITE A MOTIF DE MOUVEMENTS REGULIERS**

[72] LEE, LIN-NAN, US

[72] HOU, PETER, US

[72] LIAU, VICTOR, US

[71] HUGHES NETWORK SYSTEMS, LLC, US

[85] 2023-03-29

[86] 2021-10-04 (PCT/US2021/071710)

[87] (WO2022/087558)

[30] US (63/104,043) 2020-10-22

[30] US (17/245,301) 2021-04-30

## PCT Applications Entering the National Phase

[21] **3,194,267**  
[13] A1

[51] **Int.Cl. G01N 22/04 (2006.01) G16Y 40/10 (2020.01) G08C 17/02 (2006.01)**  
[25] EN  
[54] **MOISTURE SENSING ROOFING SYSTEMS AND METHODS THEREOF**  
[54] **SYSTEMES DE TOITURE A DETECTION D'HUMIDITE ET PROCEDES ASSOCIES**  
[72] ALOVERT, IGOR, US  
[71] BMIC LLC, US  
[85] 2023-03-29  
[86] 2021-09-30 (PCT/US2021/052873)  
[87] (WO2022/072631)  
[30] US (63/086,251) 2020-10-01

[21] **3,194,268**  
[13] A1

[51] **Int.Cl. A01G 25/09 (2006.01) A01G 25/16 (2006.01) G05D 7/06 (2006.01)**  
[25] EN  
[54] **IRRIGATION SYSTEM COMPUTING DEVICE FOR PROCESSING GEOSPATIAL DATA**  
[54] **DISPOSITIF INFORMATIQUE DE SYSTEME D'IRRIGATION POUR LE TRAITEMENT DE DONNEES GEOSPATIALES**  
[72] CHARLING, KURTIS ARLAN, US  
[72] RICKETTS, MICHAEL GEORGE, US  
[72] DEBNEY, MICHAEL JAMES, US  
[71] LINDSAY CORPORATION, US  
[85] 2023-03-29  
[86] 2021-09-20 (PCT/US2021/051078)  
[87] (WO2022/076151)  
[30] US (17/062,821) 2020-10-05

[21] **3,194,270**  
[13] A1

[51] **Int.Cl. C12Q 1/6816 (2018.01) C12Q 1/6825 (2018.01)**  
[25] EN  
[54] **DNA-BASED ASSAYS**  
[54] **DOSAGES BASES SUR L'ADN**  
[72] SOMASUNDARAM, SUBRAMANIAM, US  
[72] SINGH, ANUP, US  
[72] INAPURI, ESHWAR, US  
[71] AUBURN UNIVERSITY, US  
[85] 2023-03-29  
[86] 2021-09-29 (PCT/US2021/052560)  
[87] (WO2022/072432)  
[30] US (63/084,665) 2020-09-29

[21] **3,194,271**  
[13] A1

[51] **Int.Cl. A43B 11/00 (2006.01)**  
[25] EN  
[54] **RAPID-ENTRY FOOTWEAR HAVING A ROTATING REAR PORTION AND A FULCRUM**  
[54] **ARTICLE CHAUSSANT A ENTREE RAPIDE AYANT UNE PARTIE ARRIERE ROTATIVE ET UN POINT D'APPUI**  
[72] CHENEY, CRAIG, US  
[72] HERMANN, STEVEN, US  
[71] FAST IP, LLC, US  
[85] 2023-03-29  
[86] 2021-10-13 (PCT/US2021/054817)  
[87] (WO2022/081735)  
[30] US (63/091,290) 2020-10-13

[21] **3,194,272**  
[13] A1

[51] **Int.Cl. A47C 20/02 (2006.01) A47C 1/032 (2006.01) A47C 7/42 (2006.01) A47C 7/44 (2006.01)**  
[25] EN  
[54] **PORTABLE REBOUNDING DEVICE WITH FORCE ADJUSTMENT ASSEMBLY**  
[54] **DISPOSITIF DE REBONDISSEMENT PORTATIF AVEC ENSEMBLE DE REGLAGE DE FORCE**  
[72] DJANKOVICH, MLADEN, US  
[71] ROCKING INC., US  
[85] 2023-03-29  
[86] 2021-09-29 (PCT/US2021/052716)  
[87] (WO2022/072543)  
[30] US (63/084,947) 2020-09-29

[21] **3,194,273**  
[13] A1

[51] **Int.Cl. A61M 5/158 (2006.01) A61M 5/178 (2006.01) A61M 5/32 (2006.01)**  
[25] EN  
[54] **DELIVERY DEVICE AND COATED NEEDLE OR CANNULA**  
[54] **DISPOSITIF DE DISTRIBUTION ET AIGUILLE OU CANULE REVETUE**  
[72] MAUL, CHRISTOPHER, US  
[72] GILDEA, CHRISTOPHER, US  
[72] METTERS, ANDREW, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-03-29  
[86] 2021-10-04 (PCT/US2021/053309)  
[87] (WO2022/076279)  
[30] US (63/089,420) 2020-10-08

[21] **3,194,275**  
[13] A1

[25] EN  
[54] **CROWDSOURCED ANNOTATION AND TAGGING SYSTEM FOR DIGITAL TRANSACTIONS AND TRANSACTION PREDICTION SYSTEM**  
[54] **SYSTEME DE COMMENTAIRE ET DE MARQUAGE PARTICIPATIF POUR TRANSACTIONS NUMERIQUES ET SYSTEME DE PREVISION DE TRANSACTION**  
[72] YEE, BRYANT, US  
[72] BERGERON, GEORGE, US  
[72] BULGAKOV, MYKHAYLO, US  
[71] CAPITAL ONE SERVICES, LLC, US  
[85] 2023-03-29  
[86] 2021-09-15 (PCT/US2021/050374)  
[87] (WO2022/072139)  
[30] US (17/061,423) 2020-10-01

[21] **3,194,276**  
[13] A1

[51] **Int.Cl. E04B 1/26 (2006.01) F16B 5/00 (2006.01) F16B 15/00 (2006.01)**  
[25] EN  
[54] **CONNECTOR FOR TWO WORKPIECES**  
[54] **ELEMENT DE LIAISON POUR DEUX PIECES**  
[72] KNAPP, FRIEDRICH, AT  
[71] KNAPP HOLDING GMBH, AT  
[85] 2023-03-29  
[86] 2021-10-12 (PCT/EP2021/078147)  
[87] (WO2022/079007)  
[30] EP (20201716.6) 2020-10-14

[21] **3,194,278**  
[13] A1

[51] **Int.Cl. G01T 1/164 (2006.01) G01T 1/29 (2006.01)**  
[25] EN  
[54] **GAMMA CAMERA DEVICE AND COLLIMATOR**  
[54] **DISPOSITIF DE CAMERA GAMMA ET COLLIMATEUR**  
[72] BEEKMAN, FREDERIK JOHANNES, NL  
[71] MILABS B.V., NL  
[85] 2023-03-29  
[86] 2021-09-29 (PCT/IB2021/000656)  
[87] (WO2022/069936)  
[30] NL (2026609) 2020-10-02



## Demandes PCT entrant en phase nationale

[21] **3,194,279**  
[13] A1

[51] **Int.Cl. A61M 1/06 (2006.01)**  
[25] EN  
[54] **A BREAST PUMP INSERT**  
[54] **INSERT POUR TIRE-LAIT**  
[72] SINICKAS, ALEXANDRA, AU  
[72] MASON, ANDREW, AU  
[72] PROHASKY, DANIEL, AU  
[72] BESSABAVA, RAVI, AU  
[71] MILKDROP IP PTY LTD, AU  
[85] 2023-03-29  
[86] 2021-09-29 (PCT/AU2021/051131)  
[87] (WO2022/067381)  
[30] AU (2020903515) 2020-09-29

[21] **3,194,280**  
[13] A1

[51] **Int.Cl. B02C 18/00 (2006.01) B02C 19/00 (2006.01) B02C 25/00 (2006.01)**  
[25] EN  
[54] **CONNECTED MACERATOR**  
[54] **MACERATEUR CONNECTE**  
[72] MILLER, MATTHEW KERR, GB  
[72] BROWNLEE, STEVE, GB  
[72] PARTINGTON, GARRY, GB  
[71] VERNACARE LIMITED, GB  
[85] 2023-03-29  
[86] 2021-09-07 (PCT/GB2021/052307)  
[87] (WO2022/069856)  
[30] GB (2015488.6) 2020-09-30

[21] **3,194,281**  
[13] A1

[51] **Int.Cl. A22C 25/16 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR AUTOMATICALLY RECOVERING MEAT FROM HEADED AND GUTTED FISH**  
[54] **APPAREIL ET PROCEDE DE RECUPERATION AUTOMATIQUE DE CHAIR DE POISSONS ETETES ET EVISCERES**  
[72] PAGELS, MIRKO, DE  
[72] KRAHN, VALERI, DE  
[72] GUTTE, ULRICH, DE  
[71] NORDISCHER MASCHINENBAU RUD. BAADER GMBH + CO. KG, DE  
[85] 2023-03-29  
[86] 2020-10-19 (PCT/EP2020/079396)  
[87] (WO2022/083848)

[21] **3,194,282**  
[13] A1

[51] **Int.Cl. A61K 31/34 (2006.01) A61K 31/39 (2006.01) A61K 31/40 (2006.01) A61K 31/537 (2006.01) A61P 29/00 (2006.01)**  
[25] EN  
[54] **HSD17B13 INHIBITORS AND USES THEREOF**  
[54] **INHIBITEURS DE HSD17B13 ET LEURS UTILISATIONS**  
[72] GOVEK, STEVEN P., US  
[72] LAI, ANDILY G., US  
[72] HUDSON, ANDREW R., US  
[72] SMITH, NICHOLAS D., US  
[72] FASANYA, KARENDA L., US  
[71] FL2022-001, INC., US  
[85] 2023-03-29  
[86] 2021-09-29 (PCT/US2021/052645)  
[87] (WO2022/072491)  
[30] US (63/085,843) 2020-09-30

[21] **3,194,283**  
[13] A1

[51] **Int.Cl. C07D 217/04 (2006.01) A61P 3/10 (2006.01)**  
[25] EN  
[54] **6-METHOXY-3,4-DIHYDRO-1H-ISOQUINOLINE COMPOUNDS USEFUL IN THE TREATMENT OF DIABETES**  
[54] **COMPOSES DE 6-METHOXY-3,4-DIHYDRO-1H-ISOQUINOLINE UTILES DANS LE TRAITEMENT DU DIABETE**  
[72] BUENO MELENDO, ANA BELEN, US  
[72] LINESWALA, JAYANA PANKAJKUMAR, US  
[72] RUANO PLAZA, GEMA, US  
[72] BUEZO, NURIA DIAZ, US  
[71] ELI LILLY AND COMPANY, US  
[85] 2023-03-29  
[86] 2021-10-06 (PCT/US2021/053691)  
[87] (WO2022/076503)  
[30] EP (20382887.6) 2020-10-08

[21] **3,194,285**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01)**  
[25] EN  
[54] **ANTI-ADENOSINE RECEPTOR (A2AR) ANTIBODIES**  
[54] **ANTICORPS ANTI-RECEPTEUR DE L'ADENOSINE (A2AR)**  
[72] LIU, SHUYING, US  
[72] ZHAO, XINYAN, US  
[72] HU, CHANGYUN, US  
[71] NA BIOTECH CORP, US  
[71] ADEPT BIOPHARMACEUTICAL AND TECHNOLOGY LTD., CN  
[85] 2023-03-29  
[86] 2021-09-30 (PCT/US2021/052819)  
[87] (WO2022/072601)  
[30] US (63/085,612) 2020-09-30

[21] **3,194,287**  
[13] A1

[51] **Int.Cl. F02B 19/00 (2006.01) F02B 19/08 (2006.01) F02B 19/10 (2006.01) F02D 19/02 (2006.01) F02D 41/00 (2006.01) F02D 41/10 (2006.01) F02D 41/38 (2006.01)**  
[25] EN  
[54] **INTERNAL COMBUSTION ENGINE**  
[54] **MOTEUR A COMBUSTION INTERNE**  
[72] FIMML, WOLFGANG, AT  
[72] SPYRA, NIKOLAUS, AT  
[72] SCHAUMBERGER, HERBERT, AT  
[72] GROTZ, MATTHIAS, AT  
[72] BOEWING, ROBERT, AT  
[71] INNIO JENBACHER GMBH & CO OG, AT  
[85] 2023-03-29  
[86] 2020-11-23 (PCT/AT2020/060416)  
[87] (WO2022/104401)

## PCT Applications Entering the National Phase

---

[21] **3,194,288**  
[13] A1

[51] **Int.Cl. G16B 20/20 (2019.01) G16B 20/40 (2019.01) G16B 30/10 (2019.01) G16B 50/30 (2019.01)**

[25] EN

[54] **FORMATTING AND STORAGE OF GENETIC MARKERS**

[54] **FORMATAGE ET STOCKAGE DE MARQUEURS GENETIQUES**

[72] PARADARAMI, TULASI KRISHNA, US

[72] POLCARI, MICHAEL, US

[72] BALACHANDAR, YESHWANTH BASHYAM, US

[72] CORLEY, MATTHEW BRYAN, US

[72] VERMA, ANUVED, US

[72] BOG, ANJA, US

[72] BLAKKAN, CORDELL T., US

[72] STUPAKOV, DMITRY, US

[71] 23ANDME, INC., US

[85] 2023-03-29

[86] 2021-10-08 (PCT/US2021/054300)

[87] (WO2022/076909)

[30] US (63/198,315) 2020-10-09

---

[21] **3,194,289**  
[13] A1

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

[25] EN

[54] **MULTI-PATHWAY SATELLITE COMMUNICATION SYSTEMS AND METHODS**

[54] **SYSTEMES ET PROCEDES DE COMMUNICATION PAR SATELLITES MULTIVOIES**

[72] DEVARAJ, KIRUTHIKA, US

[71] PLANET LABS PBC, US

[85] 2023-03-29

[86] 2021-09-29 (PCT/US2021/052557)

[87] (WO2022/072430)

[30] US (17/036,893) 2020-09-29

---

[21] **3,194,292**  
[13] A1

[51] **Int.Cl. B41M 1/40 (2006.01)**

[25] EN

[54] **BEVERAGE CANS WITH SURFACE OBSCURING COATINGS**

[54] **CANETTES DE BOISSON COMPORTANT DES REVETEMENTS OBSCURCISSANTS DE SURFACE**

[72] FEAVER, TIMOTHY L., US

[72] ARVESON, MATTHEW E., US

[72] REMNANT, JAMES, US

[72] TEAGUE, ALAN W., US

[72] PAULMAN, JASON S., US

[72] RUDOLPH, JAMES, US

[72] MOORE, ROBERT WAYNE, US

[71] CONTOUR PRINTWORKS, LLC, US

[85] 2023-03-29

[86] 2021-09-29 (PCT/US2021/052566)

[87] (WO2022/072436)

[30] US (63/085,486) 2020-09-30

---

[21] **3,194,293**  
[13] A1

[51] **Int.Cl. G07C 5/00 (2006.01)**

[25] EN

[54] **DYNAMIC AND PREDICTIVE ADJUSTMENT OF PAYMENT ATTRIBUTES BASED ON CONTEXTUAL DATA AND METADATA**

[54] **AJUSTEMENT DYNAMIQUE ET PREDICTIF D'ATTRIBUTS DE PAIEMENT SUR LA BASE DE DONNEES CONTEXTUELLES ET DE METADONNEES**

[72] GEORGIADIS, IOANNIS, GR

[72] HARIHARAN, GOPALAKRISHNAN, US

[72] THOMAS, JOHN K., US

[71] ZACT INC., US

[85] 2023-03-29

[86] 2021-09-29 (PCT/US2021/052573)

[87] (WO2022/072441)

[30] US (63/084,565) 2020-09-29

[30] US (63/152,353) 2021-02-23

[30] GR (20210100451) 2021-07-01

[30] US (17/488,136) 2021-09-28

---

[21] **3,194,294**  
[13] A1

[51] **Int.Cl. H04N 21/4402 (2011.01) H04N 19/597 (2014.01)**

[25] EN

[54] **POINT CLOUD DATA PROCESSING METHOD AND APPARATUS, AND STORAGE MEDIUM AND ELECTRONIC APPARATUS**

[54] **PROCEDE ET APPAREIL DE TRAITEMENT DE DONNEES DE NUAGE DE POINTS, ET SUPPORT DE STOCKAGE ET APPAREIL ELECTRONIQUE**

[72] BAI, YAXIAN, CN

[72] HUANG, CHENG, CN

[71] ZTE CORPORATION, CN

[85] 2023-03-29

[86] 2021-09-23 (PCT/CN2021/119964)

[87] (WO2022/068672)

[30] CN (202011063014.X) 2020-09-30

---

[21] **3,194,296**  
[13] A1

[51] **Int.Cl. F02B 19/00 (2006.01) F02B 23/08 (2006.01) F02B 43/00 (2006.01)**

[25] EN

[54] **PISTON AND INTERNAL COMBUSTION ENGINE HAVING SUCH A PISTON**

[54] **PISTON ET MOTEUR A COMBUSTION INTERNE EQUIPE D'UN TEL PISTON**

[72] GROTZ, MATTHIAS, AT

[72] FUCHS, JOCHEN, AT

[72] BOEWING, ROBERT, AT

[72] BIRGEL, ANDREAS, AT

[71] INNIO JENBACHER GMBH & CO OG, AT

[85] 2023-03-29

[86] 2020-11-27 (PCT/AT2020/060424)

[87] (WO2022/109632)

## Demandes PCT entrant en phase nationale

[21] **3,194,297**  
[13] A1

[51] **Int.Cl. A61L 27/20 (2006.01) A61L 27/50 (2006.01) A61L 27/52 (2006.01)**

[25] EN  
[54] **TRANSDERMAL DELIVERY ADMINISTRATION TRANSDERMIQUE**

[72] LEVINSON, DOUGLAS, US  
[72] VOGUS, DOUGLAS R., US  
[72] KRISHNAN, VINU, US  
[72] MITRAGOTRI, SAMIR, US  
[71] FOUNT BIO, INC., US  
[85] 2023-03-29  
[86] 2021-10-27 (PCT/US2021/056916)  
[87] (WO2022/094002)  
[30] US (63/106,623) 2020-10-28

[21] **3,194,298**  
[13] A1

[51] **Int.Cl. A61M 5/14 (2006.01) A61M 5/162 (2006.01) A61M 5/168 (2006.01) A61M 5/42 (2006.01)**

[25] EN  
[54] **DELIVERY DEVICE WITH CAM DRIVEN PERISTALTIC PUMP DISPOSITIF DE DISTRIBUTION AVEC POMPE PERISTALTIQUE ENTRAINEE PAR CAME**

[72] YANG YU, BO, US  
[72] PIZZOCHERO, ALESSANDRO, US  
[72] GYORY, J. RICHARD, US  
[72] WOOD, MARK, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[85] 2023-03-29  
[86] 2021-10-05 (PCT/US2021/053458)  
[87] (WO2022/076337)  
[30] US (63/089,922) 2020-10-09

[21] **3,194,300**  
[13] A1

[51] **Int.Cl. E02B 8/08 (2006.01)**

[25] EN  
[54] **FISH TRANSFER SYSTEM AND METHOD SYSTEME ET PROCEDE DE TRANSFERT DE POISSONS**

[72] PEIRSON, WILLIAM LESLIE, AU  
[72] HARRIS, JOHN HAMLYN, AU  
[72] FELDER, STEFAN MARKUS, AU  
[71] TUBE FISHWAYS PTY. LTD., AU  
[85] 2023-03-29  
[86] 2021-09-30 (PCT/AU2021/051141)  
[87] (WO2022/067386)  
[30] AU (2020244510) 2020-09-30

[21] **3,194,306**  
[13] A1

[51] **Int.Cl. F24F 11/62 (2018.01) F24F 11/72 (2018.01)**

[25] EN  
[54] **METHOD AND SYSTEM FOR CONTROLLING A VENTILATION SYSTEM TO PREVENT INFILTRATION OF POLLUTANTS THROUGH A BUILDING ENVELOPE**

[54] **PROCEDE ET SYSTEME DE COMMANDE D'UN SYSTEME DE VENTILATION POUR EMPECHER L'INFILTRATION DE POLLUANTS A TRAVERS UNE ENVELOPPE DE BATIMENT**

[72] LIE, BJORNAR, NO  
[72] HELSETH, PER MAGNE, NO  
[71] AIRTHINGS ASA, NO  
[85] 2023-03-29  
[86] 2021-09-30 (PCT/NO2021/050198)  
[87] (WO2022/071809)  
[30] NO (20201072) 2020-09-30

[21] **3,194,311**  
[13] A1

[51] **Int.Cl. A61B 5/0295 (2006.01) A61B 5/318 (2021.01) A61B 5/327 (2021.01) A61B 5/346 (2021.01) G06N 3/02 (2006.01) G06N 3/08 (2023.01)**

[25] EN  
[54] **METHOD AND APPARATUS FOR GENERATING AN ELECTROCARDIOGRAM FROM A PHOTOPLETHYSMOGRAM**

[54] **PROCEDE ET APPAREIL DE GENERATION DE ELECTROCARDIOGRAMME A PARTIR D'UN PHOTOPLETHYSMOGRAMME**

[72] SARKAR, PRITAM, CA  
[72] ETEMAD, ALI, CA  
[71] QUEEN'S UNIVERSITY AT KINGSTON, CA  
[85] 2023-03-29  
[86] 2021-09-30 (PCT/CA2021/051368)  
[87] (WO2022/067439)  
[30] US (63/085,394) 2020-09-30

[21] **3,194,313**  
[13] A1

[51] **Int.Cl. F02D 19/02 (2006.01) F02B 43/10 (2006.01) F02B 43/12 (2006.01) F02B 19/10 (2006.01) F02D 19/06 (2006.01)**

[25] EN  
[54] **INTERNAL COMBUSTION ENGINE AND A METHOD FOR OPERATING SUCH AN INTERNAL COMBUSTION ENGINE**

[54] **MOTEUR A COMBUSTION INTERNE ET PROCEDE D'ACTIONNEMENT DUDIT MOTEUR A COMBUSTION INTERNE**

[72] FIMML, WOLFGANG, AT  
[72] SPYRA, NIKOLAUS, AT  
[71] INNIO JENBACHER GMBH & CO OG, AT  
[85] 2023-03-29  
[86] 2020-11-30 (PCT/AT2020/060427)  
[87] (WO2022/109633)

[21] **3,194,314**  
[13] A1

[51] **Int.Cl. C07D 403/14 (2006.01) C07D 231/20 (2006.01) C07D 241/20 (2006.01)**

[25] EN  
[54] **3-[(1H-PYRAZOL-4-YL)OXY]PYRAZIN-2-AMINE COMPOUNDS AS HPK1 INHIBITOR AND USE THEREOF**

[54] **COMPOSES DE 3-[(1H-PYRAZOL-4-YL)OXY]PYRAZIN-2-AMINE UTILISES EN TANT QU'INHIBITEUR DE HPK1 ET LEUR UTILISATION**

[72] XU, SANJIA, CN  
[72] LI, JING, CN  
[72] WANG, ZHIWEI, CN  
[71] BEIGENE, LTD., KY  
[85] 2023-03-29  
[86] 2021-09-29 (PCT/CN2021/121562)  
[87] (WO2022/068848)  
[30] CN (PCT/CN2020/119171) 2020-09-30  
[30] CN (PCT/CN2020/135968) 2020-12-11  
[30] CN (PCT/CN2021/076993) 2021-02-20  
[30] CN (PCT/CN2021/113967) 2021-08-23

## PCT Applications Entering the National Phase

[21] **3,194,316**  
[13] A1

[51] **Int.Cl. F03D 7/00 (2006.01) F03D 17/00 (2016.01)**  
[25] EN  
[54] **WIND TURBINE PLANT AND POWER CONTROL METHOD AND DEVICE THEREOF**  
[54] **ENSEMBLE GENERATEUR EOLIEN ET PROCEDE DE REGULATION DE PUISSANCE ET DISPOSITIF ASSOCIE**  
[72] LIU, ZHONGPENG, CN  
[71] XINJIANG GOLDWIND SCIENCE & TECHNOLOGY CO., LTD., CN  
[85] 2023-03-29  
[86] 2020-12-11 (PCT/CN2020/135602)  
[87] (WO2022/068068)  
[30] CN (202011058738.5) 2020-09-30

[21] **3,194,318**  
[13] A1

[51] **Int.Cl. A24F 40/465 (2020.01) A24F 40/53 (2020.01) A61M 11/04 (2006.01)**  
[25] EN  
[54] **AEROSOL-GENERATING DEVICE WITH MEANS FOR IDENTIFYING A TYPE OF AN AEROSOL-GENERATING ARTICLE BEING USED WITH THE DEVICE**  
[54] **DISPOSITIF DE GENERATION D'AEROSOL DOTE D'UN MOYEN D'IDENTIFICATION DU TYPE D'UN ARTICLE DE GENERATION D'AEROSOL UTILISE AVEC LE DISPOSITIF**  
[72] BUTIN, YANNICK, CH  
[72] STURA, ENRICO, CH  
[72] CHATEAU, MAXIME, CH  
[71] PHILIP MORRIS PRODUCTS S.A., CH  
[85] 2023-03-29  
[86] 2021-09-29 (PCT/EP2021/076856)  
[87] (WO2022/069582)  
[30] EP (20199174.2) 2020-09-30

[21] **3,194,360**  
[13] A1

[25] EN  
[54] **COMPOSITIONS AND METHODS FOR PAIN RELIEF AND NUMBING**  
[54]  
[72] WAUGH, JACOB (DECEASED), US  
[71] ZIROPA, INC., US  
[85] 2023-03-28  
[86] 2021-09-29 (PCT/US2021/052694)  
[87] (3194360)  
[30] US (63/198,092) 2020-09-29

[21] **3,194,463**  
[13] A1

[51] **Int.Cl. G06N 3/094 (2023.01)**  
[25] EN  
[54] **ADVERSARIAL SEMI-SUPERVISED ONE-SHOT LEARNING**  
[54] **APPRENTISSAGE EN UNE SEULE FOIS SEMI-SUPERVISE CONTRADICTOIRE**  
[72] KATSUKI, TAKAYUKI, JP  
[72] OSOGAMI, TAKAYUKI, JP  
[71] INTERNATIONAL BUSINESS MACHINES CORPORATION, US  
[85] 2023-03-30  
[86] 2021-11-24 (PCT/IB2021/060921)  
[87] (WO2022/123380)  
[30] US (17/114,957) 2020-12-08

[21] **3,196,231**  
[13] A1

[51] **Int.Cl. H05B 45/10 (2020.01) H05B 47/19 (2020.01)**  
[25] EN  
[54] **MOVABLE ELECTRICAL FIXTURES**  
[54] **APPAREILS ELECTRIQUES MOBILES**  
[72] SALINE, LON BENJAMIN, US  
[72] LAUGHLIN, RILEY JAMES, US  
[71] HUBBELL INCORPORATED, US  
[85] 2023-04-19  
[86] 2021-09-29 (PCT/US2021/052497)  
[87] (WO2022/072389)  
[30] US (63/084,629) 2020-09-29  
[30] US (63/094,482) 2020-10-21

[21] **3,196,232**  
[13] A1

[51] **Int.Cl. B61D 17/08 (2006.01)**  
[25] EN  
[54] **CONTROLLING VEHICLE AND CAR BODY THEREOF**  
[54] **VEHICULE DE COMMANDE ET CARROSSERIE DE VEHICULE ASSOCIEE**  
[72] QU, ZHENYANG, CN  
[72] HOU, JIANYING, CN  
[72] CHEN, LEHENG, CN  
[72] XU, BAOLEI, CN  
[72] ZHANG, JINHUA, CN  
[72] FU, YINA, CN  
[71] CRRC TANGSHAN CO., LTD., CN  
[85] 2023-04-19  
[86] 2019-12-19 (PCT/CN2019/126489)  
[87] (WO2021/120080)  
[30] CN (201911290229.2) 2019-12-16

[21] **3,196,237**  
[13] A1

[51] **Int.Cl. E05C 17/28 (2006.01) E05D 11/06 (2006.01)**  
[25] EN  
[54] **MOTION-ACTIVATED STOP FOR A VENT WINDOW**  
[54] **BUTEE ACTIVEE PAR UN MOUVEMENT DESTINEE A UNE FENETRE D'AERATION**  
[72] MCINNIS, JAMES M., US  
[72] CARD, JAMES DAVID, US  
[72] MILLIGAN, PATRICK E., US  
[72] BRADY, MATTHEW N., US  
[72] HALECKI, MARK THOMAS, US  
[71] CALDWELL MANUFACTURING COMPANY NORTH AMERICA, LLC, US  
[85] 2023-04-19  
[86] 2022-05-23 (PCT/US2022/030568)  
[87] (WO2022/251126)  
[30] US (63/192,892) 2021-05-25

[21] **3,196,242**  
[13] A1

[51] **Int.Cl. A45D 40/24 (2006.01) A45D 40/04 (2006.01)**  
[25] EN  
[54] **DUAL-ENDED STICK MECHANISM**  
[54] **MECANISME DE BATON A DEUX EXTREMITES**  
[72] YAN, JIAN, CA  
[71] ELC MANAGEMENT LLC, US  
[85] 2023-04-19  
[86] 2021-10-25 (PCT/US2021/056520)  
[87] (WO2022/093726)  
[30] US (17/081,314) 2020-10-27

[21] **3,196,317**  
[13] A1

[51] **Int.Cl. B05B 3/06 (2006.01) B05B 3/10 (2006.01) F16F 9/06 (2006.01)**  
[25] EN  
[54] **SELF REGULATING FLUID BEARING HIGH PRESSURE ROTARY RETARDER NOZZLE**  
[54] **BUSE RETARDATRICE ROTATIVE HAUTE PRESSION A PALIER FLUIDE**  
[72] SZABO, DANIEL, US  
[72] WRIGHT, DOUGLAS E., US  
[71] STONEAGE, INC., US  
[85] 2023-04-20  
[86] 2021-08-25 (PCT/US2021/047456)  
[87] (WO2022/046842)  
[30] US (63/070,953) 2020-08-27  
[30] US (63/159,666) 2021-03-11

## Demandes PCT entrant en phase nationale

[21] **3,196,383**  
[13] A1

[51] **Int.Cl. B61F 1/08 (2006.01)**  
[25] EN  
[54] **RAIL VEHICLE AND UNDERFRAME THEREOF**  
[54] **VEHICULE FERROVIAIRE ET SON CHASSIS EN ACIER MOULE**  
[72] XU, BAOLEI, CN  
[72] MA, JIJUN, CN  
[72] GONG, GAOXIA, CN  
[72] ZHANG, JINHUA, CN  
[72] AN, CHAO, CN  
[72] LI, DONGBO, CN  
[72] WANG, LI, CN  
[71] CRRC TANGSHAN CO., LTD., CN  
[85] 2023-04-20  
[86] 2019-12-19 (PCT/CN2019/126491)  
[87] (WO2021/114345)  
[30] CN (201911284670.X) 2019-12-13

[21] **3,196,384**  
[13] A1

[51] **Int.Cl. B61F 19/04 (2006.01)**  
[25] EN  
[54] **RAIL VEHICLE AND CAR END ENERGY-ABSORBING STRUCTURE THEREOF**  
[54] **VEHICULE FERROVIAIRE ET STRUCTURE D'ABSORPTION D'ENERGIE D'EXTREMITE DE VEHICULE ASSOCIEE**  
[72] YI, ZHAOFENG, CN  
[72] LIU, DONGLIANG, CN  
[72] GAO, XIAOXIA, CN  
[72] LIU, LI, CN  
[72] GAO, NING, CN  
[72] HOU, SHUAICHANG, CN  
[72] ZHANG, XIANGNING, CN  
[72] WANG, TIECHENG, CN  
[71] CRRC TANGSHAN CO., LTD., CN  
[85] 2023-04-20  
[86] 2019-12-19 (PCT/CN2019/126514)  
[87] (WO2021/120081)  
[30] CN (201911290663.0) 2019-12-16

[21] **3,196,389**  
[13] A1

[51] **Int.Cl. A01D 46/30 (2006.01)**  
[25] EN  
[54] **MULTIPLE CARRIER-GONDOLA MACHINE**  
[54] **MACHINE A NACELLES PORTEUSES MULTIPLES**  
[72] VAN LANKVELD, ARNO  
HEINRICUS WILHELMUS, NL  
[71] AVL MOTION GROEP B.V., NL  
[85] 2023-04-20  
[86] 2021-04-29 (PCT/NL2021/050281)  
[87] (WO2021/221505)  
[30] NL (2025474) 2020-04-30

[21] **3,196,444**  
[13] A1

[51] **Int.Cl. B26B 21/52 (2006.01) B26B 21/40 (2006.01)**  
[25] EN  
[54] **RAZOR HANDLE**  
[54] **MANCHE DE RASOIR**  
[72] SIMS, DANIEL JEROME, US  
[72] LIU, YIQIAN ERIC, US  
[72] HWANG, HAILEY, US  
[71] BEAUTY PERSPECTIVES, LLC, US  
[85] 2023-04-21  
[86] 2021-09-17 (PCT/US2021/050989)  
[87] (WO2022/061185)  
[30] US (63/081,114) 2020-09-21

[21] **3,196,470**  
[13] A1

[51] **Int.Cl. C08J 9/36 (2006.01) E04D 1/28 (2006.01) E04D 3/35 (2006.01)**  
[25] EN  
[54] **ROOFING MEMBRANE WITH PROTRUSIONS**  
[54] **MEMBRANE DE TOITURE A PROTUBERANCES**  
[72] ZHENG, YAN, US  
[72] XIAO, YIXI, US  
[71] BMIC LLC, US  
[85] 2023-04-21  
[86] 2021-10-22 (PCT/US2021/056227)  
[87] (WO2022/087395)  
[30] US (63/104,993) 2020-10-23

[21] **3,196,472**  
[13] A1

[25] EN  
[54] **LATERAL FLOW ASSAY FOR RAPID DETECTION OF PATHOGENS IN SAMPLES**  
[54] **DOSAGE A ECOULEMENT LATERAL POUR LA DETECTION RAPIDE D'AGENTS PATHOGENES DANS DES ECHANTILLONS**  
[72] VARMA, NISHA VERONICA, US  
[72] BOER, GOOSSEN JAN BERNARD, US  
[72] ZHOU, ZHIQIAN, US  
[72] DOWNEY, GEORGE A., US  
[72] KUMAR, SHAILENDRA, US  
[72] CRAWFORD, KEITH, US  
[71] MIRAKI INNOVATION THINK TANK LLC, US  
[85] 2023-04-21  
[86] 2021-06-11 (PCT/US2021/037021)  
[87] (WO2021/252902)  
[30] US (63/038,239) 2020-06-12  
[30] US (63/094,619) 2020-10-21

[21] **3,196,500**  
[13] A1

[51] **Int.Cl. A61L 2/00 (2006.01) C11D 1/10 (2006.01) C11D 1/72 (2006.01) C11D 1/83 (2006.01) C11D 3/00 (2006.01) C11D 3/386 (2006.01) C11D 3/48 (2006.01) C11D 11/00 (2006.01)**  
[25] EN  
[54] **LIQUID CLEANING AGENT CONCENTRATE, READY-TO-USE SOLUTION, USES THEREOF AND CLEANING METHODS**  
[54] **CONCENTRE D'AGENT DE NETTOYAGE LIQUIDE, SOLUTION PRETE A L'EMPLOI, UTILISATIONS ASSOCIEES ET PROCEDES DE NETTOYAGE**  
[72] EISERT, DENNIS, DE  
[72] WULFF, BASTIAN, DE  
[72] SPRINGER, MATTHIAS, DE  
[71] CHEMISCHE FABRIK DR. WEIGERT GMBH & CO. KG, DE  
[85] 2023-04-21  
[86] 2021-10-22 (PCT/EP2021/079352)  
[87] (WO2022/084512)  
[30] EP (20203505.1) 2020-10-23

## PCT Applications Entering the National Phase

[21] **3,196,512**  
[13] A1

[51] **Int.Cl. G01N 25/68 (2006.01) G01K 13/024 (2021.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR MEASUREMENT OF DEW POINT TEMPERATURE**  
[54] **PROCEDE ET DISPOSITIF DE MESURE DE TEMPERATURE DE POINT DE ROSEE**  
[72] KLIMOV, ANDREI  
ALEKSANDROVICH, RU  
[71] KLIMOV, ANDREI  
ALEKSANDROVICH, RU  
[85] 2023-04-23  
[86] 2020-11-17 (PCT/RU2020/000612)  
[87] (WO2022/108469)

[21] **3,196,546**  
[13] A1

[51] **Int.Cl. A61K 31/4168 (2006.01) A61K 31/573 (2006.01)**  
[25] EN  
[54] **COMBINATION OF MEDICATIONS IN A PARENTERAL DOSAGE FORM FOR LONG-TERM ANAESTHESIA**  
[54] **COMBINAISON DE MEDICAMENTS SOUS FORME GALENIQUE PARENTERALE POUR ANESTHESIE A LONG TERME**  
[72] TURAN, IBRAHIM, TR  
[71] PHARMAFINA ILAC SATIS VE PAZARLAMA ANONIM SIRKETI, TR  
[85] 2023-04-24  
[86] 2020-07-25 (PCT/TR2020/050655)  
[87] (WO2022/025830)

[21] **3,196,563**  
[13] A1

[25] EN  
[54] **COMPOSITIONS AND METHODS FOR TREATING CANCER**  
[54] **COMPOSITIONS ET METHODES DE TRAITEMENT DU CANCER**  
[72] EQUELS, THOMAS K., US  
[72] STRAYER, DAVID R., US  
[71] AIM IMMUNOTECH INC., US  
[85] 2023-04-24  
[86] 2021-09-21 (PCT/US2021/051369)  
[87] (WO2022/061309)  
[30] US (63/081,296) 2020-09-21

[21] **3,196,586**  
[13] A1

[25] EN  
[54] **FORTIFIED SANITIZING COMPOSITION HAVING ANTIMICROBIAL CHARACTERISTICS**  
[54] **COMPOSITION DESINFECTANTE ENRICHEE PRESENTANT DES CARACTERISTIQUES ANTIMICROBIENNES**  
[72] BEDI, VIJAY, US  
[72] BEDI, VIVEK, US  
[72] ROBERTS, MATTHEW, US  
[71] 2 V INDUSTRIES, INC., US  
[85] 2023-04-24  
[86] 2021-05-07 (PCT/IB2021/000576)  
[87] (WO2021/234463)  
[30] US (63/022,422) 2020-05-08  
[30] US (63/105,312) 2020-10-25

[21] **3,196,865**  
[13] A1

[51] **Int.Cl. C01B 32/215 (2017.01) H01M 4/133 (2010.01) H01M 4/1393 (2010.01) C01B 32/20 (2017.01)**  
[25] EN  
[54] **PROCESS FOR PURIFYING AND PRODUCING A HIGH PURITY PARTICULATE GRAPHITE MATERIAL FOR USE IN LITHIUM-ION BATTERIES**  
[54] **PROCEDE DE PURIFICATION ET DE PRODUCTION D'UN MATERIAU PARTICULAIRE DE HAUTE PURETE A BASE DE GRAPHITE DESTINE A ETRE UTILISE DANS DES BATTERIES AU LITHIUM-ION**  
[72] WATSON, KEVIN, CA  
[72] VENKATESH, BALAJI, CA  
[72] DAVIS, BOYD, CA  
[72] ROY, ALAIN, CA  
[71] GREEN GRAPHITE TECHNOLOGIES INC., CA  
[85] 2023-04-27  
[86] 2022-08-18 (PCT/CA2022/051255)  
[87] (WO2023/019361)  
[30] US (63/260,370) 2021-08-18

[21] **3,196,875**  
[13] A1

[51] **Int.Cl. G21K 5/02 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR IRRADIATION**  
[54] **SYSTEMES ET PROCEDES D'IRRADIATION**  
[72] SHEDLOCK, DANIEL, US  
[72] NISIUS, DAVID, US  
[72] ANDREWS, GREGORY, US  
[72] ADAMS, JEFF, US  
[71] VAREX IMAGING CORPORATION, US  
[85] 2023-04-27  
[86] 2022-04-19 (PCT/US2022/025381)  
[87] (WO2022/225956)  
[30] US (17/234,714) 2021-04-19

[21] **3,196,892**  
[13] A1

[51] **Int.Cl. H04W 88/06 (2009.01) H04R 5/04 (2006.01)**  
[25] EN  
[54] **AUDIO PLAYBACK MANAGEMENT OF MULTIPLE CONCURRENT CONNECTIONS**  
[54] **GESTION DE LECTURE DE CONTENU AUDIO DE MULTIPLES CONNEXIONS SIMULTANEEES**  
[72] VAUTRIN, JODI, US  
[72] PANDINA, MATT, US  
[72] DOLMAN, ELIZABETH, US  
[72] HU, KEN, US  
[72] YORE, JASON, US  
[72] MOORE, MATT, US  
[72] LIN, TED, US  
[72] BANNON, RICHARD, US  
[72] BABROSKI, CHRIS, US  
[72] BERMANI, ROB, US  
[71] SONOS, INC., US  
[85] 2023-04-27  
[86] 2021-09-29 (PCT/US2021/052591)  
[87] (WO2022/072457)  
[30] US (63/084,796) 2020-09-29  
[30] US (63/157,309) 2021-03-05  
[30] US (63/157,312) 2021-03-05  
[30] US (17/486,424) 2021-09-27  
[30] US (17/486,439) 2021-09-27

## Demandes PCT entrant en phase nationale

[21] **3,196,914**  
[13] A1

[51] **Int.Cl. H01M 8/0273 (2016.01) H01M 8/18 (2006.01)**  
[25] EN  
[54] **INTEGRATED ELECTRODE FRAME AND PREPARATION METHOD AND USE THEREOF**  
[54] **STRUCTURE DE CADRES D'ELECTRODES INTEGREE, ET PROCEDE DE PREPARATION Y RELATIVE ET APPLICATION Y RELATIVE**  
[72] LI, XIANFENG, CN  
[72] SHI, DINGQIN, CN  
[72] ZHANG, HUAMIN, CN  
[71] DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES, CN  
[85] 2023-04-27  
[86] 2020-07-10 (PCT/CN2020/101331)  
[87] (WO2021/253543)  
[30] CN (202010570390.1) 2020-06-19

[21] **3,196,919**  
[13] A1

[51] **Int.Cl. H01H 33/66 (2006.01) H01H 9/00 (2006.01) H01H 33/666 (2006.01) H01H 75/00 (2006.01)**  
[25] EN  
[54] **VOLTAGE READINGS USING HIGH VOLTAGE RESISTOR ACROSS VACUUM INTERRUPTER**  
[54] **LECTURES DE TENSION A L'AIDE D'UNE RESISTANCE HAUTE TENSION A TRAVERS UN INTERRUPTEUR A VIDE**  
[72] MONTENEGRO, ALEJANDRO, US  
[71] S&C ELECTRIC COMPANY, US  
[85] 2023-03-24  
[86] 2021-09-30 (PCT/US2021/052765)  
[87] (WO2022/072572)  
[30] US (63/086,222) 2020-10-01

[21] **3,196,920**  
[13] A1

[51] **Int.Cl. G01N 33/68 (2006.01)**  
[25] EN  
[54] **METHODS OF DETECTING ISOASPARTIC ACID**  
[54] **PROCEDES DE DETECTION D'ACIDE ISOASPARTIQUE**  
[72] HUI, JOHN ON-TING, US  
[72] CAMPUZANO, IAIN DAVID GRANT, US  
[71] AMGEN INC., US  
[85] 2023-03-24  
[86] 2021-09-30 (PCT/US2021/052783)  
[87] (WO2022/072583)  
[30] US (63/086,557) 2020-10-01  
[30] US (63/218,186) 2021-07-02

[21] **3,196,921**  
[13] A1

[51] **Int.Cl. B04B 5/04 (2006.01) B04B 7/02 (2006.01) B04B 7/08 (2006.01) B04B 9/08 (2006.01) B04B 9/14 (2006.01)**  
[25] EN  
[54] **ULTRA-HIGH-SPEED ROTOR**  
[54] **ROTOR A VITESSE ULTRA-ELEVEE**  
[72] PIRAMOON, SINA, US  
[71] FIBERLITE CENTRIFUGE LLC, US  
[85] 2023-03-24  
[86] 2021-10-27 (PCT/US2021/056746)  
[87] (WO2022/103577)  
[30] US (63/112,018) 2020-11-10  
[30] US (63/256,014) 2021-10-15

[21] **3,196,922**  
[13] A1

[51] **Int.Cl. A47L 13/12 (2006.01) A47L 13/08 (2006.01) A47L 13/16 (2006.01)**  
[25] EN  
[54] **SCRAPER SPONGE**  
[54] **EPONGE DE RACLAGE**  
[72] OMOTOLA, ALAHANDRO O., US  
[71] PHIISAGEN CORPORATION, US  
[85] 2023-03-27  
[86] 2021-06-22 (PCT/US2021/070741)  
[87] (WO2021/243381)  
[30] US (16/873,755) 2020-06-26

[21] **3,196,923**  
[13] A1

[51] **Int.Cl. A61K 38/095 (2019.01) A61K 38/39 (2006.01) A61P 19/02 (2006.01)**  
[25] EN  
[54] **OXYTOCIN TREATMENT FOR HYPERMOBILE EHLERS-DANLOS SYNDROME**  
[54] **TRAITEMENT DE L'OXYTOCINE POUR LE SYNDROME D'EHLER-DANLOS DE TYPE HYPERMOBILE**  
[72] LEE, BRENDAN, US  
[71] BAYLOR COLLEGE OF MEDICINE, US  
[85] 2023-03-24  
[86] 2021-09-29 (PCT/US2021/071645)  
[87] (WO2022/073008)  
[30] US (63/085,740) 2020-09-30

[21] **3,196,924**  
[13] A1

[51] **Int.Cl. G01N 33/574 (2006.01) G01N 33/50 (2006.01) G01N 33/53 (2006.01)**  
[25] EN  
[54] **IDENTIFICATION AND CHARACTERIZATION OF OVARIAN CANCER SPECIFIC BIOMARKERS IN VAGINAL SECRETIONS**  
[54] **IDENTIFICATION ET CARACTERISATION DE BIOMARQUEURS SPECIFIQUES DU CANCER DE L'OVAIRE DANS LES SECRETIONS VAGINALES**  
[72] ZAFIR-LAVIE, INBAL, IL  
[72] YEHUDAI-RESHEF, SHLOMIT, IL  
[72] DOLINSKI, MARIA, IL  
[71] GINA-LIFE DIAGNOSTICS LTD., IL  
[85] 2023-03-26  
[86] 2021-10-04 (PCT/IL2021/051190)  
[87] (WO2022/074645)  
[30] US (63/087,307) 2020-10-05  
[30] US (63/108,886) 2020-11-03  
[30] US (63/162,633) 2021-03-18

## PCT Applications Entering the National Phase

[21] **3,196,925**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) C07K 16/28 (2006.01) G01N 33/53 (2006.01)**

[25] EN

[54] **ANTIBODIES TO CANINE AND FELINE ONCOSTATIN M RECEPTOR BETA AND USES THEREOF**

[54] **ANTICORPS DIRIGE CONTRE LE RECEPTEUR BETA DE L'ONCOSTATINE M CANIN ET FELIN ET LEURS UTILISATIONS**

[72] BAMMERT, GARY FRANCIS, US  
[72] GONZALES, ANDREA JOY, US  
[71] ZOETIS SERVICES LLC, US

[85] 2023-03-26  
[86] 2021-10-18 (PCT/US2021/055366)  
[87] (WO2022/086837)  
[30] US (63/093,607) 2020-10-19

[21] **3,196,926**  
[13] A1

[51] **Int.Cl. F04F 5/54 (2006.01) F04F 1/02 (2006.01) F04F 5/24 (2006.01) F04F 5/48 (2006.01)**

[25] EN

[54] **CONSTANT FLOW SOLIDS PUMP**

[54] **POMPE A SOLIDES A ECOULEMENT CONSTANT**

[72] KROHN, MARK DAMIEN, AU  
[71] SOLIDSVAC PTY LTD, AU

[85] 2023-03-27  
[86] 2021-07-30 (PCT/AU2021/050832)  
[87] (WO2022/020903)  
[30] AU (2020210306) 2020-07-31

[21] **3,196,927**  
[13] A1

[51] **Int.Cl. H01M 10/0525 (2010.01) H01M 4/131 (2010.01) H01M 4/1391 (2010.01) H01M 10/056 (2010.01)**

[25] EN

[54] **IMPROVED BATTERY WITH SPINEL CATHODE**

[54] **BATTERIE AMELIOREE A CATHODE EN SPINELLE**

[72] CAMPBELL, STEPHEN A., CA  
[72] JURIC, PERRY, CA  
[72] NESVADERANI, FARHANG, CA  
[71] NANO ONE MATERIALS CORP., CA

[85] 2023-03-27  
[86] 2021-10-13 (PCT/CA2021/051436)  
[87] (WO2022/077105)  
[30] US (63/090,980) 2020-10-13

[21] **3,196,929**  
[13] A1

[51] **Int.Cl. C07K 16/46 (2006.01) C12N 5/0783 (2010.01) A61K 35/17 (2015.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01) C12N 5/10 (2006.01) C12N 15/13 (2006.01)**

[25] EN

[54] **BISPECIFIC CONSTRUCTS FOR EXPANDING T CELLS AND RELATED METHODS**

[54] **CONSTRUCTIONS BISPECIFIQUES POUR LA MULTIPLICATION DE LYMPHOCYTES T ET METHODES ASSOCIEES**

[72] GARIEPY, JEAN, CA  
[72] SPARKES, AMANDA, CA  
[72] MATUS, ESTHER, CA  
[72] PRODEUS, AARON, CA  
[71] SUNNYBOOK RESEARCH INSTITUTE, CA

[85] 2023-03-27  
[86] 2021-10-14 (PCT/CA2021/051439)  
[87] (WO2022/077108)  
[30] US (63/092,410) 2020-10-15

[21] **3,196,930**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C12N 15/13 (2006.01)**

[25] EN

[54] **NOVEL ANTI-CLAUDIN18 ANTIBODIES**

[54] **NOUVEAUX ANTICORPS ANTI-CLAUDIN18**

[72] QIU, YANGSHENG, CN  
[72] LU, HONGTAO, CN  
[72] XING, ROUMEI, CN  
[72] YU, JINGFENG, CN  
[72] GAO, RUI, CN  
[71] ELPISCIENCE (SUZHOU) BIOPHARMA, LTD., CN

[71] ELPISCIENCE BIOPHARMA, LTD., CN

[85] 2023-03-27  
[86] 2021-09-26 (PCT/CN2021/120683)  
[87] (WO2022/063272)  
[30] CN (PCT/CN2020/118369) 2020-09-28  
[30] CN (202111107543.X) 2021-09-22

[21] **3,196,932**  
[13] A1

[51] **Int.Cl. A44C 15/00 (2006.01) A44C 11/00 (2006.01) A44C 25/00 (2006.01)**

[25] EN

[54] **NECKLACE ACCESSORY**

[54] **ACCESSEIRE DE COLLIER**

[72] DORSEY, JACLYN, US  
[72] DORSEY, JOSHUA, US  
[71] DORSEY, JACLYN, US  
[71] DORSEY, JOSHUA, US

[85] 2023-03-27  
[86] 2020-10-15 (PCT/US2020/055746)  
[87] (WO2022/081159)

[21] **3,196,933**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C12N 5/10 (2006.01) C12N 15/13 (2006.01) C12N 15/63 (2006.01)**

[25] EN

[54] **ANTI-CD3 ANTIBODY AND USES THEREOF**

[54] **ANTICORPS ANTI-CD3 ET SES UTILISATIONS**

[72] ZHOU, SHUAIXIANG, CN  
[72] GUAN, ZHE, CN  
[72] FU, FENGGEN, CN  
[72] HU, SIYI, CN  
[71] INNOVENT BIOLOGICS (SUZHOU) CO., LTD., CN

[85] 2023-03-27  
[86] 2021-09-28 (PCT/CN2021/121285)  
[87] (WO2022/068809)  
[30] CN (202011054187.5) 2020-09-29

[21] **3,196,934**  
[13] A1

[51] **Int.Cl. G08G 5/00 (2006.01) G01S 13/933 (2020.01) G08G 5/04 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR UNMANNED AERIAL VEHICLES TO DETECT AND AVOID OTHER FLYING MACHINES**

[54] **PROCEDES ET SYSTEMES POUR VEHICULES AERIENS SANS PILOTE POUR DETECTER ET EVITER D'AUTRES ENIGNS VOLANTS**

[72] VALLELONGA, ROBERT, US  
[72] LIMBAUGH, DOUGLAS V., US  
[71] KUTTA TECHNOLOGIES, INC., US

[85] 2023-03-27  
[86] 2021-09-17 (PCT/US2021/050963)  
[87] (WO2022/098438)  
[30] US (63/084,743) 2020-09-29  
[30] US (17/225,882) 2021-04-08



## Demandes PCT entrant en phase nationale

[21] **3,196,935**  
[13] A1

[51] **Int.Cl. H04W 4/06 (2009.01) H04W 28/10 (2009.01)**  
[25] EN  
[54] **SN SYNCHRONIZATION METHOD, APPARATUS AND DEVICE FOR MULTICAST BROADCAST SERVICE, AND READABLE STORAGE MEDIUM**  
[54] **PROCEDE DE SYNCHRONISATION DE SN, APPAREIL ET DISPOSITIF DESTINES A UN SERVICE DE DIFFUSION/MULTIDIFFUSION, ET SUPPORT DE STOCKAGE LISIBLE**  
[72] LIU, JIAMIN, CN  
[71] VIVO MOBILE COMMUNICATION CO., LTD., CN  
[85] 2023-03-27  
[86] 2021-10-13 (PCT/CN2021/123544)  
[87] (WO2022/078393)  
[30] CN (202011113010.8) 2020-10-16

[21] **3,196,936**  
[13] A1

[51] **Int.Cl. C04B 11/00 (2006.01) C04B 11/028 (2006.01) F27B 15/02 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR CONDITIONING STUCCO IN A DUST COLLECTOR**  
[54] **SYSTEME DE CONDITIONNEMENT DE STUC DANS UN COLLECTEUR DE POUSSIERE**  
[72] CHEN, MICHAEL M., US  
[71] SCHENCK PROCESS LLC, US  
[85] 2023-03-27  
[86] 2021-09-24 (PCT/US2021/051877)  
[87] (WO2022/072226)  
[30] US (17/038,910) 2020-09-30

[21] **3,196,940**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61K 47/65 (2017.01) A61K 47/68 (2017.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **ANTI-HER3 ANTIBODY AND ANTI-HER3 ANTIBODY-DRUG CONJUGATE AND MEDICAL USE THEREOF**  
[54] **ANTICORPS ANTI-HER3 ET CONJUGUE ANTICORPS ANTI-HER3-MEDICAMENT ET LEUR UTILISATION MEDICALE**  
[72] YANG, YANG, CN  
[72] YU, JIA, CN  
[72] TAO, WEIKANG, CN  
[71] JIANGSU HENGRUI PHARMACEUTICALS CO., LTD., CN  
[71] SHANGHAI HENGRUI PHARMACEUTICAL CO., LTD., CN  
[85] 2023-03-27  
[86] 2021-10-14 (PCT/CN2021/123733)  
[87] (WO2022/078425)  
[30] CN (202011097383.0) 2020-10-14  
[30] CN (202111171200.X) 2021-10-08

[21] **3,196,946**  
[13] A1

[51] **Int.Cl. A61K 31/41 (2006.01) A61K 31/4192 (2006.01) A61K 31/495 (2006.01) C07D 257/04 (2006.01) C07D 257/10 (2006.01) C07D 403/14 (2006.01)**  
[25] EN  
[54] **FUSED HETEROARYL COMPOUNDS AND THEIR USE AS CAMKII INHIBITORS**  
[54] **COMPOSES HETEROARYLE FUSIONNES ET LEUR UTILISATION EN TANT QU'INHIBITEURS DE CAMKII**  
[72] MATSUNAGA, NOBUYUKI, JP  
[72] SHIRAI, JUNYA, JP  
[72] OKAWA, TOMOHIRO, JP  
[72] MIYAMOTO, YASUFUMI, JP  
[72] SHIOKAWA, ZENYU, JP  
[72] NAKAHATA, TAKASHI, JP  
[72] SHIBUYA, AKITO, JP  
[72] KAWADA, AKIRA, JP  
[72] MACCOSS, MALCOLM, US  
[71] CARDURION PHARMACEUTICALS, INC., US  
[85] 2023-03-27  
[86] 2021-09-24 (PCT/US2021/052025)  
[87] (WO2022/067082)  
[30] US (63/084,217) 2020-09-28

[21] **3,196,949**  
[13] A1

[51] **Int.Cl. H04N 19/597 (2014.01)**  
[25] EN  
[54] **ENCODING AND DECODING IMMERSIVE VIDEO**  
[54] **CODAGE ET DECODAGE DE VIDEO IMMERSIVE**  
[72] VAN GEEST, BARTOLOMEUS WILHELMUS DAMIANUS, NL  
[72] KROON, BART, NL  
[72] VAREKAMP, CHRISTIAAN, NL  
[71] KONINKLIJKE PHILIPS N.V., NL  
[85] 2023-03-27  
[86] 2021-09-23 (PCT/EP2021/076133)  
[87] (WO2022/069325)  
[30] EP (20199141.1) 2020-09-30

[21] **3,196,952**  
[13] A1

[51] **Int.Cl. H02J 7/02 (2016.01) H02J 7/04 (2006.01) H02J 7/06 (2006.01) H02J 7/10 (2006.01) H02J 7/34 (2006.01)**  
[25] EN  
[54] **PULSED CHARGING AND HEATING TECHNIQUES FOR ENERGY SOURCES**  
[54] **TECHNIQUES DE CHARGE ET DE CHAUFFAGE PULSEES POUR SOURCES D'ENERGIE**  
[72] FASCHING, RAINER, US  
[72] LOVELESS, GHRYN, US  
[72] SLEPCHENKOV, MIKHAIL, US  
[72] NADERI, ROOZBEH, US  
[71] TAE TECHNOLOGIES, INC., US  
[85] 2023-03-27  
[86] 2021-09-27 (PCT/US2021/052221)  
[87] (WO2022/067192)  
[30] US (63/084,352) 2020-09-28  
[30] US (63/119,504) 2020-11-30

## PCT Applications Entering the National Phase

---

[21] **3,196,953**  
[13] A1

[51] **Int.Cl. B01J 19/18 (2006.01) B01J 19/24 (2006.01) C08F 2/01 (2006.01) C08F 2/06 (2006.01) C08F 210/16 (2006.01) C08L 23/08 (2006.01)**

[25] EN

[54] **PLANT AND METHOD FOR THE PRODUCTION OF AN IN-LINE BLENDED POLYMER**

[54] **INSTALLATION ET PROCEDE DE PRODUCTION D'UN POLYMERE MELANGE EN LIGNE**

[72] AL-HAJ ALI, MOHAMMAD, FI

[72] AJELLAL, NOUREDDINE, FI

[71] BOREALIS AG, AT

[85] 2023-03-27

[86] 2021-09-27 (PCT/EP2021/076502)

[87] (WO2022/069409)

[30] EP (20199149.4) 2020-09-30

---

[21] **3,196,955**  
[13] A1

[51] **Int.Cl. H02J 7/34 (2006.01) H02M 7/02 (2006.01) H02M 7/66 (2006.01) H02M 7/68 (2006.01) H02M 7/86 (2006.01)**

[25] EN

[54] **MULTI-PHASE MODULE-BASED ENERGY SYSTEM**

[54] **FRAMEWORKS AND METHODS RELATED THERETO**

[54] **STRUCTURES DE SYSTEME D'ENERGIE BASEE SUR DES MODULES POLYPHASES ET PROCEDES ASSOCIES**

[72] SLEPCHENKOV, MIKHAIL, US

[72] NADERI, ROOZBEH, US

[71] TAE TECHNOLOGIES, INC., US

[85] 2023-03-27

[86] 2021-09-27 (PCT/US2021/052231)

[87] (WO2022/067198)

[30] US (63/084,110) 2020-09-28

---

[21] **3,196,958**  
[13] A1

[51] **Int.Cl. C07C 2/08 (2006.01) C07C 7/04 (2006.01)**

[25] EN

[54] **A PROCESS FOR MANUFACTURING OLEFIN TRIMERS AND TETRAMERS**

[54] **PROCEDE DE FABRICATION DE TRIMERES ET DE TETRAMERES D'OLEFINES**

[72] PYHALAHTI, ANTTI, FI

[72] KANERVO, JAANA, FI

[71] NESTE OYJ, FI

[85] 2023-04-28

[86] 2022-10-27 (PCT/FI2022/050703)

[87] (3196958)

[30] FI (20216108) 2021-10-27

---

[21] **3,196,981**  
[13] A1

[51] **Int.Cl. C08L 83/12 (2006.01)**

[25] EN

[54] **SOLVENT STABLE SLIP ADDITIVE COMPOSITION WITH MONOTERPENE**

[54] **COMPOSITION D'ADDITIF DE GLISSEMENT STABLE DANS UN SOLVANT, COMPRENANT DU MONOTERPENE**

[72] FRYFOGLE, PATRICK J., US

[72] COOK, JULIE, US

[72] MITCHELL, TIM, US

[72] LIU, YIHAN, US

[72] BEESON, REBECCA, US

[72] JANCO, MIROSLAV, US

[72] MILLER, MIKAYLA T., US

[72] PHILLIPS, BRAD J., US

[71] DOW SILICONES CORPORATION, US

[71] ROHM AND HAAS COMPANY, US

[85] 2023-04-28

[86] 2021-10-11 (PCT/US2021/054341)

[87] (WO2022/103537)

[30] US (63/107,246) 2020-10-29

---

[21] **3,197,012**  
[13] A1

[51] **Int.Cl. E21B 17/042 (2006.01) E21B 17/043 (2006.01)**

[25] EN

[54] **SELF-LOCKING THREADED CONNECTION PARTIALLY IN NON-LOCKING ENGAGEMENT**

[54] **CONNEXION FILETEE AUTOBLOQUANTE PARTIELLEMENT EN PRISE SANS BLOCAGE**

[72] OTT, WESLEY, FR

[72] VAN GORP, LOGAN, FR

[72] GRANGER, SCOTT, FR

[71] VALLOUREC OIL AND GAS FRANCE, FR

[71] NIPPON STEEL CORPORATION, JP

[85] 2023-04-28

[86] 2021-10-20 (PCT/EP2021/079122)

[87] (WO2022/090034)

[30] EP (20204267.7) 2020-10-28

---

[21] **3,197,026**  
[13] A1

[51] **Int.Cl. C07D 205/04 (2006.01)**

[25] EN

[54] **SIPONIMOD SALTS AND COCRYSTALS**

[54] **SELS ET CO-CRISTAUX DE SIPONIMOD**

[72] DYMACEK, BOHUMIL, CZ

[72] PARTL, JIRI, CZ

[72] TESSON, NICOLAS, ES

[72] TRILLA CASTANO, MONTSERRAT, ES

[71] SYNTHON B.V., NL

[85] 2023-04-28

[86] 2021-09-24 (PCT/EP2021/076406)

[87] (WO2022/064007)

[30] EP (20198482.0) 2020-09-25

[30] EP (21155774.9) 2021-02-08

## Demandes PCT entrant en phase nationale

[21] **3,197,042**  
[13] A1

[51] **Int.Cl. G03B 21/00 (2006.01) G03B 21/20 (2006.01)**  
[25] EN  
[54] **OPTICAL PROJECTION WITH COMBINED BEAMS**  
[54] **PROJECTION OPTIQUE A FAISCEAUX COMBINES**  
[72] DOORNAERT, DRIES JAN, BE  
[72] MAXIMUS, BART HENRI JOHANNA, BE  
[72] KUMARAN, RAVEEN, CA  
[72] MAES, DIRK LEONTINA, BE  
[71] BARCO NV, BE  
[85] 2023-03-27  
[86] 2021-10-01 (PCT/EP2021/077147)  
[87] (WO2022/069727)  
[30] CA (3095177) 2020-10-02  
[30] US (63/119,580) 2020-11-30

[21] **3,197,043**  
[13] A1

[51] **Int.Cl. C04B 35/488 (2006.01) C23C 4/11 (2016.01) C23C 4/134 (2016.01) C04B 35/505 (2006.01) F01D 5/28 (2006.01)**  
[25] EN  
[54] **THERMALLY STABLE THERMAL BARRIER COATINGS THAT EXHIBIT IMPROVED THERMAL CONDUCTIVITY AND EROSION RESISTANCE**  
[54] **REJETEMENTS DE BARRIERE THERMIQUE THERMIQUEMENT STABLES QUI PRESENTENT UNE CONDUCTIVITE THERMIQUE ET UNE RESISTANCE A L'EROSION AMELIOREES**  
[72] SHAROBEM, TIMOTHY TADROS, US  
[71] OERLIKON METCO (US) INC., US  
[85] 2023-03-27  
[86] 2022-01-04 (PCT/US2022/011134)  
[87] (WO2022/150300)  
[30] US (63/134,023) 2021-01-05

[21] **3,197,044**  
[13] A1

[51] **Int.Cl. B60R 11/00 (2006.01)**  
[25] EN  
[54] **STORAGE ORGANIZING ARTICLE AND SYSTEM**  
[54] **ARTICLE ET SYSTEME D'ORGANISATION DE STOCKAGE**  
[72] REBAND, DAVID, US  
[72] PRICE, ROBERT, US  
[71] THERMOFLEX CORP., US  
[85] 2023-03-27  
[86] 2021-10-25 (PCT/US2021/072007)  
[87] (WO2022/094536)  
[30] US (17/080,386) 2020-10-26

[21] **3,197,045**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **PROSTHETIC VALVE DOCKING DEVICE**  
[54] **DISPOSITIF D'ACCUEIL DE VALVE PROTHETIQUE**  
[72] CHAU, JOCELYN, US  
[72] NGUYEN, TRAM NGOC, US  
[72] PATEL, DARSHIN S., US  
[71] EDWARDS LIFESCIENCES CORPORATION, US  
[85] 2023-03-27  
[86] 2021-10-22 (PCT/US2021/056150)  
[87] (WO2022/087336)  
[30] US (63/105,099) 2020-10-23  
[30] US (63/159,130) 2021-03-10  
[30] US (63/252,524) 2021-10-05

[21] **3,197,046**  
[13] A1

[51] **Int.Cl. G06Q 10/06 (2023.01) G06Q 30/02 (2023.01) G01D 21/02 (2006.01)**  
[25] EN  
[54] **GENERATING INSIGHTS BASED ON SIGNALS FROM MEASURING DEVICE**  
[54] **GENERATION D'APERCUS SUR LA BASE DE SIGNAUX PROVENANT D'UN DISPOSITIF DE MESURE**  
[72] ADVANI, NIHAL, US  
[71] GEORAMA, INC., US  
[85] 2023-03-27  
[86] 2021-10-08 (PCT/US2021/054257)  
[87] (WO2022/076875)  
[30] US (63/089,956) 2020-10-09  
[30] US (17/175,576) 2021-02-12

[21] **3,197,047**  
[13] A1

[51] **Int.Cl. C07K 16/00 (2006.01) C12N 15/09 (2006.01)**  
[25] EN  
[54] **RATIONAL SELECTION OF BUILDING BLOCKS FOR THE ASSEMBLY OF MULTISPECIFIC ANTIBODIES**  
[54] **SELECTION RATIONNELLE DE BLOCS DE CONSTRUCTION POUR L'ASSEMBLAGE D'ANTICORPS MULTISPECIFIQUES**  
[72] GONG, DANYANG, US  
[72] GARCES, FERNANDO, US  
[72] WANG, ZHULUN, US  
[71] AMGEN INC., US  
[85] 2023-03-27  
[86] 2021-10-05 (PCT/US2021/053650)  
[87] (WO2022/076474)  
[30] US (63/088,972) 2020-10-07

[21] **3,197,048**  
[13] A1

[51] **Int.Cl. H01M 10/0562 (2010.01) H01M 4/13 (2010.01) H01M 4/131 (2010.01) H01M 4/133 (2010.01) H01M 10/052 (2010.01) H01M 10/058 (2010.01) H01M 4/38 (2006.01)**  
[25] EN  
[54] **BATTERY CELLS INCLUDING LITHIUM-ION CONDUCTING SOLID ELECTROLYTES AND METHODS OF MAKING THEREOF**  
[54] **ELEMENTS DE BATTERIE COMPRENANT DES ELECTROLYTES SOLIDES CONDUCTEURS D'IONS LITHIUM ET LEURS PROCEDES DE FABRICATION**  
[72] ALBANO, FABIO, US  
[72] FAVORS, ZACHARY, US  
[72] BURGER, BILL, US  
[72] CHMIOLA, JOHN, US  
[71] NEXTECH BATTERIES, INC., US  
[85] 2023-03-27  
[86] 2021-10-04 (PCT/US2021/053381)  
[87] (WO2022/072928)  
[30] US (63/087,169) 2020-10-02

## PCT Applications Entering the National Phase

---

[21] **3,197,050**  
[13] A1

[51] **Int.Cl. C12Q 1/6809 (2018.01) C12Q 1/6883 (2018.01) C12Q 1/6886 (2018.01) A61K 31/505 (2006.01) A61K 35/00 (2006.01) A61K 45/00 (2006.01)**

[25] EN

[54] **PATIENT SELECTION BIOMARKERS FOR TREATMENT WITH ULK INHIBITORS**

[54] **BIOMARQUEURS DE SELECTION DE PATIENT POUR UN TRAITEMENT AVEC DES INHIBITEURS D'ULK**

[72] SHAW, REUBEN J., US  
[72] BRUN, SONJA N., US  
[72] EICHNER, LILLIAN, US  
[71] SALK INSTITUTE FOR BIOLOGICAL STUDIES, US

[85] 2023-03-27  
[86] 2021-09-30 (PCT/US2021/052927)  
[87] (WO2022/072668)  
[30] US (63/085,917) 2020-09-30

---

[21] **3,197,051**  
[13] A1

[51] **Int.Cl. A62B 1/08 (2006.01) A62B 1/12 (2006.01) A62B 35/00 (2006.01) B65H 75/44 (2006.01) B65H 75/48 (2006.01) F16F 9/14 (2006.01)**

[25] EN

[54] **SELF-RETRACTING DEVICE AND AXLE THEREFOR**

[54] **DISPOSITIF D'AUTO-RETRACTION ET ESSIEU ASSOCIE**

[72] JACOB, MATTHEW FREDERICK, US  
[72] GOODSPEED, MICHAEL, US  
[71] MSA TECHNOLOGY, LLC, US

[85] 2023-03-27  
[86] 2021-09-30 (PCT/US2021/052799)  
[87] (WO2022/072592)  
[30] US (63/086,920) 2020-10-02  
[30] US (17/488,495) 2021-09-29

---



---

[21] **3,197,053**  
[13] A1

[51] **Int.Cl. G01N 30/30 (2006.01)**

[25] EN

[54] **THERMAL ISOLATION CHAMBERS AND CHROMATOGRAPHY SYSTEMS INCLUDING THEM**

[54] **CHAMBRES D'ISOLATION THERMIQUE ET SYSTEMES DE CHROMATOGRAPHIE LES COMPRENANT**

[72] KINGSTON, CHAD, US  
[72] PORTER, NATHAN L., US  
[72] BLACK, BENJAMIN, US  
[71] PERKINELMER U.S. LLC, US

[85] 2023-03-27  
[86] 2021-09-27 (PCT/US2021/052243)  
[87] (WO2022/067206)  
[30] US (17/034,851) 2020-09-28

---

[21] **3,197,055**  
[13] A1

[51] **Int.Cl. A61P 37/00 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **TREATMENT OF FLARES IN LUPUS**

[54] **TRAITEMENT DE POUSSEES DE LUPUS**

[72] KALYANI, RUBANA, US  
[72] ABREU, GABRIEL, SE  
[72] TUMMALA, RAJENDRA, US  
[72] FURIE, RICHARD, US  
[72] MORAND, ERIC, AU  
[72] ASKANASE, ANCA, US  
[72] VITAL, ED, GB  
[72] KALUNIAN, KENNETH, US  
[72] LINDHOLM, CATHARINA, SE  
[72] MAHO, EMMANUELLE, GB  
[72] KLEOUDIS, CHRISTI, US  
[71] ASTRAZENECA AB, SE

[85] 2023-03-27  
[86] 2021-10-07 (PCT/EP2021/077702)  
[87] (WO2022/074123)  
[30] US (63/089,355) 2020-10-08  
[30] US (63/178,748) 2021-04-23

---



---

[21] **3,197,056**  
[13] A1

[51] **Int.Cl. A61K 33/243 (2019.01) A61K 31/282 (2006.01) A61K 31/496 (2006.01) A61K 31/555 (2006.01) A61K 45/06 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **COMBINATION THERAPY FOR TREATING CANCER**

[54] **POLYTHERAPIE POUR LE TRAITEMENT DU CANCER**

[72] LEO, ELISABETTA, GB  
[71] ASTRAZENECA AB, SE

[85] 2023-03-27  
[86] 2021-10-07 (PCT/EP2021/077703)  
[87] (WO2022/074124)  
[30] US (63/089,195) 2020-10-08

---

[21] **3,197,058**  
[13] A1

[51] **Int.Cl. C10G 1/00 (2006.01) C10G 1/02 (2006.01) C10G 1/10 (2006.01) C10G 21/28 (2006.01) C10G 53/00 (2006.01) C10G 53/04 (2006.01) C10G 53/08 (2006.01) C10G 55/04 (2006.01)**

[25] EN

[54] **RECOVERY OF ALIPHATIC HYDROCARBONS**

[54] **RECUPERATION D'HYDROCARBURES ALIPHATIQUES**

[72] LANGE, JEAN-PAUL ANDRE MARIE JOSEPH GHISLAIN, NL  
[72] FISCHER, KAI JURGEN, NL  
[72] VAN ROSSUM, GUUS, NL  
[72] OLTHOF, TIMOTHE JOHANNES, NL  
[72] DERKS, WILLEM, NL  
[72] STICHTER, HENDRIK, NL  
[71] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL

[85] 2023-03-27  
[86] 2021-10-12 (PCT/EP2021/078226)  
[87] (WO2022/079058)  
[30] EP (20202190.3) 2020-10-16

---

## Demandes PCT entrant en phase nationale

[21] **3,197,061**  
[13] A1

[51] **Int.Cl. C10G 1/00 (2006.01) C10G 1/02 (2006.01) C10G 1/10 (2006.01) C10G 53/00 (2006.01) C10G 53/04 (2006.01) C10G 53/08 (2006.01) C10G 55/00 (2006.01) C10G 55/04 (2006.01)**

[25] EN

[54] **RECOVERY OF ALIPHATIC HYDROCARBONS**

[54] **RECUPERATION D'HYDROCARBURES ALIPHATIQUES**

[72] LANGE, JEAN-PAUL ANDRE  
MARIE JOSEPH GHISLAIN, NL

[72] VAN ROSSUM, GUUS, NL

[72] DERKS, WILLEM, NL

[72] FISCHER, KAI JURGEN, NL

[72] OLTHOF, TIMOTHE JOHANNES, NL

[72] HAAN, JOHANNES PIETER, NL

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

[85] 2023-03-27

[86] 2021-10-12 (PCT/EP2021/078227)

[87] (WO2022/079059)

[30] EP (20202173.9) 2020-10-16

[21] **3,197,062**  
[13] A1

[51] **Int.Cl. A61M 11/00 (2006.01) A61M 15/00 (2006.01) A61M 15/02 (2006.01) B05B 12/08 (2006.01)**

[25] EN

[54] **METHOD FOR DETECTING THE PRESENCE OF LIQUID IN A VIBRATING MEMBRANE NEBULIZER**

[54] **METHODE DE DETECTION DE LA PRESENCE DE LIQUIDE DANS UN NEBULISEUR A MEMBRANE VIBRANTE**

[72] HUBER, MARTIN, GB

[72] FREY, MANUAL, GB

[72] LACHER, MAXIMILIAN, GB

[72] SCHWENDNER, SEBASTIAN, GB

[72] KOLB, TOBIAS, GB

[72] HOFFMANN, TOBIAS, GB

[72] WEISER, YANNIC, GB

[72] TRINKHAUS, JONAS, GB

[71] VECTURA DELIVERY DEVICES LIMITED, GB

[85] 2023-03-27

[86] 2021-10-15 (PCT/EP2021/078627)

[87] (WO2022/079249)

[30] EP (20202253.9) 2020-10-16

[21] **3,197,065**  
[13] A1

[51] **Int.Cl. F03D 17/00 (2016.01)**

[25] EN

[54] **METHOD FOR PREDICTIVE MONITORING OF THE CONDITION OF WIND TURBINES**

[54] **PROCEDE DE SURVEILLANCE PREDICTIVE DE L'ETAT D'EOLIENNES**

[72] PIZZA, GIANMARCO, CH

[72] JARLSKOG, ESKIL, CH

[71] FLUENCE ENERGY, LLC, US

[85] 2023-03-27

[86] 2020-06-30 (PCT/IB2020/056187)

[87] (WO2022/003397)

[21] **3,197,069**  
[13] A1

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

[25] EN

[54] **METHODS OF TREATING DIFFUSE LARGE B-CELL LYMPHOMA**

[54] **METHODES DE TRAITEMENT DU LYMPHOME DIFFUS A GRANDES CELLULES B**

[72] FISET, STEPHAN, CA

[72] BRAMHECHA, YOGESH, CA

[72] CONLON, REBEKAH, CA

[72] BERINSTEIN, NEIL, CA

[71] IMMUNOVACCINE TECHNOLOGIES INC., CA

[85] 2023-03-27

[86] 2021-10-13 (PCT/IB2021/000688)

[87] (WO2022/079490)

[30] US (63/091,061) 2020-10-13

[30] US (63/110,743) 2020-11-06

[30] US (63/121,486) 2020-12-04

[21] **3,197,070**  
[13] A1

[51] **Int.Cl. G16H 50/20 (2018.01) G16H 50/30 (2018.01) A61B 5/28 (2021.01) A61B 5/318 (2021.01) A61B 5/349 (2021.01) A61B 5/361 (2021.01) A61B 5/00 (2006.01) A61B 5/024 (2006.01)**

[25] EN

[54] **ELECTROCARDIOGRAM PROCESSING SYSTEM FOR DETECTING AND/OR PREDICTING CARDIAC EVENTS**

[54] **SYSTEME DE TRAITEMENT D'ELECTROCARDIOGRAMME POUR LA DETECTION ET/OU LA PREDICTION D'EVENEMENTS CARDIAQUES**

[72] DE SAINT VICTOR, MARIE-ALBANE, FR

[72] EVAIN, HELENE, FR

[72] DELEFORGE, AURELIE, FR

[72] FOUCAULT, ARMAND, FR

[72] HAJJI, WADII, FR

[72] CALDAS, JEREMY, FR

[72] BARRE, BENJAMIN, FR

[72] ZIMMERMAN, GAUTIER, FR

[72] FLEUREAU, YANN, FR

[72] CAMPO, BAPTISTE RIOS, FR

[72] SCABELLONE, CHIARA, FR

[72] BODROVA, ANASTASIYA, FR

[72] LAVERSIN, JOHANNA, FR

[71] CARDIOLOGS TECHNOLOGIES SAS, FR

[85] 2023-03-27

[86] 2021-09-29 (PCT/IB2021/058958)

[87] (WO2022/070109)

[30] US (63/085,827) 2020-09-30

[30] EP (20306567.7) 2020-12-15

[30] US (63/226,117) 2021-07-27

[21] **3,197,071**  
[13] A1

[51] **Int.Cl. F01D 5/14 (2006.01) F01D 9/04 (2006.01) F01D 25/16 (2006.01) F02K 3/06 (2006.01)**

[25] FR

[54] **FAIRING ELEMENT FOR SURROUNDING AN OBSTACLE IN A FLUID FLOW**

[54] **ELEMENT DE CARENAGE POUR ENTOURER UN OBSTACLE DANS UN ECOULEMENT DE FLUIDE**

[72] BARRIER, RAPHAEL, FR

[71] OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES, FR

[85] 2023-03-28

[86] 2021-10-13 (PCT/FR2021/051783)

[87] (WO2022/090643)

[30] FR (FR2010999) 2020-10-27

## PCT Applications Entering the National Phase

---

[21] **3,197,072**  
[13] A1

[51] **Int.Cl. B60W 30/08 (2012.01) B60R 19/26 (2006.01) B60R 19/38 (2006.01) B60R 21/0136 (2006.01) B60W 10/04 (2006.01) B60W 10/06 (2006.01)**

[25] EN

[54] **SAFETY BUMPER ASSEMBLY AND ROBOTIC VEHICLE COMPRISING THE SAME**

[54] **ENSEMBLE PARE-CHOCS DE SECURITE ET VEHICULE ROBOTISE LE COMPRENANT**

[72] CRINKLAW, DAVID, US  
[72] SCHAPANSKY, CHASE, US  
[72] THOMPSON, GARY, US  
[71] GUSS AUTOMATION LLC, US  
[85] 2023-03-28  
[86] 2020-10-05 (PCT/US2020/054324)  
[87] (WO2022/075971)

---

[21] **3,197,075**  
[13] A1

[51] **Int.Cl. G07C 5/08 (2006.01) H04W 4/44 (2018.01) H04W 12/60 (2021.01)**

[25] EN

[54] **REMOTE MOBILE DEVICE MANAGEMENT**

[54] **GESTION DE DISPOSITIFS MOBILES A DISTANCE**

[72] FIELDS, JACOB, US  
[72] KOPCHINSKY, SCOTT, US  
[72] SON, DON, US  
[72] KENNEDY, JOHN C., US  
[72] DEMCHUK, DARRIN, US  
[72] ZOU, LIN, US  
[71] PLATFORM SCIENCE, INC., US  
[85] 2023-03-28  
[86] 2021-09-27 (PCT/US2021/052247)  
[87] (WO2022/072287)  
[30] US (63/087,082) 2020-10-02

---

[21] **3,197,153**  
[13] A1

[51] **Int.Cl. H04W 52/24 (2009.01)**

[25] EN

[54] **SPATIAL REUSE METHOD, APPARATUS, DEVICE, AND MEDIUM**

[54] **PROCEDE ET APPAREIL DE REUTILISATION SPATIALE, DISPOSITIF ET SUPPORT**

[72] YU, JIAN, CN  
[72] LI, YUNBO, CN  
[72] GAN, MING, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2023-03-28  
[86] 2022-02-25 (PCT/CN2022/078013)  
[87] (WO2022/206239)  
[30] CN (202110358332.7) 2021-04-01

---

[21] **3,197,074**  
[13] A1

[51] **Int.Cl. A61K 39/215 (2006.01) C12N 7/00 (2006.01)**

[25] EN

[54] **ATTENUATED PORCINE EPIDEMIC DIARRHEA VIRUS**

[54] **VIRUS DE LA DIARRHEE EPIDEMIQUE PORCINE ATTENUUE**

[72] RUAN, XIAOSAI, CN  
[72] LI, HAIYAN, CN  
[72] HOU, YANHONG, CN  
[72] YU, HONGXIN, CN  
[72] LIU, CAN, CN  
[71] ZOETIS SERVICES LLC, US  
[85] 2023-03-28  
[86] 2021-09-23 (PCT/US2021/051807)  
[87] (WO2022/072215)  
[30] CN (202011048314.0) 2020-09-29

---

[21] **3,197,094**  
[13] A1

[51] **Int.Cl. G06F 21/10 (2013.01) H04N 21/25 (2011.01) G06F 21/60 (2013.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR AUTOMATED DIGITAL RIGHTS ENFORCEMENT AND MANAGEMENT METHODS**

[54] **PROCEDE ET APPAREIL DE MISE EN APPLICATION AUTOMATISEE DE DROITS NUMERIQUES ET PROCEDES DE GESTION**

[72] HOD, ZOHAR, US  
[71] HOD, ZOHAR, US  
[85] 2023-05-01  
[86] 2021-09-29 (PCT/US2021/052705)  
[87] (WO2022/072536)  
[30] US (63/198,132) 2020-09-30  
[30] US (63/193,543) 2021-05-26  
[30] US (63/162,426) 2021-03-17  
[30] US (17/489,369) 2021-09-29

---

[21] **3,197,155**  
[13] A1

[51] **Int.Cl. E21B 47/0228 (2012.01) E21B 7/04 (2006.01) E21B 43/30 (2006.01) E21B 47/022 (2012.01) E21B 47/09 (2012.01) G01V 3/26 (2006.01)**

[25] EN

[54] **ACTIVE MAGNETIC RANGING WHILE DRILLING**

[54] **TELEMETRIE MAGNETIQUE ACTIVE PENDANT LE FORAGE**

[72] HAWKINSON, BEN, US  
[72] DOREY, JAMIE, US  
[72] RIDGWAY, DOUGLAS, US  
[71] SCIENTIFIC DRILLING INTERNATIONAL, INC., US  
[85] 2023-03-28  
[86] 2021-11-30 (PCT/US2021/061273)  
[87] (WO2022/115805)  
[30] US (63/119,531) 2020-11-30

## Demandes PCT entrant en phase nationale

[21] **3,197,157**  
[13] A1

[51] **Int.Cl. B29C 48/37 (2019.01) B29C 48/695 (2019.01) B29C 48/92 (2019.01)**

[25] EN

[54] **DEVICE AND METHOD FOR CONTROLLING THE FEED OF POLYMER MELT TO A PLASTICS PROCESSING MACHINE**

[54] **DISPOSITIF ET PROCEDE DE COMMANDE D'ALIMENTATION EN MASSE FONDUE DE POLYMERE D'UNE MACHINE DE TRAITEMENT DE PLASTIQUES**

[72] GROSS, DIETER, DE  
[72] JOST, SEBASTIAN, DE  
[72] STUBER, ANDREAS, DE  
[71] FEDDEM GMBH & CO. KG, DE  
[85] 2023-03-28  
[86] 2021-09-07 (PCT/EP2021/074598)  
[87] (WO2022/063569)  
[30] EP (20198670.0) 2020-09-28

[21] **3,197,158**  
[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **HUMANIZED ANTI-LIV1 ANTIBODIES FOR THE TREATMENT OF CANCER**

[54] **ANTICORPS ANTI-LIV1 HUMANISES DESTINES AU TRAITEMENT DU CANCER**

[72] ONSUM, MATT, US  
[72] LU, HAILING, US  
[72] WANG, ZEJING, US  
[71] SEAGEN INC., US  
[85] 2023-03-28  
[86] 2021-09-27 (PCT/US2021/071609)  
[87] (WO2022/067348)  
[30] US (63/084,444) 2020-09-28  
[30] US (63/243,025) 2021-09-10

[21] **3,197,159**  
[13] A1

[51] **Int.Cl. E21B 23/04 (2006.01) E21B 23/06 (2006.01) E21B 43/10 (2006.01)**

[25] EN

[54] **METHOD OF CREATING AN ANNULAR ZONAL ISOLATION SEAL IN A DOWNHOLE ANNULUS**

[54] **PROCEDE DE CREATION D'UN JOINT D'ISOLATION DE ZONE ANNULAIRE DANS UN ESPACE ANNULAIRE DE FOND DE TROU**

[72] STAM, WALTER, NL  
[71] SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., NL  
[85] 2023-03-28  
[86] 2021-10-04 (PCT/EP2021/077282)  
[87] (WO2022/078800)  
[30] EP (20201362.9) 2020-10-12  
[30] EP (21163090.0) 2021-03-17  
[30] EP (21195314.6) 2021-09-07  
[30] EP (21195665.1) 2021-09-09

[21] **3,197,160**  
[13] A1

[51] **Int.Cl. A61K 39/215 (2006.01) C07K 14/005 (2006.01) C12N 15/86 (2006.01)**

[25] EN

[54] **MESENTER RNA VACCINES AGAINST WIDE SPECTRUM OF CORONAVIRUS VARIANTS**

[54] **VACCINS A ARN MESSAGEUR CONTRE UN LARGE SPECTRE DE VARIANTS DE CORONAVIRUS**

[72] WONG, CHI-HUEY, TW  
[72] WU, CHUNG-YI, TW  
[72] MA, CHE, TW  
[72] FAN, CHEN-YU, TW  
[71] ACADEMIA SINICA, TW  
[85] 2023-03-28  
[86] 2022-04-12 (PCT/US2022/071679)  
[87] (WO2022/221835)  
[30] US (63/173,752) 2021-04-12  
[30] US (63/264,737) 2021-12-01

[21] **3,197,161**  
[13] A1

[51] **Int.Cl. C09K 11/02 (2006.01) C09K 11/70 (2006.01) C09K 11/74 (2006.01)**

[25] EN

[54] **METHOD TO MODIFY THE SURFACE OF QUANTUM DOTS AND A METHOD TO PREPARE A DISPERSION OF SURFACE MODIFIED QUANTUM DOTS**

[54] **PROCEDE DE MODIFICATION DE LA SURFACE DE POINTS QUANTIQUES ET PROCEDE DE PREPARATION D'UNE DISPERSION DE POINTS QUANTIQUES MODIFIES EN SURFACE**

[72] HENS, ZEGGER, BE  
[72] LEEMANS, JARI, BE  
[71] UNIVERSITEIT GENT, BE  
[85] 2023-03-28  
[86] 2021-10-14 (PCT/EP2021/078513)  
[87] (WO2022/079198)  
[30] EP (20201981.6) 2020-10-15

[21] **3,197,162**  
[13] A1

[51] **Int.Cl. C04B 35/48 (2006.01) C23C 4/11 (2016.01) C23C 4/134 (2016.01) C01F 17/224 (2020.01) C01F 17/235 (2020.01) C01G 23/04 (2006.01) C01G 25/02 (2006.01) C01G 27/02 (2006.01) C04B 35/49 (2006.01)**

[25] EN

[54] **COMPLEX OXIDE THERMAL BARRIER COATINGS WITH LOW THERMAL INERTIA AND LOW THERMAL CONDUCTIVITY**

[54] **RETELEMENTS DE BARRIERES THERMIQUES A OXYDE COMPLEXE PRESENTANT UNE FAIBLE INERTIE THERMIQUE ET UNE FAIBLE CONDUCTIVITE THERMIQUE**

[72] HARRINGTON, TYLER JAMES, US  
[72] SHAROBEM, TIMOTHY TADROS, US  
[71] OERLIKON METCO (US) INC., US  
[85] 2023-03-28  
[86] 2022-01-04 (PCT/US2022/011142)  
[87] (WO2022/150304)  
[30] US (63/134,009) 2021-01-05

## PCT Applications Entering the National Phase

[21] **3,197,163**  
[13] A1

[51] **Int.Cl. A61K 9/127 (2006.01) A61K 31/7088 (2006.01) A61K 47/36 (2006.01) A61P 31/00 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **LIPID COMPOSITIONS COMPRISING POLYNUCLEOTIDE ANTIGENS**

[54] **COMPOSITIONS LIPIDIQUES COMPRENANT DES ANTIGENES POLYNUCLEOTIDIQUES**

[72] STANFORD, MARIANNE, CA

[72] ORS, FREDERIC, CA

[72] HRYTSENKO, OLGA, CA

[72] RAJAGOPALAN, RAJKANNAN, CA

[71] IMMUNOVACCINE TECHNOLOGIES INC., CA

[85] 2023-03-28

[86] 2021-09-28 (PCT/IB2021/000650)

[87] (WO2022/064274)

[30] US (63/084,179) 2020-09-28

[21] **3,197,165**  
[13] A1

[51] **Int.Cl. A61K 31/517 (2006.01) A61K 31/7068 (2006.01) A61K 39/00 (2006.01) C07K 16/32 (2006.01)**

[25] EN

[54] **METHODS OF TREATING SOLID TUMORS DRIVEN BY HER2 ALTERATIONS WITH TUCATINIB IN COMBINATION WITH AN ANTI-HER2 ANTIBODY**

[54] **PROCEDES DE TRAITEMENT DE TUMEURS SOLIDES AYANT DES ALTERATIONS DE HER2 AVEC DU TUCATINIB EN COMBINAISON AVEC UN ANTICORPS ANTI-HER2**

[72] WALKER, LUKE, US

[72] KULUKIAN, ANITA, US

[71] SEAGEN INC., US

[85] 2023-03-28

[86] 2021-09-27 (PCT/US2021/071606)

[87] (WO2022/067347)

[30] US (63/084,481) 2020-09-28

[30] US (63/113,245) 2020-11-13

[30] US (63/222,335) 2021-07-15

[21] **3,197,168**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 9/127 (2006.01) A61K 31/573 (2006.01) A61K 31/585 (2006.01) A61K 31/6615 (2006.01) A61K 31/7052 (2006.01) A61P 27/02 (2006.01)**

[25] EN

[54] **METHODS FOR TREATING EYE DISEASES USING LIPID BINDING PROTEIN-BASED COMPLEXES**

[54] **METHODES DE TRAITEMENT DE MALADIES OCULAIRES FAISANT APPEL A DES COMPLEXES A BASE DE PROTEINE DE LIAISON AUX LIPIDES**

[72] TUPIN, CYRILLE, FR

[72] MARTINEZ, JEROME, FR

[72] LALLEMAND, FREDERIC, FR

[71] ABIONYX PHARMA SA, FR

[85] 2023-03-28

[86] 2021-10-01 (PCT/IB2021/000674)

[87] (WO2022/069942)

[30] US (63/086,386) 2020-10-01

[30] US (63/092,073) 2020-10-15

[30] US (63/139,015) 2021-01-19

[30] US (63/175,337) 2021-04-15

[21] **3,197,169**  
[13] A1

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

[25] EN

[54] **APPARATUS AND METHODS FOR REDUCING PARAVALVULAR LEAKAGE**

[54] **APPAREIL ET PROCEDES DE REDUCTION DE FUITE PARAVALVULAIRE**

[72] SCHWARTZ, EVAN T., US

[71] EDWARDS LIFESCIENCES CORPORATION, US

[85] 2023-03-28

[86] 2021-10-28 (PCT/US2021/056964)

[87] (WO2022/094019)

[30] US (63/107,245) 2020-10-29

[21] **3,197,170**  
[13] A1

[51] **Int.Cl. A61K 9/10 (2006.01) A61K 9/107 (2006.01) A61K 31/568 (2006.01) A61K 38/09 (2006.01) A61K 47/10 (2017.01) A61K 47/14 (2017.01) A61K 47/20 (2006.01) A61K 47/22 (2006.01) A61K 47/34 (2017.01)**

[25] EN

[54] **BIODEGRADABLE POLYMER AND SOLVENT COMPOSITIONS AND SYSTEMS FOR EXTENDED STORAGE AND DELIVERY OF ACTIVE PHARMACEUTICAL INGREDIENTS**

[54] **COMPOSITIONS DE POLYMERE BIODEGRADABLE ET DE SOLVANT ET SYSTEMES POUR STOCKAGE PROLONGE ET ADMINISTRATION DE PRINCIPES ACTIFS PHARMACEUTIQUES**

[72] GLOVER, GARRETT, US

[72] FIELDSON, GREGORY, US

[71] TOLMAR INTERNATIONAL LIMITED, IE

[85] 2023-03-28

[86] 2021-09-20 (PCT/IB2021/058557)

[87] (WO2022/069996)

[30] US (63/085,860) 2020-09-30

[21] **3,197,171**  
[13] A1

[51] **Int.Cl. B24D 15/02 (2006.01) B24D 15/00 (2006.01) B24D 15/04 (2006.01)**

[25] EN

[54] **HAND-HELD CO-EXTRUDED FINISHING SANDING BLOCK**

[54] **BLOC DE PONCAGE DE FINITION CO-EXTRUDE A MAIN**

[72] TURNBULL, WILLIAM N., US

[72] LAMB, PETER J., US

[71] TRADE ASSOCIATES, INC., US

[85] 2023-03-28

[86] 2021-10-19 (PCT/US2021/055530)

[87] (WO2022/086908)

[30] US (63/105,136) 2020-10-23



## Demandes PCT entrant en phase nationale

[21] **3,197,172**  
[13] A1

[51] **Int.Cl. H01M 50/342 (2021.01)**  
[25] EN  
[54] **PRESSURE RELIEF DEVICE**  
[54] **DISPOSITIF LIMITEUR DE PRESSION**  
[72] CASEY, COLMAN, IE  
[72] HENNESSY, DAMIEN, IE  
[72] BRAZIER, GEOFFREY, US  
[71] BS&B INNOVATIONS LIMITED, IE  
[85] 2023-03-28  
[86] 2021-09-28 (PCT/IB2021/058857)  
[87] (WO2022/064472)  
[30] US (63/084,046) 2020-09-28

[21] **3,197,173**  
[13] A1

[51] **Int.Cl. A61K 31/519 (2006.01) A61P 43/00 (2006.01) C07D 515/04 (2006.01)**  
[25] EN  
[54] **MODULATORS OF CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR**  
[54] **MODULATEURS DU REGULATEUR DE LA CONDUCTANCE TRANSMEMBRANAIRE DE LA MUCOVISCIDOSE**  
[72] MCCARTNEY, JASON, US  
[72] ABELA, ALEXANDER RUSSELL, US  
[72] ABRAHAM, SUNNY, US  
[72] ANDERSON, COREY DON, US  
[72] ARUMUGAM, VIJAYALAKSMI, US  
[72] CHAU, JACLYN, US  
[72] CLEMENS, JEREMY, US  
[72] CLEVELAND, THOMAS, US  
[72] COON, TIMOTHY RICHARD, US  
[72] DINH, ANDREW, US  
[72] DWIGHT, TIMOTHY A., US  
[72] FANNING, LEV TYLER DEWEY, US  
[72] FRIEMAN, BRYAN A., US  
[72] ISHIHARA, YOSHIHIRO, US  
[72] KRENITSKY, PAUL, US  
[72] MILLER, MARK THOMAS, US  
[72] PIERRE, FABRICE, US  
[72] SILINA, ALINA, US  
[72] TRAN, JOE A., US  
[72] VALDEZ, LINO, US  
[72] ZHOU, JINGLAN, US  
[72] GROOTENHUIS, PETER (DECEASED), US  
[72] HADIDA RUAH, SARA SABINA, US  
[71] VERTEX PHARMACEUTICALS INCORPORATED, US  
[85] 2023-03-28  
[86] 2021-10-06 (PCT/US2021/053861)  
[87] (WO2022/076625)  
[30] US (63/088,799) 2020-10-07

[21] **3,197,177**  
[13] A1

[51] **Int.Cl. B29C 63/34 (2006.01) B29C 63/36 (2006.01)**  
[25] EN  
[54] **METHOD AND KIT FOR NON-DESTRUCTIVE IN SITU REPAIR (RELINING) OF DETERIORATED PIPELINES**  
[54] **PROCEDE ET NECESSAIRE DE REPARATION IN SITU NON DESTRUCTRICE (NOUVEAU CHEMISAGE) DE CANALISATIONS DETERIOREES**  
[72] PIOVANO, ROBERTO, IT  
[71] APPLIED RESIN S.L., ES  
[85] 2023-03-28  
[86] 2021-10-05 (PCT/IB2021/059101)  
[87] (WO2022/074545)  
[30] IT (102020000023440) 2020-10-05

[21] **3,197,178**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) A61K 9/00 (2006.01) A61K 38/17 (2006.01)**  
[25] EN  
[54] **NEUROD1 COMBINATION VECTOR**  
[54] **VECTEUR DE COMBINAISON NEUROD1**  
[72] XU, JIE, US  
[71] NEUEXCELL THERAPEUTICS INC., US  
[85] 2023-03-28  
[86] 2021-09-28 (PCT/US2021/052358)  
[87] (WO2022/072325)  
[30] US (63/084,971) 2020-09-29  
[30] US (63/247,439) 2021-09-23

[21] **3,197,179**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **ANTI-CD93 CONSTRUCTS AND USES THEREOF**  
[54] **CONSTRUCTIONS ANTI-CD93 ET UTILISATIONS ASSOCIEES**  
[72] CHEN, ZIRONG, US  
[72] GUERRETTE, ROXANN, US  
[72] JONES, GREGORY, US  
[72] KOMABA, SHIGERU, US  
[72] LI, JIAN, US  
[72] NORTON, ANGELA, US  
[72] WU, LIHUA, US  
[72] XIA, ZHINAN, US  
[71] DYNAMICURE BIOTECHNOLOGY LLC, US  
[85] 2023-03-28  
[86] 2021-09-28 (PCT/US2021/052446)  
[87] (WO2022/067262)  
[30] US (63/084,474) 2020-09-28  
[30] US (PCT/US2021/035542) 2021-06-02  
[30] US (PCT/US2021/043784) 2021-07-29

[21] **3,197,180**  
[13] A1

[51] **Int.Cl. A61M 27/00 (2006.01) A61B 5/00 (2006.01) A61B 5/03 (2006.01) A61F 7/00 (2006.01) A61F 7/12 (2006.01) A61M 25/00 (2006.01)**  
[25] EN  
[54] **SUBARACHNOID FLUID MANAGEMENT METHOD AND SYSTEM**  
[54] **PROCEDE ET SYSTEME DE GESTION DE LIQUIDE SOUS-ARACHNOIDIEN**  
[72] RICCARDI, GIANNA, US  
[72] SIOPES, WILLIAM X., JR., US  
[72] GLICKMAN, MARCIE, US  
[72] DEPASQUA, ANTHONY, US  
[72] KALISH, KEVIN, US  
[72] VOSE, JOSHUA G., US  
[72] PATEL, RAJAN, US  
[71] ENCLEAR THERAPIES, INC., US  
[85] 2023-03-28  
[86] 2021-09-29 (PCT/US2021/052735)  
[87] (WO2022/072558)  
[30] US (63/084,996) 2020-09-29  
[30] US (63/117,975) 2020-11-24

## PCT Applications Entering the National Phase

[21] **3,197,181**  
[13] A1

[51] **Int.Cl. C09D 7/61 (2018.01) C08G 73/02 (2006.01) C09D 5/08 (2006.01) C09D 163/00 (2006.01) H01B 1/12 (2006.01)**

[25] EN

[54] **CONJUGATED POLYMER COMPOSITIONS, ARTICLES THEREOF, AND METHODS THEREOF**

[54] **COMPOSITIONS DE POLYMERES CONJUGUES, ARTICLES ASSOCIES ET PROCEDES DE FORMATION D'UN PRODUIT D'ADDITION DU POLYMERE CONJUGUE ET DE DOPANTS**

[72] IJERI, VIJAYKUMAR, US

[72] GAYDOS, STEPHEN P., US

[72] KINLEN, PATRICK J., US

[72] SADAGOPAN, SATHIYANARAYANAN, IN

[72] CHENAN, ARUNCHANDRAN, IN

[72] RAMACHANDRAN, JEYARAM, IN

[71] THE BOEING COMPANY, US

[85] 2023-03-28

[86] 2021-10-04 (PCT/US2021/053323)

[87] (WO2022/076286)

[30] US (63/089,436) 2020-10-08

[30] US (17/407,877) 2021-08-20

---

[21] **3,197,183**  
[13] A1

[51] **Int.Cl. H04L 5/00 (2006.01)**

[25] EN

[54] **METHOD AND DEVICE FOR SOUNDING REFERENCE SIGNAL FLEXIBILITY ENHANCEMENT**

[54] **PROCEDE ET DISPOSITIF POUR AMELIORER LA FLEXIBILITE D'UN SIGNAL DE REFERENCE DE SONDAGE**

[72] LI, GANG, CN

[72] JIANG, CHUANGXIN, CN

[72] WU, HAO, CN

[72] LU, ZHAOHUA, CN

[72] ZHANG, SHUJUAN, CN

[72] WANG, YUXIN, CN

[72] HE, ZHEN, CN

[71] ZTE CORPORATION, CN

[85] 2023-03-28

[86] 2020-09-29 (PCT/CN2020/118647)

[87] (WO2022/067457)

[21] **3,197,194**  
[13] A1

[51] **Int.Cl. H05B 45/30 (2020.01) H05B 45/325 (2020.01)**

[25] EN

[54] **LIGHT DIMMING SYSTEM**

[54] **SYSTEME DE GRADATION DE LUMIERE**

[72] WAN, YEHUA, CN

[72] YE, SONGAN, CN

[71] SENGLED CO., LTD., CN

[85] 2023-03-28

[86] 2021-09-08 (PCT/CN2021/117246)

[87] (WO2022/068547)

[30] CN (202022185358.X) 2020-09-29

---

[21] **3,197,197**  
[13] A1

[51] **Int.Cl. C07D 221/28 (2006.01) C07D 489/08 (2006.01)**

[25] EN

[54] **NOVEL INTERMEDIATE, METHOD FOR PREPARING THE SAME AND APPLICATION THEREOF**

[54] **NOUVEL INTERMEDIAIRE, SON PROCEDE DE PREPARATION ET SES UTILISATIONS**

[72] QIN, YONG, CN

[72] XUE, FEI, CN

[72] SONG, HAO, CN

[72] LIU, XIAOYU, CN

[72] ZHANG, DAN, CN

[72] HE, HUAN, CN

[71] SICHUAN UNIVERSITY, CN

[85] 2023-03-28

[86] 2021-10-13 (PCT/CN2021/123651)

[87] (WO2022/127321)

[30] CN (202011504911.X) 2020-12-18

[30] CN (202110064494.X) 2021-01-18

[21] **3,197,199**  
[13] A1

[51] **Int.Cl. A61K 31/437 (2006.01) A61P 33/02 (2006.01) C07D 471/04 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **COMPOUNDS AND COMPOSITIONS FOR THE TREATMENT OF CRYPTOSPORIDIOSIS**

[54] **COMPOSES ET COMPOSITIONS POUR LE TRAITEMENT DE LA CRYPTOSPORIDIOSE**

[72] YOUNG, JOSEPH MICHAEL, US

[72] TURNER, MICHAEL ROBERT, US

[72] LU, PEICHAO, US

[71] NOVARTIS AG, CH

[85] 2023-03-28

[86] 2021-10-12 (PCT/IB2021/059376)

[87] (WO2022/079616)

[30] US (63/091,866) 2020-10-14

---

[21] **3,197,201**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01) A61B 17/04 (2006.01)**

[25] EN

[54] **DEVICES AND METHODS FOR AREA REDUCTION AND CLOSURE OF CARDIAC OPENINGS OR CAVITIES**

[54] **DISPOSITIFS ET PROCEDES DE REDUCTION DE ZONE ET DE FERMETURE D'OUVERTURES OU DE CAVITES CARDIAQUES**

[72] SPIEGEL, LAUREN ANNE, US

[72] SHANG, HAO, US

[72] SHAFIGH, SAM, US

[72] DECKER, STEVEN ERIC, US

[72] DALTON, TIMOTHY ALLEN, US

[71] EDWARDS LIFESCIENCES INNOVATION (ISRAEL) LTD., IL

[85] 2023-03-28

[86] 2021-10-26 (PCT/IB2021/059851)

[87] (WO2022/090907)

[30] US (63/106,324) 2020-10-27

## Demandes PCT entrant en phase nationale

[21] **3,197,203**  
[13] A1

[51] **Int.Cl. A23J 1/14 (2006.01) A23L 11/00 (2021.01) A23J 3/14 (2006.01)**

[25] EN

[54] **LEGUME-DERIVED FRACTIONS AND USES THEREOF**

[54] **FRACTIONS DERIVEES DE LEGUMINEUSES ET LEURS UTILISATIONS**

[72] BEN CHAIM, NITZAN NATANI, IL  
[72] ZIVANOVIC, SVETLANA, US  
[71] INNOVOPRO LTD., IL  
[85] 2023-03-28  
[86] 2021-09-29 (PCT/IL2021/051174)  
[87] (WO2022/070187)  
[30] IL (277654) 2020-09-29

[21] **3,197,208**  
[13] A1

[51] **Int.Cl. H04L 9/40 (2022.01) H04L 45/00 (2022.01) H04L 45/02 (2022.01)**

[25] EN

[54] **SYSTEM FOR MANAGING AND CONTROLLING MESH VIRTUAL PRIVATE NETWORK AND METHOD ASSOCIATED THEREWITH**

[54] **SYSTEME DE GESTION ET DE COMMANDE D'UN RESEAU PRIVE VIRTUEL MAILLE ET PROCEDE ASSOCIE**

[72] OLSON, ZACHARY KENNETH, US  
[72] LAKKAVALLI, SHASHIDHAR, US  
[71] DATTO, INC., US  
[85] 2023-05-02  
[86] 2021-11-01 (PCT/US2021/057544)  
[87] (WO2022/094392)  
[30] US (63/108,679) 2020-11-02  
[30] US (17/379,006) 2021-07-19

[21] **3,197,219**  
[13] A1

[51] **Int.Cl. B62B 5/02 (2006.01) A45C 5/14 (2006.01) B62B 1/12 (2006.01)**

[25] EN

[54] **MULTI-WHEEL SYSTEM FOR LUGGAGE**

[54] **SYSTEME A MULTIPLES ROUES POUR BAGAGE**

[72] SHOENHAIR, JORDAN D., US  
[72] PASELK, JUSTIN A., US  
[72] SOLHEIM, JOHN A., US  
[71] KARSTEN MANUFACTURING CORPORATION, US  
[85] 2023-02-21  
[86] 2021-08-20 (PCT/US2021/046974)  
[87] (WO2022/040572)  
[30] US (63/068,693) 2020-08-21

[21] **3,197,227**  
[13] A1

[51] **Int.Cl. C02F 1/00 (2006.01) C02F 1/44 (2006.01) G01N 1/10 (2006.01) G01N 33/18 (2006.01)**

[25] EN

[54] **METHODS, APPARATUS, AND SYSTEMS FOR DETECTING AND REMOVING MICROPLASTICS FROM WATER**

[54] **PROCEDES, APPAREIL ET SYSTEMES POUR DETECTER ET ELIMINER DES MICROPLASTIQUES DANS L'EAU**

[72] GUTIERREZ, CARLOS ALBERTO HERNANDEZ, US  
[72] JOSE SANCHEZ, AIZA FERNANDA, US  
[71] AIZACO LIMITED COMPANY, US  
[85] 2023-05-02  
[86] 2022-03-22 (PCT/US2022/021423)  
[87] (WO2022/204206)  
[30] US (63/164,609) 2021-03-23

[21] **3,197,229**  
[13] A1

[51] **Int.Cl. A61M 25/00 (2006.01) A61M 25/06 (2006.01)**

[25] EN

[54] **EXPANDABLE SHEATH INCLUDING REVERSE BAYONET LOCKING HUB**

[54] **GAINE EXTENSIBLE AVEC UN MOYEU DE VERROUILLAGE A BAIONNETTE INVERSEE**

[72] SALEH, NASSER WILLIAM, US  
[72] TAMIR, IIAN, US  
[72] MANZELLA, SALVATORE, JR., US  
[72] WITZMAN, OFIR, IL  
[72] COHEN, OREN, IL  
[71] EDWARDS LIFSCIENCES CORPORATION, US  
[85] 2023-03-08  
[86] 2021-09-13 (PCT/US2021/050006)  
[87] (WO2022/056352)  
[30] US (63/077,899) 2020-09-14

[21] **3,197,264**  
[13] A1

[51] **Int.Cl. G06Q 10/04 (2023.01) G06Q 10/06 (2023.01) G06Q 50/02 (2012.01) G06Q 10/00 (2023.01)**

[25] EN

[54] **MACHINE LEARNING BASED FOREST MANAGEMENT**

[54] **GESTION FORESTIERE BASEE SUR L'APPRENTISSAGE AUTOMATIQUE**

[72] BACK, PHILIPP, FI  
[72] SUOMINEN, ANTTI, FI  
[72] MALO, PEKKA, FI  
[72] TAHVONEN, OLLI, FI  
[71] AALTO UNIVERSITY FOUNDATION SR, FI  
[71] HELSINGIN YLIOPISTO, FI  
[85] 2023-03-24  
[86] 2021-09-29 (PCT/FI2021/050645)  
[87] (WO2022/069802)  
[30] FI (20207158) 2020-09-30

[21] **3,197,276**  
[13] A1

[51] **Int.Cl. G01R 23/16 (2006.01) G01R 25/00 (2006.01) G01R 31/327 (2006.01) G01R 35/00 (2006.01)**

[25] EN

[54] **COMPENSATING FOR DRIFT IN A SWITCH GEAR VOLTAGE SENSOR**

[54] **COMPENSATION DE LA DERIVE DANS UN CAPTEUR DE TENSION A MECANISME DE COMMUTATION**

[72] PUCHE, JUAN SERRANO, US  
[72] KERR, BLAIR S., US  
[72] MICIC, STEFAN, US  
[71] G & W ELECTRIC COMPANY, US  
[85] 2023-05-02  
[86] 2022-09-16 (PCT/US2022/076592)  
[87] (WO2023/044442)  
[30] US (17/448,148) 2021-09-20

## PCT Applications Entering the National Phase

[21] **3,197,300**  
[13] A1

[51] **Int.Cl. G05D 1/02 (2020.01)**  
[25] EN  
[54] **UNMANNED VEHICLE CONTROL SYSTEM, UNMANNED VEHICLE, AND UNMANNED VEHICLE CONTROL METHOD**  
[54] **SYSTEME DE COMMANDE DE VEHICULE SANS PILOTE, VEHICULE SANS PILOTE ET PROCEDE DE COMMANDE DE VEHICULE SANS PILOTE**  
[72] KADONO, YOSUKE, JP  
[71] KOMATSU LTD., JP  
[85] 2023-03-28  
[86] 2021-10-11 (PCT/JP2021/037614)  
[87] (WO2022/080326)  
[30] JP (2020-173252) 2020-10-14

[21] **3,197,301**  
[13] A1

[51] **Int.Cl. B64D 33/04 (2006.01) F01D 25/30 (2006.01)**  
[25] EN  
[54] **EXHAUST DUCT ASSEMBLY AND AIRCRAFT INCLUDING THE SAME**  
[54] **ENSEMBLE CONDUIT D'ECHAPPEMENT ET VEHICULE AERIEN MUNI DE CE DERNIER**  
[72] JOO, YOUNG JUNG, KR  
[72] BIERNAT, JACOB, CA  
[72] LEFEBVRE, GUY, CA  
[71] HANWHA AEROSPACE CO., LTD., KR  
[71] PRATT & WHITNEY CANADA CORP., CA  
[85] 2023-03-28  
[86] 2020-10-27 (PCT/KR2020/014691)  
[87] (WO2022/080546)  
[30] KR (10-2020-0132986) 2020-10-14

[21] **3,197,302**  
[13] A1

[51] **Int.Cl. F42D 1/045 (2006.01)**  
[25] EN  
[54] **DETONATOR ASSEMBLY**  
[54] **ENSEMBLE DETONATEUR**  
[72] MULLER, ELMAR LENNOX, ZA  
[72] LIEBENBERG, ABRAHAM JOHANNES, ZA  
[71] DETNET SOUTH AFRICA (PTY) LTD, ZA  
[85] 2023-03-28  
[86] 2021-09-28 (PCT/ZA2021/050054)  
[87] (WO2022/073042)  
[30] ZA (2020/06083) 2020-10-01

[21] **3,197,303**  
[13] A1

[51] **Int.Cl. C07C 5/333 (2006.01) C07C 11/06 (2006.01) C10G 9/00 (2006.01) C10G 69/06 (2006.01)**  
[25] EN  
[54] **METHOD AND PLANT FOR PRODUCING OLEFINS**  
[54] **PROCEDE ET INSTALLATION POUR PRODUIRE DES OLEFINES**  
[72] HOFEL, TORBEN, DE  
[72] FRITZ, HELMUT, DE  
[71] LINDE GMBH, DE  
[85] 2023-03-29  
[86] 2021-10-29 (PCT/EP2021/080124)  
[87] (WO2022/090466)  
[30] EP (20204783.3) 2020-10-29

[21] **3,197,304**  
[13] A1

[51] **Int.Cl. A61K 39/385 (2006.01) A61P 37/04 (2006.01) C07K 16/30 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR CANCER DIAGNOSIS**  
[54] **COMPOSITIONS ET METHODES DE DIAGNOSTIC DU CANCER**  
[72] SARAGOVI, HORACIO URI, CA  
[71] AOA DX, US  
[85] 2023-03-29  
[86] 2021-10-05 (PCT/US2021/053503)  
[87] (WO2022/076364)  
[30] US (63/087,427) 2020-10-05

[21] **3,197,305**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61L 2/00 (2006.01) B01D 15/18 (2006.01) B01D 15/24 (2006.01) B01D 15/32 (2006.01) C07K 1/20 (2006.01) C07K 1/36 (2006.01)**  
[25] EN  
[54] **CONTINUOUS VIRUS RETENTIVE FILTRATION**  
[54] **FILTRATION A RETENTION DE VIRUS CONTINUE**  
[72] BROWNE, ROSS, US  
[72] SCHNEIDER, ERIK, US  
[71] REGENERON PHARMACEUTICALS, INC., US  
[85] 2023-03-29  
[86] 2021-10-01 (PCT/US2021/053260)  
[87] (WO2022/072899)  
[30] US (63/087,037) 2020-10-02  
[30] US (63/109,942) 2020-11-05

[21] **3,197,306**  
[13] A1

[51] **Int.Cl. C08F 20/06 (2006.01) C08K 5/092 (2006.01) C08K 5/17 (2006.01)**  
[25] EN  
[54] **B-STAGEABLE AQUEOUS BINDER COMPOSITIONS**  
[54] **COMPOSITIONS AQUEUSES DE LIANT POUVANT PASSER A L'ETAT B**  
[72] MUELLER, GERT, US  
[72] BRODERICK, ANDREW, US  
[72] ZHANG, XIUJUAN, US  
[72] CHEN, LIANG, US  
[71] OWENS CORNING INTELLECTUAL CAPITAL, LLC, US  
[85] 2023-03-29  
[86] 2021-10-01 (PCT/US2021/053093)  
[87] (WO2022/072780)  
[30] US (63/086,267) 2020-10-01

[21] **3,197,307**  
[13] A1

[51] **Int.Cl. G01R 19/25 (2006.01) G01R 31/08 (2020.01) G06F 1/30 (2006.01) H02H 1/06 (2006.01) H02H 3/06 (2006.01) H02H 7/26 (2006.01)**  
[25] EN  
[54] **RADIAL RESTORATION**  
[54] **RESTAURATION RADIALE**  
[72] QUINLAN, MICHAEL, US  
[72] DESMOND, DANIEL, US  
[72] SHARON, YOAV, US  
[72] MARENDIC, BORIS, US  
[71] S&C ELECTRIC COMPANY, US  
[85] 2023-03-29  
[86] 2021-09-30 (PCT/US2021/052763)  
[87] (WO2022/072570)  
[30] US (63/086,219) 2020-10-01

[21] **3,197,308**  
[13] A1

[51] **Int.Cl. B28D 1/22 (2006.01) B28D 7/04 (2006.01) C03B 33/02 (2006.01) C03B 33/12 (2006.01)**  
[25] EN  
[54] **GUIDING DEVICE FOR LARGE-FORMAT MANUAL CUTTERS**  
[54] **DISPOSITIF DE GUIDAGE POUR DECOUPES MANUELLES DE GRAND FORMAT**  
[72] MARTINEZ GALINDO, DAVID, ES  
[71] GERMANS BOADA, S.A., ES  
[85] 2023-03-29  
[86] 2021-08-03 (PCT/ES2021/070586)  
[87] (WO2023/012380)

## Demandes PCT entrant en phase nationale

[21] **3,197,309**  
[13] A1

[51] **Int.Cl. G01N 30/24 (2006.01) B01L 9/00 (2006.01) G01N 35/10 (2006.01) H01F 7/02 (2006.01)**

[25] EN

[54] **ASSEMBLY FIXTURES AND METHODS OF PRODUCING SAMPLE INTRODUCTION DEVICES**

[54] **APPAREILS D'ASSEMBLAGE ET PROCEDES DE PRODUCTION DE DISPOSITIFS D'INTRODUCTION D'ECHANTILLONS**

[72] BLACK, BENJAMIN J., US

[71] PERKINELMER U.S. LLC, US

[85] 2023-03-29

[86] 2021-09-29 (PCT/US2021/052727)

[87] (WO2022/072552)

[30] US (17/038,850) 2020-09-30

[21] **3,197,313**  
[13] A1

[51] **Int.Cl. B01L 9/00 (2006.01) G01N 30/24 (2006.01) G01N 35/10 (2006.01) H01F 7/02 (2006.01) G01N 35/00 (2006.01)**

[25] EN

[54] **SAMPLE INTRODUCTION DEVICES AND SYSTEMS AND METHODS OF USING THEM**

[54] **DISPOSITIFS ET SYSTEMES D'INTRODUCTION D'ECHANTILLONS ET LEURS PROCEDES D'UTILISATION**

[72] BLACK, BENJAMIN J., US

[72] JACKSON, ROBERT H., US

[71] PERKINELMER U.S. LLC, US

[85] 2023-03-29

[86] 2021-09-29 (PCT/US2021/052646)

[87] (WO2022/072492)

[30] US (17/038,841) 2020-09-30

[21] **3,197,314**  
[13] A1

[51] **Int.Cl. H01M 4/131 (2010.01) H01M 4/133 (2010.01) H01M 10/052 (2010.01) H01M 10/0566 (2010.01) H01M 10/0569 (2010.01) C22B 7/00 (2006.01) H01M 4/62 (2006.01) H01M 6/52 (2006.01) H01M 10/54 (2006.01)**

[25] FR

[54] **METHOD FOR RECYCLING A LITHIUM ION BATTERY ELECTRODE, PRECURSOR MIXTURE AND ELECTRODE COMPOSITION FOR SAID BATTERY**

[54] **PROCEDE DE RECYCLAGE D'UNE ELECTRODE POUR BATTERIE LITHIUM-ION, MELANGE PRECURSEUR ET COMPOSITION D'ELECTRODE POUR CETTE BATTERIE**

[72] DUFOUR, BRUNO, FR

[72] ASTAFYEVA, KSENIA, FR

[72] DOUSSET, CAPUCINE, FR

[71] HUTCHINSON, FR

[85] 2023-03-29

[86] 2021-09-29 (PCT/FR2021/051689)

[87] (WO2022/069838)

[30] FR (FR20 09896) 2020-09-29

[21] **3,197,315**  
[13] A1

[51] **Int.Cl. B60L 58/12 (2019.01) B60L 53/14 (2019.01) B60L 58/10 (2019.01) B60L 58/18 (2019.01)**

[25] EN

[54] **SYSTEMS, DEVICES, AND METHODS FOR INTRAPHASE AND INTERPHASE BALANCING IN MODULE-BASED CASCADED ENERGY SYSTEMS**

[54] **SYSTEMES, DISPOSITIFS ET PROCEDES POUR UN EQUILIBRAGE INTRAPHASE ET INTERPHASE DANS DES SYSTEMES D'ENERGIE EN CASCADE A BASE DE MODULES**

[72] NADERI, ROOZBEH, US

[72] SLEPCHENKOV, MIKHAIL, US

[71] TAE TECHNOLOGIES, INC., US

[85] 2023-03-29

[86] 2021-09-28 (PCT/US2021/052369)

[87] (WO2022/072330)

[30] US (63/085,628) 2020-09-30

[21] **3,197,316**  
[13] A1

[51] **Int.Cl. A61P 25/00 (2006.01) C07K 14/47 (2006.01) C12N 15/85 (2006.01) C12N 15/86 (2006.01)**

[25] EN

[54] **NEUROD1 AND DLX2 VECTOR**

[54] **VECTEUR DE NEUROD1 ET DE DLX2**

[72] XU, JIE, US

[71] NEUEXCELL THERAPEUTICS INC., US

[85] 2023-03-29

[86] 2021-09-28 (PCT/US2021/052348)

[87] (WO2022/072322)

[30] US (63/084,945) 2020-09-29

[30] US (63/247,442) 2021-09-23

[21] **3,197,318**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 31/568 (2006.01) A61K 47/10 (2017.01) A61K 47/22 (2006.01) A61K 47/34 (2017.01)**

[25] EN

[54] **BIODEGRADABLE POLYMER DELIVERY SYSTEM FOR EXTENDED DELIVERY OF TESTOSTERONE**

[54] **SYSTEME D'ADMINISTRATION DE POLYMERE BIODEGRADABLE POUR L'ADMINISTRATION PROLONGEE DE TESTOSTERONE**

[72] VAN HOVE, AMY, US

[72] JANAGAM, DILEEP, US

[72] FIELDSON, GREGORY, US

[71] TOLMAR INTERNATIONAL LIMITED, IE

[85] 2023-03-29

[86] 2021-09-24 (PCT/IB2021/058743)

[87] (WO2022/070010)

[30] US (63/085,868) 2020-09-30

## PCT Applications Entering the National Phase

[21] **3,197,320**  
[13] A1

[51] **Int.Cl. C12N 5/0793 (2010.01) A61P 25/00 (2006.01) C07K 14/47 (2006.01) C12N 15/85 (2006.01) C12N 15/88 (2006.01)**

[25] EN  
[54] **DLX2 VECTOR**  
[54] **VECTEUR DE DLX2**  
[72] XU, JIE, US  
[71] NEUEXCELL THERAPEUTICS INC., US  
[85] 2023-03-29  
[86] 2021-09-28 (PCT/US2021/052302)  
[87] (WO2022/072310)  
[30] US (63/084,927) 2020-09-29  
[30] US (63/247,417) 2021-09-23

[21] **3,197,321**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01)**

[25] EN  
[54] **NEUROD1 VECTOR**  
[54] **VECTEUR DE NEUROD1**  
[72] XU, JIE, US  
[71] NEUEXCELL THERAPEUTICS INC., US  
[85] 2023-03-29  
[86] 2021-09-28 (PCT/US2021/052299)  
[87] (WO2022/072308)  
[30] US (63/084,908) 2020-09-29  
[30] US (63/246,545) 2021-09-21

[21] **3,197,324**  
[13] A1

[51] **Int.Cl. C10M 133/16 (2006.01) C10M 133/38 (2006.01) C10M 133/40 (2006.01)**

[25] EN  
[54] **ASHLESS ADDITIVE COMPOSITION**  
[54] **COMPOSITION D'ADDITIF SANS CENDRES**  
[72] RUHE, JR., WILLIAM RAYMOND, US  
[72] FUCHI, MASAMI, JP  
[72] HOSSEINI, SEYEDEH MAHBOOBEH, US  
[71] CHEVRON ORONITE COMPANY LLC, US  
[71] CHEVRON JAPAN LTD., JP  
[85] 2023-03-29  
[86] 2021-09-29 (PCT/IB2021/058896)  
[87] (WO2022/074512)  
[30] US (63/087,584) 2020-10-05

[21] **3,197,325**  
[13] A1

[51] **Int.Cl. C08J 3/03 (2006.01) C08J 3/20 (2006.01) C08J 3/21 (2006.01)**

[25] EN  
[54] **HIGHLY FILLED COMPATIBILIZED POLYMERIC CONCENTRATES**  
[54] **CONCENTRES POLYMERES COMPATIBILISES HAUTEMENT CHARGES**  
[72] CERNOHOUS, JEFFREY JACOB, US  
[71] INTERFACIAL CONSULTANS LLC, US  
[85] 2023-03-29  
[86] 2021-08-27 (PCT/US2021/048017)  
[87] (WO2022/047200)  
[30] US (63/072,308) 2020-08-31  
[30] US (17/459,352) 2021-08-27

[21] **3,197,326**  
[13] A1

[51] **Int.Cl. B60G 17/052 (2006.01)**

[25] EN  
[54] **SYSTEM AND VALVE ASSEMBLY FOR CONTROLLING A RETRACTABLE AXLE OF A VEHICLE**  
[54] **SYSTEME ET ENSEMBLE DE SOUPAPES DE COMMANDE D'ESSIEU RETRACTABLE DE VEHICULE**  
[72] XIN, SCOTT, US  
[72] BAILEY, RICHARD, US  
[72] SUTER, ROMAN, US  
[71] NORGREN GT DEVELOPMENT CORPORATION, US  
[85] 2023-05-03  
[86] 2021-12-08 (PCT/EP2021/084759)  
[87] (WO2022/122807)  
[30] US (17/117,947) 2020-12-10

[21] **3,197,327**  
[13] A1

[51] **Int.Cl. E21B 17/08 (2006.01) E21B 19/16 (2006.01)**

[25] EN  
[54] **ROBOTIC SYSTEM FOR MAKING OR BREAKING A RISER**  
[54] **SYSTEME ROBOTIQUE PERMETTANT LA FABRICATION OU LA RUPTURE D'UNE COLONNE MONTANTE**  
[72] MCCORMICK, CRAIG, US  
[72] COADY, MICHAEL, US  
[72] MARTIN, JOHN, US  
[72] LIPPOLD, JAMES, US  
[72] WILLEY, MICHAEL, US  
[71] TRANSOCEAN SEDCO FOREX VENTURES LIMITED, KY  
[71] STEBBINS INNOVATIONS, LLC, US  
[85] 2023-03-29  
[86] 2021-06-22 (PCT/US2021/038501)  
[87] (WO2022/072019)  
[30] US (63/084,824) 2020-09-29

[21] **3,197,337**  
[13] A1

[51] **Int.Cl. H02G 3/04 (2006.01) F16G 13/16 (2006.01) F16L 3/015 (2006.01) H02G 11/00 (2006.01)**

[25] EN  
[54] **LINE-GUIDING APPARATUS FOR SUSPENDED APPLICATIONS, MORE PARTICULARLY DRILLING RIGS, DRILLING DEVICES OR THE LIKE**  
[54] **DISPOSITIF DE GUIDAGE DE CONDUITES POUR DES APPLICATIONS SUSPENDUES, EN PARTICULIER DES INSTALLATIONS DE FORAGE, DES APPAREILS DE FORAGE OU ANALOGUES**  
[72] HERMEY, ANDREAS, DE  
[72] HOWOLD, PHILIP, DE  
[72] SCHMIDT, CHRISTOPH, DE  
[72] SCHNEEBECK, TIM, DE  
[72] SCHULTES, THILO KONRAD, DE  
[71] IGUS GMBH, DE  
[85] 2023-03-29  
[86] 2021-08-03 (PCT/EP2021/071707)  
[87] (WO2022/029148)  
[30] DE (20 2020 104 482.6) 2020-08-03

## Demandes PCT entrant en phase nationale

[21] **3,197,339**  
[13] A1

[51] **Int.Cl. A61M 5/32 (2006.01)**  
[25] EN  
[54] **SAFETY COVER FOR COUPLING WITH AN INJECTION DEVICE**  
[54] **STRUCTURE DE RECOUVREMENT DE SECURITE CONCUE POUR ETRE ACCOUPLEE AVEC UN DISPOSITIF D'INJECTION**  
[72] FISCHER, STEPHAN, DE  
[72] WILKE, TOBIAS, DE  
[72] MOHR, BERND, DE  
[71] FISCHER, STEPHAN, DE  
[71] WILKE, TOBIAS, DE  
[71] MOHR, BERND, DE  
[85] 2023-03-29  
[86] 2021-09-14 (PCT/EP2021/075159)  
[87] (WO2022/073724)  
[30] DE (10 2020 126 258.2) 2020-10-07

[21] **3,197,341**  
[13] A1

[51] **Int.Cl. B08B 17/02 (2006.01) B63B 59/04 (2006.01) F21V 23/02 (2006.01)**  
[25] EN  
[54] **ANTI-FOULING UNIT AND METHOD OF APPLYING A PLURALITY OF ANTI-FOULING UNITS TO A SURFACE**  
[54] **UNITE ANTISALISSURE ET PROCEDE D'APPLICATION D'UNE PLURALITE D'UNITES ANTISALISSURE SUR UNE SURFACE**  
[72] HIETBRINK, ROELANT BOUDEWIJN, NL  
[72] SALTERS, BART ANDRE, NL  
[71] KONINKLIJKE PHILIPS N.V., NL  
[85] 2023-03-29  
[86] 2021-09-23 (PCT/EP2021/076134)  
[87] (WO2022/069326)  
[30] EP (20199835.8) 2020-10-02  
[30] EP (20199843.2) 2020-10-02

[21] **3,197,342**  
[13] A1

[51] **Int.Cl. A61P 27/02 (2006.01) C12N 15/86 (2006.01)**  
[25] EN  
[54] **GENE THERAPY FOR OCULAR MANIFESTATIONS OF CLN2 DISEASE**  
[54] **THERAPIE GENIQUE POUR MANIFESTATIONS OCULAIRES DE MALADIE CLN2**  
[72] OHNSMAN, CHRISTINA MARIA, US  
[72] PAKOLA, STEPHEN JOSEPH, US  
[72] VAN EVEREN, SHERRI, US  
[72] FALABELLA, PAULO, US  
[72] BAILEY, ALEXANDER MARSTON, US  
[72] BUSS, NICHOLAS ALEXANDER PIERS SASCHA, US  
[72] KIM, KWI HYE, US  
[71] REGENXBIO INC., US  
[85] 2023-03-29  
[86] 2021-10-06 (PCT/US2021/053802)  
[87] (WO2022/076582)

[21] **3,197,345**  
[13] A1

[51] **Int.Cl. A23L 13/70 (2023.01) A22C 9/00 (2006.01)**  
[25] EN  
[54] **PORK BELLY PROCESSING**  
[54] **TRANSFORMATION DE FLANC DE PORC**  
[72] HUNT, DALE ROBERT, US  
[71] JOHN BEAN TECHNOLOGIES CORPORATION, US  
[85] 2023-03-29  
[86] 2021-10-13 (PCT/US2021/054676)  
[87] (WO2022/081635)  
[30] US (17/070,685) 2020-10-14

[21] **3,197,372**  
[13] A1

[51] **Int.Cl. A01M 23/18 (2006.01) A01M 23/38 (2006.01)**  
[25] EN  
[54] **PEST TRAPS**  
[54] **PIEGES A NUISIBLES**  
[72] MCCAIG, JOHN, GB  
[72] MILVERTON, OLIVER JOHN LINDSEY, GB  
[72] FORD, CHRISTOPHER, GB  
[72] REININK, CHRIS BERND, GB  
[71] RENTOKIL INITIAL 1927 PLC, GB  
[85] 2023-03-14  
[86] 2021-08-09 (PCT/GB2021/052052)  
[87] (WO2022/058705)  
[30] GB (2014858.1) 2020-09-21

[21] **3,197,416**  
[13] A1

[51] **Int.Cl. F27B 3/28 (2006.01) C03B 5/425 (2006.01) C03B 18/16 (2006.01) C21C 5/52 (2006.01)**  
[25] EN  
[54] **PREDICTIVE REFRACTORY PERFORMANCE MEASUREMENT SYSTEM**  
[54] **SYSTEME DE MESURE PREDICTIVE DE PERFORMANCE D'UN REFRACTAIRE**  
[72] RICHTER, TOMAS, US  
[72] FORSTER, COREY, US  
[72] ABRINO, DONALD, US  
[71] HARBISONWALKER INTERNATIONAL, INC., US  
[85] 2023-05-03  
[86] 2020-11-30 (PCT/US2020/062543)  
[87] (WO2022/098375)  
[30] US (17/089,005) 2020-11-04

[21] **3,197,431**  
[13] A1

[25] EN  
[54] **APPARATUS FOR AIR MEASUREMENTS**  
[54] **APPAREIL DE MESURE DE L'AIR**  
[72] JAY, OLIVER, AU  
[72] EISENHUTH, JOHN, AU  
[72] ANDERSON, GLENDA, AU  
[71] THE UNIVERSITY OF SYDNEY, AU  
[85] 2023-05-03  
[86] 2021-10-27 (PCT/AU2021/051248)  
[87] (WO2022/087665)  
[30] AU (2020903903) 2020-10-28

## PCT Applications Entering the National Phase

[21] **3,197,462**  
[13] A1

[51] **Int.Cl. E04B 2/86 (2006.01) E04G 17/00 (2006.01)**  
[25] EN  
[54] **PLANAR AND CORNER INSULATED CONCRETE FORMS, MONOLITHIC FORM SKELETON FRAME MODULES, AND RELATED METHODS OF USE AND MANUFACTURING**  
[54] **COFFRAGES A BETON ISOLANTS PLATS ET ANGULAIRES, MODULES DE CADRE DE SQUELETTE DE FORME MONOLITHIQUE, PROCEDES D'UTILISATION ET DE FABRICATION ASSOCIES**  
[72] BAADER, BENJAMIN, CA  
[71] BAADER, BENJAMIN, CA  
[85] 2023-03-29  
[86] 2021-09-30 (PCT/CA2021/051370)  
[87] (WO2022/067441)  
[30] US (63/086,028) 2020-09-30

[21] **3,197,463**  
[13] A1

[51] **Int.Cl. C07K 16/46 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **ANTI-PD-1/CD40 BISPECIFIC ANTIBODIES AND USES THEREOF**  
[54] **ANTICORPS BISPECIFIQUES ANTI-PD-1/CD40 ET LEURS UTILISATIONS**  
[72] LIU, BAIHONG, CN  
[72] YANG, YI, CN  
[72] SHEN, YUELEI, CN  
[71] EUCURE (BEIJING) BIOPHARMA CO., LTD., CN  
[85] 2023-03-29  
[86] 2021-10-13 (PCT/CN2021/123438)  
[87] (WO2022/078357)  
[30] CN (PCT/CN2020/120918) 2020-10-14  
[30] CN (PCT/CN2021/085335) 2021-04-02

[21] **3,197,464**  
[13] A1

[51] **Int.Cl. C07K 14/55 (2006.01) A61K 47/68 (2017.01) A61K 38/20 (2006.01) A61P 35/00 (2006.01) A61P 35/04 (2006.01) A61P 37/04 (2006.01) C12N 1/21 (2006.01) C12N 15/70 (2006.01)**  
[25] EN  
[54] **MODIFIED INTERLEUKIN-2 (IL-2) MOLECULE AND USE THEREOF**  
[54] **MOLECULE D'IL-2 MODIFIEE ET UTILISATION ASSOCIEE**  
[72] ZHAO, YAO, CN  
[72] ZHANG, YU, CN  
[72] LIU, HUIJIE, CN  
[72] PIAO, JINHUA, CN  
[72] ZHANG, JIANJUN, CN  
[72] ZHANG, QIULEI, CN  
[72] ZHANG, WEI, CN  
[72] WANG, GUOYONG, CN  
[72] ZHANG, TIANFU, CN  
[71] LETO LABORATORIES CO., LTD, CN  
[85] 2023-03-29  
[86] 2021-10-16 (PCT/CN2021/124246)  
[87] (WO2022/078518)  
[30] CN (202011113975.7) 2020-10-18  
[30] CN (202111201233.4) 2021-10-15

[21] **3,197,465**  
[13] A1

[51] **Int.Cl. A61P 21/00 (2006.01) A61P 25/00 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **USE OF ANTI-TREM1 NEUTRALIZING ANTIBODIES FOR THE TREATMENT OF MOTOR NEURON NEURODEGENERATIVE DISORDERS**  
[54] **UTILISATION D'ANTICORPS NEUTRALISANTS ANTI-TREM1 POUR LE TRAITEMENT DE TROUBLES NEURODEGENERATIFS DES NEURONES MOTEURS**  
[72] KADIU, IRENA, BE  
[72] GASSER, JULIEN, BE  
[72] KEANEY, JAMES MARTIN, BE  
[72] SPILIOPOULOS, ANASTASIOS, GB  
[72] PHILLIPS, JONATHAN MARK, GB  
[71] UCB BIOPHARMA SRL, BE  
[85] 2023-03-29  
[86] 2020-11-02 (PCT/EP2020/080672)  
[87] (WO2022/089767)

[21] **3,197,466**  
[13] A1

[51] **Int.Cl. A01G 31/04 (2006.01)**  
[25] EN  
[54] **CULTIVATING DEVICE AND METHOD FOR GROWING PLANTS**  
[54] **DISPOSITIF DE CULTURE ET PROCEDE PERMETTANT DE CULTIVER DES PLANTES**  
[72] MALLINOWSKI, IVAN, DE  
[71] MALLINOWSKI, IVAN, DE  
[85] 2023-03-29  
[86] 2021-09-23 (PCT/EP2021/076153)  
[87] (WO2022/069330)  
[30] DE (10 2020 125 581.0) 2020-09-30

[21] **3,197,467**  
[13] A1

[51] **Int.Cl. A61N 1/372 (2006.01)**  
[25] EN  
[54] **ADJUSTMENT OF ADVERTISING INTERVAL IN COMMUNICATIONS BETWEEN AN IMPLANTABLE MEDICAL DEVICE AND AN EXTERNAL DEVICE**  
[54] **AJUSTEMENT D'UN INTERVALLE D'ANNONCE DANS DES COMMUNICATIONS ENTRE UN DISPOSITIF MEDICAL IMPLANTABLE ET UN DISPOSITIF EXTERNE**  
[72] DOUDIAN, BERJ, US  
[72] SHAH, CHIRAG, US  
[72] UYEDA, JOSHUA, US  
[72] KOTHANDARAMAN, SRIDHAR, US  
[72] RIVERA, JOHN, US  
[72] MOAZEN, DAMON, US  
[71] BOSTON SCIENTIFIC NEUROMODULATION CORPORATION, US  
[85] 2023-03-29  
[86] 2021-09-10 (PCT/US2021/071428)  
[87] (WO2022/072974)  
[30] US (63/085,569) 2020-09-30



## Demandes PCT entrant en phase nationale

[21] **3,197,468**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR CLASSIFYING A POLYSOMNOGRAPHY RECORDING INTO DEFINED SLEEP STAGES**

[54] **PROCEDE DE CLASSIFICATION D'UN ENREGISTREMENT DE POLYSOMNOGRAPHIE EN STADES DE SOMMEIL DEFINIS**

[72] MUTHURAMAN, MUTHURAMAN, DE  
[72] GOUVERIS, HARALAMPOS, DE  
[72] BOEKSTEGERS, PHILIP TJARKO, DE  
[71] UNIVERSITÄTSMEDIZIN DER JOHANNES GUTENBERG-UNIVERSITÄT MAINZ, DE

[85] 2023-03-29  
[86] 2021-09-28 (PCT/EP2021/076608)  
[87] (WO2022/069452)  
[30] DE (10 2020 125 743.0) 2020-10-01

[21] **3,197,469**  
[13] A1

[51] **Int.Cl. A61N 1/372 (2006.01)**  
[25] EN  
[54] **PAIRING OF EXTERNAL COMMUNICATION DEVICES WITH AN IMPLANTABLE MEDICAL DEVICE VIA A PATIENT REMOTE CONTROLLER**

[54] **APPARIEMENT DE DISPOSITIFS DE COMMUNICATION EXTERNES AVEC UN DISPOSITIF MEDICAL IMPLANTABLE PAR L'INTERMEDIAIRE D'UN DISPOSITIF DE COMMANDE A DISTANCE DE PATIENT**

[72] SHAH, CHIRAG, US  
[72] YOO, PETER, US  
[71] BOSTON SCIENTIFIC NEUROMODULATION CORPORATION, US

[85] 2023-03-29  
[86] 2021-09-10 (PCT/US2021/071427)  
[87] (WO2022/072973)  
[30] US (63/085,872) 2020-09-30

[21] **3,197,470**  
[13] A1

[51] **Int.Cl. C07D 471/04 (2006.01) A61K 31/519 (2006.01) A61P 31/14 (2006.01) A61P 31/20 (2006.01)**

[25] EN  
[54] **BICYCLIC COMPOUNDS**

[54] **COMPOSES BICYCLIQUES**

[72] VENDEVILLE, SANDRINE, US  
[72] RABOISSON, PIERRE JEAN-MARIE BERNARD, US  
[72] MCGOWAN, DAVID, US  
[71] ALIGOS THERAPEUTICS, INC., US

[85] 2023-03-29  
[86] 2021-10-19 (PCT/US2021/055674)  
[87] (WO2022/087011)  
[30] US (63/094,533) 2020-10-21

[21] **3,197,471**  
[13] A1

[51] **Int.Cl. D04H 1/4218 (2012.01) C09D 7/61 (2018.01) B32B 5/02 (2006.01) D04H 1/58 (2012.01) E04C 2/04 (2006.01) E04C 2/20 (2006.01)**

[25] EN  
[54] **COATED NONWOVEN MAT WITH COATING LAYER**

[54] **MAT NON TISSE REVETU AVEC COUCHE DE REVETEMENT**

[72] POLEN, SHANE, US  
[71] OWENS CORNING INTELLECTUAL CAPITAL, LLC, US

[85] 2023-03-29  
[86] 2021-10-07 (PCT/US2021/054035)  
[87] (WO2022/076731)  
[30] US (63/088,492) 2020-10-07

[21] **3,197,473**  
[13] A1

[51] **Int.Cl. A24F 40/49 (2020.01) A24F 40/53 (2020.01) A24F 47/00 (2020.01) G07C 9/00 (2020.01) H02J 7/00 (2006.01)**

[25] EN  
[54] **SECURITY FEATURES FOR AEROSOL GENERATION DEVICE**

[54] **ELEMENTS DE SECURITE POUR DISPOSITIF DE GENERATION D'AEROSOL**

[72] LUKAN, SEAN, US  
[72] ROOT, TJ, US  
[72] BAILEY, PATRICK, US  
[72] MCNEIL, RAE, US  
[72] GATTI, BENJAMIN, US  
[71] RAI STRATEGIC HOLDINGS, INC., US

[85] 2023-03-29  
[86] 2021-10-14 (PCT/US2021/054893)  
[87] (WO2022/081787)  
[30] US (17/072,814) 2020-10-16

[21] **3,197,474**  
[13] A1

[51] **Int.Cl. A61N 1/04 (2006.01)**  
[25] EN  
[54] **A SURFACE ELECTRODE**

[54] **ELECTRODE DE SURFACE**

[72] GIERGIELEWICZ, MARIUSZ, PL  
[72] PROKOPCZYK, PAWEL, PL  
[72] JANKIEWICZ, ADAM, PL  
[72] MALEJ, KRZYSZTOF, PL  
[71] NEURO DEVICE GROUP S.A., PL

[85] 2023-03-29  
[86] 2021-09-28 (PCT/EP2021/076628)  
[87] (WO2022/069464)  
[30] EP (20461562.9) 2020-09-29

## PCT Applications Entering the National Phase

[21] **3,197,477**  
[13] A1

[51] **Int.Cl. A61K 38/04 (2006.01) A61K 38/07 (2006.01) A61K 38/24 (2006.01) A61P 7/04 (2006.01)**

[25] EN

[54] **AUTOPHAGY-INHIBITING PEPTIDE AND ORGANIC ACID SALT THEREOF ADDRESSING ISSUES OF VASCULAR PERMEABILITY**

[54] **PEPTIDE INHIBITEUR D'AUTOPHAGIE ET SEL D'ACIDE ORGANIQUE DE CE DERNIER TRAITANT DES PROBLEMES DE PERMEABILITE VASCULAIRE**

[72] WENSVOORT, GERT, NL  
[72] RENES, JOHAN, NL  
[71] BIOTEMPT B.V., NL  
[85] 2023-03-29  
[86] 2021-09-29 (PCT/EP2021/076844)  
[87] (WO2022/069576)  
[30] US (63/085,771) 2020-09-30

[21] **3,197,479**  
[13] A1

[51] **Int.Cl. A61K 31/00 (2006.01) A61K 39/395 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **ADJUVANT DURVALUMAB IN COMBINATION WITH CHEMOTHERAPY FOR TREATMENT OF CANCER**

[54] **ADJUVANT DURVALUMAB POUR TRAITER LE CANCER EN COMBINAISON AVEC UNE CHIMIOTHERAPIE**

[72] DENNIS, PHILLIP, US  
[72] POOLE, LYNNE, GB  
[72] MAY, RENA, US  
[71] ASTRAZENECA AB, SE  
[85] 2023-03-29  
[86] 2021-10-11 (PCT/EP2021/078050)  
[87] (WO2022/078958)  
[30] US (63/090,441) 2020-10-12

[21] **3,197,481**  
[13] A1

[51] **Int.Cl. A61K 39/12 (2006.01) C12P 21/00 (2006.01)**

[25] EN

[54] **CELL CULTURE PROCESS FOR PRODUCING RSV F PROTEIN**

[54] **PROCEDE DE CULTURE CELLULAIRE POUR LA PRODUCTION D'UNE PROTEINE F DU RSV**

[72] BREEN, SHELBY HUTCHINS, US  
[72] HARRINGTON, CAMERON ALBERT, US  
[72] JACOBS, MICHAELA EVELINA, US  
[72] LOTVIN, JASON ARNOLD, US  
[72] MULUKUTLA, BHANU CHANDRA, US  
[72] STEAD, DAVID ROBERT, US  
[72] SUMIT, MADHURESH, US  
[71] PFIZER INC., US  
[85] 2023-03-29  
[86] 2021-09-30 (PCT/IB2021/058995)  
[87] (WO2022/070129)  
[30] US (63/086,702) 2020-10-02

[21] **3,197,483**  
[13] A1

[51] **Int.Cl. C10M 141/12 (2006.01)**

[25] EN

[54] **FRICTION MODIFIER SYSTEM**

[54] **SYSTEME DE MODIFICATION DE FROTTEMENT**

[72] HATTORI, TAIKI, JP  
[72] KUBO, KOICHI, JP  
[72] RUHE, JR., WILLIAM RAYMOND, US  
[71] CHEVRON JAPAN LTD., JP  
[71] CHEVRON ORONITE COMPANY LLC, US  
[85] 2023-03-29  
[86] 2021-10-05 (PCT/IB2021/059104)  
[87] (WO2022/074547)  
[30] US (63/087,617) 2020-10-05

[21] **3,197,488**  
[13] A1

[51] **Int.Cl. A61K 31/675 (2006.01) A61K 31/09 (2006.01) A61K 31/12 (2006.01) A61K 31/137 (2006.01) A61K 31/165 (2006.01) A61K 31/4045 (2006.01) A61K 31/405 (2006.01) A61K 31/48 (2006.01) A61K 36/06 (2006.01) A61K 36/185 (2006.01) C07C 43/285 (2006.01) C07C 43/295 (2006.01) C07C 217/60 (2006.01) C07C 233/20 (2006.01) C07D 209/16 (2006.01) C07D 209/20 (2006.01) C07F 9/572 (2006.01)**

[25] EN

[54] **COMPOSITIONS FOR REDUCING INFLAMMATION TO IMPROVE OR MAINTAIN MENTAL OR PHYSICAL HEALTH**

[54] **COMPOSITIONS POUR LA REDUCTION DE L'INFLAMMATION DANS LE BUT D'AMELIORER OU D'ENTREtenir LA SANTE MENTALE OU PHYSIQUE**

[72] HUDSON, DWIGHT DARRYL, CA  
[72] SELKIRK, IRIE VICTORIA, CA  
[71] GOODCAP PHARMACEUTICALS LTD., CA  
[85] 2023-03-29  
[86] 2021-10-12 (PCT/IB2021/059301)  
[87] (WO2022/079574)  
[30] US (63/090,552) 2020-10-12

[21] **3,197,489**  
[13] A1

[51] **Int.Cl. A61K 47/50 (2017.01) A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 31/352 (2006.01) A61K 47/42 (2017.01) A61P 25/04 (2006.01)**

[25] EN

[54] **PROTEIN-BOUND CANNABINOID FORMULATIONS AND USES THEREOF**

[54] **FORMULATIONS DE CANNABINOIDE LIE A UNE PROTEINE ET LEURS UTILISATIONS**

[72] BARENHOLZ, YECHEZKEL, IL  
[72] CERN, AHUVA, IL  
[71] YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREW UNIVERSITY OF JERUSALEM LTD., IL  
[85] 2023-03-29  
[86] 2021-09-30 (PCT/IL2021/051179)  
[87] (WO2022/070191)  
[30] US (63/086,223) 2020-10-01

## Demandes PCT entrant en phase nationale

[21] **3,197,491**  
[13] A1

[51] **Int.Cl. F42D 1/045 (2006.01)**  
[25] EN  
[54] **BLASTING SYSTEM**  
[54] **SYSTEME DE DYNAMITAGE**  
[72] MULLER, ELMAR LENNOX, ZA  
[72] LIEBENBERG, ABRAHAM  
JOHANNES, ZA  
[71] DETNET SOUTH AFRICA (PTY)  
LTD, ZA  
[85] 2023-03-29  
[86] 2021-09-28 (PCT/ZA2021/050055)  
[87] (WO2022/073043)  
[30] ZA (2020/06084) 2020-10-01

[21] **3,197,493**  
[13] A1

[51] **Int.Cl. G16H 40/00 (2018.01) G16H  
10/60 (2018.01) G16H 20/00 (2018.01)  
G16H 70/20 (2018.01) A61B 5/00  
(2006.01) A61G 99/00 (2006.01)**  
[25] EN  
[54] **VIABLE PATIENT HEALTH  
SYSTEMS**  
[54] **SYSTEMES DE SANTE DE  
PATIENT VIABLES**  
[72] TREMBLAY, LAURA, CA  
[71] TREMBLAY, LAURA, CA  
[85] 2023-03-08  
[86] 2020-09-11 (PCT/IB2020/058480)  
[87] (WO2022/053853)

[21] **3,197,496**  
[13] A1

[51] **Int.Cl. E21B 4/14 (2006.01) E21B  
21/08 (2006.01) E21B 21/10 (2006.01)**  
[25] EN  
[54] **CENTRE BYPASS MUD HAMMER**  
[54] **MARTEAU A BOUE DE  
DERIVATION CENTRALE**  
[72] STRANGE, WARREN ROSS, AU  
[71] GOOD WATER HOLDINGS PTY  
LTD, AU  
[85] 2023-03-30  
[86] 2021-09-22 (PCT/AU2021/051105)  
[87] (WO2022/067376)  
[30] AU (2020903569) 2020-10-02

[21] **3,197,499**  
[13] A1

[51] **Int.Cl. C01F 5/24 (2006.01) C01B  
32/00 (2017.01) C01B 32/182 (2017.01)  
B32B 1/04 (2006.01) C01B 33/00  
(2006.01) C01B 35/00 (2006.01) C01F  
5/00 (2006.01)**  
[25] EN  
[54] **SCALABLE SYNTHESIS OF  
PERIMORPHIC MATERIALS**  
[54] **SYNTHESE EVOLUTIVE DE  
MATERIAUX PERIMORPHES**  
[72] BISHOP, MATTHEW, US  
[72] THOMAS, ABHAY, US  
[71] DICKINSON CORPORATION, US  
[85] 2023-03-30  
[86] 2021-10-04 (PCT/US2021/053316)  
[87] (WO2022/072917)  
[30] US (63/086,760) 2020-10-02

[21] **3,197,501**  
[13] A1

[51] **Int.Cl. C09D 7/65 (2018.01) B64D  
45/02 (2006.01) C09D 5/00 (2006.01)  
C09D 5/24 (2006.01) C09D 163/00  
(2006.01) F01D 5/14 (2006.01) H01B  
1/12 (2006.01)**  
[25] EN  
[54] **POLYANILINE COMPOSITIONS,  
ARTICLES THEREOF, AND  
METHODS THEREOF**  
[54] **COMPOSITIONS DE  
POLYANILINE, ARTICLES EN  
CES DERNIERES ET PROCEDES  
ASSOCIES**  
[72] IJERI, VIJAYKUMAR, US  
[72] GAYDOS, STEPHEN P., US  
[72] KINLEN, PATRICK J., US  
[71] THE BOEING COMPANY, US  
[85] 2023-03-30  
[86] 2021-10-04 (PCT/US2021/053327)  
[87] (WO2022/076288)  
[30] US (63/089,439) 2020-10-08  
[30] US (17/407,850) 2021-08-20

[21] **3,197,503**  
[13] A1

[51] **Int.Cl. D06F 37/28 (2006.01)**  
[25] EN  
[54] **HANDS-FREE VENDING  
MACHINE AND DOOR OPENING  
ASSEMBLY**  
[54] **DISTRIBUTEUR AUTOMATIQUE  
MAINS LIBRES ET ENSEMBLE  
D'OUVERTURE DE PORTE**  
[72] JAIN, SANDEEP, IN  
[72] BHUTANI, GURMEET SINGH, IN  
[71] PEPSICO, INC., US  
[85] 2023-03-30  
[86] 2021-10-05 (PCT/US2021/053597)  
[87] (WO2022/076431)  
[30] IN (202041043379) 2020-10-06

[21] **3,197,504**  
[13] A1

[51] **Int.Cl. A61F 2/24 (2006.01)**  
[25] EN  
[54] **PROTECTIVE COVERS FOR  
PROSTHETIC VALVES**  
[54] **ENVELOPPES DE PROTECTION  
POUR VALVULES  
PROTHETIQUES**  
[72] BEN ZAKEN, NADAV, IL  
[72] BUKIN, MICHAEL, IL  
[72] YOUSEF, ABDORRUHMAN M., US  
[72] PAWAR, SANDIP VASANT, US  
[72] BASH, ASSAF, IL  
[71] EDWARDS LIFESCIENCES  
CORPORATION, US  
[85] 2023-03-30  
[86] 2021-10-06 (PCT/US2021/053697)  
[87] (WO2022/076508)  
[30] US (63/088,352) 2020-10-06  
[30] US (63/107,377) 2020-10-29  
[30] US (63/229,212) 2021-08-04

## PCT Applications Entering the National Phase

---

[21] **3,197,505**

[13] A1

[51] **Int.Cl. A61L 9/16 (2006.01) A24F  
25/00 (2006.01) A61L 9/00 (2006.01)  
A61L 9/04 (2006.01) B65D 1/42  
(2006.01) B65D 6/34 (2006.01) B65D  
8/08 (2006.01)**

[25] EN

[54] **DISPOSABLE PAD FOR INDOOR  
AND OUTDOOR GARBAGE CANS**

[54] **TAMPON JETABLE POUR LES  
POUBELLES D'INTERIEUR ET  
D'EXTERIEUR**

[72] BOYE, KEITH R., US

[71] STELLAR ENTERPRISE LLC, US

[85] 2023-03-30

[86] 2021-10-08 (PCT/US2021/054119)

[87] (WO2022/076786)

[30] US (63/089,803) 2020-10-09

---

[21] **3,197,506**

[13] A1

[51] **Int.Cl. A61K 47/68 (2017.01) A61K  
38/46 (2006.01) A61P 3/00 (2006.01)  
C12N 9/14 (2006.01) C12N 15/62  
(2006.01)**

[25] EN

[54] **FUSION PROTEINS COMPRISING  
SULFOGLUCOSAMINE  
SULFOHYDROLASE ENZYMES  
AND METHODS THEREOF**

[54] **PROTEINES DE FUSION  
COMPRENANT DES ENZYMES  
SULFOGLUCOSAMINE  
SULFOHYDROLASE ET  
METHODES ASSOCIEES**

[72] GIESE, TINA, US

[72] KANNAN, GUNASEKARAN, US

[72] KARIOLIS, MIHALIS, US

[72] MAHON, CATHAL, US

[71] DENALI THERAPEUTICS INC., US

[85] 2023-03-30

[86] 2021-10-13 (PCT/US2021/054860)

[87] (WO2022/081765)

[30] US (63/091,800) 2020-10-14

# Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

## Demandes canadiennes apparentées par division et demandes mises à la disponibilité du public non disponibles auparavant

[21] <b>3,197,098</b> [13] A1	[21] <b>3,197,111</b> [13] A1	[21] <b>3,197,117</b> [13] A1
[25] EN [54] <b>SYSTEMS AND METHODS FOR DETERMINING STRUCTURED PROCEEDING OUTCOMES</b> [54] <b>SYSTEMES ET PROCEDES POUR DETERMINER DES RESULTATS DE PROCESSUS STRUCTURE</b> [72] VACEK, THOMAS, US [72] SONG, DEZHAO, US [72] NUGENT, TIM, GB [72] COWLING, CONNER, US [72] TEO, RONALD, US [72] SCHILDER, FRANK, US [71] THOMSON REUTERS ENTERPRISE CENTRE GMBH, CH [22] 2019-06-19 [41] 2019-12-26 [62] 3,104,242 [30] US (62/686,805) 2018-06-19	[25] EN [54] <b>DEVICES FOR OVERVOLTAGE, OVERCURRENT AND ARC FLASH PROTECTION</b> [54] <b>DISPOSITIFS DE PROTECTION CONTRE LES SURTENSIONS, LES SURINTENSITES ET LES ARCS ELECTRIQUES</b> [72] POLITIS, ZAFIRIS G., GR [72] KOSTAKIS, GRIGORIS, GR [72] TSOVILIS, THOMA, GR [72] BAKATSIAS, KOSTAS, GR [71] RIPD RESEARCH AND IP DEVELOPMENT LTD., GR [22] 2016-03-18 [41] 2016-09-22 [62] 2,976,969 [30] US (62/135,284) 2015-03-19	[25] EN [54] <b>BREATH GAS ANALYSIS</b> [54] <b>ANALYSE DE GAZ RESPIRATOIRES</b> [72] GUPTA, KAPIL, US [72] PIMENTEL, MARK, US [72] REZAIE, ALI, US [71] CEDARS-SINAI MEDICAL CENTER, US [22] 2016-08-30 [41] 2017-03-09 [62] 2,996,425 [30] US (62/213,517) 2015-09-02
[21] <b>3,197,099</b> [13] A1 [25] EN [54] <b>INSULATED PANEL STRUCTURE</b> [54] <b>STRUCTURE DE PANNEAU ISOLEE</b> [72] GINGRAS, JEAN-PIERRE, CA [71] SYSTEMES NORBEC INC., CA [22] 2020-12-15 [41] 2021-03-19 [62] 3,102,712 [30] US (63015060) 2020-04-24	[21] <b>3,197,113</b> [13] A1 [25] EN [54] <b>CHILD SEAT HAVING AN OBJECT HOLDER</b> [54] <b>SIEGE POUR ENFANT DOTE D'UN PORTE-OBJET</b> [72] WILLIAMS, BRUCE L., US [72] SELLERS, GREGORY S., US [71] WONDERLAND NURSERYGOODS COMPANY LIMITED, HK [22] 2016-01-05 [41] 2018-03-08 [62] 2,997,867 [30] US (62/101,563) 2015-01-09 [30] US (62/243,922) 2015-10-20	[21] <b>3,197,149</b> [13] A1 [25] EN [54] <b>COMPRESSIVE SENSING</b> [54] <b>DETECTION DE COMPRESSION</b> [72] LI, CHENGBO, US [72] KAPLAN, SAM T., US [72] MOSHER, CHARLES C., US [72] BREWER, JOEL D., US [72] KEYS, ROBERT G., US [71] SHEARWATER GEOSERVICES SOFTWARE INC., US [22] 2014-10-31 [41] 2015-05-07 [62] 2,947,678 [30] US (61/898,960) 2013-11-01 [30] US (14/529,690) 2014-10-31

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

[21] **3,197,154**  
[13] A1

[25] EN  
[54] **SOLID COMPOSITIONS OF TRIGLYCERIDES AND USES THEREOF**  
[54] **COMPOSITIONS SOLIDES DE TRIGLYCERIDES ET LEURS UTILISATIONS**  
[72] KLOPP, JOHN, US  
[72] MORRIS, GABRIELLE, US  
[72] KAKKIS, EMIL, US  
[72] JUNGLES, STEVEN, US  
[71] ULTRAGENYX PHARMACEUTICAL INC., US  
[22] 2014-11-14  
[41] 2015-05-21  
[62] 2,929,688  
[30] US (61/904,369) 2013-11-14

[21] **3,197,174**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR PROCESSING EVENT TIMING IMAGES**  
[54] **SYSTEMES ET PROCEDES DE TRAITEMENT D'IMAGES DE TIMING D'EVENEMENT**  
[72] ALDRIDGE, JEREMY W., US  
[72] DEANGELIS, DOUGLAS J., US  
[72] SIGEL, KIRK M., US  
[72] CHOLAS, MIKE E., US  
[72] BLAYLOCK, PAUL R., US  
[72] HOLLINGER, HERB A., US  
[72] HALLAM, EVAN A., US  
[71] LYNX SYSTEM DEVELOPERS, INC., US  
[22] 2015-04-28  
[41] 2015-11-05  
[62] 3,171,586  
[30] US (14/263,550) 2014-04-28  
[30] US (14/263,578) 2014-04-28  
[30] US (14/263,504) 2014-04-28  
[30] US (14/263,532) 2014-04-28

[21] **3,197,228**  
[13] A1

[25] EN  
[54] **CONSTRUCT AND SEQUENCE FOR ENHANCED GENE EXPRESSION**  
[54] **CONSTRUCTION ET SEQUENCE POUR AMPLIFICATION DE L'EXPRESSION GENIQUE**  
[72] VAN DER HEIJDEN, MAURICE WILHELMUS, NL  
[72] ENGELS, BART MARINUS, NL  
[71] PROTEONIC BIOTECHNOLOGY IP B.V., NL  
[22] 2014-12-24  
[41] 2015-07-09  
[62] 2,935,724  
[30] EP (13199873.4) 2013-12-31  
[30] EP (13199875.9) 2013-12-31

[21] **3,197,231**  
[13] A1

[25] EN  
[54] **SYSTEM AND METHOD FOR VIRTUAL REALITY VEHICLE TRAINING**  
[54] **SYSTEME ET PROCEDE DE TERRAIN D'ENTRAINEMENT DE VEHICULE A REALITE VIRTUELLE**  
[72] MACQUARRIE, DON, CA  
[72] WARREN, DANNY, CA  
[72] MCLEOD, GEOFF, CA  
[71] ADGA GROUP CONSULTANTS INC, CA  
[22] 2018-01-31  
[41] 2018-08-09  
[62] 3,038,222  
[30] US (62/453,301) 2017-02-01

[21] **3,197,239**  
[13] A1

[25] EN  
[54] **COMPUTER-ASSISTED SHINGLE SAWING METHOD AND INSTALLATION**  
[54] **PROCEDE ET INSTALLATION DE SCIAGE DE BARDEAUX ASSISTE PAR ORDINATEUR**  
[72] MICHAUD, PIERRE, CA  
[71] CLAIR INDUSTRIAL DEVELOPMENT CORPORATION LTD., CA  
[22] 2019-06-20  
[41] 2019-12-27  
[62] 3,136,766  
[30] US (62/763,642) 2018-06-27

[21] **3,197,240**  
[13] A1

[25] EN  
[54] **BITS FOR WIDENING OPEN END PORTIONS OF TUBES AND METHODS OF MANUFACTURE AND USE THEREOF**  
[54] **MECHES POUR ELARGIR LES PARTIES D'EXTREMITE OUVERTE DE TUBES ET METHODES DE FABRICATION ET D'UTILISATION CONNEXES**  
[72] ANJOS, BRUNO MULLER DOS, BR  
[71] DIVERSITECH CORPORATION, US  
[22] 2013-09-30  
[41] 2015-04-02  
[62] 2,922,459

[21] **3,197,243**  
[13] A1

[25] EN  
[54] **COMPUTER-ASSISTED SHINGLE SAWING METHOD AND INSTALLATION**  
[54] **PROCEDE ET INSTALLATION DE SCIAGE DE BARDEAUX ASSISTE PAR ORDINATEUR**  
[72] MICHAUD, PIERRE, CA  
[71] CLAIR INDUSTRIAL DEVELOPMENT CORPORATION LTD., CA  
[22] 2019-06-20  
[41] 2019-12-27  
[62] 3,136,766  
[30] US (62/763,642) 2018-06-27

[21] **3,197,245**  
[13] A1

[25] EN  
[54] **COMPOSITIONS AND METHODS OF IDENTIFYING TUMOR SPECIFIC NEOANTIGENS**  
[54] **COMPOSITIONS ET PROCEDES D'IDENTIFICATION DE NEOANTIGENES SPECIFIQUES A UNE TUMEUR**  
[72] HACOEN, NIR, US  
[72] WU, CATHERINE, US  
[71] THE GENERAL HOSPITAL CORPORATION, US  
[71] DANA-FARBER CANCER INSTITUTE, INC., US  
[22] 2011-05-16  
[41] 2011-11-17  
[62] 2,797,868  
[30] US (61/334,866) 2010-05-14

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,197,252**  
[13] A1

[25] EN  
[54] **A BOTTOM HOLE ASSEMBLY**  
[54] **ENSEMBLE DE FOND DE TROU**  
[72] PRAY, JEFFERY SCOTT, US  
[72] SMALLEY, MICHAEL, US  
[72] KORF, JOSHUA MATTHEW, US  
[71] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US  
[22] 2019-10-23  
[41] 2020-06-18  
[62] 3,118,858  
[30] US (16/220,531) 2018-12-14

[21] **3,197,253**  
[13] A1

[25] EN  
[54] **A BOTTOM HOLE ASSEMBLY**  
[54] **ENSEMBLE DE FOND DE TROU**  
[72] PRAY, JEFFERY SCOTT, US  
[72] SMALLEY, MICHAEL, US  
[72] KORF, JOSHUA MATTHEW, US  
[71] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US  
[22] 2019-10-23  
[41] 2020-06-18  
[62] 3,118,858  
[30] US (16/220,531) 2018-12-14

[21] **3,197,257**  
[13] A1

[25] EN  
[54] **A BOTTOM HOLE ASSEMBLY**  
[54] **ENSEMBLE DE FOND DE TROU**  
[72] PRAY, JEFFERY SCOTT, US  
[72] SMALLEY, MICHAEL, US  
[72] KORF, JOSHUA MATTHEW, US  
[71] WEATHERFORD TECHNOLOGY HOLDINGS, LLC, US  
[22] 2019-10-23  
[41] 2020-06-18  
[62] 3,118,858  
[30] US (16/220,531) 2018-12-14

[21] **3,197,270**  
[13] A1

[25] EN  
[54] **AUTOMATED SAMPLE PREPARATION SYSTEM FOR DIAGNOSTIC TESTING OF SAME**  
[54] **SYSTEME DE PREPARATION D'ECHANTILLONS AUTOMATISE A DES FINS DE TESTS DIAGNOSTIQUES**  
[72] VANSICKLER, MICHAEL T., US  
[72] BAILEY, KEVIN, US  
[72] TESLUK, CHRISTOPHER JOHN, US  
[72] LIVINGSTON, DWIGHT, US  
[72] ROTUNDO, STEVEN C., US  
[72] LACHANCE, STEPHEN ROBERT, US  
[72] TOUMA, MICHAEL J., US  
[72] MCKEEN, BRIAN JAMES, US  
[72] SEVIGNY, GERARD, US  
[71] BECTON, DICKINSON AND COMPANY, US  
[22] 2017-02-17  
[41] 2017-08-24  
[62] 3,014,617  
[30] US (62/296,349) 2016-02-17  
[30] US (62/409,013) 2016-10-17

[21] **3,197,274**  
[13] A1

[25] EN  
[54] **SNOW PLOW AND MOUNT ASSEMBLY**  
[54] **CHASSE-NEIGE ET MECANISME D'INSTALLATION**  
[72] BARKER, CHAD THOMAS, US  
[72] BLOXDORF, DAVID N., US  
[72] CURRAN, MATTHEW THOMA, US  
[72] DOMINGUEZ, CHRISTOPHER A., US  
[72] KAMINECKI, MATTHEW TERRAN, US  
[71] DOUGLAS DYNAMICS, L.L.C., US  
[22] 2015-11-09  
[41] 2016-05-13  
[62] 2,911,625  
[30] US (14/540,676) 2014-11-13

[21] **3,197,278**  
[13] A1

[25] EN  
[54] **SNOW PLOW AND MOUNT ASSEMBLY**  
[54] **CHASSE-NEIGE ET MECANISME D'INSTALLATION**  
[72] BARKER, CHAD THOMAS, US  
[72] BLOXDORF, DAVID N., US  
[72] CURRAN, MATTHEW THOMA, US  
[72] DOMINGUEZ, CHRISTOPHER A., US  
[72] KAMINECKI, MATTHEW TERRAN, US  
[71] DOUGLAS DYNAMICS, L.L.C., US  
[22] 2015-11-09  
[41] 2016-05-13  
[62] 2,911,625  
[30] US (14/540,676) 2014-11-13

[21] **3,197,280**  
[13] A1

[25] EN  
[54] **SNOW PLOW AND MOUNT ASSEMBLY**  
[54] **CHASSE-NEIGE ET MECANISME D'INSTALLATION**  
[72] BARKER, CHAD THOMAS, US  
[72] BLOXDORF, DAVID N., US  
[72] CURRAN, MATTHEW THOMA, US  
[72] DOMINGUEZ, CHRISTOPHER A., US  
[72] KAMINECKI, MATTHEW TERRAN, US  
[71] DOUGLAS DYNAMICS, L.L.C., US  
[22] 2015-11-09  
[41] 2016-05-13  
[62] 2,911,625  
[30] US (14/540,676) 2014-11-13

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

[21] **3,197,284**  
[13] A1

[25] EN  
[54] **LIGHT SOURCE, MULTIVIEW BACKLIGHT, AND METHOD WITH A BIFURCATED EMISSION PATTERN**  
[54] **SOURCE LUMINEUSE, DISPOSITIF DE RETROECLAIRAGE A VUES MULTIPLES ET PROCEDE AVEC UN PROFIL D'EMISSION BIFURQUE**  
[72] FATTAL, DAVID A., US  
[72] MA, MING, US  
[71] LEIA INC., US  
[22] 2020-04-28  
[41] 2020-11-05  
[62] 3,137,112  
[30] US (62/841,222) 2019-04-30

[21] **3,197,288**  
[13] A1

[25] EN  
[54] **ELECTRONIC AEROSOL PROVISION SYSTEM WITH A PLURALITY OF AEROSOL GENERATING AREAS**  
[54] **SYSTEME D'AEROSOL ELECTRONIQUE COMPORTANT PLUSIEURS ZONES DE PRODUCTION D'AEROSOL**  
[72] BRUTON, CONNOR, GB  
[72] DICKENS, COLIN, GB  
[72] MOLONEY, PATRICK, GB  
[72] KORUS, ANTON, GB  
[72] SPENCER, ALFRED VINCENT, GB  
[72] BLICK, KEVIN DAVID, GB  
[72] AZZOPARDI, ANNA, GB  
[72] HARVEY, LISA, GB  
[71] NICOVENTURES TRADING LIMITED, GB  
[22] 2018-12-19  
[41] 2019-06-27  
[62] 3,085,804  
[30] GB (1721477.6) 2017-12-20

[21] **3,197,296**  
[13] A1

[25] EN  
[54] **BENCHMARKING THROUGH DATA MINING**  
[54] **ETALONNAGE PAR EXPLORATION DE DONNEES**  
[72] MOLE, TIM, NZ  
[72] ANDERSON, GRANT, NZ  
[71] XERO LIMITED, NZ  
[22] 2015-05-20  
[41] 2016-11-03  
[62] 2,983,799  
[30] US (14/696,925) 2015-04-27

[21] **3,197,310**  
[13] A1

[51] **Int.Cl. A61K 8/44 (2006.01) A61K 8/20 (2006.01) A61K 8/21 (2006.01) A61K 8/49 (2006.01) A61Q 11/00 (2006.01)**  
[25] EN  
[54] **ORAL CARE COMPOSITIONS COMPRISING A STANNOUS ION SOURCE AND AN AMINO ACID FOR PROMOTING GUM HEALTH**  
[54] **COMPOSITIONS DE SOINS BUCCAUX COMPRENANT UNE SOURCE D'ION STANNEUX ET UN ACIDE AMINE POUR PROMOUVOIR LA SANTE DES GENCIVES**  
[72] STRAND, ROSS, SG  
[72] SHI, YUNMING, CN  
[71] THE PROCTER & GAMBLE COMPANY, US  
[22] 2018-03-29  
[41] 2019-10-03  
[62] 3,095,054

[21] **3,197,312**  
[13] A1

[25] EN  
[54] **SYSTEMS AND METHODS FOR OPTIMIZING DATA DRIVEN MEDIA PLACEMENT**  
[54] **SYSTEMES ET PROCEDES PERMETTANT D'OPTIMISER LA MISE EN PLACE D'UN SUPPORT DIRIGE PAR LES DONNEES**  
[72] EMANS, MATTHEW, US  
[72] HOCTOR, JOHN, US  
[72] TURNER, JONATHAN, US  
[71] ROVI TECHNOLOGIES CORPORATION, US  
[22] 2014-01-09  
[41] 2014-07-17  
[62] 2,897,911  
[30] US (61/750,809) 2013-01-10  
[30] US (14/142,223) 2013-12-27  
[30] US (14/142,226) 2013-12-27  
[30] US (14/142,120) 2013-12-27

[21] **3,197,317**  
[13] A1

[25] EN  
[54] **INFUSION SYSTEMS INCLUDING COMPUTER-FACILITATED MAINTENANCE AND/OR OPERATION AND METHODS OF USE**  
[54] **SYSTEMES D'INFUSION OFFRANT L'ENTRETIEN ET/OU L'OPERATION ET/OU L'OPERATION ET LES METHODES D'UTILISATION**  
[72] ZODDA, JULIUS P., US  
[72] HUNTER, KATHRYN M., US  
[72] FONTAINE, AARON M., US  
[72] HIDEM, STEPHEN E., US  
[72] MCDONALD, PATRICK M., US  
[72] GELBACH, JANET L., US  
[72] SWENSON, ROLF E., US  
[71] BRACCO DIAGNOSTICS INC., US  
[22] 2009-06-11  
[41] 2009-12-17  
[62] 3,081,018  
[30] US (12/137,356) 2008-06-11  
[30] US (12/137,363) 2008-06-11  
[30] US (12/137,377) 2008-06-11  
[30] US (12/137,364) 2008-06-11



**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,197,331**  
[13] A1

[25] EN  
[54] **SEAT BASE ASSEMBLY OF A VEHICLE**  
[54] **ENSEMBLE DE BASE DE SIEGE D'UN VEHICULE**  
[72] LAIRD, MICHAEL, US  
[72] MAYEKAWA, ROY, US  
[72] PUGH, MICHAEL, US  
[72] ZINDLER, MICHAEL T., US  
[72] STONER, JAMES, US  
[71] THE BRAUN CORPORATION, US  
[22] 2016-02-22  
[41] 2016-08-25  
[62] 2,975,551  
[30] US (62/118,774) 2015-02-20

[21] **3,197,378**  
[13] A1

[25] EN  
[54] **ATTACHMENT OF COMPOSITE LUG TO COMPOSITE STRUCTURAL TUBE**  
[54] **FIXATION D'UN ERGOT EN COMPOSITE A UN TUBE STRUCTUREL EN COMPOSITE**  
[72] LUCE, WILLIAM E., US  
[71] GOODRICH CORPORATION, US  
[22] 2016-03-07  
[41] 2016-11-22  
[62] 2,923,121  
[30] US (14/720,359) 2015-05-22

[21] **3,197,384**  
[13] A1

[25] EN  
[54] **AGRICULTURAL TRENCH DEPTH SYSTEMS, METHODS, AND APPARATUS**  
[54] **SYSTEMES, PROCEDES ET APPAREIL DE PROFONDEUR DE TRANCHEE AGRICOLE**  
[72] SLONEKER, DILLON, US  
[72] SWANSON, TODD, US  
[72] KOCH, DALE, US  
[71] PRECISION PLANTING LLC, US  
[22] 2017-02-17  
[41] 2017-08-24  
[62] 3,014,327  
[30] US (62/297,535) 2016-02-19  
[30] US (62/322,314) 2016-04-14  
[30] US (62/366,405) 2016-07-25  
[30] US (62/417,144) 2016-11-03

[21] **3,197,387**  
[13] A1

[25] EN  
[54] **AGRICULTURAL TRENCH DEPTH SYSTEMS, METHODS, AND APPARATUS**  
[54] **SYSTEMES, PROCEDES ET APPAREIL DE PROFONDEUR DE TRANCHEE AGRICOLE**  
[72] SLONEKER, DILLON, US  
[72] SWANSON, TODD, US  
[72] KOCH, DALE, US  
[71] PRECISION PLANTING LLC, US  
[22] 2017-02-17  
[41] 2017-08-24  
[62] 3,014,327  
[30] US (62/297,535) 2016-02-19  
[30] US (62/322,314) 2016-04-14  
[30] US (62/366,405) 2016-07-25  
[30] US (62/417,144) 2016-11-03

[21] **3,197,410**  
[13] A1

[25] EN  
[54] **INFUSION PUMP ASSEMBLY**  
[54] **ENSEMBLE POMPE D'INFUSION**  
[72] GRANT, KEVIN L., US  
[72] DEMERS, JASON A., US  
[72] TRACEY, BRIAN D., US  
[72] KAMEN, DEAN, US  
[72] LANIGAN, RICHARD J., US  
[72] LANIER, GREGORY R., US  
[72] FOO, BRIGHT C. K., US  
[72] GUSTIN, LISA A., US  
[72] SOLDAU, THOMAS F., US  
[72] FICHERA, STEPHEN L., US  
[72] CANNAN, DAVID D. B., US  
[72] MOREAU, TIMOTHY D., US  
[71] DEKA PRODUCTS LIMITED PARTNERSHIP, US  
[22] 2015-07-02  
[41] 2016-01-07  
[62] 2,956,895  
[30] US (14/323,571) 2014-07-03  
[30] US (14/323,604) 2014-07-03

[21] **3,197,443**  
[13] A1

[25] EN  
[54] **PROCESS FOR TRANSMUCOSAL PSYCHOACTIVE ALKALOID COMPOSITION**  
[54]  
[72] LIGHTBURN, BENJAMIN, CA  
[72] MOSS, RYAN, CA  
[72] RANKEN, LISA, CA  
[71] PSILO SCIENTIFIC LTD., CA  
[22] 2021-03-24  
[41] 2022-06-28  
[62] 3,113,240  
[30] US (63131028) 2020-12-28  
[30] US (63139453) 2021-01-20

[21] **3,197,453**  
[13] A1

[25] EN  
[54] **SELF-CONTAINED MODULAR ANALYTICAL CARTRIDGE AND PROGRAMMABLE REAGENT DELIVERY SYSTEM**  
[54] **CARTOUCHE D'ANALYSE MODULAIRE ET AUTONOME ET SYSTEME PROGRAMMABLE DE DISTRIBUTION DE REACTIF**  
[72] ROBERTS, LESLIE DON, US  
[71] ROBERTS, LESLIE DON, US  
[22] 2014-02-14  
[41] 2014-09-25  
[62] 2,906,345  
[30] US (61/802,408) 2013-03-16

[21] **3,197,460**  
[13] A1

[25] EN  
[54] **NOZZLE AND KEYED FLUSH FACE RECEIVER**  
[54] **BUSE ET RECEPTEUR CLAVETE A FACE PLATE**  
[72] BALLARD, MARK PAUL, US  
[72] BALLARD, CARL PAUL, US  
[72] KENDRICK, JOHN TRENT, US  
[71] FLOMAX INTERNATIONAL, INC., US  
[22] 2015-08-14  
[41] 2016-02-18  
[62] 2,958,069  
[30] US (62/037,598) 2014-08-14

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

---

[21] **3,197,472**

[13] A1

[25] EN

[54] **ATV HAVING A HAND GRIP  
ARRANGEMENT FOR A  
PASSENGER**

[54] **VTT AYANT UNE  
CONFIGURATION DE POIGNEE  
POUR UN PASSAGER**

[72] RIPLEY, RICHARD D., US

[72] SUNSDAHL, ROY A., US

[72] TAYLOR, SCOTT D., US

[71] POLARIS INDUSTRIES INC., US

[22] 2009-02-03

[41] 2009-08-13

[62] 3,105,098

[30] US (12/012587) 2008-02-04

---

[21] **3,197,521**

[13] A1

[51] **Int.Cl. C25B 15/023 (2021.01) C25B  
9/65 (2021.01) C25B 9/70 (2021.01)  
C25B 1/04 (2021.01)**

[25] EN

[54] **ELECTROLYSER AND ENERGY  
SYSTEM**

[54] **ELECTROLYSEUR ET SYSTEME  
ENERGETIQUE**

[72] JOOS, NATHANIEL IAN, CA

[72] CARGNELLI, JOSEPH, CA

[71] HYDROGENICS CORPORATION,  
CA

[22] 2013-05-27

[41] 2013-12-05

[62] 3,101,570

[30] US (61/652,263) 2012-05-28

# Index of Canadian Patents Issued

May 16, 2023

## Index des brevets canadiens délivrés

16 mai 2023

10353744 CANADA LTD.	2,993,259	ARKEMA FRANCE	2,969,071	BEIJING FRIENDSHIP	
4 FEET UNDER OY	3,086,949	ARKEMA FRANCE	2,971,550	HOSPITAL, CAPITAL	
A.O. SMITH CORPORATION	3,072,186	ARLT, WOLFGANG	2,967,879	MEDICAL UNIVERSITY	3,159,995
ABBANA BENNANI, MOUNA	3,114,682	ARMSTRONG, ED	2,821,681	BEIJING HANMI PHARM. CO.,	
ACCETTA, ALESSANDRO	2,952,287	ASAHI KASEI KABUSHIKI		LTD.	3,036,913
ACHE LABORATORIOS		KAISHA	3,148,220	BELKIN, ANATOLY S.	2,922,425
FARMACEUTICOS S.A	3,084,623	ASH, SIMON CHRISTOPHER	3,071,733	BELL, ANDREW	2,865,741
ACTIVE BIOTECH AB	2,967,112	ASHIDA, SHINJI	3,078,218	BELL, IAN M.	3,098,583
ADDISON, MARK E.	2,991,329	ASKEM, BEN ALAN	2,971,796	BENNETT, GREGORY E.	3,090,250
ADRIAN, KLAUS	2,970,732	ASTRAZENECA AB	2,917,603	BENOIT, ERIC	2,897,011
ADVANSIX RESINS &		ATHANS, JOHN D.	3,104,161	BERGLUND, PIERRE	2,984,871
CHEMICALS LLC	3,118,466	ATKINSON, MICHAEL		BERKESSEL, ALBRECHT	2,925,293
AEVA	2,918,522	RANDOLPH	3,155,662	BERNITSAS, NIKOLAOS	2,948,862
AGRINSKIY, ANDREI		ATS AUTOMATION TOOLING		BERTACCHI, SERGIO	2,979,921
NIKOLAEVICH	2,967,564	SYSTEMS INC.	2,949,562	BESSER, STEVEN	2,997,770
AIKENS, DAVID	3,099,474	ATTAL, YOHAN	3,007,675	BHATTACHARYA,	
AIRSPED SYSTEMS LLC	3,178,862	ATTENTI ELECTRONIC		TATHAGATA	2,957,935
AKAO, TAKESHI	3,060,457	MONITORING LTD	2,961,371	BHUSHAN, NAGA	2,924,536
AKTIEBOLAGET SKF	2,950,351	AZAB, MOSTAFA	3,049,457	BIAGETTI, MATTEO	2,952,287
ALAPURANEN, MARIKA	2,994,320	AZEVEDO, HATYLAS FELYPE		BIBEAU, LOUIS	2,919,104
ALFORD, JOHN	3,026,417	ZANETI DE	3,084,623	BIGA, MICHAEL	2,970,241
ALLEN, ROBERT C.	3,022,426	B & W CUSTOM TRUCK		BILLIANI, JOHANN	2,976,608
ALLNEX AUSTRIA GMBH	2,976,608	BEDS, INC.	3,093,949	BIOCORP PRODUCTION	2,987,214
ALMA MATER STUDIORUM -		BACTOCLEAR HOLDINGS		BISHOP, JONATHAN J.	2,955,079
UNIVERSITA' DI		PTE. LTD.	2,833,176	BJERKETVEDT, ERIC D.	3,046,653
BOLOGNA	3,104,614	BAIGET ORTS, AMPARO	2,964,501	BLACKBURN, IAIN MICHAEL	2,821,681
ALVEY, LUKE JONATHAN	2,971,110	BAKER HUGHES OILFIELD		BLANC, OLIVIER	2,964,295
ALVIRA, MAURICIO R.	3,159,060	OPERATIONS LLC	2,968,360	BLENNOW, BENGT PETER	
AMANTINI, DAVID	2,971,110	BAKKER, NIELS	2,954,389	GUSTAV	3,044,874
AMG METALS INC.	2,892,412	BANG, KEUK CHAN	3,108,856	BLOCK, INC.	2,955,454
AMVAC CHEMICAL		BANKS AND ACQUIRERS		BLONDEAU, PHILIPPE	2,950,981
CORPORATION	2,976,866	INTERNATIONAL		BLUEMLING, GREGORY R.	2,969,372
AMVAC CHEMICAL		HOLDING	2,964,295	BLUON, INC.	2,986,923
CORPORATION	2,977,191	BANQUE NATIONALE DU		BOCQUET, LYDERIC	2,997,169
ANAND, RAJ	3,039,786	CANADA	3,133,893	BODISHBAUGH, ADRIAN,	
ANANTHARAMAIAH,		BARABEISCH, MARKUS	2,988,701	BENJAMIN	3,068,067
GATTADAHALLI M.	2,954,475	BARNES, MICHAEL	2,965,431	BOLUKBASI, AKIF O,	3,036,473
ANDERSON, NEIL	2,944,525	BARTLETT, NATHAN	2,968,301	BOMATTER, CHRISTIAN W.	3,109,521
ANDERSON, SALLY	3,086,681	BASF SOUTH EAST ASIA PTE.		BOYDELL, JAMES	2,968,301
ANDREOTTI, DANIELE	2,921,294	LTD.	2,934,580	BRASE, RANDALL L.	3,117,690
ANDRITZ AG	3,035,614	BASSI, GIUSEPPE	2,979,921	BREBION, FRANCK LAURENT	2,971,110
ANEAS, ANTOINE	2,987,214	BASTIAN, GEOFFREY		BRESSON BOIL, ALICE	2,950,981
ANJI PHARMACEUTICALS		WILLIAM	3,052,659	BROAN-NUTONE LLC	2,950,887
INC.	2,954,475	BATEMAN, MICHAEL	3,068,067	BROOKES, DAVID	2,948,862
ANOVA APPLIED		BAUER, TIMOTHY	3,118,466	BROUWERS, EDWARD	3,027,642
ELECTRONICS, INC.	2,893,329	BAUMANN, MICHAEL	2,950,351	BRUTON, ERIC ALAN	3,027,642
ANQUETIL, JEROME	2,957,159	BAYER OY	2,974,167	BUDINCAK, JOHN FRANK,	
APPAIAH, C.B.	2,833,176	BECHELANY, MIKHAEL	2,997,169	JR.	2,956,657
AQUAGEN AS	2,951,500	BECKER, MICHAEL	2,910,381	BUFF, RYAN	2,901,379
ARCELORMITTAL	3,114,682	BECTON, DICKINSON AND		BUNTING JR., ROBERT L.	3,085,947
ARCELORMITTAL	3,137,680	COMPANY	3,076,366	BUSCH PROTECTIVE	
ARCELORMITTAL		BECTON, DICKINSON AND		GERMANY GMBH & CO.	
INVESTIGACION Y		COMPANY	3,077,591	KG	3,150,510
DESARROLLO, S.L.	2,957,935	BEIGELMAN, LEONID	2,921,294	BUSSCHER, HENK J.	2,991,772
ARJONA, DANIEL R.	3,003,707				

## Index of Canadian Patents Issued May 16, 2023

BYKOV, ALEXANDER		COLE, ELIZABETH T.	2,787,655	DEPREZ, PIERRE MARC	
NIKOLAEVICH	2,967,564	COLLINS, ETHAN	2,887,955	MARIE JOSEPH	2,971,110
CAI, LINKUN	3,159,995	COMMONWEALTH		DEROCHE, TIMOTHY J.	2,955,079
CALDERONI, ANTHONY	2,887,955	SCIENTIFIC AND		DEROSIER, GREG	2,952,828
CALIN, DANIEL	2,971,550	INDUSTRIAL RESEARCH		DERUE, NICHOLAS A.	3,104,161
CAMELBAK PRODUCTS, LLC	3,085,550	ORGANISATION	2,937,580	DESROSIERS, DOMINIC	2,945,834
CAMP, JOSHUA LANE	3,110,596	CONLEY, WALTER, III	2,991,329	DI MARCO, STEVEN	2,997,770
CAMPBELL, BRIAN T.	3,098,583	CONOCOPHILLIPS COMPANY	2,940,561	DIAGONAL BIO AB	3,168,685
CANON KABUSHIKI KAISHA	3,080,790	CONOCOPHILLIPS COMPANY	2,989,619	DICERNA	
CANTEX INTERNATIONAL,		CONSEJO NACIONAL DE		PHARMACEUTICALS,	
INC.	3,046,708	INVESTIGACIONES		INC.	3,032,165
CAPELLI, ANNA MARIA	2,952,287	CIENTIFICAS Y		DICKINSON, OWEN J.	3,046,653
CAPUCIATI, PETER	2,986,923	TECNICAS CONICET	3,083,505	DIETRICH, AARON	2,997,770
CARTER, CHAD A.	3,100,473	CORNING OPTICAL		DITNER, JOHN	2,949,562
CASTORO, DANIEL	2,937,822	COMMUNICATIONS LLC	2,954,776	DJURDJEVIC, DEANA	2,924,227
CASTRO FEO, BEGONA	2,964,501	COSSON, OLIVIER	2,954,313	DOBRUSKY, SVATOPLUK	2,969,033
CATERPILLAR INC.	2,961,203	COTLER, ELLIOT M.	3,003,707	DODDS, MICHAEL W.	2,991,772
CATERPILLAR INC.	2,969,520	COVENANT EYES, INC.	2,965,513	DOI, FUMINAO	3,078,218
CATINO, BEVERLY A.	2,971,740	COVIDIEN LP	2,887,955	DONYA, GILSON	3,137,680
CATINO, MITCHELL A.	2,971,740	COYLE, ROBERT TERRY, JR.	3,052,659	DOPKE, RUSSELL J.	2,889,413
CATINO, THEODORE A.	2,971,740	CRANE, MITCHELL LEE	3,158,452	DOW GLOBAL	
CAUCHOIS, JEAN-PIERRE	2,969,071	CROSS, JOE	3,084,892	TECHNOLOGIES LLC	2,980,728
CENTRE NATIONAL DE LA		CROW, SEAN SPENCER	2,953,403	DRESSER, SAM	3,109,721
RECHERCHE		CROWLEY, BRENDAN M.	3,098,583	DREYFUS, NICOLAS	
SCIENTIFIQUE (CNRS)	2,997,169	CROWN EQUIPMENT		JACQUES FRANCOIS	3,108,158
CFPH, LLC	2,907,172	CORPORATION	2,991,329	DUAN, HOULI	3,079,243
CHABAILLE, CHRISTOPHE	2,958,025	CRYPTOMATHIC LTD	2,978,380	DUMAS, THIBAUD	3,007,675
CHAMPIE, MAX	2,986,923	CRYSTAL SPRING COLONY		DUVAL, KARINE	2,974,850
CHAMPION POWER		FARMS LTD.	3,101,840	DWFRITZ AUTOMATION, LLC	3,007,826
EQUIPMENT	2,889,413	CUI, JINGWEI	3,109,204	EATON INTELLIGENT POWER	
CHANVILLARD, GILLES	2,969,033	CUNNINGHAM, TIMOTHY J.	3,067,199	LIMITED	2,934,001
CHEATHAM, BENJAMIN		CURL, WELDON, JR.	3,084,892	EATON INTELLIGENT POWER	
CURTIS	2,999,309	CYTIVA US LLC	3,122,838	LIMITED	2,935,775
CHEN, ANDREW XIAN	2,974,220	D'AQUINO, RICCARDO	2,970,426	EATON INTELLIGENT POWER	
CHEN, AO	3,122,127	D'HONDT, ERIK JOZEF	2,777,670	LIMITED	2,935,776
CHEN, THOMAS	3,101,444	DACH, ALEXANDER		ECO'RING	3,004,616
CHEN, WANSHI	2,924,536	SEBASTIAN	3,106,577	EDELMANN, BIANCA	2,970,732
CHEN, YANG	3,089,660	DAEWOONG		EGI TECH (SHEN ZHEN) CO,	
CHEN, YUE	2,992,626	PHARMACEUTICAL CO.,		LIMITED	3,122,127
CHEVRON PHILLIPS		LTD.	3,108,856	EL-GAYYAR, AHMED	2,935,775
CHEMICAL COMPANY LP	3,007,925	DAIICHI SANKYO COMPANY,		EL-GAYYAR, AHMED	2,935,776
CHIESI FARMACEUTICI S.P.A.	2,952,287	LIMITED	3,078,218	ELC MANAGEMENT LLC	3,076,588
CHILOV, GERMES		DAMMEYER, KARL L.	2,991,329	ELI LILLY AND COMPANY	3,108,158
GRIGORIEVICH	3,021,306	DAMNJANOVIC,		EMBRY, DALE	2,940,561
CHIN, FEE LING	3,041,380	ALEKSANDAR	2,924,536	EMMERSON, ROBERT	2,821,681
CHIPROOT, AVI	2,918,870	DANIELCZYK, ANTJE	2,978,659	EMORY UNIVERSITY	2,969,372
CHIRP PRODUCTS LLC	3,024,514	DARKOW, TORSTEN	2,969,247	ENDRIZZI, JAMES J.	3,046,653
CHOBANIAN, HARRY R.	3,098,583	DARR, ADNAN	2,854,044	ENERPAC TOOL GROUP	
CHOI, JANG-SIK	3,108,373	DAVIES, JEFF	3,085,550	CORP.	2,993,587
CHOI, YUNG-GEUN	3,108,373	DAVIS, MARK	3,158,311	ENGELMANN, HANS BERND	2,777,670
CHORNEY, MARC	2,930,944	DE CEUNINCK, FREDERIC		EOM, DEOK KI	3,108,856
CHOU, JANICE J.	2,972,038	ANDRE	2,971,110	EP MINERALS LLC.	2,953,403
CHOUDHARY, SANJEEV	3,164,732	DE LA ROSA, ABEL	2,969,372	ERASMUS UNIVERSITEIT	
CHOUINARD, PATRICK	2,974,844	DE NYS, PETER CANISIUS	2,937,580	MEDISCH CENTRUM	
CHOUINARD, PATRICK	2,983,037	DECKARD, AARON D.	3,046,653	ROTTERDAM	2,928,012
CHUBB, RYAN	2,949,562	DECKER, ARNOLD	2,993,587	ERDMANN, JENS	3,001,090
CHUKKA, SRINIVAS	2,965,431	DECKERT, JOCHEN	2,967,367	ERICKSON, CHRIS J.	3,020,872
CLARENCEW PTY. LTD	2,837,823	DEHAAS, RONALD	2,965,513	ERIKSSON, HELENA	2,967,112
CLARKE, JAMES ANTHONY	3,086,681	DEHN, JAMES J.	2,889,413	ERTAC, CAPUR	2,982,156
COATES, PETER	3,090,557	DELAMERE, JAMES HAROLD	2,892,412	ESSEGHIR, MOHAMED	2,980,728
COCHRAN, JOHN AUSTIN	2,934,001	DELAMERE/POWELL		ETHICON, LLC	2,999,832
COHAN, KEVIN C.	2,787,655	HOLDCO INC.	2,892,412	ETHOX CHEMICALS, LLC	2,906,986
COHEN, ERAN	3,066,206	DENNINGER, MARC	2,974,844	EURECAT S.A	3,004,616
COIMBATORE, SARAVANAN	2,979,557	DENNINGER, MARC	2,983,037	EVANOFF, KARA LINN	2,953,403

**Index des brevets canadiens délivrés  
16 mai 2023**

EVAPCO, INC.	2,952,828	GARCIA-GARCIA, JOSE		GU, XIAODONG	3,076,232
EX SCINTILLA LIMITED	3,090,557	CARLOS	3,076,232	GUALA, MATILDE	2,952,287
EXONDA SALON TOOLS		GAROFF, NIKLAS	3,001,090	GUERNSEY, KEVIN W.	2,955,079
GMBH	3,058,982	GATELY, JOHN DECLAN	2,973,624	GUIADEEN, DEODIAL G.	3,098,583
EXONETIK INC.	2,983,037	GATOS, KONSTANTINOS G.	2,951,352	GUIMARAES, CRISTIANO	
EXOXEMIS, INC.	3,022,426	GAUS, PHILIPP	3,013,513	RUCH WERNECK	3,084,623
EXPRESS SCRIPTS, INC.	2,787,655	GAWEL, MAREK	2,936,130	GULIZIA, STEFAN	2,944,525
EXTRACT MANAGEMENT		GAWRYLA, MATTHEW		GUO, CHEN	3,094,771
COMPANY, LLC	3,158,452	DANIEL	2,956,657	GUPTA, VISHAL	2,953,403
EXXONMOBIL TECHNOLOGY		GEOPIER FOUNDATION		GUSTAV KLAUKE GMBH	2,969,247
AND ENGINEERING		COMPANY, INC.	2,919,894	HABASIT AG	2,979,921
COMPANY	3,109,918	GEORGESCU, SERBAN P.	2,897,011	HADWEN, BENJAMIN JAMES	3,086,681
FACCHINELLO, JEROME	3,100,473	GERARD, PIERRE	2,969,071	HAGEN, BRIAN M.	3,090,250
FAHEY, MICHAEL	2,897,011	GERARD, PIERRE	2,971,550	HAGEN, NATHAN ADRIAN	2,870,419
FAIRCHILD FASTENERS		GERBERICK, GEORGE		HAGHSHENAS, ARASH	3,110,332
EUROPE - CAMLOC		FRANKLIN	3,076,232	HAHN, KLAUS	3,112,404
GMBH	3,106,577	GEUMEZ, GILLES JEAN	2,983,348	HALLIBURTON ENERGY	
FANDEL, JOSEPH J.	3,089,245	GEUMEZ, GILLES JEAN	2,994,031	SERVICES, INC.	3,110,596
FARMER, PAUL	2,948,862	GIBBS, IRVING ALBERT	2,934,001	HALONEN, TEEMU	2,994,320
FARR, THOMAS ARTHUR	2,934,001	GIFTDROP LLC	3,076,488	HAMADA, HIROFUMI	3,078,218
FARSAD, MAHSA	3,099,474	GIGSMART, INC.	2,971,740	HAMMER, JOE K.	2,991,329
FELLS, JAMES I.	3,098,583	GILBERTSON, MICHAEL		HAMMERSLEY, SCOTT	2,965,513
FERGUSON, BRENT W.	2,998,886	LESLIE	2,999,309	HANSEN, PAL FRANCIS	3,150,510
FERRARI, IACOPO CLAUDIO	2,971,796	GILHOOLEY, NEILL	3,071,733	HAO, LIFEN	3,094,771
FERRERI, SUZANNE	3,076,366	GILLESPIE, CLAYTON	2,943,044	HAPPONEN, JAAKKO	2,916,802
FILOSI, ANDREAS	3,089,798	GIRARD, MICKAEL	2,918,522	HARADA, NAOYA	3,078,218
FLAVELL, RICHARD A.	2,877,286	GIUFFRIDA, FRANK	2,905,797	HARALUR,	
FOINI, MATTEO	2,971,796	GIVAUDAN SA	2,950,981	GURULINGAMURTHY M.	3,078,474
FOLKES, SHAWN M.	2,922,425	GLAESEMANN, WILLIAM E.	3,015,980	HARDY, BRIAN	3,076,488
FONDAZIONE TELETHON	2,877,286	GLAXOSMITHKLINE		HARDY, NORMAN	3,076,488
FORD, COLIN P.	3,087,505	BIOLOGICALS S.A.	2,777,670	HARRO HOFLIGER	
FORGET, GUILLAUME	2,978,380	GLAXOSMITHKLINE		VERPACKUNGSMASCHI	
FORZANI, PAOLO	2,971,796	BIOLOGICALS,		NEN GMBH	3,013,513
FRANCOIS, GILLES	2,969,071	NIEDERLASSUNG DER		HART, CHRISTOPHER	
FRANKE TECHNOLOGY AND		SMITHKLINE BEECHAM		PATRICK	2,944,525
TRADEMARK LTD	3,109,521	PHARMA GMBH & CO.		HASEGAWA, KOJI	2,991,105
FRASER, DARREN	2,944,525	KG	2,777,670	HASENBERG, DANIEL M.	3,007,925
FREDRICKSON, DONOVAN L.	3,046,653	GLEASON, TIMOTHY R.	3,036,473	HASHIMOTO, MASARU	2,980,461
FREEMAN, THOMAS	3,128,493	GLYCOTOPE GMBH	2,978,659	HAUSMAN, JR, DONALD F.	3,107,116
FRENKEN, EGBERT	2,969,247	GOBEC, MICHAEL	2,976,608	HAYAKAWA, ICHIRO	3,078,218
FRIEDMAN, ARI	2,907,172	GODLEY, MATTHEW		HAYES, JOHN A.	2,799,613
FRITSCH, MATT	2,993,587	HOWARD	2,935,344	HAZEN, STANLEY LEON	3,076,232
FROMENT, MARION	2,964,295	GOLDBERG, DENNIS	2,954,475	HE, HAIYING	2,921,294
FRYER, CHRISTOPHER JOHN	2,971,796	GOLETZ, STEFFEN	2,978,659	HE, LIN	3,122,127
FRYER, MARK	2,942,445	GORELL, SHELDON	2,874,728	HEIKKINEN, PETRI	2,916,802
FUJIMURA, KAZUKI	3,118,704	GOSMINI, ROMAIN LUC		HEILMAYER, WERNER	2,935,415
FUJITA, TERUNORI	3,068,805	MARIE	2,971,110	HEIREDAL-CLAUSEN,	
FUNDACION TECNALIA		GOSSAGE, ROLAND	2,921,285	THOMAS	3,044,874
RESEARCH &		GRAPHIC PACKAGING		HELLEDAY, THOMAS	2,950,780
INNOVATION	2,993,472	INTERNATIONAL, LLC	3,087,505	HELTON, KRISTEN	3,012,355
FUTAKI, HISASHI	2,966,970	GRAZIANO, ANTONIO	2,970,426	HERON, ANDREW JOHN	3,086,681
GAAL, PETER	2,924,536	GREBENKAMPER, KAI	3,004,505	HESS, MARTIN	2,969,376
GABOREL, GAEL	2,918,522	GREEN CROSS		HETTICH HOLDING GMBH &	
GABRIEL, JOSEPH M.	3,015,980	CORPORATION	3,077,009	CO. OHG	2,974,591
GACW INCORPORATED	3,106,815	GREEN, RICHARD	2,952,620	HEXAGON TECHNOLOGY AS	3,015,980
GACW INCORPORATED	3,106,819	GREENLEE TEXTRON INC.	2,969,247	HEXCEL CORPORATION	2,978,956
GAGIE, ETHAN	3,128,493	GREGORI, SILVIA	2,877,286	HICKE, DAVID J.	3,046,653
GAGLIANI, NICOLA	2,877,286	GREMILLION, KEVIN L.	2,955,079	HIDO, SHOHEI	2,757,461
GALAPAGOS NV	2,971,110	GRESHOCK, THOMAS J.	3,098,583	HIGASHI, KENJI	3,086,011
GALHOTRA, PRAGATI	2,953,403	GRID4C LTD.	3,066,206	HILD, MARCUS	3,013,513
GANSTER, JOHANNES	3,001,090	GROSVELD, FRANK	2,928,012	HILJANEN, JARMO	2,958,619
GAO, GUANGPING	3,159,060	GROUPBY INC.	2,921,285	HILLER, NATHAN D.	3,029,964
GAO, LI	3,110,332	GROVES, KEVIN	2,901,379	HINOJOSA, CHRIS	3,026,417
		GRUWE, ALAIN	2,926,132	HISAZUMI, KOJI	2,991,105

## Index of Canadian Patents Issued May 16, 2023

HISTOCELL, S.L.	2,964,501	INVENTIO AG	2,969,376	JUNG, DOOHWAN	3,101,444
HOBART, PATRICK	2,997,770	ISAACS, ALFRED	3,058,982	JUNG, JAEHYUN	3,108,856
HODEL, BENJAMIN	2,961,203	ISEKI, KATSUHIKO	2,979,326	JUNIOR, MARCOS ANTONIO FERREIRA	3,084,623
HOHLIOS, GUS A.	3,007,274	ISHII, SEIICHI	3,068,805	KABUSHIKI KAISHA POWREX	2,991,105
HOLCIM TECHNOLOGY LTD	2,969,033	IVEZIC-SCHOENFELD, ZRINKA	2,935,415	KACINES, JEFFERY J.	3,085,023
HOLCIM TECHNOLOGY LTD	2,984,070	IWAMOTO, MITSUHIRO	3,078,218	KAISER, ANDRE	2,974,591
HOLDEN, MATTHEW	3,086,681	IWANO, SHUNSUKE	2,979,326	KALLIO, JARNO	2,994,320
HOLEMANS, PETER	3,036,473	IZUMIMOTO, NAOKI	2,979,326	KARANDINOS, ANTHONY G.	2,951,352
HOLLAENDER, JENNY	2,974,167	JAASKELAINEN, MIKKO	3,110,596	KARVO, ANNA	3,105,006
HOLLERMANN, ROSS MICHAEL	3,072,916	JACOBSON, JAMES D.	2,922,425	KASHIMA, HISASHI	2,757,461
HOLMBERG, SVANTE	2,974,167	JAHN, DOREEN	2,978,659	KATO, SHO	2,980,461
HOLTE, COREY	3,068,067	JAMES COOK UNIVERSITY	2,937,580	KATSUMURA, TATSURO	3,118,704
HONG, JONG-ILL	3,108,451	JAMISON, DALE E.	3,110,332	KEISTER, JOSH	3,039,786
HONKA, ANU-LIISA	2,974,167	JANG, CHOONG HYO	2,964,447	KEMENY, ZOLTAN	3,106,815
HOOMAN, SATU	2,994,320	JANG, SEONG-RYONG	3,088,910	KEMENY, ZOLTAN	3,106,819
HOSSBACH, MARKUS	2,967,367	JANSSEN BIOPHARMA, INC.	2,921,294	KEMP, ELIZABETH	3,158,311
HOU, JINZHAO	2,967,367	JAPAN TOBACCO INC.	3,060,457	KENDALL, JAMES R.	3,053,465
HOU, LIANHUA	3,109,204	JARY, HELENE MARIE	2,971,110	KESTER, ROBERT TIMOTHY	2,870,419
HOWARD, JAMES W.	2,961,371	JAYARAM, ROBIN CHANDRAS	3,078,474	KIM, DAE HWAN	2,964,447
HOWELL, JACK	2,989,619	JENSEN, NEAL	3,068,067	KIM, DAE-WON	3,108,451
HRYB, JOHN	2,887,955	JEONG, HYUN KU	2,964,447	KIM, DONG SIK	3,077,009
HUANG, FRANK	3,114,682	JEONG, JUN HONG	3,077,009	KIM, JUN O	2,964,447
HUANGFU, HAIYAN	3,094,771	JEONGSEOK CHEMICAL CORPORATION	3,108,451	KIM, JUNG-HO	3,108,373
HUANGFU, JIURU	3,094,771	JFE STEEL CORPORATION	3,118,704	KIM, KI SU	3,077,009
HUBBELL INCORPORATED	3,105,213	JI, TINGFANG	2,924,536	KIM, MIN SOO	2,964,447
HUBER, SAMUEL	2,877,286	JIA, XIAOQING	3,094,771	KIM, SANGKYUM	2,961,203
HUCK, KATHARINA	3,058,982	JIANG, CHONGJUN	2,953,403	KIM, SE-WON	3,108,373
HUGILL, MARK DANIEL	2,979,026	JIANG, TAO	2,961,974	KIM, WOL YOUNG	3,108,856
HUGILL, SHANE ROSS	2,979,026	JIANGMEN PENGCHENG HELMETS LTD.	3,116,276	KIM, YONG-HYUN	3,108,451
HUMAN BRAIN WAVE S.R.L.	2,970,426	JIANGSU DAOYING TECHNOLOGY CO., LTD.	3,035,900	KIMBLE, DAVID	3,041,380
HUMANN, DAVID	3,128,493	JIANGSU LVIYAN ECOLOGICAL TECHNOLOGY CO., LTD.	3,108,836	KING, JASON	2,965,513
HUNNEBECK GMBH	2,910,381	JIAXING SUPER LIGHTING ELECTRIC APPLIANCE CO., LTD	2,961,974	KING, SHELBY MARIE	2,962,778
HUNT, ALLAN KENNETH FRAZER GRUGEON	2,971,796	JIN, MENGXIE	3,036,913	KINLEN, PATRICK JOHN	3,027,642
HUNTSMAN INTERNATIONAL LLC	2,983,348	JIN, YI	2,980,728	KINLEY, ROBERT DOUGLAS	2,937,580
HUNTSMAN INTERNATIONAL LLC	2,994,031	JOEHNCK, MATTHIAS	2,970,732	KLEINIKKINK, ALBERT	2,949,562
HYDE, JASON ROBERT	3,086,681	JOHNSON, BRENT	2,977,191	KLEINSASSER, JONATHAN	3,101,840
HYDEN, WOLFGANG	2,976,608	JOHNSON, DEREK ANTON	3,015,980	KMIEC, CHESTER J.	2,980,728
HYDROGENIOUS TECHNOLOGIES GMBH	2,967,879	JOHNSON, RICHARD L.	3,109,068	KNAP, GRAHAM	2,949,562
ICHIHASHI, FUMITAKA	2,978,956	JOHNSON, TYLER JEFFREY	2,993,587	KNOCH, TOBIAS	2,928,012
ICHIKAWA, SHINICHIRO	3,068,805	JOINT STOCK COMPANY "AKME-ENGINEERING"	2,967,564	KNOOK, ARIE JAN THEODORUS	2,983,581
ICU MEDICAL, INC.	2,922,425	JOINT STOCK COMPANY "LIMACO"	3,064,198	KOBAYASHI, MAKOTO	2,991,105
IDEXX LABORATORIES, INC.	3,155,662	JONASSEN, TOM	3,150,510	KOGLER, CHRISTIAN	2,950,351
INFOBIONIC, INC.	2,897,011	JONCHERAY, THOMAS JULIEN	2,983,348	KOH, JONG-SUNG	3,108,373
INGEVITY SOUTH CAROLINA, LLC	3,089,245	JONCHERAY, THOMAS JULIEN	2,994,031	KOLBERT, ALEXANDER	2,968,717
INGRAM-TEDD, ANDY	2,942,445	JONES, JASON B.	3,090,557	KOLLMANN, HERMANN	2,935,415
INNER MONGOLIA ACADEMY OF AGRICULTURAL & ANIMAL HUSBANDRY SCIENCES	3,094,771	JOWAT SE	2,963,165	KOMSTA, ZOFIA	2,968,301
INSMED INCORPORATED	2,967,385	JUKARAINEN, HARRI	2,974,167	KONICEK, DONNA M.	2,967,385
INSTITUT DE SOUDURE	2,969,071	JULING, DIETER	3,106,577	KONNECTRONIX, INC.	3,026,417
INTER IKEA SYSTEMS B.V.	2,950,457	JULIO, GUIFRE	2,974,844	KORHONEN, MIKA	3,086,949
INTERNATIONAL BUSINESS MACHINES CORPORATION	2,757,461	JULIO, GUIFRE	2,983,037	KOSKI, WILLIAM	2,975,543
INTERNATIONAL NAME PLATE SUPPLIES LTD.	3,128,493	JUNG, DONG-SIK	3,108,373	KRAUSZ INDUSTRIES LTD.	2,918,870
				KREMEIER, STARK	3,158,452
				KRESSIN, MATTHEW SCOTT	3,052,659
				KREUZER, KARL-ANTON	2,925,293
				KRISHNAMURTHY, VENKATA	3,032,165
				KRUGER, MARK	2,925,293
				KRUSE, REINHARD	3,058,982
				KUBOTA CORPORATION	3,086,011
				KUDO, TOMOYUKI	2,958,132
				KUK, KEON	2,964,447
				KUNGAS, RAINER	3,044,874

**Index des brevets canadiens délivrés  
16 mai 2023**

KUPPURAJ, RAVI	2,897,011	LIEN, SIGBJORN	2,951,500	MAKGERU, KABU WALTER	3,115,962
KURAMOTO, RYO	2,958,132	LIM, HYUNG KWON	3,077,009	MALININ, VLADIMIR	2,967,385
KWIETNIAK, KAROL	3,164,732	LIM, YANG MI	3,077,009	MALLADI, DURGA PRASAD	2,924,536
KYRIAKOULEAS, KYRI	2,957,042	LIMA, MARCELO G.	3,117,690	MANGETTE, STEPHEN T.	2,991,329
L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE	2,992,626	LIMITED LIABILITY COMPANY «FUSION PHARMA»	3,021,306	MANGINO, MARTIN J.	3,151,433
LAFLEUR, BONNIE	2,965,431	LINAMAR CORPORATION	2,970,241	MAPELLI, MATTEO	2,979,921
LAFRENIERE, MARC-ANDRE	3,133,893	LINDBO, SVERKER	2,942,445	MARANO, MATTEO	3,104,614
LAGADEC, JEAN	2,954,313	LINDSAY-SCOTT, PETER JAMES	3,108,158	MARCHAND, PATRICK	2,945,834
LAITRAM, L.L.C.	2,955,079	LISZKAL, TAMAS	2,975,543	MARCON, GIANFRANCO	2,979,921
LANCASTER, PATRICK R., III	3,109,068	LITESTONE HOLDINGS PTY LIMITED	2,957,042	MARTINEZ MANE, ANGEL	3,033,783
LANDMARK GRAPHICS CORPORATION	2,874,728	LIU, DONG	3,159,995	MARVIN LUMBER AND CEDAR COMPANY, D/B/A MARVIN WINDOWS AND DOORS	3,072,916
LANDMARK GRAPHICS CORPORATION	3,110,332	LIU, HAOYU	3,118,466	MASCARELLO, ALESSANDRA	3,084,623
LANDROCK, PETER	2,978,380	LIU, JIAWANG	3,036,913	MASI, FRANCESCO	2,956,367
LANTECH.COM, LLC	3,109,068	LIU, YAN-FEI	3,089,660	MASUDA, TAKESHI	3,078,218
LAROSE, PASCAL	2,974,844	LIU, YAWEN	3,159,995	MAYER, JORG	2,950,457
LAROSE, PASCAL	2,983,037	LIU, YIJUN	3,109,918	MAZLOOM, AMIN	3,049,457
LARRANAGA, ANTONIA	3,140,835	LIZARDI, PAUL M.	2,998,886	MC (US) 3 LLC	3,013,184
LATIMER, EDWARD	2,940,561	LOADTEST, INC.	2,799,613	MCADAMS, TOM	3,101,840
LATITUDE PHARMACEUTICALS, INC.	2,974,220	LOBNER, ERIC C.	2,961,371	MCCALL, TRAVIS M.	3,093,949
LE GRAS, HERVE	2,954,313	LOGISTIK UNICORP INC.	2,919,104	MCCANDLISH, LARRY E.	2,937,822
LE NEEL, DIDIER	3,007,826	LOMBARDINI, MARCO	2,973,168	MCCARTHY, WILLIAM E.	3,090,250
LEACH, DOUGLAS D.	3,090,250	LONGUET, JEAN-PHILIPPE	2,954,313	MCCOY, ROBERT	3,158,452
LEARY, STEVEN J.	3,083,903	LOVAL, SEBASTIEN	2,958,025	MCCRAY, JEREMY D.	3,109,068
LEAVITT, KENNETH J.	3,098,583	LOY, DAVID J.	3,118,466	MCDIARMID, LEIGH	2,922,285
LEDENT, PHILIPPE	2,926,132	LU, JIANXIN	3,110,332	MCMILLAN, WILLIAM A.	3,012,355
LEE, BRIAN R.	2,955,079	LU, YOUXIONG	3,097,606	MCNULTY, WILLIAM JOHN	2,969,247
LEE, HEE KYU	3,108,373	LU, ZIQIANG	2,930,944	MCS INDUSTRIES, INC.	3,052,659
LEE, JAEKYO	3,108,373	LUCO, KENNETH	2,943,191	MEAT & LIVESTOCK AUSTRALIA LIMITED	2,937,580
LEE, JONATHAN	2,972,487	LUDWIG, MATTHEW B.	3,090,250	MEDICINAL CHEMISTRY PHARMACEUTICALS, CO., LTD.	2,947,404
LEE, PAUL	2,961,203	LUEDEMANN, HANS- CHRISTIAN	2,957,677	MEDINICE S.A.	3,164,732
LEE, YEON IM	3,108,856	LUI, TIMOTHY S.	2,991,997	MEDITECH ENDOSCOPY LTD	2,946,457
LEENHOUTS, ABRAHAM	3,004,505	LUMUS LTD.	3,100,472	MEGA PLAST INDUSTRIAL- EXPORTING S.A.	2,951,352
LEFEBVRE, GUY	2,892,417	LUND, CLINTON	2,934,580	MEGURO, MASAKI	3,078,218
LEHMANN, ANDRE	3,001,090	LUNDBY, CARSTEN	3,047,628	MERCK PATENT GMBH	2,970,732
LEHMANN, ANDREAS	2,979,921	LUNZER, FLORIAN	2,976,608	MERCK SHARP & DOHME LLC	3,098,583
LEHMANN, MARIO	2,950,457	LUO, DEHONG	3,159,995	MERTENS, IVES	3,007,925
LEHR, ANDREAS	2,969,247	LUO, TAO	2,924,536	METALOGENIA RESEARCH & TECHNOLOGIES S.L.	3,033,783
LEI, XINSHENG	2,971,354	LUSTED, RODERICK MARK	2,968,360	MICRO MOTION, INC.	3,067,199
LEIFER, FRANZISKA	2,967,385	LUSTENBERGER, IVO	2,969,376	MILBANK MANUFACTURING CO.	3,090,250
LELEU, BENEDICTE	2,958,025	LUTNICK, HOWARD W.	2,907,172	MILDH, GUNNAR	3,091,559
LEMKE, GARY	2,991,997	LUTRON TECHNOLOGY COMPANY LLC	3,107,116	MILLER, MARK	2,907,172
LEONE, YVAN	2,974,850	LUTZ, DENNIS J.	3,046,653	MILTON, STEFAN	2,984,871
LESNIAK, STEVEN J.	3,085,947	LUZZATO, MICHEL	2,981,936	MIRONOVA, ANASTASIA	2,989,619
LI, DI	2,974,850	LV, HAN	3,159,995	MITCHELL, MICHAEL P.	3,109,068
LI, JING	3,159,995	MA, YOUNG-GIL	3,108,451	MIYOSHI, RISHO	2,947,404
LI, YI XIN	3,048,265	MACHADO, LORENNA	2,937,580	MIYOSHI, TOMOYA	2,979,326
LI, ZHILI	2,967,385	MADERER, TANJA	3,103,669	MOBA GROUP B.V.	2,983,581
LI, ZIQIN	3,094,771	MAGHRABI, SHADAAB S.	3,089,245	MOEN, THOMAS	2,951,500
LIAO, HAOTIAN	3,116,276	MAGNA SEATING INC.	3,024,229	MOERMAN, JASON	3,128,493
LIAO, SHA	3,122,127	MAGNANI, CHIARA FRANCESCA	2,877,286	MOGAM INSTITUTE FOR BIOMEDICAL RESEARCH	3,077,009
LIBERMAN, ALEKSANDR VLADIMIROVICH	3,064,198	MAGNUSSON, MARIE ELISABETH	2,937,580	MOLLATT, TORBJORN	3,067,919
LICKOV, GENNADII GENNADIEVICH	3,064,198	MAGULURU, MADHUKAR	2,969,520	MOLZ, RONALD J.	3,003,707
LIEBRECHT, LOREN K.	3,151,433	MAHMOODIAN, ROZA	3,076,366		
		MAIER, BEAT RENE	2,984,070		
		MAITRA, AMARNATH	2,991,772		
		MAKAY, MICHAEL CHAD	3,024,514		

## Index of Canadian Patents Issued May 16, 2023

MOMANN, DIRK	2,968,717	OERLIKON METCO (US) INC.	3,003,707	PETROCHINA COMPANY LIMITED	3,109,204
MONTALVO URBANO, ADRIANA	2,954,776	OGORZALEK, JEREMY	2,993,587	PHENOXY AG	2,954,389
MONTECCHIO, ANDREAS	2,974,591	OJALA, ANTTI	3,105,006	PICARD, LYONEL	3,004,616
MOO PRINT LIMITED	2,909,122	OKAJIMA, DAISUKE	3,078,218	PICARD, MICHEL	3,114,682
MOREAU-BELANGER, LAURENCE	2,974,850	OLIVER GARCIA, LAURA	2,993,472	PICHARA, KARIM	3,140,835
MORI, TOMONORI	3,080,790	OPCO MEDICAL APS	3,047,628	PICON MANJON, FRANCESC	3,033,783
MORISHITA, HIROMASA	3,112,497	OPEN AIRWAY DENTAL SOLUTIONS LTD.	2,944,525	PICTOMETRY INTERNATIONAL CORP.	2,905,797
MORITA, YASUHIRO	2,979,326	OPTIMA CONSUMER GMBH	3,112,404	PIERRE, FRITZ, JR.	3,109,918
MORRIS, JEFFREY G.	3,068,067	ORGANOVO, INC.	2,962,778	PIERSON, JOHN DAVID	2,892,412
MOSHOLDER, MICHAEL B.	2,821,681	ORLOV, BORIS VALENTINOVICH	2,967,564	PIETROBON, JOHN	2,892,417
MOTTET, BRUNO	2,997,169	ORTHOSOFT ULC	2,974,850	PIETSCH, CLAUDIA	2,976,608
MOUTTE, MAXENCE	2,950,981	OSADA, YUJI	2,979,326	PIHLAJA, JYRKI	2,974,167
MOWAT, DON	2,949,562	OSCOTEC INC.	3,108,373	PILATI, ALESSIO	3,104,614
MUBAYED, JONATHAN	3,133,893	OSKARSSON, DAGUR	3,022,785	PLANTE, JEAN-SEBASTIEN	2,974,844
MUCHNICK, MATIAS	3,140,835	OSPEDALE SAN RAFFAELE SRL	2,877,286	PLANTE, JEAN-SEBASTIEN	2,983,037
MUELLER, MICHAEL D.	3,093,949	OTA, HIROKI	3,118,704	PLASTEX SA	2,973,168
MUHAMMAD, AJMAL	3,091,559	OTA, YUSUKE	3,078,218	PLAUNT, ADAM	2,967,385
MYBRAIN TECHNOLOGIES	3,007,675	OTTA, SHOURYA PRAKASH	2,968,360	POLARIS INDUSTRIES INC.	3,046,653
NABRIVA THERAPEUTICS AG	2,935,415	OWENS CORNING		POLESELLO, MARIO	2,956,367
NAGATO, TAKUYA	2,991,105	INTELLECTUAL CAPITAL, LLC	2,956,657	POLL-WOLBECK, SIMON	2,925,293
NAIDU, JITHENDRA KUMAR SATHYANARAYANA	3,077,591	OXFORD NANOPORE TECHNOLOGIES LTD.	3,086,681	PONSSE OYJ	2,958,619
NAKADA, TAKASHI	3,078,218	OXFORD NANOPORE TECHNOLOGIES PLC	3,086,681	POP-BOTEZ, IULIANA ECATERINA	2,971,110
NAKAMURA, KENSUKE	3,078,218	PADMANABHAN, SRIRAM	2,833,176	POWELL (RICHMOND HILL) CONTRACTING LIMITED	2,892,412
NAKANO, YUTA	3,112,497	PAINTER, GEORGE	2,969,372	POWELL, BEN	2,892,412
NAPOLITANO, CARMELA	2,921,294	PALM, SCOTT KEVIN	2,953,403	POWELL, STEVEN D.	3,024,514
NARINE, ORLANDO	2,937,822	PALMER, CHARLES FRANCIS, JR.	2,906,986	PRASHAR, YOGESH	2,919,894
NARUCHI, KENTARO	2,947,404	PALMERSHEIM, RICHARD J.	2,950,887	PRATT & WHITNEY CANADA CORP.	2,892,417
NEAL, JOSHUA LEE	2,946,753	PANACEA QUANTUM LEAP TECHNOLOGY LLC	2,981,226	PRESNELL, SHARON C.	2,962,778
NEC CORPORATION	2,966,970	PANTAZIS, JOHN	2,887,955	PRICE, ROBERT LOWELL	3,109,721
NEESER, ROLF	3,109,521	PARADIS, FRANCOIS	2,974,850	PRINGLE, JOHN WALTER, IV	3,020,872
NELSON, W. ROBERT	3,007,274	PARATA SYSTEMS, LLC	3,084,892	PROFUSA, INC.	3,012,355
NESBIT, ASHLEIGH R.	3,105,870	PARK, JOON SEOK	3,108,856	PROTZ, ROBERT	3,001,090
NESTE OYJ	3,105,006	PARK, SONG-EUN	3,108,373	PRYOR, JAMES GARFIELD	2,973,624
NETFLIX, INC.	3,072,753	PARK, YONG YEA	3,077,009	PULMAIR MEDICAL, INC.	3,117,690
NG, MUM PEW	3,077,591	PARKER-HANNIFIN CORPORATION	2,984,489	PUNYANI, KUSHAGR	3,168,685
NGUYEN, DEBORAH LYNN GREENE	2,962,778	PAUKNER, SUSANNE	2,935,415	PURANEN, TERHI	2,994,320
NGUYEN, DUY D.	3,046,708	PAUL, NICHOLAS ANDREW	2,937,580	PYLE, MICHAEL LEE	3,052,659
NGUYEN, VU THUA	2,944,525	PAUWELS, ALEX	3,007,925	QI, XUELE	2,968,360
NIPPON SHEET GLASS CO., LTD.	3,112,497	PAVLOV, NIKOLAI NIKOLAEVICH	2,967,564	QUALCOMM INCORPORATED	2,924,536
NISHIMURA, SHINICHIRO	2,947,404	PEACOCK, MARTIN	3,168,685	QUEEN'S UNIVERSITY AT KINGSTON	3,089,660
NIU, ZHONGSHENG	3,072,186	PEDEN, BENOIT	2,954,313	QUELLET, CHRISTIAN	2,950,981
NONNENMACHER, MATHIEU E.	2,967,367	PEDERSEN, TORBEN PRYDS	2,978,380	QUINTERO, JULIAN A.	2,999,832
NORBY, TOBIAS HOLT	3,044,874	PEISA, JANNE	3,091,559	RADA, VANESSA L.	3,098,583
NORKIN, ANDREY	3,072,753	PEIXOTO, CHRISTOPHE	2,971,110	RAIBLE, DONALD G.	2,917,603
NOTCO DELAWARE, LLC	3,140,835	PELLETIER, BENOIT	2,974,850	RAJAGOPAL, SELVASUNDARAM	2,976,866
NOVEMBAL USA INC.	2,981,936	PELLETIER, MICHAEL T.	3,110,332	RAJAGOPAL, SELVASUNDARAM	2,977,191
NOVOMATIC AG	2,936,130	PEREZ SORIA, FRANCISCO	3,033,783	RAJAGOPALAN, SURIYANARAYANAN	2,940,561
NUSCALE POWER, LLC	2,975,543	PERKINELMER HEALTH SCIENCES, INC.	3,099,474	RAMAMURTHI, KUMARAN S.	2,977,493
NYBERG, PER ANDREAS	3,168,685	PERKINS, WALTER	2,967,385	RAMSEY, PETER	2,946,457
NZP UK LIMITED	2,968,301	PERRIN, HENRI	2,969,071	RANDALL, ALFRED LEE	2,934,001
O'CONNOR, DOUGLAS PAUL	3,105,213	PETAOMICS, INC.	2,998,886	RANTA, NIKO	2,958,619
OBERMARK, CRAIG	2,984,489	PETERS, HEINRICH	3,013,513	RASS-HANSEN, JEPPE	3,044,874
OCADO INNOVATION LIMITED	2,942,445			RDX TECHNOLOGIES LIMITED	2,979,026
OCADO INNOVATION LIMITED	3,088,706			REBELLION PHOTONICS, INC.	2,870,419
OCHS, RYAN R.	3,090,250				
OERLIKON METCO (US) INC.	2,865,741				



**Index des brevets canadiens délivrés  
16 mai 2023**

REEVES WIRELINE TECHNOLOGIES LIMITED	3,071,733	SCHLEIF, ANDREW C.	3,046,653	SOLIDIA TECHNOLOGIES, INC.	2,937,822
REIL, GORAN	3,033,994	SCHMIDT, CHRISTIAN	2,963,165	SOMMAZZI, ANNA	2,956,367
REIL, VLADIMIR	3,033,994	SCHMITT, BERND	3,058,982	SONG, NANMENG	3,036,913
REN, PENGLING	3,159,995	SCHOOL OF ROCK, LLC	3,109,721	SONG, PEILING	3,094,771
RENSING, MATTHEW JOSEPH	3,067,199	SCHULTZ, MICHAEL WILLIAM	3,072,186	SONIN, JUHAN	2,897,011
RESENTERA BEIZA, ALEXANDER CRISTIAN	3,083,505	SCHULTZ, STEPHEN L.	2,905,797	SONNENMOSER, ASTRID	2,969,376
RETINI, MICHELE	2,952,287	SCHUMACHER, JENNIFER F.	2,961,371	SONOCO DEVELOPMENT, INC.	3,127,016
REYNOLDS PRESTO PRODUCTS INC.	3,104,161	SCHUTSKY, SERGEY YURIEVICH	2,967,564	SOPSTAD, SINDRE	3,168,685
REZAYEE, AFSHIN	2,955,454	SCHWARTZ, MARK	3,026,417	SOREMARTEC S.A.	2,979,796
RICE, THOMAS A.	3,087,505	SCHWERT, ERIC	2,993,587	SOTIROPOULOS, PANAGIOTIS	3,088,706
RIEDL, ROSEMARIE	2,935,415	SCOTT, RYAN	2,949,562	SOUBIRANE, ALAIN	2,964,295
RIMINI, NOA	3,066,206	SEFCIK, MICHAEL C.	2,970,241	SOUTHERN STATES LLC	3,039,786
RIVA, CHRISTIAN	2,971,796	SEQUENOM, INC.	3,049,457	SPENCE, DEAN	2,922,285
ROAL OY	2,994,320	SERRURIER, DOUGLAS C.	2,969,520	SPIRIT AEROSYSTEMS, INC.	3,007,274
ROCHA, MURILO PUNDEK	3,117,690	SEW-EURODRIVE GMBH & CO. KG	2,968,717	SRIRAM, BHARATHI	2,833,176
ROCKLAND FLOORING LLC	2,930,944	SHAGAEV, OLEG	3,035,614	STAEDTLER MARS GMBH & CO. KG	3,103,669
RODRIGUEZ, MARIO HUMBERTO	3,083,505	SHAIKH, SIDDIQUE	2,942,445	STEC, SEBASTIAN	3,164,732
ROH, YEON JUNG	3,076,588	SHAO, JINHUA	3,079,243	STEIN, KARIN ANN	2,921,294
RONCAROLO, MARIA GRAZIA	2,877,286	SHAW, PAUL D.	3,053,465	STEINER, ANDREAS	2,976,608
RONEN, EITAN	3,100,472	SHELBOURNE, MONTSERRAT	2,968,301	STEVENS, JAMES P.	3,127,016
ROSALES, GUSTAVO DANIEL	3,083,505	SHEN, HANJIE	3,122,127	STOIN, URI	2,947,818
ROSENGREN, GARY W.	2,997,770	SHEN, YIFENG	3,108,836	STOLTEN, ELIZABETH MARY, AS TRUSTEE OF AND TO THE ISAIAH 54 TRUST	2,821,883
ROSKOS, LORIN	2,917,603	SHERRETT, JASON L.	3,046,653	STOLTEN, MARK RANDALL	2,821,883
ROSSI, CLAUDIO	3,104,614	SHI, ZHIDAN	3,094,771	STOLTEN, MARK RANDALL, AS TRUSTEE OF AND TO THE ISAIAH 54 TRUST	2,821,883
ROSTRON, JOSEPH R.	3,039,786	SHIN, JAE YEN	3,168,685	STORA ENSO OYJ	3,001,090
ROXTEC AB	2,984,871	SHINZATO, YOSHIFUMI	2,958,132	STRICKMANN, DIRK	2,935,415
ROYTEK, CORRIE S.	3,046,653	SHORT, RICHARD	2,919,894	STURM, JULIA	3,013,513
RSM IMAGINEERING AS	3,067,919	SHULZ, ROBERT	2,997,770	SUKHAVASI, RAVI TEJA	2,924,536
RUSSELL, DUNCAN	3,088,706	SHUTKO, ALAN T.	2,787,655	SUMITOMO CHEMICAL COMPANY, LIMITED	2,996,680
RUSU, AI	2,996,680	SICHUAN BOWA ENGINEERING MATERIAL CO., LTD.	2,971,354	SUN, JIN	3,079,243
RYAN, WILLIAM G.	2,799,613	SIIKA-AHO, MATTI	2,994,320	SURIYAARACHCHI, RAVIENDRA S.	3,053,465
SAARINEN, JARNO	3,086,949	SIMONOV, NIKITA IGOREVICH	2,967,564	SUZHOU MICROVIEW MEDICAL TECHNOLOGIES CO., LTD.	3,079,243
SAENZ GOMEZ, JESSICA	2,993,472	SIMS, COLIN	2,907,172	SUZUKI, YUSUKE	3,148,220
SAEPLAST ICELAND EHF.	3,022,785	SINUR, RICHARD R.	2,950,887	SVENSSON, LEIF	2,967,112
SAFE MEDICAL TECHNOLOGY, INC.	3,158,311	SIRIA, ALESSANDRO	2,997,169	SWAIN, PHILIP B.	3,046,653
SAFRAN AIRCRAFT ENGINES	2,958,025	SITNICK, LEONARD A.	3,109,721	SWAN, HERBERT	2,989,619
SAH, DINAH WEN-YEE	2,967,367	SKOLER, FREDERICK W.	2,936,121	SWEETCH ENERGY	2,997,169
SAINT-GOBAIN ABRASIFS	3,078,474	SKUDAS, ROMAS	2,970,732	SWETE, WOLFGANG	2,950,351
SAINT-GOBAIN ABRASIVES, INC.	3,078,474	SLATER, MICHAEL LEIGH	2,944,525	SWIFTLINK TECHNOLOGIES INC.	3,101,444
SAMET KALIP VE MADEN ESYA SAN. VE TIC A.S.	2,982,156	SMITH & NEPHEW PLC	2,971,796	SWORDS, KATHLEEN	2,976,866
SAMPSON, KEVIN	2,924,227	SMITH & NEPHEW, INC.	2,821,681	SWORDS, KATHLEEN	2,977,191
SAMSUNG ELECTRONICS CO., LTD.	2,964,447	SMITH, C. DANIEL	3,068,009	TADIELLO, JEAN-PHILIPPE	2,992,626
SAMUNI, ERAN	3,066,206	SMITH, ELIZABETH JANE	2,973,624	TAILLEMITE, SEBASTIEN	2,969,071
SANCHEZ GARCIA, SERGIO	2,954,776	SMITH, JUDD MICHAEL	3,068,009	TAILLEMITE, SEBASTIEN	2,971,550
SANI-MARC INC.	2,945,834	SMITH, MALCOLM R.	2,955,454	TANAKA, MASAKAZU	2,947,404
SANJIV, KUMAR	2,950,780	SMITH, MIRIAM	2,919,894	TARNOVSKII, ANDREI VALERIEVICH	3,064,198
SARAVANAN, R. SANJEEV	2,833,176	SMITH, PATRICK	2,965,513	TECHNOLOGIES AVANCEES ET MEMBRANES INDUSTRIELLES	2,957,159
SAREYKA, BRETT WAYNE	2,946,753	SMITH, TADD NICHOLAS	3,068,009		
SASAKI, SHUNSUKE	3,118,704	SNYDER, MATTHEW	2,975,543		
SASSON, YOEL	2,947,818	SNYDER, SCOTT	3,104,161		
SATO, MASAHARU	2,947,404	SOCIETE DE COMMERCIALISATION DES PRODUITS DE LA RECHERCHE APPLIQUEE			
SAVILL, ROBERT F., JR.	3,003,707	SOCRA SCIENCES ET GENIE S.E.C.	2,974,844		
SAVUOJA, JANI	2,958,619	SODELAND, MARTE	2,951,500		
SAYRES, JUSTIN	3,084,892	SOKOLOFF, BRUNO	3,004,616		
SCHAPER, ULF	3,083,180				

## Index of Canadian Patents Issued May 16, 2023

TECTUM HOLDINGS, INC.	3,100,473	THORPE, DARRELL T.	2,977,191	VERTEX PHARMACEUTICALS	
TEICHMANN, DANIEL	2,967,879	TILLOTSON, BRIAN J.	2,997,719	INCORPORATED	2,950,780
TELEFONAKTIEBOLAGET LM		TIME WARNER CABLE		VETERE, LOUIS, II	3,024,229
ERICSSON (PUBL)	3,091,559	ENTERPRISES LLC	3,041,380	VIAU, JOEL	2,974,844
TERAUCHI, TOMOKO	3,078,218	TITOV, ILYA YURIEVICH	3,021,306	VIKARI, LIISA	2,994,320
TERFLOTH, CHRISTIAN	2,963,165	TODA, NARIHIRO	3,078,218	VILLARAN VELASCO,	
TERRASI, GIUSEPPE	2,979,796	TOLOMATIC, INC.	2,997,770	MARIA, CARMEN	2,993,472
TEYEB, OUMER	3,091,559	TOMKINS, NIGEL WILLIAM	2,937,580	VINYLAST, INC.	3,083,903
TGS-NOPEC GEOPHYSICAL		TOPSOE A/S	3,044,874	VIRGINIA COMMONWEALTH	
COMPANY	2,948,862	TORAY INDUSTRIES, INC.	2,979,326	UNIVERSITY	3,151,433
THALES	2,926,132	TORAY INDUSTRIES, INC.	2,980,461	VISCO, ANTHONY G.	2,944,714
THALES	2,954,313	TORNGREN, MARIE	2,967,112	VISEN MEDICAL, INC.	2,901,379
THALES DIS CPL USA, INC.	2,979,557	TORRIANI, LAURENT	2,950,457	VOHR, SAMUEL	2,952,620
THANGAMANI, ARUNVEL	3,078,474	TRANSFORM SR BRANDS,		VOUTILAINEN, SANNI	2,994,320
THE BOEING COMPANY	2,991,997	LLC	2,936,121	VOYAGER THERAPEUTICS,	
THE BOEING COMPANY	2,997,719	TRIGINER BOIXEDA, JORGE	3,033,783	INC.	2,967,367
THE BOEING COMPANY	2,999,309	TROMBIA TECHNOLOGIES		VULPETTI, MATTHEW	2,955,079
THE BOEING COMPANY	3,020,872	OY	2,916,802	WAGNER, D. RY	2,976,866
THE BOEING COMPANY	3,027,642	TRUONG, ANH	2,921,294	WAGNER, D. RY	2,977,191
THE BOEING COMPANY	3,029,964	TSURUME, YOSHINOBU	3,112,497	WAI NG, KEVIN KA	2,955,454
THE BOEING COMPANY	3,036,473	TSX INC.	2,924,227	WAKATABE, MICHIO	2,980,461
THE BOEING COMPANY	3,053,465	TTS TOOLTECHNIC SYSTEMS		WALLIS, LAURA	2,968,301
THE BOEING COMPANY	3,105,870	AG & CO. KG	2,988,701	WANENE, WILSON KAMAU	2,953,403
THE CLEVELAND CLINIC		TURNQUIST, NORMAN		WANG, BING	2,917,603
FOUNDATION	3,076,232	ARNOLD	2,968,360	WANG, GUANGYI	2,921,294
THE PROCTER & GAMBLE		TYPHON TECHNOLOGY		WANG, HUA	3,101,444
COMPANY	2,988,492	SOLUTIONS, LLC	3,068,067	WANG, JINGHONG	3,109,204
THE PROCTER & GAMBLE		UAB RESEARCH		WANG, QIANG	3,079,243
COMPANY	3,076,232	FOUNDATION	2,954,475	WANG, WEIMIN	3,032,165
THE REGENTS OF THE		UACJ CORPORATION	2,958,132	WANG, ZHENCHANG	3,159,995
UNIVERSITY OF		UCHIDA, HIROAKI	3,078,218	WARD, CHRISTINE	2,917,603
CALIFORNIA	2,952,620	UCHINO, YOUSUKE	3,148,220	WARREN, WILL	2,921,285
THE TRUSTEES FOR THE		UDAGAWA, SHUJI	2,979,326	WASSERSCHIED, PETER	2,967,879
TIME BEING OF THE		UESUGI, TETSUO	3,080,790	WATANABE, ATSUSHI	2,996,680
KMN FULFILMENT		UMIT, KIRENCI	2,982,156	WATERWORTH, TOM	2,993,587
TRUST	3,115,962	UNILEVER GLOBAL IP		WATSON, CRAIG M.	3,178,862
THE TRUSTEES OF THE		LIMITED	2,973,624	WEI, YONGBIN	2,924,536
UNIVERSITY OF		UNIVERSIDAD NACIONAL DE		WELLNITZ, BRIAN R.	2,950,887
PENNSYLVANIA	3,159,060	CUYO	3,083,505	WESSEL, STEFAN	2,991,772
THE UNITED STATES OF		UNIVERSITAT ZU KOLN	2,925,293	WEYMOUTH-WILSON,	
AMERICA, AS		UOP LLC	3,085,947	ALEXANDER	2,968,301
REPRESENTED BY THE		UPFIELD EUROPE B.V.	3,004,505	WHITE, JAMES	3,086,681
SECRETARY,		UYTTERSROT, JAN-		WICHA, WOLFGANG	2,935,415
DEPARTMENT OF		SEBASTIAAN	2,988,492	WIESEGGER, LUKAS	3,035,614
HEALTH AND HUMAN		VADERA, KSHITIZ	2,955,454	WIETH, FRANZ	3,089,798
SERVICES	2,972,038	VAKILI, MOHAMMAD		WILCOX, GARY S.	2,787,655
THE UNITED STATES OF		BAGHER	2,892,412	WILKINSON, TIMOTHY J.	3,122,838
AMERICA, AS		VALIN, MYRIAM	2,974,850	WILLIS, GREGORY LYNN	2,837,823
REPRESENTED BY THE		VALO, TUULA	2,974,167	WILSON, JAMES M.	3,159,060
SECRETARY,		VAN DE VELDE, ROGIER	3,105,006	WILSON, JENNIFER LYN	3,007,274
DEPARTMENT OF		VAN DER MEI, HENNY C.	2,991,772	WINTEC KOREA INC.	3,088,910
HEALTH AND HUMAN		VANDENBROECK, JAN	2,983,348	WISNIEWSKI, NATALIE ANN	3,012,355
SERVICES	2,977,493	VANDENBROECK, JAN	2,994,031	WM. WRIGLEY JR. COMPANY	2,991,772
THE, ROGIER ANTOINE		VANDEZANDE, GERALD	2,906,986	WOBBEN PROPERTIES GMBH	3,083,180
FLORIS	3,004,505	VAPOLA, RISTO	3,105,006	WOFFORD, JEFF	2,965,513
THIRRING, KLAUS	2,935,415	VARIN, MARIE LAURENCE		WOLLE, LUTZ	2,988,701
THOMPSON, DAVID	2,934,580	CLAIRE	2,971,110	WON, JONG WHA	3,077,009
THOMPSON, GREGG	3,104,161	VEHMAANPERA, JARI	2,994,320	WOODWARD, BRADLEY D.	3,072,916
THOMPSON, ZACHARY R.	3,104,161	VELASCO VALCKE,		WOODWELDING AG	2,950,457
THOMSON, JAMES		FRANCISCO JAVIER	2,981,226	WORKS, JOSEPH W.	3,093,949
CRAWFORD	2,971,898	VENTANA MEDICAL		WORTHINGTON	
THOFT, SERGE OMER		SYSTEMS, INC.	2,965,431	ARMSTRONG VENTURE	2,946,753
ALFONS JEAN	2,988,492	VERSALIS S.P.A.	2,956,367	WOS, JOHN AUGUST	3,076,232
THOROGOOD, PAUL	2,909,122			WU, CHEN MING	3,107,116

**Index des brevets canadiens délivrés  
16 mai 2023**

WU, I-LIN	2,977,493	ZHOU, YANYAN	2,971,354
WU, JEFF	2,893,329	ZHU, CHUNXIA	3,094,771
WU, YIJIN	3,049,457	ZIRNGAST, MICHAELA	2,976,608
XING, WEIMIN	3,097,606	ZTE CORPORATION	3,097,606
XIONG, LINHONGJIA	3,168,685		
XU, CHANG	2,965,431		
XU, CHONGJUN	3,122,127		
XU, HAO	2,924,536		
XU, HEQIN	2,975,543		
XU, JUNQIANG	3,122,127		
XU, ZHANPING	3,085,947		
YALE UNIVERSITY	2,877,286		
YALVAC, SELIM	2,980,728		
YAMADA, MANABU	3,060,457		
YAN, HAIPENG	2,955,454		
YAN, MENGJIAO	3,094,771		
YANG, DONGGE	3,036,913		
YANG, JIN	3,097,606		
YANG, MENG	3,072,186		
YANG, SIMING	3,035,900		
YANG, YANG	3,036,913		
YANG, YAPING	3,036,913		
YANG, YONGQING	3,094,771		
YANKOPOLUS, NICHOLAS K.	2,799,613		
YASUDA, MASAFUMI	3,086,011		
YERRAMALLI, SRINIVAS	2,924,536		
YERRAMILI, MAHALAKSHNI	3,155,662		
YERRAMILI, MURTHY V. S. N.	3,155,662		
YI, WEIHONG	3,048,265		
YIN, BEI	3,013,184		
YIN, HONGXIA	3,159,995		
YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREW UNIVERSITY OF JERUSALEM LTD.	2,947,818		
YOON, SUNG-YONG H.	2,976,866		
YOON, SUNG-YONG H.	2,977,191		
YOON, YOUN JUNG	3,108,856		
YOUNG, KENNETH	3,027,642		
YUGA, MASAO	3,118,704		
ZAIMI, SAMI-ALEX	3,114,682		
ZAK, ALEXANDER	3,066,206		
ZAMORA, PABLO	3,140,835		
ZHANG, BO	3,108,836		
ZHANG, HONGJUAN	3,036,913		
ZHANG, TINGTING	3,159,995		
ZHANG, WENWEI	3,122,127		
ZHANG, XIAOHUI	3,035,900		
ZHANG, YI	2,993,259		
ZHANG, YICHI	2,980,728		
ZHANG, YING	3,094,771		
ZHANG, YUQIAN	3,108,836		
ZHAO, ERWEI	3,159,995		
ZHAO, LILI	3,094,771		
ZHAO, PENGFEI	3,159,995		
ZHAO, ZHONGYING	3,109,204		
ZHENG, HONGHE	3,035,900		
ZHENG, WEI	3,159,995		
ZHENG, XUEYING	3,035,900		
ZHONG, YANG	3,049,457		
ZHOU, PENGCHENG	2,967,367		

# Index of Canadian Applications Open to Public Inspection

April 30, 2023 to May 6, 2023

## Index des demandes canadiennes mises à la disponibilité du public

30 avril 2023 au 6 mai 2023

10353744 CANADA LTD.	3,180,833	BRANSTETTER, LEE	3,137,402	EVITE, INC.	3,180,859
9155-0020 QUEBEC INC.	3,176,278	BROWN, DOUGLAS		EXXONMOBIL UPSTREAM	
ABB SCHWEIZ AG	3,137,834	GEOFFREY	3,137,330	RESEARCH COMPANY	3,173,741
ABEL, KEITH A.	3,184,361	BROWN, JUSTIN MICHAEL	3,181,434	FANG, BIAO	3,179,871
ABENAIM, JONATHAN	3,180,204	BTL HEALTHCARE		FARIS, EUGENE WILLIAM	
ACCENTURE GLOBAL		TECHNOLOGIES A.S.	3,178,145	MICHAEL	3,180,388
SOLUTIONS LIMITED	3,181,446	BURHENN, MARCEL	3,175,781	FARRELL, ROD	3,166,036
ACCENTURE GLOBAL		CAPITAL ONE SERVICES, LLC	3,181,404	FDK CORPORATION	3,172,502
SOLUTIONS LIMITED	3,184,654	CAPITAL ONE SERVICES, LLC	3,182,692	FDK CORPORATION	3,180,744
AGBANI, EJAIFE O.	3,137,826	CARL ZEISS X-RAY		FDK CORPORATION	3,180,747
AKALANNE, LUCIUS	3,170,441	MICROSCOPY, INC.	3,180,901	FETTE, BRIAN	3,179,685
ALLRED III, PHILIP		CARL ZEISS X-RAY		FILSTEIN, ALEX	3,181,211
MORRISON	3,181,140	MICROSCOPY, INC.	3,180,919	FISKARS FINLAND OY AB	3,180,077
AMETEK, INC.	3,170,441	CARL ZEISS X-RAY		FISKARS FINLAND OY AB	3,180,082
AMPLE CONSTRUCTION LTD.	3,179,511	MICROSCOPY, INC.	3,180,933	FITECH SP. Z O.O.	3,181,224
ANDREW, MATTHEW	3,180,901	CATERPILLAR INC.	3,180,059	FLEMING, TAMMY	3,137,402
ANDREW, MATTHEW	3,180,919	CATTRON NORTH AMERICA,		FLUCKIGER, MIKE	3,181,447
ANDREW, MATTHEW	3,180,933	INC.	3,179,685	FRANCOIS, TIM HENRI ANN	3,179,490
ARAI, YUKI	3,137,477	CEBULA, SCOTT	3,184,361	FRANZ, FREDERIK	3,175,781
ARCONIC TECHNOLOGIES		CEROICI, CHRISTOPHER	3,137,612	FRY, WILLIAM	3,166,036
LLC	3,156,338	CHAMPAGNE, OLIVIER	3,180,766	GAGNE, REMI	3,180,081
ARIANEGROUP GMBH	3,180,072	CHEN, ALLEN Y.	3,180,059	GAO, HAORUI	3,169,575
ARIANEGROUP GMBH	3,180,260	CHEN, LIN	3,162,776	GARCIA, FRANZ	3,181,291
ARMSTRONG, TAD	3,179,069	CHEN, ZHENHUI	3,180,118	GARCIA, MARCO	3,178,987
AYOTTE-NADEAU, PIERRE-		CHIRICO, DANIELE	3,179,273	GENERAL ELECTRIC	
LUC	3,180,364	CLIMOV, VLADIMIR	3,181,230	COMPANY	3,179,871
BACON, PETER WILLIAM	3,174,042	CLOUDOPS INC.	3,181,291	GERMANS BOADA, S.A.	3,140,823
BACON, PETER WILLIAM	3,174,052	COCHRAN, ROBERT	3,155,378	GERVAIS, DARREN	3,138,129
BADAN, CHRISTOPHE	3,180,081	COCHRAN, ROBERT	3,179,210	GIESE, TIMOTHY J.	3,180,932
BAILEY, BRETT	3,137,402	COMMISSARIAT A L'ENERGIE		GILL, SANDEEP	3,137,800
BAILEY, RONALD TIMOTHY,		ATOMIQUE ET AUX		GODARD-TREMBLY, SIMON	3,181,291
JR	3,179,685	ENERGIES		GOODRICH ACTUATION	
BALANTZIAN, MARK G.	3,138,728	ALTERNATIVES	3,181,232	SYSTEMS LIMITED	3,174,042
BARBULESCU, ION-HORATIU	3,156,338	COMTEST NETWORKS INC.	3,166,036	GOODRICH ACTUATION	
BARNHOUSE, JAMES A., JR	3,179,491	CONOCOPHILLIPS COMPANY	3,181,211	SYSTEMS LIMITED	3,174,052
BARROS, DEVIN	3,155,378	COOK, CHARLES J.	3,184,361	GOODRICH ACTUATION	
BARROS, DEVIN	3,179,210	COPELAND, SHANNON L.	3,181,446	SYSTEMS LIMITED	3,180,097
BEAUCHESNE-MARTEL,		COPELAND, SHANNON L.	3,184,654	GOODSITT, JEREMY	3,182,692
PHILIPPE	3,180,306	CRAMPAIN, JEFF	3,137,402	GOULD, DEFOREST C.	3,180,059
BEDARD, MAGELLA	3,180,766	CUNNINGHAM, MARK	3,180,306	GRIFFITHS, MICHAEL	3,180,627
BELDEN-PREZIO,		CURLE, JASON RALPH		GROSS, CLIFFORD	3,180,624
ALEXANDER	3,137,201	GORDON	3,179,490	GROSSARD, MATHIEU	3,181,232
BELLEZA, TED	3,181,140	DARBY, JONATHAN	3,180,097	GROUP DEKKO, INC.	3,178,725
BENAROUS, MAAMAR	3,174,052	DASER, KEITH	3,137,402	GROUP DEKKO, INC.	3,178,728
BHARWANI, KIRAN KUMAR		DECKER, KENDAL K.	3,173,741	GROUPE SINOX INC.	3,180,081
RAM	3,165,126	DELAY, SHAWN	3,166,036	GRZADZIEL, MICHAL	3,181,224
BLACKBERRY LIMITED	3,173,573	DEUGO, SHAWN	3,181,034	GUO, WENPING	3,180,833
BLOOM ENERGY		DRAKE, EVAN	3,180,933	GUZMAN, MIGUEL	3,137,180
CORPORATION	3,179,069	DUBE, PATRICK	3,181,291	HALL, LEE J.	3,173,741
BOREK, PAWEL	3,181,224	DZEBA, GORDAN	3,181,447	HAMADA, MAIKO	3,137,477
BOURGAULT INDUSTRIES		ECOAIR LLC	3,140,547	HANSEN, DONALD S.	3,180,932
LTD.	3,155,378	EDEN, GRANT	3,182,692	HARDER, MATT	3,155,378
BOURGAULT INDUSTRIES		EGGERT, DANIEL M.	3,179,689	HARDER, MATT	3,179,210
LTD.	3,179,210	EMBER FUND, INC.	3,180,859	HARDY, BOB	3,137,402
BOUTHLETTE, ETIENNE	3,176,278	EVELEIGH, CEDRIC	3,137,182	HARDY, JOEANNE	3,137,402

**Index des demandes canadiennes mises à la disponibilité du public  
30 avril 2023 au 6 mai 2023**

HARI, ROBBIE SINGH	3,181,034	LE PAPE, DAMIEN	3,180,306	OSBORN, KEVIN	3,181,404
HE, RUOXU	3,169,575	LED SMART INC.	3,137,589	OSTENDORF, WARD WILLIAM	3,180,938
HODEN, BRIAN	3,170,441	LESSER, BRAM MITCHELL	3,137,821	OSTENDORF, WARD WILLIAM	3,180,990
HOPPER, CHRISTOPHER	3,179,268	LI, XIAOPENG	3,179,871	OSTENDORF, WARD WILLIAM	3,180,998
HOPPER, CHRISTOPHER	3,179,273	LI, XIAORONG	3,180,118	OSTENDORF, WARD WILLIAM	3,180,998
HUBCZAK, MARIUSZ	3,181,224	LIN, FA-HSUAN	3,153,025	OSTENDORF, WARD WILLIAM	3,180,998
HUBNER GMBH & CO. KG	3,175,781	LINTON, JOSHUA	3,179,268	OSTENDORF, WARD WILLIAM	3,181,019
HUBSCH, DANIEL	3,175,781	LINTON, JOSHUA	3,179,273	OSTENDORF, WARD WILLIAM	3,181,031
HUDON, SEBASTIEN	3,180,606	LIONETTI, ROBERT EDWARD	3,180,929	OSTENDORF, WARD WILLIAM	3,181,036
HYDRO-QUEBEC	3,152,895	LITALIEN, STEFAN	3,181,034	OTSUKI, KAZUFUMI	3,137,477
IKEGAYA, YUJI	3,180,824	LIU, HUANHUAN	3,169,575	PALOMA CO., LTD.	3,179,592
IKEGAYA, YUJI	3,180,832	LIU, TUANFANG	3,157,005	PHELPS, WILLIAM	3,179,930
ILLINOIS TOOL WORKS INC.	3,179,268	LIU, TUANFANG	3,158,228	PLAECZNY, PAWEL	3,181,224
ILLINOIS TOOL WORKS INC.	3,179,273	LIU, TUANGFANG	3,158,226	PLANETA, MIREK	3,181,230
IMPERIAL OIL RESOURCES LIMITED	3,184,361	LOCKWOOD, RYAN	3,137,402	PLANTE, MARTIN	3,180,766
IPATENKO, ALEK	3,140,823	LONGCHAMP-AUBE, ANTOINE	3,180,081	POLARIS INDUSTRIES INC.	3,180,932
IRVING LICENSING INC.	3,180,895	LUCYD LTD.	3,180,624	POREBSKI, LUKASZ	3,181,224
ISKRA, OLEG	3,180,306	MACKENZIE, JAMIE	3,137,402	PRATT & WHITNEY CANADA CORP.	3,180,306
ISSELHORST, ARMIN	3,180,072	MANITT, CHRISTOPHER	3,137,821	PRESNELL, SHARON COLLINS	3,181,140
ISSELHORST, DR. ARMIN	3,180,260	MANN, ALEX	3,181,230	PRICE, DAVID	3,179,666
IVAKITCH, RICHARD	3,180,306	MARCHAND, PATRICK	3,180,364	PRIZANT, JASON ARTHUR	3,137,821
J.C. BAMFORD EXCAVATORS LIMITED	3,179,666	MAROCCO, MARIO	3,181,410	PROVENCHER, GUILLAUME	3,180,766
JACKSON, PETER DOUGLAS	3,181,434	MAROCCO, STEVEN	3,181,410	PULSEMEDICA CORP.	3,137,612
JAHN, ANDREAS	3,181,435	MAROMATY, ALEXANDER	3,179,135	PYCLIK, KRZYSTOF	3,181,224
JAHN, ANDREAS	3,181,444	MAROTTA, NICK	3,180,968	RAILSBACK, JUSTIN	3,179,069
JEFFERY, RYAN	3,137,402	MARTIN, PHILIPPE MATHIEU	3,180,895	REHRIG PACIFIC COMPANY	3,181,434
JELINKOVA, LUCIA	3,178,145	MARTIN, ROBERT LEE, JR	3,181,434	RICHARDS, BRYN	3,137,402
JHA, RAHUL	3,184,361	MARTIN, ROBERT LEE, JR	3,181,434	RIESS, WILLIAM	3,180,480
JIANG, FANHUI	3,169,575	MAXXMAR INC.	3,181,410	RIIKONEN, JOUNI	3,180,082
JOLIVETTE, WILBERT L.	3,180,603	MEEHAN, SHANE	3,137,861	RINER, RAYMOND H.	3,178,725
JONES, JASON JOHN	3,140,547	MELNECHENKO, KEVIN	3,137,630	RINER, RAYMOND H.	3,178,728
JOVENALL, JEREMY	3,179,685	MEYER, PASCAL	3,179,871	RIVIAN IP HOLDINGS, LLC	3,165,126
KABRICH, TODD R.	3,179,491	MIETTE, PHILIPPE	3,180,089	ROBBINS, CLAIRE	3,137,821
KADOKO, JONAH	3,137,834	MIGNOT, LAURANT JOSE MARIE BERNARD	3,181,019	ROMANENS, ALEXANDRE	3,180,364
KATCHINSKIY, NIR	3,137,612	MIGNOT, LAURANT JOSE MARIE BERNARD	3,181,031	RUPERT, BRIAN K.	3,178,725
KATSUBE, YASUYUKI	3,180,747	MIGNOT, LAURANT JOSE MARIE BERNARD	3,181,036	RUPERT, BRIAN K.	3,178,728
KELLY, MICHAEL JOHN	3,180,625	MIGNOT, LAURENT JOSE MARIE BERNARD	3,180,938	SADA, ALEJANDRO BREMER	3,137,821
KEMPPI, MIKKO	3,180,077	MIGNOT, LAURENT JOSE MARIE BERNARD	3,180,990	SAGEN, JODY	3,137,402
KEMPPI, MIKKO	3,180,082	MIGNOT, LAURENT JOSE MARIE BERNARD	3,180,998	SAIGHI, AHMED	3,180,081
KENNY, CHRISTOPHER JAMES	3,179,871	MIRZAEI, ARASH	3,137,442	SALOMON S.A.S.	3,180,089
KFOURY, FARES	3,181,232	MISTRZYK, PIOTR	3,181,224	SANI-MARC INC.	3,180,364
KIEN, KATHRYN CHRISTIAN	3,180,938	MITSUBISHI TANABE PHARMA CORPORATION	3,137,477	SAPONJA, JEFFREY CHARLES	3,181,034
KIEN, KATHRYN CHRISTIAN	3,180,990	MOCHIZUKI, SHUN	3,172,502	SARMIENTO, MIGUEL ANGEL	3,140,823
KIEN, KATHRYN CHRISTIAN	3,180,998	MOCHIZUKI, SHUN	3,180,747	SAUVAGEAU, YVES	3,180,766
KIEN, KATHRYN CHRISTIAN	3,181,019	MODERN CLEANING CONCEPT L.P.	3,137,821	SCHWARZ, TOMAS	3,178,145
KIEN, KATHRYN CHRISTIAN	3,181,031	MONTZ, STEPHEN	3,156,338	SHAN, XINXIN	3,137,589
KIEN, KATHRYN CHRISTIAN	3,181,036	NAILOOR INDUSTRIES OF TEXAS, INC.	3,180,388	SHEEHAN, JEFFREY GLEN	3,180,938
KIM, ERIC	3,180,594	NIEN MADE ENTERPRISE CO., LTD.	3,162,776	SHEEHAN, JEFFREY GLEN	3,180,990
KIM, JOO-HAN	3,170,441	NISBET, PETER JOHN	3,179,490	SHEEHAN, JEFFREY GLEN	3,181,019
KITAMURA, KENJI	3,180,747	OILIFY NEW-TECH SOLUTIONS INC.	3,181,034	SHEEHAN, JEFFREY GLEN	3,181,031
KLASSEN, BYRON	3,137,402	OLIVER CRISPIN ROBOTICS LIMITED	3,179,490	SHEEHAN, JEFFREY GLEN	3,181,036
KLEINFELLER, EMIL GYULA	3,180,898	OSAKA UNIVERSITY	3,137,477	SHENZHEN EIGATE TECHNOLOGY CO., LTD.	3,157,005
KONOPKA, DR.-ING. MARTIN	3,180,260			SHITAMA, HIROAKI	3,137,477
KONOPKA, MARTIN	3,180,072			SHULTZ, DONALD A.	3,180,937
KOROLUK, DEVON C.	3,184,361			SINGULAR SOLUTIONS INC.	3,181,230
KUBIK, VOJTECH	3,178,145			SMITH, DAVID	3,180,594
KUNNAS, KARI	3,180,082				
LANDRY, GABRIEL	3,180,766				
LATIMER, CRAIG	3,180,594				
LATORRE, MATTHEW S.	3,180,480				
LAZARO, MARIO CERDAN	3,180,859				

**Index of Canadian Applications Open to Public Inspection  
April 30, 2023 to May 6, 2023**

SMITH, DUNCAN ANDREW	3,179,666	UTTAMCHANDANI, RAJIV	3,137,821
SMITH, PAUL	3,174,042	VAILLANCOURT, MARC	3,181,291
SNAP-ON INCORPORATED	3,179,689	VAN FAROWE, JASON L.	3,180,059
SNOKE, PHILLIP JACK	3,181,140	WADA, HIROKO	3,137,477
SOARES, MATHIEU	3,152,895	WALTERS, AUSTIN	3,182,692
SOUCY INTERNATIONAL INC.	3,180,766	WALTERS, DEAN W.	3,180,059
SOUTHWIRE COMPANY, LLC	3,180,603	WANG, ALEX	3,180,859
SPM OIL & GAS INC.	3,179,491	WANG, ENLIANG	3,173,573
STEINBERG, AVI	3,137,821	WANG, GUANGBANG	3,180,833
STERICYCLE, INC.	3,180,480	WAYMO LLC	3,180,594
STEWART, IAN THOMAS	3,179,926	WBM TECHNOLOGIES INC.	3,137,402
STOJKOVIC, DRAGAN	3,173,741	WEL, JUNPENG	3,180,118
STORIZ, PAUL	3,179,268	WENDT, CHRISTIAN	3,180,072
STORIZ, PAUL	3,179,273	WENDT, DR. CHRISTIAN	3,180,260
STRETCH, CARL	3,181,034	WESTROCK SHARED	
SUN, QIAN	3,180,833	SERVICES, LLC	3,180,937
SUNNYBROOK RESEARCH		WIGEMYR, DWIGHT	3,179,511
INSTITUTE	3,153,025	WOLFE, DANIEL ERIC	3,137,821
SUTER		WOO, JASON	3,180,859
ENTFEUCHTUNGSTECHN		WOOTEN, RYAN	3,179,685
IK AG	3,181,447	WURMFELD, DAVID KELLY	3,181,404
SWINWOOD-SKY, KALE	3,137,201	WUXI HI-TEC	
SYPHON QUANTUM ENERGY		ENVIRONMENTAL	
INC.	3,137,180	MATERIAL CO., LTD	3,169,575
SZEWCZYK, DOMINIK	3,181,224	XIONG, YEZHI	3,169,575
TAKAKURA, NOBUYUKI	3,137,477	YAMAHA HATSUDOKI	
TAKEUCHI, MAKOTO	3,179,592	KABUSHIKI KAISHA	3,180,824
TAMAKI, KATSUHIKO	3,180,744	YAMAHA HATSUDOKI	
TARAS, ANDRE ROMAN	3,152,895	KABUSHIKI KAISHA	3,180,832
TAYLOR, MARK	3,137,176	YAMAKOSHI, SHUHEI	3,137,477
TAYLOR, MATTHEW S.	3,180,932	YAN, GUORONG	3,180,306
TAYLOR, R. JAY	3,140,547	YANG, FAZHENG	3,180,118
TESSIER, MATTHEW	3,166,036	YANG, LIANGJIONG	3,169,575
THE GOODYEAR TIRE &		YANG, SHUAI	3,180,833
RUBBER COMPANY	3,180,929	YAZDI ZEHTAB, ALIREZA	3,184,361
THE PROCTER & GAMBLE		YEOM, DAVID	3,180,859
COMPANY	3,180,938	YIN, ZHENXING	3,180,118
THE PROCTER & GAMBLE		YOUNG, NIGEL	3,179,666
COMPANY	3,180,990	ZENG, JIA	3,169,575
THE PROCTER & GAMBLE		ZHANG, YI	3,180,833
COMPANY	3,180,998	ZHU, MIN	3,169,575
THE PROCTER & GAMBLE		ZORN, CINDY	3,137,176
COMPANY	3,181,019	ZS2 TECHNOLOGIES LTD.	3,137,330
THE PROCTER & GAMBLE			
COMPANY	3,181,031		
THE PROCTER & GAMBLE			
COMPANY	3,181,036		
THE TORONTO-DOMINION			
BANK	3,180,968		
THOMPSON, CHRISTOPHER			
D.	3,179,689		
THYER, DANIEL JAMES	3,181,434		
TODORIC, SAVO	3,166,036		
TORCHE, GUILLAUME	3,180,859		
TRANSPORTATION IP			
HOLDINGS, LLC	3,179,135		
TRUONG, ANH	3,182,692		
TRZNADEL, MIROSLAW	3,181,224		
TSIOGKAS, DIONYSIOS	3,179,268		
TSIOGKAS, DIONYSIOS	3,179,273		
U-HAUL INTERNATIONAL,			
INC.	3,178,987		
URO-1, INC.	3,181,140		
UTI LIMITED PARTNERSHIP	3,137,826		

# Index of PCT Applications Entering the National Phase

## Index des demandes PCT entrant en phase nationale

11887041 CANADA LTD.	3,193,968	ALBERT, DR. SAMUEL	3,194,091	ASKANASE, ANCA	3,197,055
1ST BIOTHERAPEUTICS, INC.	3,193,865	ALBIN, BROOKE	3,193,655	ASMUS, JOSEPH	3,193,758
2 V INDUSTRIES, INC.	3,196,586	ALCON INC.	3,193,974	ASSA ABLOY AB	3,194,079
23ANDME, INC.	3,194,288	ALCON INC.	3,193,981	ASTAFYEVA, KSENIA	3,197,314
6K INC.	3,193,640	ALCON INC.	3,194,258	ASTRAZENECA AB	3,197,055
AALTO UNIVERSITY		ALI, SHARIB	3,194,146	ASTRAZENECA AB	3,197,056
FOUNDATION SR	3,197,264	ALIGOS THERAPEUTICS, INC.	3,197,470	ASTRAZENECA AB	3,197,479
AASBERG-PETERSEN, KIM	3,193,912	ALLEN, ROBERT GLEN	3,193,970	ATKINS, MARTIN	3,193,807
ABB SCHWEIZ AG	3,193,864	ALNYLAM		ATKINS, MARTIN	3,193,815
ABB SCHWEIZ AG	3,194,059	PHARMACEUTICALS,		ATLAS COPCO AIRPOWER,	
ABDALLAH, SLEIMAN	3,193,538	INC.	3,193,830	N.V.	3,193,653
ABEHASERA, BENYAMIN	3,151,027	ALOVERT, IGOR	3,194,267	ATOBE, MASAKAZU	3,194,164
ABELA, ALEXANDER		ALTENDORFER, BERNARD	3,193,750	ATOMIC ENERGY OF	
RUSSELL	3,197,173	ALVEREZ, CELESTE N.	3,193,855	CANADA LIMITED /	
ABIOMED EUROPE GMBH	3,193,572	AMERICAN STERLIZER		ENERGIE ATOMIQUE DU	
ABIONYX PHARMA SA	3,197,168	COMPANY	3,193,949	CANADA LIMITEE	3,193,984
ABRAHAM, SUNNY	3,197,173	AMGEN INC.	3,196,920	AUBURN UNIVERSITY	3,194,270
ABREU, GABRIEL	3,197,055	AMGEN INC.	3,197,047	AUDACY OPERATIONS, INC.	3,193,587
ABRINO, DONALD	3,197,416	AMIN, NIKHIL	3,194,111	AUDACY OPERATIONS, INC.	3,193,633
ABUJAROUR, RAMZEY	3,193,977	AMPACET CORPORATION	3,193,786	AUSTIN, CHRISTINE	3,194,166
ABUKHDEIR, NASSER		AN, CHAO	3,196,383	AUSTRHEIM, TROND	3,194,121
MOHIEDDIN	3,193,852	ANALYTICS FOR LIFE INC.	3,193,680	AUTOSTORE TECHNOLOGY	
ABUNDIA BIOMASS-TO-		ANDERSON, CARL	3,193,966	AS	3,193,969
LIQUIDS LIMITED	3,193,807	ANDERSON, CARL	3,193,999	AUTOSTORE TECHNOLOGY	
ABUNDIA BIOMASS-TO-		ANDERSON, COREY DON	3,197,173	AS	3,194,121
LIQUIDS LIMITED	3,193,815	ANDERSON, GLENDA	3,197,431	AVL MOTION GROEP B.V.	3,196,389
ACADEMIA SINICA	3,197,160	ANDERSON, WALTER	3,193,750	AXXIN PTY LTD	3,193,647
ACADEMISCH ZIEKENHUIS		ANDERSSON, RONNIE	3,193,874	AZAFAROS B.V.	3,193,939
LEIDEN (H.O.D.N. LUMC)	3,193,694	ANDRES, MIKE	3,194,156	AZARI, HASSAN	3,193,856
ACM BIOLABS PTE LTD	3,193,643	ANDREWS, GREGORY	3,196,875	B-HIVE INNOVATIONS	
ADAMS, JEFF	3,196,875	ANGITIA BIOMEDICINES		LIMITED	3,193,820
ADDUP	3,193,686	LIMITED	3,193,569	BAADER, BENJAMIN	3,197,462
ADDUP	3,193,690	ANTLOGA, KATHLEEN M.	3,193,949	BABROSKI, CHRIS	3,196,892
ADDUP	3,194,003	AO, RAN	3,193,684	BACIC, TIJANA	3,193,985
ADEPT		AOA DX	3,197,304	BACK, PHILIPP	3,197,264
BIOPHARMACEUTICAL		AONO, NAOMI	3,194,164	BACON, JEFF	3,193,776
AND TECHNOLOGY LTD.	3,194,285	AOYAMA, SHIGEKAZU	3,193,679	BADII, CAMERON SCOTT	3,194,101
ADIBEKIAN, ALEXANDER	3,194,116	AOYAMA, SHOJI	3,193,527	BAE SYSTEMS CONTROLS	
ADLMAIER, MARTIN	3,193,550	AOYAMA, YOSHITAKA	3,193,527	INC.	3,194,251
ADS THERAPEUTICS LLC	3,193,940	APEX BIOTECH RESEARCH		BAELING, PETER	3,193,874
ADVANI, NIHAL	3,197,046	PTY LTD	3,193,951	BAELING, PETER	3,193,885
AGAAJANI, SHAHRIAR	3,194,262	APPEL, NIKOLAUS	3,193,550	BAI, YAXIAN	3,194,294
AGARAM.COM, LTD.	3,193,771	APPLIED RESIN S.L.	3,197,177	BAILEY, ADAM	3,194,146
AGARWAL, AMAN	3,193,883	APRILBIO CO., LTD.	3,193,862	BAILEY, ALEXANDER	
AGROSPHERES, INC.	3,193,715	ARAI, KOICHIRO	3,194,164	MARSTON	3,197,342
AHMADVAND, ALI	3,193,987	ARNOLD, PETER J.	3,194,251	BAILEY, PATRICK	3,197,473
AIM IMMUNOTECH INC.	3,196,563	ARORA, MANISH	3,194,166	BAILEY, RICHARD	3,197,326
AIRBUS ATLANTIC	3,193,699	ARRIS ENTERPRISES LLC	3,193,541	BAIRD, KYLE	3,193,943
AIRBUS ATLANTIC	3,193,859	ARRIS ENTERPRISES LLC	3,193,545	BAK, JEONG HYEON	3,189,227
AIRTHINGS ASA	3,194,306	ARRIS ENTERPRISES LLC	3,194,113	BAKER HUGHES OILFIELD	
AIZACO LIMITED COMPANY	3,197,227	ARUMUGAM,		OPERATIONS LLC	3,193,684
AJELLAL, NOUREDDINE	3,196,953	VIJAYALAKSMI	3,197,173	BAKER, MATTHEW C.	3,194,253
AKINLADE, BOLANLE	3,194,111	ARVESON, MATTHEW E.	3,194,292	BAKER, ROBERT MILES	3,193,681
AKULIS, CHRISTOPHER P.	3,194,251	AS AMERICA, INC.	3,193,566	BAL, GUIDO	3,193,653
AL-HAJ ALI, MOHAMMAD	3,196,953	ASAHI KASEI PHARMA		BALACHANDAR,	
ALBANO, FABIO	3,197,048	CORPORATION	3,194,164	YESHWANTH BASHYAM	3,194,288

## Index of PCT Applications Entering the National Phase

BALAY, THOMAS	3,193,768	BEIJING YUTAN		BOARD OF REGENTS, THE	
BAMBINO PREZIOSO		TECHNOLOGY CO., LTD	3,194,233	UNIVERSITY OF TEXAS	
SWITZERLAND AG	3,194,050	BELAGHZAL, HOUDA	3,193,868	SYSTEM	3,194,081
BAMMERT, GARY FRANCIS	3,196,925	BELL, COLIN	3,193,966	BOBE, FRANK	3,194,232
BANNON, RICHARD	3,196,892	BELL, COLIN	3,193,999	BODROVA, ANASTASIYA	3,197,070
BAO, CHENGJI	3,149,547	BEN CHAIM, NITZAN NATANI	3,197,203	BOECKE, MATTHEW S.	3,194,251
BARBEAU, SAMUEL	3,193,886	BEN ZAKEN, NADAV	3,197,504	BOEHMER, SCOTT H.	3,193,528
BARCO NV	3,197,042	BENAIN, PIERRE-YVES	3,193,718	BOEHRINGER INGELHEIM	
BARENHOLZ, YECHEZKEL	3,197,489	BENDT, ELLEN	3,193,861	INTERNATIONAL GMBH	3,193,701
BARNET PRODUCTS, LLC	3,193,639	BENGAOUER, ALAIN	3,193,853	BOEKSTEGERS, PHILIP	
BAROODY, THOMAS E.	3,193,726	BENGAOUER, ALAIN	3,193,857	TJARKO	3,197,468
BARR, SHAWN	3,193,910	BERGERON, GEORGE	3,194,275	BOER, GOOSSEN JAN	
BARRE, BENJAMIN	3,197,070	BERGHI, ALESSANDRO	3,193,717	BERNARD	3,196,472
BARRETT, PHILIP A.	3,193,693	BERINSTEIN, NEIL	3,197,069	BOEWING, ROBERT	3,194,287
BARRIER, RAPHAEL	3,197,071	BERMANI, ROB	3,196,892	BOEWING, ROBERT	3,194,296
BASF SE	3,193,937	BERNING, MATTHIAS	3,194,059	BOG, ANJA	3,194,288
BASF SE	3,194,225	BERRY, WILLIAM W.	3,193,726	BOHAM, SCOTT GEORGE	3,193,899
BASH, ASSAF	3,197,504	BERTELSEN, RENE	3,194,012	BOHAM, SCOTT GEORGE	3,193,901
BASTARRACHEA, KARIN		BERTRAM, JOHN RUSSELL	3,193,719	BOLTERS DORF, DIRK	3,193,850
GABRIELA	3,193,764	BERTRAM, SAMUEL		BOOTH, NICHOLAS	
BASU, SAURABH	3,193,513	BERNARD CLIFFORD	3,193,719	CONSTANTINE	3,193,587
BATES, DAVID	3,193,776	BESSABAVA, RAVI	3,194,279	BOOTH, NICHOLAS	
BAYLOR COLLEGE OF		BEST, TED R.	3,193,960	CONSTANTINE	3,193,633
MEDICINE	3,196,923	BESTGEN, SEBASTIAN	3,194,139	BOREALIS AG	3,196,953
BEABER, COREY	3,193,758	BETAGENON BIO AB	3,193,947	BORN, NILS-OLOF JOACHIM	3,193,937
BEACHY, PHILIP A.	3,193,537	BETOLAR OY	3,193,891	BORRISON, REUBEN	3,194,059
BEARD, DANIEL	3,194,232	BEYER, LUCAS KLAUS	3,193,958	BOSTON SCIENTIFIC	
BEAUDRY, DONALD J.	3,193,954	BHATIA, GAURAV	3,193,617	NEUROMODULATION	
BEAUTY PERSPECTIVES, LLC	3,196,444	BHATTI, JASLEEN	3,194,086	CORPORATION	3,197,467
BEBO, III NELSON J.	3,193,517	BHAVE, PRAMOD	3,193,513	BOSTON SCIENTIFIC	
BECKER-WEIMANN, KLAUS	3,194,083	BHUTANI, GURMEET SINGH	3,197,503	NEUROMODULATION	
BECTON, DICKINSON AND		BIERNAT, JACOB	3,197,301	CORPORATION	3,197,469
COMPANY	3,194,088	BILLERUD AKTIEBOLAG		BOTANIWORLD, LLC	3,193,506
BECTON, DICKINSON AND		(PUBL)	3,193,900	BOTO, ELENA	3,194,163
COMPANY	3,194,298	BIO 54, LLC	3,193,893	BOUCKE, EDDY ALBERIC	3,193,510
BECTON, DICKINSON AND		BIOMARIN TECHNOLOGIES		BOULZE, DANIEL	3,193,699
COMPANY	3,193,516	B.V.	3,193,919	BOWE, MICHAEL D.	3,193,703
BECTON, DICKINSON AND		BIONTECH SE	3,193,985	BOWES, BRIAN DAVID	3,193,722
COMPANY	3,193,560	BIOTEMPT B.V.	3,197,477	BOYE, KEITH R.	3,197,505
BECTON, DICKINSON AND		BIRGEL, ANDREAS	3,194,296	BPG SALES AND	
COMPANY	3,193,658	BIRON HEALTH GROUP INC.	3,193,886	TECHNOLOGY	
BECTON, DICKINSON AND		BISARIA, NAMITA	3,193,508	INVESTMENTS, LLC	3,194,238
COMPANY	3,193,878	BISHOP, MATTHEW	3,197,499	BRADEN, BARBARA	3,194,146
BECTON, DICKINSON AND		BJORKMAN, PAMELA J.	3,193,843	BRADFORD, MICHAEL	3,193,655
COMPANY	3,193,882	BLACK, BENJAMIN	3,197,053	BRADY, MATTHEW N.	3,196,237
BECTON, DICKINSON AND		BLACK, BENJAMIN J.	3,197,309	BRAIME GROUP PLC	3,193,797
COMPANY	3,193,888	BLACK, BENJAMIN J.	3,197,313	BRAMHECHA, YOGESH	3,197,069
BECTON, DICKINSON AND		BLACKWELL, KIMBERLEY		BRAUN, ROLAND	3,194,059
COMPANY	3,194,255	EMMA	3,193,980	BRAZIER, GEOFFREY	3,197,172
BECTON, DICKINSON AND		BLADE DYNAMICS LIMITED	3,193,972	BREEN, SHELBY HUTCHINS	3,197,481
COMPANY	3,194,273	BLADE DYNAMICS LIMITED	3,193,975	BRNARDIC, EDWARD	3,193,913
BECTON, DICKINSON		BLAESI, ARON H.	3,193,905	BROCKMEYER, CARSTEN	3,193,930
FRANCE, S.A.	3,193,895	BLAKKAN, CORDELL T.	3,194,288	BRODERICK, ANDREW	3,197,306
BEDI, VIJAY	3,196,586	BLATTER, FRITZ	3,193,939	BROOKES, MATTHEW	3,194,163
BEDI, VIVEK	3,196,586	BLEOMELEN, MAEL	3,193,539	BROWNE, ROSS	3,197,305
BEECH, LAUREN MARIE	3,193,868	BLOCK, INC.	3,193,571	BROWNLEE, STEVE	3,194,280
BEEKMAN, FREDERIK		BLUMA, ARNE	3,194,147	BRUBACHER, ADRIAN	3,193,890
JOHANNES	3,194,278	BMIC LLC	3,193,727	BRUCKBAUER, WILHELM	3,193,550
BEESON, REBECCA	3,196,981	BMIC LLC	3,193,904	BRUDER, JOSEPH	3,193,685
BEIGENE, LTD.	3,194,314	BMIC LLC	3,194,267	BRUDER, JOSEPH	3,193,697
BEIJING JINGKELUN		BMIC LLC	3,196,470	BRUMBAUGH, DAVID F.	3,193,541
ENGINEERING DESIGN		BOARD OF REGENTS, THE		BRUMBAUGH, DAVID F.	3,193,545
AND RESEARCH		UNIVERSITY OF TEXAS		BRUMMELL, ROGER	3,193,528
INSTITUTE CO., LTD.	3,194,228	SYSTEM	3,193,745	BRUN, SONJA N.	3,197,050



## Index des demandes PCT entrant en phase nationale

BRYZEK, JOSEPH	3,193,721	CATERPILLAR INC.	3,193,712	CHENG, STANLEY KIN SUI	3,193,955
BS&B INNOVATIONS LIMITED	3,197,172	CATERPILLAR SARL	3,193,948	CHENG, YINGQUAN	3,193,617
BUENO MELENDO, ANA BELEN	3,194,283	CELATKA, CASSANDRA	3,193,661	CHENGJI PASSIVE HOUSE (HANGZHOU) CO. LTD.	3,149,547
BUEZO, NURIA DIAZ	3,194,283	CENTRE FOR DEVELOPMENT OF TELEMATICS	3,193,513	CHEREAU, DENIS	3,193,524
BUHLER, STEPHAN	3,193,850	CENTURYLINK INTELLECTUAL PROPERTY LLC	3,193,638	CHEVRON JAPAN LTD.	3,197,324
BUKIN, MICHAEL	3,197,504	CERES INTELLECTUAL PROPERTY COMPANY LIMITED	3,193,652	CHEVRON JAPAN LTD.	3,197,483
BULGAKOV, MYKHAYLO	3,194,275	CERN, AHUVA	3,197,489	CHEVRON ORONITE COMPANY LLC	3,197,324
BUNNING, DONALD	3,193,655	CERNOHOUS, JEFFREY JACOB	3,197,325	CHEVRON ORONITE COMPANY LLC	3,197,483
BURGER, BILL	3,197,048	CERTAINTEED GYPSUM, INC.	3,193,954	CHIANG, RANDY YANG	3,193,827
BURIN, PAOLO	3,194,250	CG BIO CO., LTD.	3,193,892	CHIANG, RANDY YANG	3,193,828
BURLINGTON INDUSTRIES LLC	3,193,517	CHA, SANG HOON	3,193,862	CHICH, ADEM	3,193,727
BURNHAM, PHILIPPE	3,193,642	CHABANON, JEAN-MARC	3,193,895	CHILDERS, ERIN	3,193,946
BURY, MICHAEL	3,193,913	CHAI, XIAOLING	3,194,102	CHIN, RICHARD	3,193,727
BUSCHKENS-GOTZ, ANN-KATHRIN	3,193,861	CHAIRMAN, DEFENCE RESEARCH & DEVELOPMENT ORGANISATION (DRDO)	3,193,557	CHINTALLAPUDI, RAVI KIRAN	3,193,692
BUSIELLO, IMMACOLATA	3,193,845	CHAISE, ALBIN	3,193,853	CHISI, TOWELA	3,193,861
BUSS, NICHOLAS ALEXANDER PIERS SASCHA	3,197,342	CHAISE, ALBIN	3,193,857	CHMIOLA, JOHN	3,197,048
BUTIN, YANNICK	3,194,318	CHAMPAGNAC, MAXIME	3,193,539	CHRISTENSEN, THOMAS SANDAHL	3,193,912
C4 THERAPEUTICS, INC.	3,194,169	CHAN, HING FAI	3,193,955	CHUN, CHANGMIN	3,194,179
CADALEN, ALICE	3,194,141	CHANDAR, PREM	3,193,716	CHYUNG, YUNG	3,193,909
CADILLA, RODOLFO	3,193,913	CHANDRASEKARAN, SATHISH ARUMUGAM	3,193,541	CIGLER, PETR	3,193,521
CAI, ZHONGJIAN	3,194,116	CHANDRASEKARAN, SATHISH ARUMUGAM	3,193,545	CISCO TECHNOLOGY, INC.	3,193,692
CALDAS, JEREMY	3,197,070	CHAO, HAIYING	3,194,228	CISEK, LUKASZ	3,194,095
CALDWELL MANUFACTURING COMPANY NORTH AMERICA, LLC	3,196,237	CHARLING, KURTIS ARLAN	3,194,268	CLAREN, JORG	3,193,996
CALIFORNIA INSTITUTE OF TECHNOLOGY	3,193,843	CHARTER COMMUNICATIONS OPERATING, LLC	3,193,547	CLARIANT PRODUKTE (DEUTSCHLAND) GMBH	3,193,996
CAMPBELL, IAN	3,194,046	CHARTRAND, BOB	3,194,156	CLARIDGE, JOHN	3,193,652
CAMPBELL, STEPHEN A.	3,196,927	CHATEAU, MAXIME	3,194,318	CLARKSON, JAY SIMON	3,193,681
CAMPO, BAPTISTE RIOS	3,197,070	CHATTEM, INC.	3,194,239	CLEAVER-BROOKS, INC.	3,194,209
CAMPUZANO, IAIN DAVID GRANT	3,196,920	CHAU, JACLYN	3,197,173	CLEMENS, JEREMY	3,197,173
CANTOLI-ALVES, VANESSA	3,193,828	CHAU, JOCELYN	3,197,045	CLEVELAND, THOMAS	3,197,173
CAO, WENJIE	3,194,228	CHAUVIN, RENE	3,193,670	COADY, MICHAEL	3,197,327
CAPITAL ONE SERVICES, LLC	3,194,275	CHE, ZHONGHUI	3,193,979	COBURN, BRODERICK	3,193,894
CAPLE, MICHAEL JOHN	3,193,818	CHEMISCHE FABRIK DR. WEIGERT GMBH & CO. KG	3,196,500	CODA INTELLECTUAL PROPERTY B.V.	3,194,197
CARABALL UGARTE, JOSE ANTONIO	3,194,066	CHEN, ABEL	3,193,730	CODA INTELLECTUAL PROPERTY B.V.	3,194,199
CARBALLO, SERGIO MADRIGAL	3,193,715	CHEN, ALEX	3,194,162	COE, ANDREW JAMES	3,193,681
CARD, JAMES DAVID	3,196,237	CHEN, FRED	3,193,706	COFFEY, DUNCAN	3,194,239
CARDIOLOGS TECHNOLOGIES SAS	3,197,070	CHEN, HONGBO	3,194,050	COHEN, ALEXANDER A.	3,193,843
CARDURION PHARMACEUTICALS, INC.	3,196,946	CHEN, LEHENG	3,196,232	COHEN, OREN	3,197,229
CAREFUSION 303, INC.	3,193,883	CHEN, LIANG	3,197,306	COLANTONI, DAVID J.	3,193,709
CARGNELLO, MATTEO	3,194,129	CHEN, LIQIAN	3,194,102	COLEMAN, JOHN	3,193,719
CARIOLARO, FEDERICO	3,194,005	CHEN, MICHAEL M.	3,196,936	COLLINS, JON	3,193,913
CARTIER, RICHARD	3,193,844	CHEN, SHUHUI	3,194,065	COLMET LLC	3,193,970
CARUSO, JOSEPH ROBERT	3,193,640	CHEN, SHUN	3,193,829	COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES	3,193,853
CASEY, COLMAN	3,197,172	CHEN, SHUN	3,194,010	COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES	3,193,857
CASEY, STEVEN M.	3,193,638	CHEN, XIAOBO	3,193,858	COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN	3,193,876
CASPARI, MAIK	3,194,139	CHEN, YINJU	3,193,827	COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN	3,194,075
CASTEL S.R.L.	3,194,152	CHEN, YU	3,133,915	COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN	3,194,084
CASTORENO, ADAM	3,193,830	CHEN, ZIRONG	3,197,179		
CATERPILLAR INC.	3,193,709	CHENAN, ARUNCHANDRAN	3,197,181		
		CHENEY, CRAIG	3,194,271		

## Index of PCT Applications Entering the National Phase

COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN	3,194,141	DANIELI & C. OFFICINE MECCANICHE S.P.A.	3,194,250	DOAK, WILLIAM J.	3,194,251
COMPRI, ANDREA	3,193,717	DANNENBERG, JAN-HERMEN	3,193,914	DOLINSKI, MARIA	3,196,924
CONCAGH, DANNY	3,193,558	DANOS, OLIVIER	3,193,685	DOLMAN, ELIZABETH	3,196,892
CONGER, TERRY GENE	3,194,209	DANOS, OLIVIER	3,193,697	DONG, ERIC	3,193,954
CONLON, REBEKAH	3,197,069	DANZIGER, ERIC	3,193,965	DOORNAERT, DRIES JAN	3,197,042
CONTEMPORARY AMPEREX TECHNOLOGY CO., LIMITED	3,193,858	DASGUPTA, ANINDYA	3,193,765	DOREY, JAMIE	3,197,155
CONTOUR PRINTWORKS, LLC	3,194,292	DASGUPTA, BIVASH RANJAN	3,193,716	DORMIGNY, THOMAS	3,193,548
COOK, JULIE	3,196,981	DATTO, INC.	3,197,208	DORSEY, JACLYN	3,196,932
COON, TIMOTHY RICHARD	3,197,173	DAUNAY, ALEXIS	3,194,201	DORSEY, JOSHUA	3,196,932
COOPER, JAMES NIALL	3,193,952	DAVIDE PEDERSOLI S.R.L.	3,193,945	DOSHI, HARIT	3,194,224
CORDINGLEY, MICHAEL GRAHAM	3,193,512	DAVIS, BOYD	3,196,865	DOSHI, MALAY	3,193,512
CORLEY, MATTHEW BRYAN	3,194,288	DE GROOT, ANNE	3,193,819	DOSOVITSKIY, ALEXEY	3,193,958
CORNELL PUMP COMPANY	3,193,540	DE MARCO, ANNA	3,194,162	DOUBLET, SEBASTIEN	3,193,686
CORNELL, THOMAS ANDREW	3,193,643	DE REN, JAN	3,193,962	DOUBLET, SEBASTIEN	3,193,690
CORNELLCOOKSON, LLC	3,193,768	DE SAINT VICTOR, MARIE- ALBANE	3,197,070	DOUBLET, SEBASTIEN	3,194,003
CORNING RESEARCH & DEVELOPMENT CORPORATION	3,193,705	DE SARKAR, SUDIP	3,193,912	DOUDIAN, BERJ	3,197,467
CORNWALL, MARK K.	3,193,724	DE VISSER, PETER CHRISTIAN	3,193,919	DOUGHETRY, MICHAEL	3,193,727
CORTI, DAVIDE	3,194,162	DEBELLEMANIERE, OLIVIER	3,193,686	DOUSSET, CAPUCINE	3,197,314
COUTURIER, LAURENT	3,194,141	DEBELLEMANIERE, OLIVIER	3,193,690	DOW GLOBAL TECHNOLOGIES LLC	3,193,700
COZANITIS, MATHEW	3,192,333	DEBELLEMANIERE, OLIVIER	3,194,003	DOW GLOBAL TECHNOLOGIES LLC	3,193,707
CRAWFORD, KEITH	3,196,472	DEBNEY, MICHAEL JAMES	3,194,268	DOW GLOBAL TECHNOLOGIES LLC	3,193,708
CRIDER, JR. RICHARD ARELIN	3,193,870	DEBOER, DAVID M.	3,194,238	DOW SILICONES CORPORATION	3,196,981
CRINKLAW, DAVID	3,197,072	DEBROSSE, MADELEINE	3,193,809	DOWNEY, GEORGE A.	3,196,472
CROSS, JASON	3,193,745	DECAILLOT, FABIEN	3,193,643	DR. MARY MORRIS & ASSOCIATES, LLC	3,193,994
CROWLEY, JOHN DAVID	3,193,587	DECICCO, STEVEN G.	3,193,667	DRENTH, CHRISTOPHER L.	3,193,890
CROWLEY, JOHN DAVID	3,193,633	DECIMADX, LLC	3,194,143	DU, ZHENXING	3,194,077
CRRC TANGSHAN CO., LTD.	3,196,232	DECKER, STEVEN ERIC	3,197,201	DUBREUIL, LAURENT	3,193,859
CRRC TANGSHAN CO., LTD.	3,196,383	DEFRANCO, SUSAN	3,193,910	DUCATI ENERGIA S.P.A.	3,193,717
CRRC TANGSHAN CO., LTD.	3,196,384	DEFRIZE, JEREMY	3,193,548	DUCROS, FREDERIC	3,193,853
CSPC ZHONGQI PHARMACEUTICAL TECHNOLOGY (SHIJIAZHUANG) CO., LTD	3,194,102	DEGHANI, MOSTAFA	3,193,958	DUCROS, FREDERIC	3,193,857
CTCELLS, INC.	3,189,227	DEKA, NISHITA	3,193,810	DUFFY, DAVID L.	3,193,764
CUI, CHENGSEN	3,194,116	DELEFORGE, AURELIE	3,197,070	DUFOUR, BRUNO	3,197,314
CULLIS WATSON, BENJAMIN HARRY	3,193,701	DEMCHUK, DARRIN	3,197,075	DUNCAN, ROBERT	3,193,666
CULVER, SEAN P.	3,193,530	DENALI THERAPEUTICS INC.	3,197,506	DURIE, KARSON	3,193,669
CUNNION, KENJI	3,193,565	DENG, BING	3,193,826	DURIE, KARSON	3,193,672
CURTIN, PAUL	3,194,166	DENNIS, PHILLIP	3,197,479	DURIE, KARSON	3,193,674
CZARNECKI, DAVID	3,193,827	DEPASQUA, ANTHONY	3,197,180	DURIE, KARSON	3,193,677
CZARNECKI, DAVID	3,193,828	DERKS, WILLEM	3,197,058	DUX, CHRISTIAN	3,193,634
CZOK, MATTHIAS	3,193,896	DERKS, WILLEM	3,197,061	DWIGHT, TIMOTHY A.	3,197,173
D'ATTILIO, WILLIAM	3,193,730	DESMOND, DANIEL	3,197,307	DWYER, BRENDAN	3,194,116
DABANELLO, LUCREZIA	3,194,152	DESTAILLEUR, CHARLES- ANTOINE	3,193,548	DYMACEK, BOHUMIL	3,197,026
DAI, MINGJI	3,194,116	DETNET SOUTH AFRICA (PTY) LTD	3,197,302	DYNAMICURE BIOTECHNOLOGY LLC	3,197,179
DALELA, PANKAJ KUMAR	3,193,513	DETNET SOUTH AFRICA (PTY) LTD	3,197,491	EAST, JAMES EDWARD	3,194,146
DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES	3,196,914	DEVARAJ, KIRUTHIKA	3,194,289	ECO COMPTEUR	3,193,794
DALTON, TIMOTHY ALLEN	3,197,201	DHIBA, DRISS	3,193,726	EDLUND, THOMAS	3,193,947
DALVI, SANDESH DASHRATH	3,194,149	DHONDGE, KAMLESH	3,194,149	EDWARDS LIFESCIENCES CORPORATION	3,197,045
DALY, SIMONA	3,193,845	DI PAOLO, RICHARD	3,193,994	EDWARDS LIFESCIENCES CORPORATION	3,197,169
DANG, LAN THI HOANG	3,193,830	DICKINSON CORPORATION	3,197,499	EDWARDS LIFESCIENCES CORPORATION	3,197,229
		DICKSON, DAMIAN	3,193,552	EDWARDS LIFESCIENCES CORPORATION	3,197,504
		DICKSON, JOHN F.	3,194,209	EDWARDS LIFESCIENCES INNOVATION (ISRAEL) LTD.	3,197,201
		DIHANNI, WILLIAM J.	3,193,517	EGLEY, JENNIFER M.	3,193,685
		DIMITRAKOPOULOS, JAMES	3,193,954	EICHNER, LILLIAN	3,197,050
		DINH, ANDREW	3,197,173		
		DINSMORE, TEDDI R.	3,193,959		
		DIXON, WILLIAM	3,193,538		
		DJANKOVICH, MLADEN	3,194,272		
		DJUVE, HEGGEBO JORGEN	3,193,969		
		DO, ANTHONY	3,193,647		

## Index des demandes PCT entrant en phase nationale

EISENHUTH, JOHN	3,197,431	FERNANDES, PAULO		FU, FENGGEN	3,196,933
EISERT, DENNIS	3,196,500	ALEXANDRE BRAGA	3,193,665	FU, MANLIANG	3,193,878
EISSES, JAN	3,193,551	FEVERTAGS, LLC	3,193,870	FU, MANLIANG	3,194,255
EKSLER, VACLAV	3,193,869	FIBER SENSE LIMITED	3,193,676	FU, YINA	3,196,232
EL MAHDI, MOUNIR	3,193,726	FIBERLITE CENTRIFUGE LLC	3,196,921	FUCHI, MASAMI	3,197,324
ELAFLEX HIBY GMBH & CO. KG	3,194,132	FIEGLEIN, HENRY	3,194,095	FUCHS, JOCHEN	3,194,296
ELC MANAGEMENT LLC	3,196,242	FIELDS, JACOB	3,197,075	FUCHTJOHANN, NILS	3,193,931
ELDOLAB HOLDING B.V.	3,162,830	FIELDS, JAMES P.	3,193,518	FUKAZAWA, HIROSHI	3,193,902
ELI LILLY AND COMPANY	3,193,722	FIELDSON, GREGORY	3,197,170	FUKUMITSU, HITOSHI	3,194,225
ELI LILLY AND COMPANY	3,194,283	FIELDSON, GREGORY	3,197,318	FULLER, ALEXANDRA	3,193,750
ELKHART PLASTICS, INC.	3,193,573	FIMML, WOLFGANG	3,194,287	FULTS, ALVIN C	3,193,870
ELLEPOT A/S	3,193,574	FIMML, WOLFGANG	3,194,313	FUNAHASHI, GORO	3,194,044
ELPISCIENCE (SUZHOU) BIOPHARMA, LTD.	3,196,930	FINE, BERNARD MARTIN	3,193,952	FURIE, RICHARD	3,197,055
ELPISCIENCE BIOPHARMA, LTD.	3,196,930	FINN, TIMOTHY S.	3,193,712	G & W ELECTRIC COMPANY	3,197,276
ELSMARK, LARS	3,194,079	FINN, TIMOTHY SEAN	3,193,709	GADEGAONKAR, KAMLAKAR	3,194,149
ELTA SYSTEMS LTD.	3,194,221	FIORILLE, ANTHONY	3,194,135	GALLEN, ROBERT WILLIAM	3,193,681
ENCLEAR THERAPIES, INC.	3,197,180	FIRE, ANDREW Z.	3,194,081	GALLIANI, STEFANO	3,193,845
ENGELBERTS, PATRICK	3,193,914	FIRNBERG, ELAD	3,193,685	GALLIS, KARL W.	3,193,933
ENGLERT, INC.	3,193,595	FIRNBERG, ELAD	3,193,697	GAMAUF, CHRISTIAN	3,193,996
ENGLUND, DIRK ROBERT	3,193,998	FISCHER, KAI JURGEN	3,197,058	GAN, MING	3,197,153
ENGLUND, MARK ANDREW	3,193,676	FISCHER, KAI JURGEN	3,197,061	GANAPATHY, JALAGANDESWARI	3,193,545
ENI S.P.A.	3,193,509	FISCHER, STEPHAN	3,197,339	GANNEX PHARMA CO., LTD.	3,193,906
ENTERLINE, ANDREW	3,193,540	FISSET, STEPHAN	3,197,069	GAO, FU	3,193,963
EPIVAX, INC.	3,193,819	FL2022-001, INC.	3,194,282	GAO, NING	3,196,384
EQUELS, THOMAS K.	3,196,563	FLAGSHIP PIONEERING INNOVATIONS V, INC.	3,193,868	GAO, RUI	3,196,930
ERK, CHRISTOPH	3,193,937	FLAHERTY, MICHAEL	3,193,506	GAO, XIAOXIA	3,196,384
ERK, CHRISTOPH	3,194,225	FLANIGAN, KEVIN	3,194,122	GAO, XIONGWEI	3,193,858
ESSEGHIR, MOHAMED	3,193,700	FLEETWOOD, RUSSEL K.	3,193,732	GARCES, FERNANDO	3,197,047
ETEMAD, ALI	3,194,311	FLEUREAU, YANN	3,197,070	GARCIA MOLINA, GARY N.	3,193,910
EUCURE (BEIJING) BIOPHARMA CO., LTD.	3,197,463	FLIEGELMAN, LESLIE	3,194,134	GARG, PARISHEKH CHANDRA	3,194,149
EUROBEARINGS S.R.L.	3,194,158	FLUENCE ENERGY, LLC	3,197,065	GARIEPY, JEAN	3,196,929
EVAIN, HELENE	3,197,070	FLYNN, JAMIE	3,194,048	GASSER, JULIEN	3,197,465
EVANS, DAVID M.	3,194,161	FLYNN, ROBIN L.	3,193,750	GATT, JOSEPH E.	3,194,179
EVANS, PHILLIP	3,193,954	FOGG, OLIVER DAVID	3,193,701	GATTI, BENJAMIN	3,197,473
EVONIK OPERATIONS GMBH	3,193,933	FONG, LAWRENCE HERMAN	3,193,827	GATTUPALLI, RAJESWAR R.	3,193,962
EVONIK OPERATIONS GMBH	3,194,139	FONG, LAWRENCE HERMAN	3,193,828	GAULKE, KEN	3,193,528
EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY	3,194,179	FORD, CHRISTOPHER	3,197,372	GAVARD-LONCHAY, ODILE	3,194,084
E_COMMERCE 4.0 S.R.L.	3,193,897	FOREL S.P.A.	3,193,877	GAYDOS, STEPHEN P.	3,197,181
FABER, KATHERINE A.	3,193,703	FORMYCON AG	3,193,930	GAYDOS, STEPHEN P.	3,197,501
FALABELLA, PAULO	3,197,342	FORSBERG, GUSTAF	3,193,874	GAZTRANSPORT ET TECHNIGAZ	3,193,539
FALKENBURG, DE HEER J. H. FREDERIK	3,193,694	FORSBERG, GUSTAF	3,193,885	GEAR, MATTHEW	3,194,060
FAN, CHEN-YU	3,197,160	FORSTER, COREY	3,197,416	GELLY, SYLVAIN	3,193,958
FAN, LIXUE	3,194,102	FOUCAULT, ARMAND	3,197,070	GENENTECH, INC.	3,193,952
FAN, ZHIJUN	3,194,145	FOUNT BIO, INC.	3,194,297	GENESYS CLOUD SERVICES, INC.	3,193,583
FANG, QI	3,194,160	FRAMMERY, HUGO PIERRE RODOLPHE	3,193,718	GENESYS CLOUD SERVICES, INC.	3,193,586
FANNING, LEV TYLER DEWEY	3,197,173	FRANCISCO, BRIAN E.	3,193,530	GENESYS CLOUD SERVICES, INC.	3,193,730
FARELLI, JEREMIAH DALE	3,193,868	FRANK, JOSEPH	3,193,715	GENMAB A/S	3,193,914
FARROW, NIGEL RICHARD	3,194,014	FRANK, PATRICK	3,194,083	GENZYME CORPORATION	3,193,866
FASANYA, KARENSA L.	3,194,282	FREED, DAVID M.	3,194,046	GEORAMA, INC.	3,197,046
FASCHING, RAINER	3,196,952	FRENKEL, NOAM	3,194,221	GEORGE, BASIL	3,193,583
FAST IP, LLC	3,194,271	FREUDENBERG MEDICAL LLC	3,193,535	GEORGE, BASIL	3,193,586
FATE THERAPEUTICS, INC.	3,193,977	FREY, GABRIELLASATCHIOLIVI A	3,193,716	GEORGIADIS, IOANNIS	3,194,293
FAVORS, ZACHARY	3,197,048	FREY, MANUAL	3,197,062	GERKE, BIRGIT	3,193,937
FEAVER, TIMOTHY L.	3,194,292	FRIEDEL, MARK	3,193,809	GERMANS BOADA, S.A.	3,197,308
FEDDEM GMBH & CO. KG	3,197,157	FRIEMAN, BRYAN A.	3,197,173	GERSTENMEIER, JURGEN	3,194,138
FELDER, STEFAN MARKUS	3,194,300	FRITSCH, JENS	3,193,564	GETTS, DANIEL	3,193,508
		FRITZ, HELMUT	3,197,303		
		FRYFOGLE, PATRICK J.	3,196,981		

## Index of PCT Applications Entering the National Phase

GEUIJEN, CECILIA ANNA WILHELMINA	3,193,619	GROSS, DIETER	3,197,157	HAULOTTE GROUP	3,193,849
GHANNOUCHI, FADHEL	3,193,796	GROTZ, MATTHIAS	3,194,287	HAWKINSON, BEN	3,197,155
GIBBS, PHILLIP	3,194,143	GROTZ, MATTHIAS	3,194,296	HAYOT, LAURENT	3,193,718
GIERGIELEWICZ, MARIUSZ	3,197,474	GRUNBERG, MARIO	3,194,147	HAYTON, PAUL GRAHAM	3,193,701
GIESE, TINA	3,197,506	GU, MINGGUANG	3,193,858	HE, CHAO	3,193,700
GILDEA, CHRISTOPHER	3,194,273	GUAN, ZHE	3,196,933	HE, CHUAN C.	3,193,704
GILEAD SCIENCES, INC.	3,193,879	GUARINO, BARBARA	3,194,162	HE, HAIYING	3,194,065
GILLGREN, THOMAS	3,193,900	GUERRETTE, ROXANN	3,197,179	HE, HUAN	3,197,197
GINA-LIFE DIAGNOSTICS LTD.	3,196,924	GUNNARSSON, JOHAN	3,193,729	HE, ZHEN	3,197,183
GINDLER, DAVID	3,194,095	GUNTHER, WILLIAM R.	3,194,179	HE, ZHIYONG	3,193,951
GIROUX, DAVID C.	3,193,555	GUO, YU	3,193,913	HEBERT, CASEY	3,193,658
GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED	3,193,913	GURICOVA, MIROSLAVA	3,193,521	HEEMSKERK, MW MIRJAM H. M.	3,193,694
GLEAN, ALDO	3,193,954	GURURAJAN, VIDYANATH	3,193,820	HEIGOLD, GEORG	3,193,958
GLEN, KEVIN ALAN	3,193,535	GUSS AUTOMATION LLC	3,197,072	HEIKENFELD, JASON	3,193,805
GLICKMAN, MARCIE	3,197,180	GUTERMUTH, GEORG	3,193,864	HEIKENFELD, JASON	3,193,806
GLOVER, AHMAD	3,193,884	GUTIERREZ, CARLOS ALBERTO HERNANDEZ	3,197,227	HEIKENFELD, JASON	3,193,808
GLOVER, GARRETT	3,197,170	GUTTE, ULRICH	3,194,281	HEIKENFELD, JASON	3,193,809
GOBRECHT III, RICHARD C.	3,193,767	GUYARD, GABRIEL	3,193,954	HEIKENFELD, JASON	3,193,812
GOLDBERG, JOSHUA GOULED	3,193,838	GUZENKO, DMYTRO	3,193,910	HEIKENFELD, JASON	3,193,816
GONG, DANYANG	3,197,047	GUZMAN BLANCO, ENRIQUE	3,194,066	HEIKENFELD, JASON	3,193,835
GONG, GAOXIA	3,196,383	GYORY, J. RICHARD	3,194,298	HEIKENFELD, JASON	3,193,837
GONZALES, ANDREA JOY	3,196,925	HAAN, JOHANNES PIETER	3,197,061	HEINEKEN SUPPLY CHAIN B.V.	3,193,511
GONZALEZ SALAZAR, ITXASO	3,193,898	HAAS, HEINRICH	3,193,985	HEINRICH, ANDREW	3,193,828
GOOD MEAT, INC.	3,191,121	HADIDA RUAH, SARA SABINA	3,197,173	HEJAZI, VAHID	3,193,533
GOOD WATER HOLDINGS PTY LTD	3,197,496	HAGAR, WILLIAM J.	3,193,933	HEJAZI, VAHID	3,194,009
GOOD, ANDREW CHARLES	3,194,169	HAGENS, STEVEN	3,193,971	HELAOUI, MOHAMED	3,193,796
GOODCAP PHARMACEUTICALS LTD.	3,197,488	HAIRSTON, HOB	3,194,095	HELM, ANDREA LAURA	3,193,872
GOODSPEED, MICHAEL	3,197,051	HAJDUCH, MARIAN	3,193,521	HELSETH, PER MAGNE	3,194,306
GOOGLE LLC	3,193,958	HAJJI, WADII	3,197,070	HELSINGIN YLIOPISTO	3,197,264
GORAKSHNATH, GADHE CHANGDEV	3,193,865	HAJKOWSKI, KEITH R.	3,194,179	HENDERSON, JAMES A.	3,194,169
GORMAN, SAMUEL KEITH	3,193,848	HALAS, ROBERT J.	3,193,907	HENICK, BRIAN S.	3,193,687
GORNI, MARIA	3,193,785	HALECKI, MARK THOMAS	3,196,237	HENNESSY, DAMIEN	3,197,172
GOSS, KENDRICK ALAN	3,193,868	HALL, ROBERT JAMES	3,194,137	HENS, ZEGER	3,197,161
GOUVERIS, HARALAMPOS	3,197,468	HALLEN, PAUL R.	3,193,974	HERMANN, STEVEN	3,194,271
GOVEK, STEVEN P.	3,194,282	HALLEN, PAUL R.	3,193,981	HERMEY, ANDREAS	3,197,337
GRAF, GERGO	3,193,789	HAMAYA, YOICHIRO	3,194,191	HERNANDEZ, STEVEN M.	3,194,150
GRAFF, GUNTHER	3,194,139	HAMERLY, RYAN	3,193,998	HETT, ROBERT	3,193,939
GRAINOK, JANYA	3,193,706	HAMILTON, ANTHONY	3,193,538	HIBBETTS, KRISTEN LYNN	3,193,872
GRANDCHAMP, YVES HENRI	3,193,718	HAN, BUXING	3,194,233	HIETANIEMI, MATTI	3,194,007
GRANGER, SCOTT	3,197,012	HAN, SHUO	3,193,537	HIETBRINK, ROELANT BOUDEWIJN	3,197,341
GRANKO, HAZAR AWAD	3,193,893	HAN, ZHENJI	3,194,225	HILLER, THOMAS MICHAEL	3,193,985
GRAPHIC PACKAGING INTERNATIONAL, LLC	3,193,943	HANDLON, ANTHONY	3,193,913	HINCAPIE, JUAN CARLOS	3,193,804
GRAY, BRENTON	3,194,048	HANNEN, RICARDA	3,193,564	HIRSIGER, CHRISTOPH	3,194,107
GRECU, HORIA	3,194,258	HANSON, BRIAN K.	3,194,119	HOD, ZOHAR	3,197,094
GREEN GRAPHITE TECHNOLOGIES INC.	3,196,865	HANSON, BRIAN K.	3,194,136	HODGES, JAMES	3,193,775
GREEN, RICHARD	3,193,820	HANTZ, DANIEL C.	3,193,617	HODGES, JAMES	3,193,778
GREER, JOHN M.	3,193,870	HANWHA AEROSPACE CO., LTD.	3,197,301	HODGES, JAMES M.	3,193,769
GRIGIS, MATTEO	3,193,845	HAO, LIXUAN	3,194,228	HOFEL, TORBEN	3,197,303
GRISLEY, EVAN ROBERT	3,193,872	HAO, YUCANG	3,193,858	HOFFGAARD, FRANZISKA	3,193,564
GROOTENHUIS, PETER (DECEASED)	3,197,173	HARASHIMA, HIDEYOSHI	3,194,148	HOFFMANN, TOBIAS	3,197,062
		HARBISONWALKER INTERNATIONAL, INC.	3,197,416	HOFMANN, DANIEL	3,193,786
		HARIHARAN, GOPALAKRISHNAN	3,194,293	HOGG, MARK RICHARD	3,193,848
		HARRINGTON, CAMERON ALBERT	3,197,481	HOGG, STEPHEN	3,193,984
		HARRINGTON, TYLER JAMES	3,197,162	HOLLERIETH, TOBIAS	3,193,550
		HARRIS, JOHN HAMLYN	3,194,300	HOLMES, KIRK	3,193,764
		HASHIBA, KAZUKI	3,194,148	HOLMES-LIBBIS, JOHN	3,193,758
		HASSEMAN, JEREMY P.	3,193,683	HOME DEPOT INTERNATIONAL, INC.	3,193,987
		HATTORI, TAIKI	3,197,483	HONEYWELL INTERNATIONAL INC.	3,193,962
				HOPPER, WILLIAM ROBB	3,193,647

## Index des demandes PCT entrant en phase nationale

HORDEAUX, JULIETTE	3,193,833	HWANG, YEJIN	3,193,865	ISHIKITA, NAOYUKI	3,194,043
HORNER, SEBASTIAN	3,193,985	I4F LICENSING NV	3,193,510	ISSA, SAMER	3,194,252
HOSSEINI, SEYEDEH		IARROBINO, RYAN	3,193,909	ITRON, INC	3,193,724
MAHBOOBEH	3,197,324	ICAHN SCHOOL OF		ITRON, INC	3,193,725
HOU, JIANYING	3,196,232	MEDICINE AT MOUNT		IZCO ZARATIEGUI, JESUS	
HOU, PETER	3,194,263	SINAI	3,193,824	MARIA	3,193,898
HOU, SHUAICHANG	3,196,384	ICAHN SCHOOL OF		J.H. FLETCHER & CO.	3,194,074
HOU, YANHONG	3,197,074	MEDICINE AT MOUNT		JACKSON, ROBERT H.	3,197,313
HOUCK, ROY J.	3,193,764	SINAI	3,194,166	JACOB, MATTHEW	
HOULSBY, NEIL MATTHEW		ICEOXFORD LIMITED	3,193,789	FREDERICK	3,197,051
TINMOUTH	3,193,958	IDEXX LABORATORIES, INC.	3,193,555	JACOBS, ADAM	3,193,711
HOURNE, ROMAIN	3,193,849	IDEXX LABORATORIES, INC.	3,193,872	JACOBS, MICHAELA	
HOUSE, MATTHEW		IGUS GMBH	3,197,337	EVELINA	3,197,481
GREGORY	3,193,848	IHI CORPORATION	3,193,679	JACOBSEN, PETER	
HOWARD HUGHES MEDICAL		IIDA, TSUTOMU	3,193,679	MELDGAARD	3,193,574
INSTITUTE	3,193,683	IJERI, VIJAYKUMAR	3,197,181	JACOBSON, KENNETH A.	3,193,855
HOWARD, FREDRICK TODD	3,193,624	IJERI, VIJAYKUMAR	3,197,501	JACOBSON, SVEN	3,193,561
HOWE INDUSTRIES LLC	3,193,543	IMAGO BIOSCIENCES, INC.	3,193,661	JAIN, SANDEEP	3,197,503
HOWE, STEVEN DANIEL	3,193,543	IMMATICS		JAKUBCZAK, PAULINA	3,193,769
HOWE, TROY MICHAEL	3,193,543	BIOTECHNOLOGIES		JAKUBCZAK, PAULINA	3,193,775
HOWOLD, PHILIP	3,197,337	GMBH	3,193,564	JAKUBCZAK, PAULINA	3,193,778
HRYTSENKO, OLGA	3,197,163	IMMATICS		JANAGAM, DILEEP	3,197,318
HSU, HUI-TING	3,193,977	BIOTECHNOLOGIES		JANCO, MIROSLAV	3,196,981
HU, CHANGYUN	3,194,285	GMBH	3,193,567	JANG, SE II	3,189,227
HU, DINGYUE	3,193,652	IMMUNOVACCINE		JANG, TAEHEE	3,194,047
HU, GUOPING	3,194,065	TECHNOLOGIES INC.	3,197,069	JANICK, JAMES	3,193,768
HU, KEN	3,196,892	IMMUNOVACCINE		JANKIEWICZ, ADAM	3,197,474
HU, SIYI	3,196,933	TECHNOLOGIES INC.	3,197,163	JARLSKOG, ESKIL	3,197,065
HU, XUN	3,133,915	IMPROVE	3,193,524	JAVED, FAIZAN	3,193,987
HUANG, CHENG	3,194,294	INAPURI, ESHWAR	3,194,270	JAWOREK, HANA	3,193,521
HUANG, HE	3,193,714	INDUSTRIAL CERAMICS		JAY, OLIVER	3,197,431
HUANG, LIHUA	3,193,722	LIMITED	3,193,852	JAYASINGHE, LAKMAL	
HUANG, WEIXIN	3,194,129	INFLOWCONTROL AS	3,194,000	NISHANTHA	3,193,980
HUANG, XIAOYAN	3,193,684	INFRAVISION HOLDINGS PTY		JEAN-BAPTISTE-DIT-	
HUANG, XIETIAN	3,193,840	LTD	3,193,728	DOMINIQUE, FRANCOIS	3,194,084
HUANG, XUEHUI	3,193,682	INGBER, DONALD	3,194,232	JEFFERIES, RYAN M.	3,194,238
HUAWEI TECHNOLOGIES		INGRAM, GARY DURON	3,193,628	JEON, YEONGUK	3,193,865
CO., LTD.	3,193,840	INNIO JENBACHER GMBH &		JEONG, JONG GWAN	3,189,227
HUAWEI TECHNOLOGIES		CO OG	3,194,287	JEONG, KWAN	3,193,880
CO., LTD.	3,197,153	INNIO JENBACHER GMBH &		JERSBLAD, JOHAN	3,194,068
HUBBELL INCORPORATED	3,194,159	CO OG	3,194,296	JESPERSEN, UFFE	3,194,261
HUBBELL INCORPORATED	3,196,231	INNIO JENBACHER GMBH &		JESSER, MARK	3,194,088
HUBER, MARTIN	3,197,062	CO OG	3,194,313	JIANG, CHUANGXIN	3,197,183
HUDSON, ANDREW R.	3,194,282	INNOTECH PRECISION		JIANG, CHUNHUA	3,194,102
HUDSON, DWIGHT DARRYL	3,197,488	MEDICINE, INC.	3,193,691	JIANGSU HENGRUI	
HUFFER, SCOTT WILLIAM	3,193,630	INNOVENT BIOLOGICS		PHARMACEUTICALS CO.,	
HUGHES NETWORK		(SUZHOU) CO., LTD.	3,196,933	LTD.	3,194,077
SYSTEMS, LLC	3,193,617	INNOVOPRO LTD.	3,197,203	JIANGSU HENGRUI	
HUGHES NETWORK		INSTITUTE OF		PHARMACEUTICALS CO.,	
SYSTEMS, LLC	3,194,263	MICROBIOLOGY,		LTD.	3,196,940
HUI, JOHN ON-TING	3,196,920	CHINESE ACADEMY OF		JIO PLATFORMS LIMITED	3,194,149
HUKELMANN, JENS	3,193,564	SCIENCES	3,193,963	JIO PLATFORMS LIMITED	3,194,153
HUKELMANN, JENS	3,193,567	INTELLIGENT WELLHEAD		JK-HOLDING GMBH	3,194,138
HUMABS BIOMED SA	3,194,162	SYSTEMS INC.	3,193,666	JO, SUYEON	3,193,865
HUMANWELL HEALTHCARE		INTERFACIAL CONSULTANS		JO, WANGJE	3,193,771
(GROUP) CO., LTD.	3,194,087	LLC	3,197,325	JOCSON, CRISTINA	3,193,910
HUMPHREYS, TRAVIS	3,193,730	INTERNATIONAL BUSINESS		JOHANSSON, JAN	3,193,729
HUNT, DALE ROBERT	3,197,345	MACHINES		JOHN BEAN TECHNOLOGIES	
HUNTER, SAMUEL JOSEPH		CORPORATION	3,194,463	CORPORATION	3,197,345
STRINGER	3,194,157	INVISIBLE AI INC.	3,193,965	JOHN MEZZALINGUA	
HUSS, NICKOLAS	3,193,639	IRISH, LINDA	3,193,836	ASSOCIATES, LLC	3,194,047
HUSTON, CHARLES A.	3,193,573	ISHIHARA SANGYO KAISHA,		JOHNSON MATTHEY DAVY	
HUTCHINSON	3,197,314	LTD.	3,194,011	TECHNOLOGIES LIMITED	3,193,681
HWANG, HAILEY	3,196,444	ISHIHARA, YOSHIHIRO	3,197,173	JOHNSON, ADAM	3,193,672

## Index of PCT Applications Entering the National Phase

JOHNSON, ADAM	3,193,674	KE, HUAZHU	3,193,569	KRAUSS-MAFFEI WEGMANN	
JOHNSON, DAVID	3,194,156	KEANEY, JAMES MARTIN	3,197,465	GMBH & CO. KG	3,193,896
JOHNSON, ERICK	3,193,540	KELLY, PAUL	3,193,789	KREBS, LARA ELLEN	3,193,722
JOHNSON, SCOTT	3,194,073	KEMIRA OYJ	3,194,007	KRENITSKY, PAUL	3,197,173
JOHNSTECH		KENNEDY, JAMES	3,194,135	KRENZER, ULRICH	3,194,133
INTERNATIONAL	3,194,156	KENNEDY, JODI MICHELLE	3,193,868	KRISHNA, NEEL K.	3,193,565
JOHNSTECH		KENNEDY, JOHN C.	3,197,075	KRISHNAN, VINU	3,194,297
INTERNATIONAL		KEROS THERAPEUTICS, INC.	3,193,654	KROHN, MARK DAMIEN	3,196,926
CORPORATION	3,194,134	KERR, BLAIR S.	3,197,276	KROON, BART	3,196,949
JOHNSTON, KARL	3,193,750	KHAN, AMIT KUMAR	3,193,643	KUATRO GROUP APS	3,194,045
JOLIVET, PIERRE	3,193,539	KHOSRAVI-FAR, ROYA	3,193,691	KUBICKOVA, AGATA	3,193,521
JONES, GREGORY	3,197,179	KHRANOVSKYY, ERIK	3,194,252	KUBO, KOICHI	3,197,483
JONES, MICHAEL A.	3,193,528	KILGOUR, JOHN JOSEPH	3,193,980	KUBOTA CORPORATION	3,194,044
JONES, PHILIP	3,193,745	KIM, HYE JOO	3,193,575	KUHLMAN, ROBERT W.	3,193,767
JOO, YOUNG JUNG	3,197,301	KIM, JAE EUN	3,193,865	KULKARNI, CHANDRU	
JORGENSEN, JEPPE	3,193,975	KIM, KWI HYE	3,197,342	PATREYYA	3,193,557
JORGENSEN, JEPPE BJORN	3,193,972	KIM, MISOON	3,193,865	KULUKIAN, ANITA	3,197,165
JOSE SANCHEZ, AIZA		KIND, TOBIAS	3,193,985	KUMAR, AKANSHA	3,194,149
FERNANDA	3,197,227	KINGHORN, JOHN RITCHIE	3,193,559	KUMAR, AKANSHA	3,194,153
JOST, SEBASTIAN	3,197,157	KINGSTON, CHAD	3,197,053	KUMAR, NEERAJ	3,194,209
JOVIC, MARC	3,193,976	KINLEN, PATRICK J.	3,197,181	KUMAR, SHAIENDRA	3,196,472
JOYAL, PAT	3,194,134	KINLEN, PATRICK J.	3,197,501	KUMAR, SHAILESH	3,194,153
JT INTERNATIONAL S.A.	3,193,894	KIRK, ANTONY	3,193,916	KUMAR, UPPADA URBAN	3,193,557
JT INTERNATIONAL SA	3,193,552	KISSELSTEIN, JAY A.	3,194,119	KUMAR, RAVEEN	3,197,042
JT INTERNATIONAL SA	3,193,702	KISSELSTEIN, JAY A.	3,194,136	KUMORDZIE, AMI	3,194,088
JUNG, HYOCUL	3,193,892	KIVENTERA, JENNI	3,193,891	KURSMARK, MATTHEW T.	3,193,571
JUNKIN, ANGUS	3,193,506	KLEIBERIT SE & CO. KG	3,194,083	KURZ, PHILIPP	3,193,550
JURIC, PERRY	3,196,927	KLEIN, CHRISTOPHER D.	3,193,507	KUSHWAHA, NIRAJ KANT	3,193,513
KAAN, WOUTER JAN	3,194,100	KLEOUDIS, CHRISTI	3,197,055	KUTTA TECHNOLOGIES, INC.	3,196,934
KADIU, IRENA	3,197,465	KLIMOV, ANDREI		KVIST, MARKUS	3,194,007
KADONO, YOSUKE	3,197,300	ALEKSANDROVICH	3,196,512	KYOCERA SENCO	
KAINERSTORFER, JANA	3,193,711	KLOCKNER PENTAPLAST OF		INDUSTRIAL TOOLS, INC.	3,193,507
KAITTANIS, CHARALAMBOS	3,193,830	AMERICA, INC.	3,193,634	KYOSTIO-MOORE, SIRKKA	
KAKKAR, KARAN	3,193,617	KNAPP HOLDING GMBH	3,194,276	R.M.	3,193,866
KALISH, KEVIN	3,197,180	KNAPP, FRIEDRICH	3,194,276	L'AIR LIQUIDE SOCIETE	
KALLUMADI, SURYA	3,193,987	KNERR, MICHAEL	3,194,107	ANONYME POUR	
KALUNIAN, KENNETH	3,197,055	KODAMA, MUNEHIRO	3,193,673	L'ETUDE ET	
KALYANI, RUBANA	3,197,055	KOLB, ILYA	3,193,683	L'EXPLOITATION DES	
KAMAT, PRITISH	3,193,708	KOLB, TOBIAS	3,197,062	PROCEDES GEORGES	
KAMAT, PRITISH M.	3,193,707	KOLESNIKOV, ALEXANDER	3,193,958	CLAUDE	3,193,686
KAMATH, MITHUN N.	3,193,954	KOLEV, EVGENY	3,193,775	L'AIR LIQUIDE SOCIETE	
KAMBA, ELIE	3,193,629	KOLEV, EVGENY	3,193,778	ANONYME POUR	
KAMPMANN, KRISTOFFER	3,194,045	KOMABA, SHIGERU	3,197,179	L'ETUDE ET	
KANDIBA, SLAVA	3,194,221	KOMATSU LTD.	3,197,300	L'EXPLOITATION DES	
KANERVO, JAANA	3,196,958	KONG, WEIXIN	3,194,145	PROCEDES GEORGES	
KANG, JIANHUI	3,194,228	KONINKLIJKE PHILIPS N.V.	3,196,949	CLAUDE	3,193,690
KANN, JAMES LEE	3,193,724	KONINKLIJKE PHILIPS N.V.	3,197,341	L'AIR LIQUIDE, SOCIETE	
KANN, JAMES LEE	3,193,725	KOOPMAN, LOUISE	3,193,914	ANONYME POUR	
KANNAN, GUNASEKARAN	3,197,506	KOPCHINSKY, SCOTT	3,197,075	L'ETUDE ET	
KAPICAK, LOU	3,193,655	KORHONEN, MARKUS	3,194,007	L'EXPLOITATION DES	
KARATHUR, KARTHIK N.	3,193,668	KORPPI, MARIA	3,193,891	PRO...	3,194,003
KARIOLIS, MIHALIS	3,197,506	KORY, MICHAEL	3,193,827	LABANOWSKI, DOMINIC	3,193,810
KARNIK, RAHUL	3,193,868	KORY, MICHAEL	3,193,828	LABAT-ROCHECOUSTE,	
KARPPI, ASKO	3,194,007	KOTHANDARAMAN,		ANDREW GUY	3,193,701
KARSTEN MANUFACTURING		SRIDHAR	3,197,467	LACATUSU, PHILIPP	3,193,550
CORPORATION	3,197,219	KOUTERS, LUCAS JOHANNES		LACHER, MAXIMILIAN	3,197,062
KARUMUTHIL-MELETHIL,		CORNELIS	3,193,511	LAGHI, MATTEO	3,193,556
SUBHA	3,193,685	KOUVA, SONJA	3,193,663	LAI, ANDILIY G.	3,194,282
KASHIWAGI, JUNJI	3,194,225	KOWALEWSKI, DANIEL	3,193,564	LAI, CHOUNG-HOUNG	3,193,954
KASYANENKO, VALERIY	3,193,970	KOWALEWSKI, DANIEL	3,193,567	LAI, YI-SHIN	3,193,977
KATSUKI, TAKAYUKI	3,194,463	KOZLOWSKI, ERIC	3,193,670	LAI, YUMING	3,193,700
KAUFFMAN, JUDSON	3,194,120	KOZLOWSKI, MICHAEL	3,193,640	LAITINEN, ARI	3,193,891
KAWADA, AKIRA	3,196,946	KRAHN, VALERI	3,194,281	LAKKAVALLI, SHASHIDHAR	3,197,208
KAWAKATSU, TOMO	3,194,044				

## Index des demandes PCT entrant en phase nationale

LAKKIREDDY, MANOJ REDDY	3,194,149	LEWIS, GREGORY	3,193,775	LIU, KUNFENG	3,193,569
LALLEMAND, FREDERIC	3,197,168	LEWIS, GREGORY	3,193,778	LIU, LI	3,196,384
LAM, JIAN HANG	3,193,643	LEWIS, GREGORY J.	3,193,769	LIU, LIFEI	3,194,087
LAMB, PETER J.	3,197,171	LEWIS, WILLIAM H.	3,194,069	LIU, SHUYING	3,194,285
LAMBERT, MILLARD HURST III	3,193,913	LEXOGEN GMBH	3,193,967	LIU, XIAOFENG	3,193,569
LANDSKRONER, KYLE	3,193,939	LI, CHUNNA	3,194,102	LIU, XIAOYU	3,197,197
LANGE, JEAN-PAUL ANDRE MARIE JOSEPH GHISLAIN	3,197,058	LI, CUI	3,193,979	LIU, YE	3,193,685
LANGE, JEAN-PAUL ANDRE MARIE JOSEPH GHISLAIN	3,197,061	LI, DONGBO	3,196,383	LIU, YE	3,193,697
LANGLOIS, JOHN	3,193,954	LI, GANG	3,197,183	LIU, YIHAN	3,196,981
LANGTON, JOHN	3,193,776	LI, HAIYAN	3,197,074	LIU, YIQIAN ERIC	3,196,444
LANZA, ROSSANA	3,193,639	LI, HUIJIE	3,193,913	LIU, ZHONGPENG	3,194,316
LARSSON, JOHAN	3,193,900	LI, JIAN	3,194,065	LIXIL LIVING TECHNOLOGY (SUZHOU) CORPORATION	3,193,779
LATORRE, STEFANO	3,193,785	LI, JIAN	3,197,179	LLOYD, THOMAS S.	3,194,069
LAUGHLIN, RILEY JAMES	3,196,231	LI, JING	3,194,314	LM WIND POWER A/S	3,193,972
LAVER SIN, JOHANNA	3,197,070	LI, JU	3,194,113	LM WIND POWER A/S	3,193,975
LAWLOR, ANTHONY STEPHEN	3,193,647	LI, JUNZENG	3,194,228	LOCUS SOLUTIONS IPCO, LLC.	3,193,668
LAWRENCE, JON D.	3,194,238	LI, LIE	3,194,087	LONGO ARESO, CARLOS MARIA	3,193,898
LAZAR, VLADIMIR	3,193,688	LI, LIWEI	3,193,707	LONGYEAR TM, INC.	3,193,890
LAZERWITH, SCOTT E.	3,193,879	LI, LIWEI	3,193,708	LOOGER, LOREN L.	3,193,683
LE LOC'H, CLEMENTINE	3,193,895	LI, MENG	3,191,121	LOPERA, MARIA JOSEF	3,193,880
LE, KANG	3,193,745	LI, MENGSONG	3,193,952	LOTVIN, JASON ARNOLD	3,197,481
LEE, BRENDAN	3,196,923	LI, MUYU	3,193,569	LOUISIANA-PACIFIC CORPORATION	3,194,073
LEE, DAE HEE	3,189,227	LI, NAN	3,194,145	LOVELESS, GHRYN	3,196,952
LEE, HOBIN	3,193,855	LI, PENG	3,194,145	LOWERY, III FRANK J.	3,194,229
LEE, JI-HYE	3,193,892	LI, WENTING	3,194,065	LOZHKO, ANDRIY	3,194,136
LEE, JINHWA	3,193,865	LI, XIANFENG	3,193,714	LTS LOHMANN THERAPIE-SYSTEME AG	3,193,713
LEE, JUNG MIN	3,189,227	LI, XIAOLIN	3,196,914	LU, DAN	3,193,963
LEE, KANG SOO	3,194,124	LI, XUEQIANG	3,194,065	LU, HAILING	3,197,158
LEE, KYUNG S.	3,193,855	LI, YANG	3,194,087	LU, HONGTAO	3,196,930
LEE, LIN-NAN	3,194,263	LI, YUE	3,194,087	LU, PEICHAO	3,197,199
LEE, SEUNGJIN	3,193,875	LI, YUNBO	3,193,913	LU, WAN-JIN	3,193,537
LEE, WEI-HUA	3,193,697	LIANG, BIN	3,197,153	LU, XIN	3,193,635
LEEMAN, PAUL	3,193,838	LIAU, VICTOR	3,193,906	LU, YIMING	3,193,639
LEEMANS, JARI	3,197,161	LIE, BJORNAR	3,194,263	LU, ZHAOHUA	3,197,183
LEFEBVRE, GUY	3,197,301	LIEBENBERG, ABRAHAM JOHANNES	3,194,306	LUBECORE INTERNATIONAL INC.	3,193,551
LEHEE, GUILLAUME	3,193,895	LIEBENBERG, ABRAHAM JOHANNES	3,197,302	LUCON ENGINEERING, INC.	3,194,137
LEI, JIA	3,193,984	LIM, KEONSEUNG	3,197,491	LUCON, PETER ANDREW	3,194,137
LEIBOWITZ, EVAN	3,193,516	LIM, SEUNG MOOK	3,193,865	LUKAN, SEAN	3,197,473
LEMAY, DAVID BERNARD MARTIN	3,193,847	LIM, TAEHOON	3,193,875	LULOFF, MARK STEPHEN	3,193,984
LEMO ALVARES DOS SANTOS, RUI MANUEL	3,193,678	LIMBAUGH, DOUGLAS V.	3,196,934	LUND, MORTEN TOFT	3,162,183
LEMPPE, FLORIAN A.	3,194,162	LIN, BOB TSE-WENG	3,193,933	LUO, LIN	3,193,707
LENDERS, FELIX	3,193,864	LIN, TED	3,196,892	LUO, ZHI	3,194,065
LEO, ELISABETTA	3,197,056	LINDE GMBH	3,197,303	LUPTON, FRANCIS STEPHEN	3,193,769
LEPAGE, ALAIN	3,188,740	LINDEM, ALFRED C.	3,193,692	LUVATA OHIO INC.	3,193,944
LEPPANEN, JUHA	3,193,891	LINDEMAN, ADAM	3,193,540	LYBEERT, MART	3,193,653
LEROY, FRANCK	3,193,524	LINDHOLM, CATHARINA	3,197,055	LYNCH, DANIEL ERIC	3,194,197
LESAFFRE ET COMPAGNIE	3,193,845	LINDLEY, JACOB	3,193,528	LYNCH, DANIEL ERIC	3,194,199
LETHIN, DOUGLAS	3,193,941	LINDSAY CORPORATION	3,194,190	LYNN, TIMOTHY R.	3,193,704
LETO LABORATORIES CO., LTD	3,197,464	LINDSAY CORPORATION	3,194,268	LYRA THERAPEUTICS, INC.	3,193,558
LETZELTER, THOMAS	3,194,225	LINESWALA, JAYANA PANKAJKUMAR	3,194,283	M & M INTERNATIONAL, LLC	3,193,804
LEUTHOLD, MARTIN	3,194,147	LING, JOHNSON	3,193,907	MA, CHE	3,197,160
LEVENE, STEPHEN	3,194,081	LINGAM, HARISH	3,194,149	MA, JIJUN	3,196,383
LEVIN, NOAM	3,194,229	LINUS HEALTH, INC.	3,193,776	MA, YIPING	3,193,560
LEVINSON, DOUGLAS	3,194,297	LIPPOLD, JAMES	3,197,327	MAALOUF, SHARBEL	3,193,721
		LITTLE, BRANDEN	3,193,562	MACALLISTER, THOMAS	3,193,561
		LIU, BAIHONG	3,197,463	MACCOSS, MALCOLM	3,196,946
		LIU, CAN	3,197,074	MADDOX, DANIEL PAUL	3,194,164
		LIU, DONGLIANG	3,196,384		
		LIU, HUIJIE	3,197,464		
		LIU, JIA	3,193,954		
		LIU, JIAMIN	3,196,935		

## Index of PCT Applications Entering the National Phase

MADSEN, GARY L.	3,193,642	MCCARTNEY, JASON	3,197,173	MITCHELL, MICHAEL	
MADSEN, MAD S HOLST		MCCLANAHAN, ERIC	3,193,674	WILBERT	3,193,628
AAGAARD	3,162,183	MCCORMICK, CRAIG	3,197,327	MITCHELL, TIM	3,196,981
MAEDA, YOSHIKI	3,194,148	MCGAURAN, EMMET	3,193,927	MITRAGOTRI, SAMIR	3,194,297
MAES, DIRK LEONTINA	3,197,042	MCGOWAN, DAVID	3,197,470	MITSUBISHI ELECTRIC	
MAGIDI, SHAI	3,193,688	MCININCH, JAMES D.	3,193,830	CORPORATION	3,194,191
MAGNA SEATING INC.	3,193,670	MCINNIS, JAMES M.	3,196,237	MIYAMOTO, YASUFUMI	3,196,946
MAGNI REAL ESTATE S.R.L.	3,193,813	MCMAHAN, CASSIDY S.	3,194,009	MOADDEL, TEANOOSH	3,193,716
MAGNI, RICCARDO	3,193,813	MCNEIL, RAE	3,197,473	MOAZEN, DAMON	3,197,467
MAGNUSSON, BRIAN JAMES	3,194,190	MCQUERREY, SEAN JOSEPH	3,194,074	MOGANTY, SURYA	3,194,151
MAHANTI, ARJUN	3,193,571	MEASE, TAMARA R.	3,193,517	MOGANTY, SURYA	3,194,155
MAHO, EMMANUELLE	3,197,055	MEDICAL SYSTEM PROTECT		MOHR, BERND	3,197,339
MAHON, CATHAL	3,197,506	GMBH	3,193,861	MOLL, PAMELA	3,193,967
MAJUMDAR, SABYASACHI	3,193,513	MEDLEY, JONATHAN		MOLLAAGHABABA, REZA	3,193,691
MAKINO, MASAYUKI	3,193,779	WILLIAM	3,193,879	MONACA, GIORGIO	3,194,152
MALAVIARACHCHIGE		MEDLINE INDUSTRIES, LP	3,193,721	MONETTE, KEVIN	3,193,910
RABEL, RANGA		MEEUS, HANS	3,193,653	MONTENA, NOAH P.	3,194,119
PRABHATH	3,193,980	MEHTA, RUJUL M.	3,193,704	MONTENA, NOAH P.	3,194,136
MALEJ, KRZYSZTOF	3,197,474	MENON,		MONTENEGRO, ALEJANDRO	3,196,919
MALLEMALA, PRATHYUSHA	3,193,765	KANJIMPUREDATHIL		MONTET, SHAUN PAUL	3,193,804
MALLINOWSKI, IVAN	3,197,466	MURALIKRISHNA	3,193,883	MOON, JAMES J.	3,193,682
MALLYA, PARIKSHITH	3,193,557	MERANI, MARK		MOORE, MATT	3,196,892
MALO, PEKKA	3,197,264	CHRISTOPHER	3,193,970	MOORE, ROBERT WAYNE	3,194,292
MAMMERI, KAHINA	3,194,084	MERCER, ANDREW	3,193,685	MORAND, ERIC	3,197,055
MANASCO, ANTON TRAVIS	3,193,893	MERCER, ANDREW	3,193,697	MORGAN, PAUL	3,193,946
MANG, MICHAEL	3,193,669	MEREDIAN, INC.	3,193,669	MORGANELLI, PHILIP A.	3,193,879
MANG, MICHAEL	3,193,677	MEREDIAN, INC.	3,193,672	MORITZ, ALON	3,193,719
MANGLIK, AASHISH	3,193,537	MEREDIAN, INC.	3,193,674	MORRIS, MARY S.	3,193,994
MANIAR, ROHAN	3,193,687	MEREDIAN, INC.	3,193,677	MORTENSEN, PETER	
MANITOU BF	3,193,629	MERSEBAK, DANIEL LUNDT	3,194,045	MOLGAARD	3,193,912
MANZELLA, SALVATORE, JR.	3,197,229	MERSEBAK, NICOLAI		MOSER, MICHAEL	3,194,086
MAO, TONGQIN	3,194,228	SCHERLING	3,194,045	MOTAQI, AHMADREZA	3,193,796
MAPAL FABRIK FUR		MERUS N.V.	3,193,619	MOTTE, JEAN-CHARLES	3,193,524
PRAZISIONSWERKZEUGE		METTERS, ANDREW	3,194,273	MOUSTAKIM, MOSES	3,194,169
DR. KRESS KG	3,194,133	MEYER INTELLECTUAL		MSA TECHNOLOGY, LLC	3,197,051
MARECHAL, JEAN-FRANCOIS	3,193,524	PROPERTIES LIMITED	3,193,955	MUELLER, GERT	3,197,306
MARENDIC, BORIS	3,197,307	MEYER, ULRICH	3,194,132	MULLER, ELMAR LENNOX	3,197,302
MARGALIT, ELI	3,193,786	MEZA, ALBERT	3,193,708	MULLER, ELMAR LENNOX	3,197,491
MARIN, JEAN-PHILIPPE		MIAO, WENKE	3,193,700	MULUKUTLA, BHANU	
JACQUES	3,193,847	MIAO, XIAOXIONG	3,193,700	CHANDRA	3,197,481
MARONEY, RICHARD	3,194,119	MIARELLI, MARCO	3,193,509	MUNNANGI, KRUSHEEL	3,194,153
MARTIN, ANTONY	3,194,048	MICATU INC.	3,194,135	MUNS, JADE YOON JOO	3,193,960
MARTIN, JOHN	3,197,327	MICHEL, KATHRIN	3,193,937	MUNSON, BEAUFORD	
MARTIN, WILLIAM	3,193,819	MICHELS, DORAN JOHN	3,194,137	EUGENE	3,194,137
MARTIN, WILLIAM GRANT	3,194,101	MICIC, STEFAN	3,197,276	MUOTRI, ALYSSON R.	3,194,085
MARTINEZ GALINDO, DAVID	3,197,308	MICREOS FOOD SAFETY B.V.	3,193,971	MURALI, ARJUN	3,193,883
MARTINEZ, JEROME	3,197,168	MIETTINEN, JOONA	3,193,469	MURAWCZUK, DANIEL	3,193,647
MARTINEZ, RAPHAEL	3,194,075	MILABS B.V.	3,194,278	MURE, CLIFF R.	3,193,704
MARTINEZ-MORALES,		MILEWICZ, MARIUSZ	3,194,080	MUSHTAQ, FAISAL	3,193,910
ALFREDO A.	3,193,875	MILKDROP IP PTY LTD	3,194,279	MUTHURAMAN,	
MARTINOT, PIERRE	3,193,534	MILLER, JACK R.	3,193,543	MUTHURAMAN	3,197,468
MASON, ANDREW	3,194,279	MILLER, MARK THOMAS	3,197,173	MYELOID THERAPEUTICS,	
MASSACHUSETTS INSTITUTE		MILLER, MATTHEW KERR	3,194,280	INC.	3,193,508
OF TECHNOLOGY	3,193,998	MILLER, MIKAYLA T.	3,196,981	NA BIOTECH CORP	3,194,285
MATSUNAGA, NOBUYUKI	3,196,946	MILLIGAN, PATRICK E.	3,196,237	NADERI, ROOZBEH	3,196,952
MATUS, ESTHER	3,196,929	MILLS, RAJASI	3,193,910	NADERI, ROOZBEH	3,196,955
MATYS, PAWEL	3,193,640	MILON, CHRISTOPHE	3,193,794	NADERI, ROOZBEH	3,197,315
MAUG, JAMES A.	3,193,518	MILVERTON, OLIVER JOHN		NAFZIGER, GREGORY W.	3,193,750
MAUL, CHRISTOPHER	3,194,273	LINDSEY	3,197,372	NAHUM, ALTAN	3,193,827
MAXIMUS, BART HENRI		MINDERER, MATTHIAS		NAIK, MILIND	3,194,149
JOHANNA	3,197,042	JOHANNES LORENZ	3,193,958	NAKAHATA, TAKASHI	3,196,946
MAY, RENA	3,197,479	MIRAKI INNOVATION THINK		NAKAJIMA, MASAHIRO	3,193,679
MCAFOOS, TIMOTHY	3,193,745	TANK LLC	3,196,472	NAKAMOTO, YOZO	3,193,948
MCCAIG, JOHN	3,197,372	MIRATECH GROUP, LLC	3,193,667	NAKAYAMA, JUMPEI	3,194,225



## Index des demandes PCT entrant en phase nationale

NALLANI, MADHAVAN	3,193,643	NOHMS TECHNOLOGIES, INC.	3,194,155	OWENS-BROCKWAY GLASS	
NAM, HWAJUNG	3,193,865	NOLTE, DAVID D.	3,193,880	CONTAINER INC.	3,193,750
NANAYAKKARA, AVINASH	3,194,224	NOMIKOS, GEORGE	3,193,909	OWENS-BROCKWAY GLASS	
NANDAGOPAN, OBLA		NOMME, CHRISTIAN	3,194,000	CONTAINER INC.	3,193,758
RAMANANDAM	3,193,557	NORDISCHER		OWENS-BROCKWAY GLASS	
NANO ONE MATERIALS		MASCHINENBAU RUD.		CONTAINER INC.	3,193,764
CORP.	3,196,927	BAADER GMBH + CO. KG	3,194,281	OWENS-BROCKWAY GLASS	
NANO TEXTILE SOLUTIONS		NORGREN GT		CONTAINER INC.	3,193,767
AB	3,194,252	DEVELOPMENT		OXFORD NANOPORE	
NARAYANAN,		CORPORATION	3,197,326	TECHNOLOGIES PLC	3,193,980
MURALIDHARAN	3,193,541	NORTON, ANGELA	3,197,179	OXFORD UNIVERSITY	
NARAYANAN,		NOVARTIS AG	3,197,199	INNOVATION LIMITED	3,194,146
MURALIDHARAN	3,193,545	NUNLEY, MARK	3,193,655	OXFORD UNIVERSITY	
NARGIELLO, MARIA	3,193,933	NUTRI'EARTH	3,193,548	INNOVATION LIMITED	3,194,232
NASATO, ELMO	3,193,852	O'CALLAGHAN, COLIN	3,193,540	PACAK, JOHN STEPHEN	3,193,968
NASH, JEFFREY P.	3,193,712	O'DONNELL, CHARLES W.	3,193,868	PACINO, JOHN MICHAEL	3,193,587
NASSIRI KOOPAEI, NASSER	3,193,856	O'NEAL, EVERETT J.	3,194,179	PACINO, JOHN MICHAEL	3,193,633
NASVESCHUK,		OCP S.A.	3,193,726	PADULA, WILLIAM V.	3,193,959
CHRISTOPHER G.	3,194,169	OERLIKON METCO (US) INC.	3,197,043	PAFFHAUSEN, MICHAEL	
NATIONAL UNIVERSITY		OERLIKON METCO (US) INC.	3,197,162	JAMES	3,194,137
CORPORATION		OFFICE NATIONAL D'ETUDES		PAGELS, MIRKO	3,194,281
HOKKAIDO UNIVERSITY	3,194,148	ET DE RECHERCHES		PAKOLA, STEPHEN JOSEPH	3,197,342
NCX CORPORATION	3,194,242	AEROSPATIALES	3,197,071	PALASIS, MARIA	3,193,558
NCX CORPORATION	3,194,243	OHNSMAN, CHRISTINA		PALEY, DANIEL NOAH	3,193,838
NCX CORPORATION	3,194,247	MARIA	3,197,342	PALMER, WILLIAM	3,194,048
NCX CORPORATION	3,194,249	OHSE, JEREMY	3,193,528	PANDINA, MATT	3,196,892
NEBURKOVA, JITKA	3,193,521	OIL FIELD PACKAGING LLC	3,193,818	PAONE, DANIEL	3,193,913
NERANDZIC, MICHELLE M.	3,193,949	OKAWA, TOMOHIRO	3,196,946	PAPES, FABIO	3,194,085
NESTE OYJ	3,193,663	OKUMURA, YUTA	3,194,044	PARADARAMI, TULASI	
NESTE OYJ	3,196,958	OLIVA, PAOLA	3,193,855	KRISHNA	3,194,288
NESVADERANI, FARHANG	3,196,927	OLSON, ZACHARY KENNETH	3,197,208	PARIA, BIMAN C.	3,194,229
NEUEXCELL THERAPEUTICS		OLTHOF, TIMOTHE		PARK, A YEONG	3,193,865
INC.	3,197,178	JOHANNES	3,197,058	PARK, HEE KYUNG	3,193,575
NEUEXCELL THERAPEUTICS		OLTHOF, TIMOTHE		PARK, HYUNJUNG	3,193,892
INC.	3,197,316	JOHANNES	3,197,061	PARK, JUNG-EUN	3,193,855
NEUEXCELL THERAPEUTICS		OMNIPLY TECHNOLOGIES		PARK, KYUNG SOO	3,193,682
INC.	3,197,320	INC.	3,194,224	PARK, MIN-JUNG	3,193,575
NEUEXCELL THERAPEUTICS		OMORI, NAOMICHI	3,193,679	PARK, NATHANIEL	3,191,121
INC.	3,197,321	OMOTOLA, ALAHANDRO O.	3,196,922	PARTINGTON, GARRY	3,194,280
NEURO DEVICE GROUP S.A.	3,197,474	OMYA DEVELOPMENT AG	3,194,107	PARTL, JIRI	3,197,026
NEXTECH BATTERIES, INC.	3,197,048	ONDRA, MARTIN	3,193,521	PASCUAL-LEONE, ALVARO	3,193,776
NGUYEN, LAURA ANH	3,193,868	ONEPOINTONE, INC.	3,193,719	PASELK, JUSTIN A.	3,197,219
NGUYEN, TRAM NGOC	3,197,045	ONSCALE, INC.	3,194,046	PATEL, DARSHIN S.	3,197,045
NI, JINSONG	3,193,940	ONSUM, MATT	3,197,158	PATEL, PRALESHKUMAR	
NICHOLLS, ANDREW BRYCE	3,194,100	OPFERMAN, STEPHEN	3,193,638	GUVANTRAY	3,193,692
NICHOLLS, RICHARD JOHN	3,194,100	OPTIVOLT LABS, INC.	3,193,836	PATEL, RAJAN	3,197,180
NICOVENTURES TRADING		ORGERON, KEITH J.	3,193,970	PAULMAN, JASON S.	3,194,292
LIMITED	3,193,899	ORS, FREDERIC	3,197,163	PAWAR, SANDIP VASANT	3,197,504
NICOVENTURES TRADING		OSHETSKI, MICHAEL	3,194,135	PEARSON, RICHARD PHILIP	
LIMITED	3,193,901	OSHINSKI, MATTHEW	3,193,882	DAVID	3,193,681
NICOVENTURES TRADING		OSOGAMI, TAKAYUKI	3,194,463	PEDERSOLI, STEFANO	3,193,945
LIMITED	3,193,903	OTSU, AYAKA	3,194,148	PEETERS, KOEN	3,193,653
NIELSEN, OLE	3,193,972	OTT, WESLEY	3,197,012	PEIRSON, WILLIAM LESLIE	3,194,300
NIPPON FIBER		OTTEN, DHR. ANDY		PENG, GANG	3,193,951
CORPORATION	3,193,902	JOHANNA ELISABETH	3,162,830	PENG, JIQIAN	3,193,829
NIPPON STEEL		OURABAH, AMINE	3,194,008	PENNER, TREVOR	3,193,562
CORPORATION	3,197,012	OWENS CORNING		PENZ, JANET	3,193,725
NISIUS, DAVID	3,196,875	INTELLECTUAL		PEPSICO, INC.	3,197,503
NITROCAPT AB	3,193,874	CAPITAL, LLC	3,197,306	PEREIRA, ANA	3,193,824
NITROCAPT AB	3,193,885	OWENS CORNING		PERFUSION TECH APS	3,162,183
NITTO DENKO		INTELLECTUAL		PERHERIN, DANIEL	3,193,699
CORPORATION	3,194,148	CAPITAL, LLC	3,197,471	PERKINELMER U.S. LLC	3,197,053
NIX, CHRISTOPH	3,193,572	OWENS-BROCKWAY GLASS		PERKINELMER U.S. LLC	3,197,309
NOHMS TECHNOLOGIES, INC.	3,194,151	CONTAINER INC.	3,193,732	PERKINELMER U.S. LLC	3,197,313

## Index of PCT Applications Entering the National Phase

PERNYER, KENNETH	3,194,079	PRIBANIC, TOMAS A.	3,193,570	RAYDIANT OXIMETRY, INC.	3,193,711
PETIT, LISA	3,193,665	PRICE, ROBERT	3,197,044	RAZEGHI, RAMA	3,193,972
PETITPAIN PERRIN, FRANCOISE	3,194,201	PRIMAS, BERNHARD	3,193,864	RAZEGHI, RAMA	3,193,975
PETRAK, MARTIN	3,193,562	PRIMEVERT, VINCENT	3,193,890	REALTA LIFE SCIENCES, INC.	3,193,565
PFIZER INC.	3,197,481	PRO TRANSIT NANOTHERAPY LLC	3,193,642	REBAND, DAVID	3,197,044
PHARMAFINA ILAC SATIS VE PAZARLAMA ANONIM SIRKETI	3,196,546	PRODEUS, AARON	3,196,929	RECALDE IRURZUN, JOSE IGNACIO	3,193,898
PHIISAGEN CORPORATION	3,196,922	PROHASKY, DANIEL	3,194,279	RECYCLESMAST SOLUTIONS INC.	3,193,966
PHILIP MORRIS PRODUCTS S.A.	3,194,318	PROIA, DAVID	3,194,169	RECYCLESMAST SOLUTIONS INC.	3,193,999
PHILLIPS, BRAD J.	3,196,981	PROKOPCZYK, PAWEL	3,197,474	REDDY, PRANAY REDDY CHEN	3,194,149
PHILLIPS, JONATHAN MARK	3,197,465	PRUD'HOMME, OLIVIER	3,193,873	REDJDAL, MAKHLOUF	3,193,640
PHOTONIP B.V.	3,193,678	PRUISSCHER, SEBASTIAAN	3,194,100	REGAZZI, GIANNI	3,193,717
PIAO, JINHUA	3,197,464	PRYSTUPA, DAVID ALLAN	3,193,968	REGAZZI, NICOLO	3,193,717
PIERRE, FABRICE	3,197,173	PRÆST, LARS	3,194,012	REGELMAN, VADIM (DAN)	3,193,786
PIISPANEN, MIRJA	3,193,891	PUCHE, JUAN SERRANO	3,197,276	REGENERON	
PINHASI, ZOHAR	3,151,027	PURDUE RESEARCH FOUNDATION	3,193,880	REGENERON PHARMACEUTICALS, INC.	3,194,111
PINTO, HEN	3,194,221	PURDUE RESEARCH FOUNDATION	3,194,116	REGENERON PHARMACEUTICALS, INC.	3,197,305
PIOVANO, ROBERTO	3,197,177	PUTHUKKAD, RAHUL	3,193,883	REGENXBIO INC.	3,193,685
PIRAMOON, SINA	3,196,921	PUTTICK, JAMES	3,193,720	REGENXBIO INC.	3,193,697
PITOUT, IANTHE	3,193,706	PYC THERAPEUTICS LIMITED	3,193,706	REGENXBIO INC.	3,197,342
PITSCH, WALTER	3,193,566	PYHALAHTI, ANTTI	3,196,958	REGISTER, JAMES ARTHUR, III	3,193,705
PITT-OHIO EXPRESS LLC	3,193,518	QATTAN, AHLAM JAWDAT	3,193,701	REINER, STEVEN L.	3,193,687
PIZZA, GIANMARCO	3,197,065	QBD (QS-IP) LIMITED	3,193,927	REININK, CHRIS BERND	3,197,372
PIZZOCHERO, ALESSANDRO	3,194,298	QI, FEI	3,194,102	REITER, ALWIN	3,193,930
PIZZUTO, MATTEO SAMUELE	3,194,162	QIAN, CHENG	3,194,243	REMANT, JAMES	3,194,292
PLANET LABS PBC	3,194,289	QIAN, CHENG	3,194,247	RENES, JOHAN	3,197,477
PLATFORM SCIENCE, INC.	3,197,075	QIAN, RANDOLPH	3,193,685	RENOLIT AG	3,194,110
PLICHTA, STEVEN A.	3,193,722	QIAN, DONGRUN	3,193,840	RENTOKIL INITIAL 1927 PLC	3,197,372
PLOUZENNEC, PIERRE	3,194,075	QIN, YONG	3,197,197	REPEAT PRECISION, LLC	3,194,101
PLUMBO, VICTOR A. II	3,193,764	QIU, YANGSHENG	3,196,930	RESCH, BERNHARD	3,193,933
POLCARI, MICHAEL	3,194,288	QU, ZHENYANG	3,196,232	RESEARCH INSTITUTE AT NATIONWIDE CHILDREN'S HOSPITAL	3,194,122
POLEN, SHANE	3,197,471	QUEEN'S UNIVERSITY AT KINGSTON	3,194,311	RESOORT, MIKE	3,194,100
POLK, KATRINA	3,193,725	QUINLAN, MICHAEL	3,197,307	REYNOLDS, BRENT	3,193,856
PONGORNE KIRSCH, KLARA	3,193,855	QUOTIENT SUISSE SA	3,193,927	RI.MOS. S.R.L.	3,193,785
PONTONIO, STEVEN J.	3,193,693	R.P. SCHERER TECHNOLOGIES, LLC	3,194,160	RIBEIRO, CLAUDIO HENRIQUE TEIXEIRA	3,194,004
POOLE, LYNNE	3,197,479	RABOISSON, PIERRE JEAN- MARIE BERNARD	3,197,470	RIBEIRO, JOSE PANCRACIO	3,194,004
POPOV, ADRIAN	3,193,717	RADENEZ, PASCAL	3,193,927	RIBONI, GIACOMO	3,194,158
POPSOCKETS LLC	3,193,827	RADIC8 PTE LTD	3,194,124	RICCARDI, GIANNA	3,197,180
POPSOCKETS LLC	3,193,828	RAI STRATEGIC HOLDINGS INC.	3,194,009	RICE, KIM	3,193,706
PORTER, CHRISTOPHER L.	3,193,642	RAI STRATEGIC HOLDINGS, INC.	3,193,533	RICHER, SARAH M.	3,193,722
PORTER, NATHAN L.	3,197,053	RAI STRATEGIC HOLDINGS, INC.	3,197,473	RICHTER, CHRISTOPH	3,193,861
PORTIER, GUILLAUME	3,194,141	RAJAGOPALAN, RAJKANNAN	3,197,163	RICHTER, TOMAS	3,197,416
POTRECK, JANINE-MELANIE	3,193,519	RAJARAM, MITHUN	3,193,572	RICKETTS, MICHAEL GEORGE	3,194,190
POTTER, ANDREW JOHN	3,194,164	RAMACHANDRAN, JEYARAM	3,197,181	RICKETTS, MICHAEL GEORGE	3,194,268
POURTAHERI, PAYAM	3,193,715	RAMANATHAN, GAVIN	3,193,647	RIDGWAY, DOUGLAS	3,197,155
POWELL, MARGARET BOOTH	3,193,893	RAMCHANDANI, SHYAMLAL	3,193,680	RITTSCHER, JENS	3,194,146
PPC BROADBAND, INC.	3,194,119	RAM, VIRPI	3,193,663	RIVERA, JOHN	3,197,467
PPC BROADBAND, INC.	3,194,136	RANDEL, MICHAEL WILLIAM	3,194,154	RIVIER, CEDRIC	3,193,895
PRAEST, LARS	3,194,013	RAPID PHENOTYPING PTY LIMITED	3,194,048	RIZVI, NAIYER A.	3,193,687
PRASTATEK, CRAIG	3,193,670	RASHLEY, SHANE T.	3,193,732	ROACH, JOHN	3,193,828
PRATT & WHITNEY CANADA CORP.	3,197,301	RASHLEY, SHANE T.	3,193,767	ROBERT BOSCH GMBH	3,193,720
PRAXAIR TECHNOLOGY, INC.	3,193,693	RAUSCH, PHILIP J.	3,193,758	ROBERTS, BRUCE	3,193,538
PRECISION ADM INC.	3,193,562	RAUSCHER, FRANK	3,193,937		
PRESCOTT, ANDREW	3,193,711	RAUSCHER, FRANK	3,194,225		
PRESIDENT AND FELLOWS OF HARVARD COLLEGE	3,194,232	RAY, NEIL PADHARIA	3,193,711		
PRETLOVE, HARRISON JAMES	3,194,015				
PRETZ, MATTHEW T.	3,193,707				
PRETZ, MATTHEW T.	3,193,708				

## Index des demandes PCT entrant en phase nationale

ROBERTS, MATTHEW	3,196,586	SAKA, NANNAJI	3,193,905	SCHUY, STEFFEN	3,193,701
ROBIN, JENNIFER	3,193,939	SAKAMOTO, SACHIKO	3,194,148	SCHWARTZ, EVAN T.	3,197,169
ROBINSON, ALEX	3,194,060	SALDHI, ANKITA	3,193,513	SCHWENDNER, SEBASTIAN	3,197,062
ROBINSON, DERICK C.	3,193,507	SALEH, NASSER WILLIAM	3,197,229	SCIENTIFIC DRILLING	
ROBINSON, WILLIAM H.	3,194,253	SALINE, LON BENJAMIN	3,194,159	INTERNATIONAL, INC.	3,197,155
ROCKING INC.	3,194,272	SALINE, LON BENJAMIN	3,196,231	SCUBLA, STEFANO	3,194,250
RODD-ROUTLEY, SELENE	3,194,048	SALK INSTITUTE FOR		SEAGEN INC.	3,197,158
ROESSLE, MARTIN	3,194,110	BIOLOGICAL STUDIES	3,197,050	SEAGEN INC.	3,197,165
ROGAN, ANDREW ROBERT		SALTERS, BART ANDRE	3,197,341	SEASUN THERAPEUTICS	3,193,575
JOHN	3,193,702	SAMANTA, SATYABRATA	3,193,672	SECO, JOAO	3,193,894
ROGERS, EMILY	3,193,776	SAMJITSINGH, SHARON	3,194,002	SEEHRA, JASBIR S.	3,193,654
ROHANI, DARIUS ADAM	3,194,045	SAMJITSINGH, SHARON	3,194,006	SEGHAR, SAID	3,193,873
ROHDE, WOLFGANG	3,193,937	SAMJITSINGH, SHARON	3,194,246	SEITZ, ALEXANDER	3,193,967
ROHM AND HAAS COMPANY	3,193,703	SANDOVAL, FERMIN	3,193,708	SELKIRK, IRIE VICTORIA	3,197,488
ROHM AND HAAS COMPANY	3,196,981	SANDVIK MINING AND		SENGLED CO., LTD.	3,197,194
ROMAN, DAVID A.	3,193,962	CONSTRUCTION OY	3,194,237	SEO, JUN-HYUK	3,193,892
ROMER, MICHAEL	3,193,567	SANDVIK SRP AB	3,193,729	SERVICES MAKILA INC.	3,188,740
RONDINI, NICOLA	3,194,250	SANGENIC INTERNATIONAL		SETHI, YOGESH	3,193,617
RONTREE, SCOTT	3,194,001	LIMITED	3,194,001	SEVINDIK, VOLKAN	3,193,547
ROOS, KEVIN	3,194,075	SANOBI BIOTECHNOLOGY	3,194,111	SH GROUP A/S	3,194,012
ROOT, TJ	3,197,473	SANTHOSH, SWARGAM	3,194,149	SH GROUP A/S	3,194,013
ROSAIN-GUEU, MARC	3,194,003	SANTO, VITOR ESPIRITO	3,191,121	SHADFORTH, IAN	3,193,680
ROSEN, LAURA	3,194,162	SARAGOVI, HORACIO URI	3,197,304	SHAFIGH, SAM	3,197,201
ROSENBERG, STEVEN A.	3,194,229	SARASWAT, MANOJ KUMAR	3,194,149	SHAH, CHIRAG	3,197,467
ROSSEINSKY, MATTHEW	3,193,652	SARKAR, PRITAM	3,194,311	SHAH, CHIRAG	3,197,469
ROTH, AXEL	3,193,701	SARTORIUS STEDIM		SHAKACAN IP B.V.	3,194,100
ROTHENBERG, ASHLEY		BIOTECH GMBH	3,194,147	SHAKEEL, AMEER HAMZA	3,193,715
RACHEL	3,193,882	SATIJN, DAVID	3,193,914	SHANG, HAO	3,197,201
ROTHENBERG, ASHLEY		SATO, YUSUKE	3,194,148	SHANG, ZONGREN	3,193,640
RACHEL	3,194,088	SATTLER, WESLEY	3,194,179	SHANGHAI HENGRUI	
ROTHERY, DAVID	3,193,516	SCABELLONE, CHIARA	3,197,070	PHARMACEUTICAL CO.,	
ROUGEOLLE, MATHIEU	3,193,794	SCARABEE SYSTEMS &		LTD.	3,194,077
ROVALDI, CHRISTOPHER R.	3,193,654	TECHNOLOGY B.V.	3,193,988	SHANGHAI HENGRUI	
ROWELL, RYAN WAYNE	3,194,101	SCHAPANSKY, CHASE	3,197,072	PHARMACEUTICAL CO.,	
ROWLEY JR., WILLIAM F.	3,193,508	SCHAUMBERGER, HERBERT	3,194,287	LTD.	3,196,940
ROY, ALAIN	3,196,865	SCHEIBEL, AXEL	3,193,896	SHAO, CHENG	3,194,077
RUAN, XIAOSAI	3,197,074	SCHEIDEGGER, ADAM		SHAROBEM, TIMOTHY	
RUANO PLAZA, GEMA	3,194,283	WALTER	3,193,868	TADROS	3,197,043
RUBBERGREEN INDUSTRIE	3,193,873	SCHENCK PROCESS		SHAROBEM, TIMOTHY	
RUDELL, GREGORY ROY	3,193,907	AUSTRALIA PTY		TADROS	3,197,162
RUDDY, MARCELLA	3,194,111	LIMITED	3,194,080	SHARON, EREZ	3,194,221
RUDOLPH, JAMES	3,194,292	SCHENCK PROCESS LLC	3,196,936	SHARON, YOAV	3,197,307
RUECKERT, JULIUS	3,194,059	SCHERBAKOVA, INNA	3,193,508	SHARP, DAVID	3,194,239
RUFUS, ISAAC BERNARD	3,193,727	SCHIMER, JIRI	3,193,521	SHARRAH, JONATHAN R.	3,193,991
RUHE, JR., WILLIAM		SCHIPA, MAURIZIO	3,193,897	SHAW, DONALD F.	3,193,708
RAYMOND	3,197,324	SCHLEGEL, MARK K.	3,193,830	SHAW, EDWARD E.	3,193,946
RUHE, JR., WILLIAM		SCHMIDT, CHRISTOPH	3,197,337	SHAW, REUBEN J.	3,197,050
RAYMOND	3,197,483	SCHMITTGEN, THOMAS D.	3,193,856	SHEARER, BARRY	3,193,913
RUOTSALAINEN, PASI	3,194,237	SCHNEEBECK, TIM	3,197,337	SHEDLOCK, DANIEL	3,196,875
RYON, SHAWN M.	3,193,709	SCHNEIDER, ERIK	3,197,305	SHEETS, WILLIAM	3,193,769
RYU, HYUNSEUNG	3,193,892	SCHOLAR ROCK, INC.	3,193,909	SHEETS, WILLIAM	3,193,775
RYU, MIYOUNG	3,193,892	SCHOMISCH, SEBASTIAN	3,193,713	SHEETS, WILLIAM	3,193,778
S&C ELECTRIC COMPANY	3,196,919	SCHOOR, OLIVER	3,193,564	SHELL INTERNATIONALE	
S&C ELECTRIC COMPANY	3,197,307	SCHOOR, OLIVER	3,193,567	RESEARCH	
SAAB AB	3,194,068	SCHRADER, CHRISTOPH	3,193,564	MAATSCHAPPIJ B.V.	3,197,058
SACHDEVA, PRATEEK	3,193,965	SCHRADER, CHRISTOPH	3,193,567	SHELL INTERNATIONALE	
SADAGOPAN,		SCHRECK, DAVID JAMES	3,193,655	RESEARCH	
SATHIYANARAYANAN	3,197,181	SCHREITER, ERIC R.	3,193,683	MAATSCHAPPIJ B.V.	3,197,061
SAERTEX MULTICOM GMBH	3,193,931	SCHULTE, CHRISTIE	3,193,913	SHELL INTERNATIONALE	
SAFRAN HELICOPTER		SCHULTES, THILO KONRAD	3,197,337	RESEARCH	
ENGINES	3,193,847	SCHURR, MANUEL	3,193,634	MAATSCHAPPIJ B.V.	3,197,159
SAGERER, DAVID	3,194,110	SCHUSTER, HEIKO	3,193,564	SHEN, PIFA	3,193,552
SAINT LOUIS UNIVERSITY	3,193,994	SCHUSTER, HEIKO	3,193,567	SHEN, YUELEI	3,197,463
SAINT-GOBAIN PLACO	3,194,261	SCHUTZ, THORBEN	3,194,139		

## Index of PCT Applications Entering the National Phase

SHENZHEN MICROBT ELECTRONICS TECHNOLOGY CO., LTD.	3,194,145	SOLHEIM, JOHN A. SOLID POWER OPERATING, INC.	3,197,219	SUELING, CARSTEN	3,193,937
SHENZHEN PHARMACIN CO., LTD.	3,193,829	SOLIDSVAC PTY LTD	3,193,530	SUEZ INTERNATIONAL	3,194,201
SHENZHEN PHARMACIN CO., LTD.	3,194,010	SOMASUNDARAM, SUBRAMANIAM	3,196,926	SUKURU, KARUNAKAR	3,194,160
SHEPOSH, BRIAN	3,194,156	SOMMER, HEINO	3,194,270	SUMIT, MADHURESH	3,197,481
SHI, DINGQIN	3,196,914	SON, DON	3,193,937	SUMIYOSHI, TEIKO	3,193,952
SHI, LIMING	3,193,767	SON, KKA BI	3,197,075	SUN, LONGWEI	3,193,829
SHI, ZHIQIANG	3,193,954	SONERA MAGNETICS, INC.	3,189,227	SUN, LONGWEI	3,194,010
SHIBUYA, AKITO	3,196,946	SONG, GUOCHEN	3,193,810	SUN, XIAOQI	3,193,682
SHILOACH, ANAT	3,193,716	SONG, HAO	3,193,909	SUN, XIAOYU	3,193,979
SHINDO, TAKESHI	3,194,011	SONOCO PRODUCTS CO.	3,197,197	SUNDARAM, RAMASUBRAMANIAN	3,193,583
SHIOKAWA, ZENYU	3,196,946	SONOS, INC.	3,193,630	SUNDARAM, RAMASUBRAMANIAN	3,193,586
SHIRAI, JUNYA	3,196,946	SORET MARTON, AGUSTIN	3,196,892	SUNDARARAJAN, NIRANJAN	3,194,047
SHIRANI, KIESUKE	3,193,948	SOTH, MICHAEL	3,193,898	SUNNYBOOK RESEARCH INSTITUTE	3,196,929
SHISHIDO, TAKUYA	3,194,148	SOUILLARD-MANDAR, WILLIAM	3,193,745	SUNRISE SA	3,193,534
SHOENHAIR, JORDAN D.	3,197,219	SOULLIAC, PATRICIA	3,193,776	SUOMINEN, ANTTI	3,197,264
SHOURA, MASSA	3,194,081	SOUNDARAPANDIAN, MANGALA MEENAKSHI	3,193,661	SURVILA, MANTAS	3,193,967
SHRIVASTAVA, GUARAV	3,193,692	SPACE TIME S.A.	3,193,830	SUTER, ROMAN	3,197,326
SICHUAN UNIVERSITY	3,197,197	SPARKES, AMANDA	3,194,262	SVOBODA, KAREL	3,193,683
SILICON QUANTUM COMPUTING PTY LIMITED	3,193,848	SPHERA TECHNOLOGY GMBH	3,196,929	SWANK, BRIAN	3,193,944
SILINA, ALINA	3,197,173	SPIEGEL, LAUREN ANNE	3,193,519	SWEETWATER ENERGY, INC.	3,194,002
SILVEIRA, CHRISTOPHE	3,193,849	SPILIOTOPOULOS, ANASTASIOS	3,197,201	SWEETWATER ENERGY, INC.	3,194,006
SIMANTIRAS, STEPHEN	3,193,516	SPRINGER, MATTHIAS	3,197,465	SWEETWATER ENERGY, INC.	3,194,246
SIMMONS, MICHELLE YVONNE	3,193,848	SPYRA, NIKOLAUS	3,197,465	SWIMC LLC	3,193,960
SIMMONS, STEPHEN C.	3,193,516	SPYRA, NIKOLAUS	3,197,465	SYLEJMANI-REKALIU, MIMOZA	3,193,769
SIMMONS, TABATHA	3,194,122	ST. GERMAIN, BRIAN	3,196,500	SYLEJMANI-REKALIU, MIMOZA	3,193,775
SIMS, DANIEL JEROME	3,196,444	STABERNAU, JOHN	3,194,287	SYLEJMANI-REKALIU, MIMOZA	3,193,778
SINGH, ANUP	3,194,270	STALLER, TRACY D.	3,194,073	SYNTHON B.V.	3,197,026
SINGH, PRATIK RAJ	3,193,980	STAM, WALTER	3,193,818	SZABO, DANIEL	3,196,317
SINICKAS, ALEXANDRA	3,194,279	STANFORD, MARIANNE	3,193,667	SZEWCZYK, JANAH C.	3,193,703
SINICROPI, JOHN	3,194,151	STAPLES, TRIPP CAPPEL	3,197,159	T.EN PROCESS TECHNOLOGY, INC.	3,193,655
SINICROPI, JOHN	3,194,155	STEAD, DAVID ROBERT	3,197,163	TAE TECHNOLOGIES, INC.	3,196,952
SIOPES, WILLIAM X., JR.	3,197,180	STEBBINS INNOVATIONS, LLC	3,193,804	TAE TECHNOLOGIES, INC.	3,196,955
SIRNAOMICS, INC.	3,194,161	STEGALL, BRIAN	3,197,481	TAE TECHNOLOGIES, INC.	3,197,315
SITA SWITZERLAND SARL	3,193,718	STEIN, DOMINIK	3,197,327	TAGLIANI, AURO ROBERTO	3,193,845
SKALERUD, AMUND	3,194,121	STELLAR ENTERPRISE LLC	3,193,571	TAGUCHI, MASAMITSU	3,194,148
SKOULIDAS, ANASTASIOS	3,194,179	STEPHENSON, NEIL A.	3,194,147	TAHVONEN, OLLI	3,197,264
SLEEP NUMBER CORPORATION	3,193,910	STERNER, MARION	3,197,505	TAKABA, KENICHIRO	3,194,164
SLEEP NUMBER CORPORATION	3,193,916	STEWART, JOSHUA P.	3,193,693	TAKARA BELMONT CORPORATION	3,193,673
SLEIPNER FINLAND OY	3,193,469	STICHTER, HENDRIK	3,194,005	TAKASHIMA, MISATO	3,194,164
SLEPCHENKOV, MIKHAIL	3,196,952	STONEAGE, INC.	3,197,058	TAKIZAWA, SATOSHI	3,194,044
SLEPCHENKOV, MIKHAIL	3,196,955	STRANGE, WARREN ROSS	3,196,317	TAMIR, IIAN	3,197,229
SLEPCHENKOV, MIKHAIL	3,197,315	STRATTON, THOMAS P.	3,197,496	TAMSETT, COLIN	3,193,681
SMID, CALEB GORDON	3,193,551	STRAYER, DAVID R.	3,193,879	TAN, MICHAEL KIM	3,193,988
SMID, JOHN PETER	3,193,551	STREAMLIGHT, INC.	3,196,563	TAN, SHUGUANG	3,193,963
SMITH, BRANDON C.	3,193,768	STROUMPOULIS, DIMITRIOS	3,193,991	TANAKA, KENSUKE	3,193,948
SMITH, DAVID	3,193,916	STRUVE, FRIEDRICH-WILHELM	3,193,535	TAO, WEIKANG	3,196,940
SMITH, JESSE JEROME	3,193,868	STRYDE LIMITED	3,194,110	TAPPER, AMY	3,193,661
SMITH, NICHOLAS D.	3,194,282	STUBER, ANDREAS	3,194,008	TASTY INFUSION, INC.	3,194,154
SNAVELY, DAN A.	3,194,251	STUCKERT, NICHOLAS R.	3,197,157	TAYLOR, BENJAMIN FRANCIS	3,193,903
SOBERANO, ERIC B.	3,193,566	STUPAKOV, DMITRY	3,193,693	TAZ, HUMAIRA	3,194,224
SOCIETE DES PRODUITS NESTLE S.A.	3,193,665	STURA, ENRICO	3,194,288	TEAGUE, ALAN W.	3,194,292
SOCIETE FINANCIERE INDUSTRIELLE	3,193,524	STURINO, CLAUDIO	3,194,318	TENCENT TECHNOLOGY (SHENZHEN) COMPANY LIMITED	3,133,915
SOILMEC SPA	3,193,556	SU, SHANDONG	3,193,512	TEPE, APRIL R.	3,193,685
		SUAREZ, GEORGE DAVID	3,133,915		
		SUBRAMANYA, TEJASVI	3,193,838		
			3,193,535		

## Index des demandes PCT entrant en phase nationale

TEPE, APRIL R.	3,193,697	THIENEL, ULRICH	3,193,565	UNIVERSITÄTSMEDIZIN DER	
TERKALAS, DONNIE	3,193,538	THOMAS, ABHAY	3,197,499	JOHANNES GUTENBERG-	
TERRADEPTH, INC.	3,194,120	THOMAS, JOHN K.	3,194,293	UNIVERSITÄT MAINZ	3,197,468
TERRY, NATHANIEL M.	3,193,517	THOMAS, WILLIAM	3,193,767	UNIVERSITÄT GENT	3,197,161
TERTEL, JONATHAN A.	3,193,962	THOMPSON, GARY	3,197,072	UNIVERSITY OF CINCINNATI	3,193,805
TESSON, NICOLAS	3,197,026	THOMPSON, KARL	3,193,776	UNIVERSITY OF CINCINNATI	3,193,806
TETREAU, NICOLAS	3,193,886	THUILLIEZ, ANNE-LISE	3,194,084	UNIVERSITY OF CINCINNATI	3,193,808
TEXTRACE AG	3,193,850	TIAN, JINING	3,193,692	UNIVERSITY OF CINCINNATI	3,193,809
TEYHAN, DOUGLAS ROBERT	3,194,080	TIAN, WENBO	3,194,145	UNIVERSITY OF CINCINNATI	3,193,812
THE BOARD OF TRUSTEES OF		TOBYNE, SEAN	3,193,776	UNIVERSITY OF CINCINNATI	3,193,816
THE LELAND STANFORD		TOLMAR INTERNATIONAL		UNIVERSITY OF CINCINNATI	3,193,835
JUNIOR UNIVERSITY	3,193,537	LIMITED	3,197,170	UNIVERSITY OF CINCINNATI	3,193,837
THE BOARD OF TRUSTEES OF		TOLMAR INTERNATIONAL		UNIVERSITY OF FLORIDA	
THE LELAND STANFORD		LIMITED	3,197,318	RESEARCH	
JUNIOR UNIVERSITY	3,194,081	TONY, ANTHONY	3,194,086	FOUNDATION,	
THE BOARD OF TRUSTEES OF		TOPIX PHARMACEUTICALS,		INCORPORATED	3,193,856
THE LELAND STANFORD		INC.	3,194,150	UNIVERSITÄT PALACKEHO V	
JUNIOR UNIVERSITY	3,194,129	TOPSOE A/S	3,193,912	OLMOUCI	3,193,521
THE BOARD OF TRUSTEES OF		TORRES, GABRIEL	3,194,155	UNTERTHINER, THOMAS	3,193,958
THE LELAND STANFORD		TOUGNE, GAEL	3,194,261	UOP LLC	3,193,769
JUNIOR UNIVERSITY	3,194,253	TOUR, JAMES M.	3,193,826	UOP LLC	3,193,775
THE BOEING COMPANY	3,197,181	TOURENNE, ANNABEL	3,194,141	UOP LLC	3,193,778
THE BOEING COMPANY	3,197,501	TRADE ASSOCIATES, INC.	3,197,171	USTAV ORGANICKE CHEMIE	
THE REGENTS OF THE		TRAN, JOE A.	3,197,173	A BIOCHEMIE AV CR,	
UNIVERSITY OF		TRANBERG, THOMAS		V.V.I.	3,193,521
CALIFORNIA	3,193,875	LINDBERG	3,193,574	USZKOREIT, JAKOB D.	3,193,958
THE REGENTS OF THE		TRANI, GIORGIO	3,194,005	UTAMA, SASIWIMON	3,193,706
UNIVERSITY OF		TRANSOCEAN SEDCO FOREX		UV 426, LLC	3,151,027
CALIFORNIA	3,194,085	VENTURES LIMITED	3,197,327	UYEDA, JOSHUA	3,197,467
THE REGENTS OF THE		TRANSPOSON		UZUN, OKTAY	3,194,232
UNIVERSITY OF		THERAPEUTICS, INC.	3,193,512	VAGNOLI, STEFANO	3,193,653
MICHIGAN	3,193,682	TRAUTHWEIN, HARALD	3,194,139	VAIDYA, RUTVIK	3,194,151
THE TRUSTEES OF		TREIBERGS, VALTS	3,194,134	VAIDYA, RUTVIK	3,194,155
COLUMBIA UNIVERSITY	3,193,687	TREMBLAY, LAURA	3,197,493	VALAMEHR, BAHRAM	3,193,977
THE TRUSTEES OF THE		TRILLA CASTANO,		VALDEZ, LINO	3,197,173
UNIVERSITY OF		MONTERRAT	3,197,026	VALLELONGA, ROBERT	3,196,934
PENNSYLVANIA	3,193,833	TRINKHAUS, JONAS	3,197,062	VALLOUREC OIL AND GAS	
THE UNITED STATES OF		TRIPOD, JOSEPH F.	3,193,595	FRANCE	3,197,012
AMERICA, AS		TSE, JOHNSON	3,193,730	VAN DER BERG, CAMERON	3,193,728
REPRESENTED BY THE		TUBE FISHWAYS PTY. LTD.	3,194,300	VAN DER BERG, DANIEL	3,193,728
SECRETARY,		TUCKER, RICHARD D.	3,193,990	VAN DEUTKOM, JUDITH	
DEPARTMENT OF		TUDMAN, SCOTT	3,194,006	CHRISTINA THEODORA	3,193,919
HEALTH AND HUMAN		TUMMALA, RAJENDRA	3,197,055	VAN EVEREN, SHERRI	3,197,342
SERVICES	3,193,855	TUPIN, CYRILLE	3,197,168	VAN GEEST, BARTOLOMEUS	
THE UNITED STATES OF		TURAN, IBRAHIM	3,196,546	WILHELMUS DAMIANUS	3,196,949
AMERICA, AS		TUREK, JOHN J.	3,193,880	VAN GORP, LOGAN	3,197,012
REPRESENTED BY THE		TURNBULL, WILLIAM N.	3,197,171	VAN HOVE, AMY	3,197,318
SECRETARY,		TURNER, MICHAEL ROBERT	3,197,199	VAN LANKVELD, ARNO	
DEPARTMENT OF		TURNG, BEEN-FOO	3,193,888	HEINRICUS WILHELMUS	3,196,389
HEALTH AND HUMAN		TYAGI, VIPIN	3,193,513	VAN LEEUWEN, ERWIN	
SERVICES	3,194,229	UCB BIOPHARMA SRL	3,197,465	CHRISTIAAN	3,194,100
THE UNIVERSITY OF		UDDIN, MAYA C.	3,193,946	VAN ROOIJ, GERARD	
FLORIDA RESEARCH		UNDEFINED TECHNOLOGIES		JACOBUS	3,193,885
FOUNDATION,		CORP.	3,193,570	VAN ROSSUM, GUUS	3,197,058
INCORPORATED	3,194,116	UNILEVER GLOBAL IP		VAN ROSSUM, GUUS	3,197,061
THE UNIVERSITY OF		LIMITED	3,193,716	VANDEVENTER, SARA LYN	3,193,872
NOTTINGHAM	3,194,163	UNILEVER GLOBAL IP		VARANASI, RAMA KRISHNA	3,193,557
THE UNIVERSITY OF		LIMITED	3,193,765	VAREKAMP, CHRISTIAAN	3,196,949
SASKATCHEWAN	3,194,086	UNITED KINGDOM		VAREX IMAGING	
THE UNIVERSITY OF		RESEARCH AND		CORPORATION	3,196,875
SYDNEY	3,197,431	INNOVATION	3,194,060	VARHALE, ASHISH A.	3,193,617
THEES, CARSTEN	3,193,948	UNIVATION TECHNOLOGIES,		VARMA, NISHA VERONICA	3,196,472
THERMOFLEX CORP.	3,197,044	LLC	3,193,704	VAUTRIN, JODI	3,196,892
THEVENON, LUC	3,193,849				

## Index of PCT Applications Entering the National Phase

VECTURA DELIVERY DEVICES LIMITED	3,197,062	WANG, ZEREN	3,193,829	WU, YUE	3,194,155
VED, PARAG	3,193,661	WANG, ZEREN	3,194,010	WUHAN HUMANWELL INNOVATIVE DRUG RESEARCH AND DEVELOPMENT CENTER LIMITED COMPANY	3,194,087
VENDEVILLE, SANDRINE	3,197,470	WANG, ZHENYU	3,194,102	WULFF, BASTIAN	3,196,500
VENKATESH, BALAJI	3,196,865	WANG, ZHIWEI	3,194,314	WULLKOPF, LENA	3,193,567
VERMA, ANUVED	3,194,288	WANG, ZHULUN	3,197,047	WUNDER, KIMBERLEY	3,193,946
VERNA, ERIC	3,193,686	WASKAR, MORRIS	3,193,765	WUNDERLICH, STEFFEN	3,194,083
VERNA, ERIC	3,193,690	WATLOW ELECTRIC MANUFACTURING COMPANY	3,193,528	WYATT, DANIEL	3,193,670
VERNA, ERIC	3,194,003	WATSON, KEVIN	3,196,865	XIA, ZHINAN	3,197,179
VERNACARE LIMITED	3,194,280	WAUGH, JACOB (DECEASED)	3,194,360	XIAO, SA	3,193,951
VERNALIS (R&D) LIMITED	3,194,164	WAYNE FUELING SYSTEMS LLC	3,194,095	XIAO, YIXI	3,196,470
VERRELST, BJORN	3,193,653	WEATHERFORD TECHNOLOGY HOLDINGS, LLC	3,193,628	XIAO, ZHICHENG	3,193,951
VERTEX PHARMACEUTICALS INCORPORATED	3,197,173	WEBER, ECKARD	3,193,512	XIE, WEIBO	3,194,228
VEYEZER, LLC	3,193,959	WEIL, SCOTT	3,193,750	XIN, SCOTT	3,197,326
VIANELLO, FORTUNATO	3,193,877	WEILAND, ANDREAS	3,193,550	XIN, YANG	3,193,840
VIANELLO, RICCARDO	3,193,877	WEIN, NICOLAS SEBASTIEN	3,194,122	XING, ROUMEI	3,196,930
VIASAT, INC.	3,193,532	WEISER, YANNIC	3,197,062	XINJIANG GOLDWIND SCIENCE & TECHNOLOGY CO., LTD.	3,194,316
VIERGUTZ, MICHAEL A.	3,193,948	WEISSENBORN, DIRK	3,193,958	XU, BAOLEI	3,196,232
VIETS, SEBASTIAN	3,194,132	WENG, JIANMIAO	3,133,915	XU, BAOLEI	3,196,383
VINCENT, PASCAL	3,188,740	WENSVOORT, GERT	3,197,477	XU, CHRISTINE	3,194,111
VIR BIOTECHNOLOGY, INC.	3,194,162	WERSWICK, BJORNAR	3,194,000	XU, JIE	3,197,178
VISCOFAN, S.A.	3,193,898	WESTMAN, JACOB	3,193,947	XU, JIE	3,197,316
VITAL, ED	3,197,055	WHEAT, JOHNATHAN NORMAN	3,193,797	XU, JIE	3,197,320
VIVIAN, ANDREW M.	3,193,670	WHITE, RICHARDSON CHARLES JR.	3,193,872	XU, JIE	3,197,321
VIVO MOBILE COMMUNICATION CO., LTD.	3,196,935	WHITE, RYAN JEFFREY	3,193,812	XU, SANJIA	3,194,314
VOGL, LEONARD	3,193,550	WHYMAN, WILLIAM	3,193,962	XU, XIANMIN	3,193,700
VOGUS, DOUGLAS R.	3,194,297	WICAKSONO, BAYU	3,193,730	XU, XUEJUAN	3,193,954
VOICEAGE CORPORATION	3,193,869	WIGMAN, PETER HENRI SAMUEL	3,193,511	XUE, FEI	3,197,197
VOISIN, FLORIANDRE	3,193,876	WILKE, TOBIAS	3,197,339	YADAV, ARUN	3,193,513
VOL-TAR LIMITED	3,194,157	WILL LEWIS CONSULTING, LLC	3,194,069	YAN, JIAN	3,196,242
VON BARGEN, NICHOLAS	3,193,827	WILLEY, MICHAEL	3,197,327	YAN, PEIHUA	3,193,779
VORA, NAMRATA	3,193,661	WILLIAM MARSH RICE UNIVERSITY	3,193,826	YANG YU, BO	3,194,298
VOSE, JOSHUA G.	3,197,180	WILLIAMS, DREW E.	3,193,703	YANG, CHENGBING	3,194,087
W. L. GORE & ASSOCIATES, INC.	3,193,946	WILLIAMS, NATHANAEL	3,193,555	YANG, JIANGUO	3,194,228
W.C. BRADLEY CO.	3,193,538	WITT, ERIC KURT	3,194,088	YANG, JUN	3,194,087
WALKER, LUKE	3,197,165	WITZMAN, OFIR	3,197,229	YANG, LI-YING	3,193,904
WALLACE, ELIZABETH JAYNE	3,193,980	WOLFEL, JOSEF	3,194,120	YANG, RONG	3,193,940
WALSH, CLARE	3,193,721	WOLSCHIN, FLORIAN	3,193,930	YANG, YANG	3,196,940
WALTER, RICHARD E.	3,193,708	WONG, CHI-HUEY	3,197,160	YANG, YI	3,197,463
WAN, YEHUA	3,197,194	WOOD, MARK	3,194,298	YANG, ZUOXING	3,194,145
WAN, YULIN	3,133,915	WOODWARD, JACK	3,194,080	YASUI, SHIGEAKI	3,193,673
WANG, CHUJIE	3,193,840	WOODWARD, JONATHAN JAMES	3,193,680	YATES, RODNEY	3,193,549
WANG, GUOYONG	3,197,464	WOOLSEY PHARMACEUTICALS, INC.	3,193,561	YE, GUOSEN	3,193,913
WANG, HAO	3,193,684	WORLDWIDE INNOVATIVE NETWORK	3,193,688	YE, SONGAN	3,197,194
WANG, JIE	3,194,077	WRIGHT, ALISON	3,193,820	YEE, BRYANT	3,194,275
WANG, LE	3,133,915	WRIGHT, DOUGLAS E.	3,196,317	YEHUDAI-RESHEF, SHLOMIT	3,196,924
WANG, LI	3,196,383	WU, CHUNG-YI	3,197,160	YI, ZHAOFENG	3,196,384
WANG, LIFENG	3,193,684	WU, HAO	3,197,183	YING, MABEN	3,193,913
WANG, PEIYUAN	3,193,879	WU, JIAN	3,193,906	YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREW UNIVERSITY OF JERUSALEM LTD.	3,197,489
WANG, QIAN	3,194,253	WU, JINZI JASON	3,193,906	YLITALO, KARI	3,193,891
WANG, QUANJIANG	3,194,228	WU, LIHUA	3,197,179	YOO, PETER	3,197,469
WANG, TIECHENG	3,196,384			YOON, HI HYE	3,189,227
WANG, XU	3,193,697			YORE, JASON	3,196,892
WANG, XUEHUI	3,193,858			YOSEPH, RAMI	3,194,229
WANG, YING	3,193,954			YOSHIDA, HITOSHI	3,193,673
WANG, YONGGANG	3,194,087				
WANG, YUXIAO	3,193,508				
WANG, YUXIN	3,197,183				
WANG, ZEJING	3,197,158				

## Index des demandes PCT entrant en phase nationale

YOSHINAGA, SEIICHIRO	3,193,679	ZHOU, CHENGJUN	3,194,228
YOST, SAMANTHA	3,193,685	ZHOU, JINGLAN	3,197,173
YOST, SAMANTHA	3,193,697	ZHOU, SHUAIXIANG	3,196,933
YOU, CHANGCHENG	3,193,558	ZHOU, XIANQIANG	3,194,077
YOU, LINGFENG	3,194,077	ZHOU, ZHILI	3,193,684
YOUNG, JOSEPH MICHAEL	3,197,199	ZHOU, ZHIQIAN	3,196,472
YOUSEF, ABDORRUHMAN M.	3,197,504	ZHU, JING	3,193,779
YU, HONGXIN	3,197,074	ZHUHAI UNITED	
YU, JI-YEON	3,193,575	LABORATORIES CO.,	
YU, JIA	3,196,940	LTD.	3,194,065
YU, JIAN	3,197,153	ZHYBAK, MYKHAILO	3,194,252
YU, JINGFENG	3,196,930	ZIEGER, PETER	3,194,258
YUAN, BAOZHI	3,193,569	ZIMMERMAN, GAUTIER	3,197,070
YUAN, QUAN	3,193,707	ZIMMERMAN, KURT A.	3,193,532
YUAN, QUAN	3,193,708	ZIROPA, INC.	3,194,360
ZAATO, FRANCIS	3,194,224	ZIVANOVIC, SVETLANA	3,197,203
ZACT INC.	3,194,293	ZOETIS SERVICES LLC	3,196,925
ZAFIR-LAVIE, INBAL	3,196,924	ZOETIS SERVICES LLC	3,197,074
ZALA, RAKESH	3,194,209	ZOMORODI, SEPEHR	3,193,715
ZANG, YANG	3,194,087	ZOU, LIN	3,197,075
ZAUGG, TORIN	3,193,984	ZSCHERLICH, VERENA	3,193,572
ZENG, XIANTING	3,194,228	ZTE CORPORATION	3,193,714
ZHAI, XIAOHUA	3,193,958	ZTE CORPORATION	3,193,979
ZHANG, BING	3,194,086	ZTE CORPORATION	3,194,294
ZHANG, BO	3,194,087	ZTE CORPORATION	3,197,183
ZHANG, CHAOZAI	3,194,102	ZUME, INC.	3,193,838
ZHANG, CHUANHUI	3,193,878		
ZHANG, CHUANHUI	3,193,888		
ZHANG, CHUANHUI	3,194,255		
ZHANG, DAN	3,197,197		
ZHANG, HONGLIANG	3,193,634		
ZHANG, HUAMIN	3,196,914		
ZHANG, HUICHANG	3,193,913		
ZHANG, JIAN	3,194,242		
ZHANG, JIAN	3,194,247		
ZHANG, JIAN	3,194,249		
ZHANG, JIANJUN	3,197,464		
ZHANG, JILONG	3,194,228		
ZHANG, JINHUA	3,196,232		
ZHANG, JINHUA	3,196,383		
ZHANG, QIUFENG	3,193,878		
ZHANG, QIUFENG	3,193,888		
ZHANG, QIUFENG	3,194,255		
ZHANG, QIULEI	3,197,464		
ZHANG, SHUJUAN	3,197,183		
ZHANG, TIANFU	3,197,464		
ZHANG, WEI	3,197,464		
ZHANG, WENJUN	3,194,086		
ZHANG, XIANGNING	3,196,384		
ZHANG, XIUJUAN	3,197,306		
ZHANG, XUEJUN	3,194,087		
ZHANG, YAN	3,193,683		
ZHANG, YAN	3,194,102		
ZHANG, YONG	3,133,915		
ZHANG, YU	3,197,464		
ZHANG, YUNXIAO	3,193,537		
ZHANG, ZHAOFU	3,194,233		
ZHAO, CHUANWU	3,194,102		
ZHAO, HUI	3,194,228		
ZHAO, XINYAN	3,194,285		
ZHAO, YANXIN	3,193,829		
ZHAO, YANXIN	3,194,010		
ZHAO, YAO	3,197,464		
ZHENG, YAN	3,196,470		

# Index of Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

## Index des demandes canadiennes apparentées par division et demandes mises à la disponibilité du public non disponibles auparavant

ADGA GROUP		EMANS, MATTHEW	3,197,312	LYNX SYSTEM DEVELOPERS,	
CONSULTANTS INC	3,197,231	ENGELS, BART MARINUS	3,197,228	INC.	3,197,174
ALDRIDGE, JEREMY W.	3,197,174	FATTAL, DAVID A.	3,197,284	MA, MING	3,197,284
ANDERSON, GRANT	3,197,296	FICHERA, STEPHEN L.	3,197,410	MACQUARRIE, DON	3,197,231
ANJOS, BRUNO MULLER DOS	3,197,240	FLOMAX INTERNATIONAL,		MAYEKAWA, ROY	3,197,331
AZZOPARDI, ANNA	3,197,288	INC.	3,197,460	MCDONALD, PATRICK M.	3,197,317
BAILEY, KEVIN	3,197,270	FONTAINE, AARON M.	3,197,317	MCKEEN, BRIAN JAMES	3,197,270
BAKATSIAS, KOSTAS	3,197,111	FOO, BRIGHT C. K.	3,197,410	MCLEOD, GEOFF	3,197,231
BALLARD, CARL PAUL	3,197,460	GELBACH, JANET L.	3,197,317	MICHAUD, PIERRE	3,197,239
BALLARD, MARK PAUL	3,197,460	GINGRAS, JEAN-PIERRE	3,197,099	MICHAUD, PIERRE	3,197,243
BARKER, CHAD THOMAS	3,197,274	GOODRICH CORPORATION	3,197,378	MOLE, TIM	3,197,296
BARKER, CHAD THOMAS	3,197,278	GRANT, KEVIN L.	3,197,410	MOLONEY, PATRICK	3,197,288
BARKER, CHAD THOMAS	3,197,280	GUPTA, KAPIL	3,197,117	MOREAU, TIMOTHY D.	3,197,410
BECTON, DICKINSON AND		GUSTIN, LISA A.	3,197,410	MORRIS, GABRIELLE	3,197,154
COMPANY	3,197,270	HACOHEN, NIR	3,197,245	MOSHER, CHARLES C.	3,197,149
BLAYLOCK, PAUL R.	3,197,174	HALLAM, EVAN A.	3,197,174	MOSS, RYAN	3,197,443
BLICK, KEVIN DAVID	3,197,288	HARVEY, LISA	3,197,288	NICOVENTURES TRADING	
BLOXDORF, DAVID N.	3,197,274	HIDEM, STEPHEN E.	3,197,317	LIMITED	3,197,288
BLOXDORF, DAVID N.	3,197,278	HOCTOR, JOHN	3,197,312	NUGENT, TIM	3,197,098
BLOXDORF, DAVID N.	3,197,280	HOLLINGER, HERB A.	3,197,174	PIMENTEL, MARK	3,197,117
BRACCO DIAGNOSTICS INC.	3,197,317	HUNTER, KATHRYN M.	3,197,317	POLARIS INDUSTRIES INC.	3,197,472
BREWER, JOEL D.	3,197,149	HYDROGENICS		POLITIS, ZAFIRIS G.	3,197,111
BRUTON, CONNOR	3,197,288	CORPORATION	3,197,521	PRAY, JEFFERY SCOTT	3,197,252
CANNAN, DAVID D. B.	3,197,410	JOOS, NATHANIEL IAN	3,197,521	PRAY, JEFFERY SCOTT	3,197,253
CARGNELLI, JOSEPH	3,197,521	JUNGLES, STEVEN	3,197,154	PRAY, JEFFERY SCOTT	3,197,257
CEDARS-SINAI MEDICAL		KAKKIS, EMIL	3,197,154	PRECISION PLANTING LLC	3,197,384
CENTER	3,197,117	KAMEN, DEAN	3,197,410	PRECISION PLANTING LLC	3,197,387
CIHOLAS, MIKE E.	3,197,174	KAMINECKI, MATTHEW		PROTEONIC	
CLAIR INDUSTRIAL		TERRAN	3,197,274	BIOTECHNOLOGY IP B.V.	3,197,228
DEVELOPMENT		KAMINECKI, MATTHEW		PSILO SCIENTIFIC LTD.	3,197,443
CORPORATION LTD.	3,197,239	TERRAN	3,197,278	PUGH, MICHAEL	3,197,331
CLAIR INDUSTRIAL		KAMINECKI, MATTHEW		RANKEN, LISA	3,197,443
DEVELOPMENT		TERRAN	3,197,280	REZAIE, ALI	3,197,117
CORPORATION LTD.	3,197,243	KAPLAN, SAM T.	3,197,149	RIPD RESEARCH AND IP	
COWLING, CONNER	3,197,098	KENDRICK, JOHN TRENT	3,197,460	DEVELOPMENT LTD.	3,197,111
CURRAN, MATTHEW THOMA	3,197,274	KEYS, ROBERT G.	3,197,149	RIPLEY, RICHARD D.	3,197,472
CURRAN, MATTHEW THOMA	3,197,278	KLOPP, JOHN	3,197,154	ROBERTS, LESLIE DON	3,197,453
CURRAN, MATTHEW THOMA	3,197,280	KOCH, DALE	3,197,384	ROTUNDO, STEVEN C.	3,197,270
DANA-FARBER CANCER		KOCH, DALE	3,197,387	ROVI TECHNOLOGIES	
INSTITUTE, INC.	3,197,245	KORF, JOSHUA MATTHEW	3,197,252	CORPORATION	3,197,312
DEANGELIS, DOUGLAS J.	3,197,174	KORF, JOSHUA MATTHEW	3,197,253	SCHILDER, FRANK	3,197,098
DEKA PRODUCTS LIMITED		KORF, JOSHUA MATTHEW	3,197,257	SELLERS, GREGORY S.	3,197,113
PARNERSHIP	3,197,410	KORUS, ANTON	3,197,288	SEVIGNY, GERARD	3,197,270
DEMERS, JASON A.	3,197,410	KOSTAKIS, GRIGORIS	3,197,111	SHEARWATER GEOSERVICES	
DICKENS, COLIN	3,197,288	LACHANCE, STEPHEN		SOFTWARE INC.	3,197,149
DIVERSITECH CORPORATION	3,197,240	ROBERT	3,197,270	SHI, YUNMING	3,197,310
DOMINGUEZ, CHRISTOPHER		LAIRD, MICHAEL	3,197,331	SIGEL, KIRK M.	3,197,174
A.	3,197,274	LANIER, GREGORY R.	3,197,410	SLONEKER, DILLON	3,197,384
DOMINGUEZ, CHRISTOPHER		LANIGAN, RICHARD J.	3,197,410	SLONEKER, DILLON	3,197,387
A.	3,197,278	LEIA INC.	3,197,284	SMALLEY, MICHAEL	3,197,252
DOMINGUEZ, CHRISTOPHER		LI, CHENGBO	3,197,149	SMALLEY, MICHAEL	3,197,253
A.	3,197,280	LIGHTBURN, BENJAMIN	3,197,443	SMALLEY, MICHAEL	3,197,257
DOUGLAS DYNAMICS, L.L.C.	3,197,274	LIVINGSTON, DWIGHT	3,197,270	SOLDAU, THOMAS F.	3,197,410
DOUGLAS DYNAMICS, L.L.C.	3,197,278	LUCE, WILLIAM E.	3,197,378	SONG, DEZHAO	3,197,098
DOUGLAS DYNAMICS, L.L.C.	3,197,280			SPENCER, ALFRED VINCENT	3,197,288



**Index des demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

STONER, JAMES	3,197,331
STRAND, ROSS	3,197,310
SUNSDAHL, ROY A.	3,197,472
SWANSON, TODD	3,197,384
SWANSON, TODD	3,197,387
SWENSON, ROLF E.	3,197,317
SYSTEMES NORBEC INC.	3,197,099
TAYLOR, SCOTT D.	3,197,472
TEO, RONALD	3,197,098
TESLUK, CHRISTOPHER JOHN	3,197,270
THE BRAUN CORPORATION	3,197,331
THE GENERAL HOSPITAL CORPORATION	3,197,245
THE PROCTER & GAMBLE COMPANY	3,197,310
THOMSON REUTERS ENTERPRISE CENTRE GMBH	3,197,098
TOUMA, MICHAEL J.	3,197,270
TRACEY, BRIAN D.	3,197,410
TSOVILIS, THOMA	3,197,111
TURNER, JONATHAN	3,197,312
ULTRAGENYX PHARMACEUTICAL INC.	3,197,154
VACEK, THOMAS	3,197,098
VAN DER HEIJDEN, MAURICE WILHELMUS	3,197,228
VANSICKLER, MICHAEL T.	3,197,270
WARREN, DANNY	3,197,231
WEATHERFORD TECHNOLOGY HOLDINGS, LLC	3,197,252
WEATHERFORD TECHNOLOGY HOLDINGS, LLC	3,197,253
WEATHERFORD TECHNOLOGY HOLDINGS, LLC	3,197,257
WILLIAMS, BRUCE L.	3,197,113
WONDERLAND NURSERYGOODS COMPANY LIMITED	3,197,113
WU, CATHERINE	3,197,245
XERO LIMITED	3,197,296
ZINDLER, MICHAEL T.	3,197,331
ZODDA, JULIUS P.	3,197,317